Appropriation Testimony

Introduction

Introduce Gil Whitaker

I would like to begin by making a few general comments before moving to the details of the FY91-92 budget request and responding to your questions.

My Message

Michigan as a state is changing very rapidly...
We are becoming more diverse, more pluralistic

as a people. Indeed, almost 85% of the new entrants into our workforce during the 1990s will be people of color, women, or immigrants.

Our economy and commerce are becoming every day more interdependent with other nations as the United States becomes a world nation, a member of the global community --

And we are rapidly evolving into a new post-industrial society, in which the key strategic resource necessary for prosperity and social well-being has become knowledge itself, that is, educated people and their ideas.

Indeed, knowledge will play the same role that in the past were played by natural resources or geographical location or labor pools...

In the pluralistic, knowledge-intensive, global future that is our destiny, it is clear that the quality of and access to

...education in general

...higher education in particular

...and research universities

such as the University of Michigan

are rapidly becoming the key factors in determining the strength and prosperity of our state.

From this perspective, it is important that we not

view the public support of higher education as just another expenditure demand on an already over-extended state budget, but rather as a critical investment in our future.

Let me illustrate with just two examples...

Let me give three examples of just the past few months

Genetic Medicine

Medical scientists

Applications of molecular genetics to medicine

- i) Discovery and cloning of gene responsible for cystic fibrosis
- ii) Discovery of the gene responsible for neurofibromatosis...Elephant's Man disease
- iii) How to inject normal genetic material into a cystic fibrosis gene and cure it
- iv) Identified gene responsible for body's inability to handle chloresterol
- v) Within past several weeks have now discovered the gene responsible for diabetes

What an esxtraoridinary contribution!

Note: 40 years ago, Michigan conducted the clinical trials for the Salk Vaccine...

Jonas Salk was a faculty member at UM!

An example of how Michigan research has great impact on our society!

Computer Network

NSFnet, the major computer network, operated by the University in collaboration with IBM and MCI, passed the milestone of linking together over one million users in the U.S. and around the world...at over 500 sites.

The next stage, the National Research and Education Network or NREN, now stands poised to continue this momentum in the year ahead with strong support building both in the White House and in Congress.

Las fall in Washington, UM, IBM, and MCI are announcing the formation of a new nonprofit corporation to manage this "interstate highway system" for information transfer.

It is clear that the public research university...

...an institution for which the University of Michigan is not only the prototype, but perhaps also the flagship... ...touches the lives of a great many people in a great many different ways...

Through education, research, and service...
through health care, economic development, and
...yes...even through a sense of pride in their
athletic accomplishments.

Yet as important as these institutions are today in our everyday lives, it is my belief that in the future they will play an even more critical role as they become the key player in providing the knowledge resources...knowledge itself, and the educated citizens capable of applying it wisely... necessary for our prosperity, security, and social well-being.

Even beyond that:

"The solution of virtually all the problems with which government is concerned: health, education, environment, energy, urban development, international relationships, space, economic competitiveness, and defense and national security, all depend on creating new knowledge---and hence upon the health of America's research universities" (Bloch)

The Particular Challenge Faced by Our State

It is clear that our state is in the midst of a profound transition...

...from an industrial economy based upon the abundance

of natural resources, unskilled labor, and, to some degree, constrained, slowly moving domestic markets...

To a knowlege-based economy, characterized by intensely competitive world markets, rapid change, and--most important of all--educated people and their ideas.

This has not been...and will not be...an easy transition to make.

The impact of these changes are already painfully apparent to Michigan's workers and industries.

The truth is that the outcome is still very much in doubt!

Whether we will emerge from this transition as a
world economic leader once again...with a
strong, prosperous--albeit new--economy
producing jobs and improving our quality of life.

Or whether we will fail to heed the warnings...
...to make the necessary investments and
sacrifices today necessary for strength and
prosperity tomorrow...

And become an economic backwater in the century ahead. It is clear that we have arrived at a fork in the road ahead. My central theme is that education, broadly defined, will be the pivotal issue in determining which of these two alternative futures will be Michigan's...and America's.

Indeed, I am absolutely convinced that the dominant issue of the 1990s will be the development of our human resources.

Previous economic transformations were closely associated with major public investment in infrastructure such as railroads, canals, electric networks, and highways. In the coming economic transition, an equivalent infrastructure will be an educated population.

The actions we must take today...

...and the investments we must make...

...will clearly determine our capacity to respond to this future...

Clouds on the Horizon

Michigan

- 1. Numerous studies over the past several years have suggested that Michigan is seriously underinvesting in its "knowledge infrastructure"...by as much as 30% to 40% relative to other states.
- 2. The challenges faced by K-12 education are apparent. By any measure, K-12 is in serious trouble.

We are "A Nation At Risk"...

Note: it is bad enough that...

10% of Americans are illiterate 25% now fail to complete high school

But in recent years we have learned that in international comparisons of achievement in science and mathematics,

our grade school and high school students score at the very bottom of industrialzed nations.

The coins of the realm in the age of knowledge will be science, mathematics, and technology...

But most American students are simply not developing these skills.

They aren't even learning the basics... reading, writing, critical thinking, languages geography, history, literature, the arts

3. The situation is somewhat different yet no less acute for higher education in our state.

While the quality of Michigan higher education today is still high, the long term prognosis is poor if we continue as we have been in recent years.

Over the past two decades, the State of Michigan has dropped from the position of a national leader (ranked 6th in 1965) in its public support of higher education to among the lowest in the nation.

Let's look at the comparisions for a moment: Among the states, Michigan currently ranks i) 33nd in appropriations per student

- ii) 37th in appropriations as a percent of personal income
- iii) 35th in appropriations as a percent of tax revenue Further, we not only fall significantly below the national average in our support, but it is clear that we are slipping even farther behind with each passing year: In fact, the increases we have provided in our support to higher education now rank
 - iv) 42nd over the past two years
 - v) 45th over the past ten years nearly deal-last among the states.

Whether measured in terms of state appropriation per student or fraction of our tax dollars directed toward higher ed, it is clear that in comparison with other states, our present level of public support is simply

to maintain over the long run a system of higher education that is competitive on a national basis.

We have become consumers of education, not investors in the future.

Specific Needs

inadequate

1. We applaud the Governor's recommendations for the FY91-92 Budget year...and we applaud the strong message of support we have received thus far from the Legislature.

However let me note that the recommended 4% increase while courageous in the face of a tight budget year, will at best only cover the minimum inflationary cost increases in our universities, and in itself it fails to address either the past underfunding or necessary program investments in our institutions.

Hence, we must respectively ask that the Legislature take further steps to approach the funding

increase requested by the Presidents' Council of 8.5%, while considering a multiple year approach to restore Michigan to at least the top third of states in the nation.

2. Five years of freeze on capital outlay projects have caused serious damage to our campuses. Urgent projects have been bottled up. Considering the seriously inadequate support of capital facilities on many of our campuses during the 1970s, we simply cannot continue much longer without some mechanism for rebuilding our infrastructure. For example, on UMAA, over the past 20 years

we have received state funding for only 2 academic buildings--and that at a 50% participation rate. This amounts to an average of \$3.6 M in state funding for new facilities over the past 20 years... compared to a level of \$25 to \$50 million per year for peer campuses such as UCB, UNC, Illinois,...

The House bill calling for an increase on the bonding cap of the State Building Authority addresses this urgent need in a fiscally responsible manner, and we urge its support.

- 3. Over the past several years the REF has been of critical importance in strengthening and diversifying Michigan's industrial base. At Michigan, we have multiplied this investment by attracting \$2 from federal and industrial sources for every \$1 of REF...while stimulating roughly a tenfold investment increase through economic activity. Yet we face serious challenges:
 - i) REF funding has not kept pace with inflation, hence forcing program cutbacks

- ii) Creation of the new competitive program has drained funds from the original program while introducing an additional layer of bureaucracy into the process
- iii) The real impact of REF can only be achieved through very long term funding. The year-by-year micromanagement of the program foces a very short term focus, thereby undercutting long term efforts.

Conclusion

We recognize that the choices before Michigan are not easy.

We must address pressing social issues of employment, health, social welfare, we must meet the important nees of our citizens today.

But also we must balance these immediate needs with investment

in our future.

If we don't invest in cures, our symptoms will, in time, become fatal...

For generations, the people of Michigan sacrificed so that their children could have a better life.

They had faith in education.

Now it is our generation's turn.

We must rekindle that faith

and that commitment to the future today.

We must care for our children's future as much as we attempt to our present needs and desires.

Education represents one of the most important investments a society can make in its future...since it is an investment in its people...