UNIVERSITY OF MASSACHUSETTS AMHERST
OFFICE OF THE FACULTY SENATE

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A PDF version of her PowerPoint Presentation is available at:
http://www.umass.edu/senate/fs/minutes/2006-2007/hatch_facilities_11-16-06.pdf

Good afternoon. First, I want to thank Secretary May for asking me to share some information with you today. Some of this information is about facilities, and it is something that is a big part of my day, so I appreciate this time. We have had some discussions in the Rules Committee/Administration meetings and some other venues about facilities and facilities planning, and there has been a lot of planning going on over the last year and a half, not just recently, in addition to the current plans underway. Part of the planning was to revisit all of the information that we had on deferred maintenance, building-by-building. We started this over a year and a half ago. What we thought, with all of our facilities staff, was that it would be helpful to bring in some outside folks who had information about other schools and use their template. They are the Sightlines firm. Our experts on campus had already done most of the basic work, but Sightlines has a methodology to document, then created a database. It is stack of printouts with a profile for every building on campus. We have been using that, even though, anecdotally, we know what is wrong with the buildings, but this really documents it. I am going to share some information about that with you, and also what they bring to the table. It is helpful to us, since it is the same information from 150 schools that they have worked with. They collected data and then helped consult on where we should go next in our asset management. What I thought I would start with is just an overview of what is going on now. Sometimes people have asked questions like, "why didn't you take care of that in the $700 million?" and here was why, because here was what was in the $700 million. This is the work currently underway. A lot of planning went on for about five years to even get to this, the $710 million. Of that, you can see that only 10% was being anticipated to come from the state. Obviously, this is the same thing we have been saying over and over. The state capital planning program has not been helpful to us. This is not new; this had been going on for years and years. So, as a result, we had to take some action. We were borrowing $522 million, using $110 million of our own money out of operating budgets and set-asides, and doing the work.

This is the summary of the biggest buildings underway. Now, in some cases, the new buildings get rid of deferred maintenance. The deferred maintenance on the heating plant ($118 million) was not that much. It was small. It was actually a museum, and if anyone wanted to see it before it came down, you could get a tour, because it was really a relic. There was coal fire and firemen still going underneath, with the little wheelbarrows getting the coal. That did not get rid of much deferred maintenance, but it was a cost. You get a sense of big projects underway, the funded projects. I am separating out the $500 million, because this was the cost, the $70 million of the state money was going toward these projects, and the rest of it was from the campus' general operations. This is the competition for the next dollar out of the campus' general fund. The rest of it, about $201 million, were projects that we called self-funded. Housing was paying for it on their own. They have a revenue stream. If anyone has not seen the Berkshire Dining Commons lately, you should go down. Anyone can pay for a meal. It is state of the art, and they are paying for it out of their operations. They run as auxiliaries. For the stadium turf, we did a loan to the Athletic Department. They had a contract with us, and they already had a revenue stream each year over a few years to pay the campus back. So all of these were funded, not in competition with the other projects nor with the next group of projects. For the Integrated Science Building, this was the next way of getting research space, since the full three teaching floors were being done and on the fourth floor, the shell was being constructed with campus general funds. We had designs to fit out the research labs, for about $7 million, and it was going to whoever could pay the amount of the debt to fit it out who would be the researchers who were in that space. So, this was a new concept, but it was the only way to try to stretch a dollar, because that competes with the next building that needs electricity updates. Just to point out, of the $700 million, $200 million was coming from areas that were self-funded. In the prior five years, we had $30 million from the state and we spent $174 million.

In the Northeast we love our old buildings. Sightlines talked about how, when they worked with campuses out in the Midwest or the Southwest, they demolished buildings and built new again. They did not hang on. They were not as old anyway to begin with, so there was probably nothing to cherish as much as we cherish our old facilities. Because of that, we still have buildings we are using that were built in 1890, 1892, and 1912. The average age of our facilities is 42 years. That is pretty significant, particularly since only one of our older buildings has been totally renovated. Of all the buildings that are 42 years or older, the only one that has been totally renovated is the Research Administration Building.

So what we did was work with Sightlines, and they added up what the total was for all the facilities on campus, and it came to $1.3 billion. They looked around and said, "you know, some of these buildings are not worth fixing," and they were correct. A certain amount of the inventory we would designate as needing to be totally replaced. But still, whether you fixed it up or you replaced it, it was $1.3 billion.

So they worked with us to identify, of the 150 institutions, the ones that were closest to us. We chose a list of state research institutions. The University of Vermont was probably the smallest on the list, but because it was in the Northeast, it was good for comparisons. Compared to the other institutions, with us at $1.3 billion, you could see that the closest institution might be $600 million in terms of deferred maintenance. We needed to normalize for size, and so we took that $1.3 billion divided by the gross square feet to come up with a measure: $142 per square foot. That was the average deferred maintenance on this campus. A couple of the newer buildings were terrific, and then we had some that were $700 per square foot to renovate. It was a huge range, but when you did this, then you could compare to the other institutions, and we were number one. Probably not a surprise for many of you who are in some of that academic space.

We were doing this to explain to the Trustees how much we are doing on our own. We really need more assistance from the state, and to show the limitations of what we can do on our own, we turn it into something called debt burden. Right now, this campus has 3.9% of debt per expenses on campus, and when we finish borrowing for the current plan, we will be up to 6%. That means that 6% of our budget will go to pay off debt. If we were to try to fix the current problem, take care of all the deferred maintenance and borrow that amount, it would be a debt payment of $116 million a year, and that would be 16% debt burden. This was helpful when explaining to the Trustees on the Administration and Finance Committee, who had seen financial indicators and they had felt pretty comfortable with them. 3.9% looked pretty healthy; you still had room to borrow more money. But to take care of the deferred maintenance would be another 16%. So how did we compare to the other institutions? We found the financial statements, shared them with Sightlines, and they converted it into a comparison. You can see it would take us another 16%. The other institutions have the capacity, it appears, to really take care of their deferred maintenance if they chose to do that. Groups like Standard and Poor's external finance assessors would say that an institution should not leverage more than 10% of its expenses.

Someone could say, "you have got $700 million underway. You are doing all this work. Is this deferred maintenance not going to go away somehow?" Well, the $1.3 billion did not include what we called the infrastructure, the horizontal work -- the roadways, the steamlines, the electrical -- because Sightlines did not capture that data for the other institutions. To really solve the problem, you have to add that back in. Then, only approximately $200 million of the deferred maintenance problem would have been taken care of. The example with the heating plant, the $118 million expenditure did not get rid of $118 million of deferred maintenance.

This is a summary of how many net square feet (referring to the chart). Remaining deferred maintenance of $1.3 billion, and the dollars per square foot went down $136 on average. It is just a way to track our improvements as we do more work. One of the things this enables us to do, now that we have lots of building-by-building data, is to do this calculation for every building, and we can also do it by type of building. You can see that the facilities in the best shape, at $79 per square foot of deferred maintenance, are housing and dining. Some people say, "well, why are they better?" They charge a fee for dining and they charge rent. They have a commitment out of those fees to set money aside every year. They still have a lot to do, but they are in much better shape than the lab research buildings and academic instructional buildings. Those buildings were built by the state, and we have not been able to borrow to fix those because the Building Authority, up until recently, would not even let us borrow money to fix state-built buildings. So, unless the state came up with the money, you can see why, in those categories, we are in worse shape than housing and dining.

This is really part of a review of all of our facilities, and this is the data that has helped and is needed in order to do the planning. The goal is to have a building-by-building plan. We are not just going to react when the roof starts to leak. We will have a thorough plan for every building. It does not mean that we have the money, but in some cases, some buildings will be labeled "do not keep." Some will be labeled "do not resuscitate." They are good as long as the roof is firm, it is not leaking, as long as the electricity is working and people can breathe. One of the reasons is that a recent regulation determines when building codes kick in: fire, safety, and ADA. Now, when we work on a roof, and the cost of the roof exceeds $300,000, the whole first floor of the building had to be ADA upgraded. So you can imagine that, with some of our older buildings, the first time that roof failed, it would be a question that we would have to answer, because it is not just the cost of the roof, it is the cost of a lot of other collateral work. Some people are very fond of the "legacy buildings" and some people are less fond of some of them. Because they are the oldest and they have the most deferred maintenance for the smallest amount of square feet, some of them were $500-600 per square foot to fix, we must have a plan or a recommendation on the future of those buildings. Some of those would be recommended to keep. As things happen, try to fix them. Others, we are going to recommend "do not keep," and, in fact, as soon as the next thing goes, we are going to have to close them.