Senate Republican Causus

Introduction

Today I would like to discuss fhe State of Michigan's strategy to achieve prosperity in the face of intense internation!! compeu tion and rapid techological hange.

However t see!s appropriate first to`broade our persvective

`head3 - a! it and view the challenge facing Michigan within

the broader context of the major changes occurring in the very stru#ture, th! very fabric, of the world economy...

.heqd 2 + In a sense, Michigan's challenge is the chyllenxe of dramytic ea \square nomic ch!nge itself. being

.jead 3 - friven in large meysure by technology ...

Over the years, I have become increasingly convinced that education -- or more g}nerally, the development of human capital -- will become the dominant issue for our state, just as it will be for our nation, in the 1990s and beyond.

In a very real sense, we are enterinp a new age... what has been termed, an "age of knowledge", in which knowledge...that is, educated people and their ideas...will become the keys to our future...

And in this knowledge-intensive future, research universities such as the University of Michixan will become the cornerstone of our prosperity and well-being...

Background

To discuss this challenge, I am going to toss aside my hat as president of the University of Michigan, and instead return to my roots as a scientist and engineer.

Throughout my scientific career, I have been heavily involved in stimulating technological change...

In areas such as nuclear energy, lasers, thermonuclear fusion...indeed, I even worked on the Rover Project to develop a nuclear rocket in the 1960s...
In the 1970s, I switched my attention to areas such as supercomputers and

And in economic development activities first as Dean of Engineering at Michigan and then as its Provost.

computer networks....

But there is one additional hat I would also like to put on...
that of a member of the National Science Board...our
nation's principal source of science policy...
since, as you will see in few minutes, the theme of

international competitiveness has become the

.h ad 3 - cornerstone of our efforts to strengthen America's

√cience and engineeringbase.

Note: Close working relationships with Bush Administration

Theview from @ichigan.. "the(Rust Belt"..*

Whi e(□eople genIrally look at the midwest as `relic of America's industrial past, let,m` suggest hat in many ways, it can,also,be viewed as America's future.

For it is in the industrial midwest...in Michilan...

□ - that,we jar □

had to learn how to adapt toç.head 3 - a brave, new world of intense economic competitiox...

We have learned through the school of hard knocks,

as we have fought and scratched and clawed our way back from the economic brink to achieve prosperity.

We have had to build new coalitions inw lving

the public and private sectors...state government, education, bus...ness, industry, and labor...to develop an agenda appropriate to secure the future prosperity of this state.

I am absolutely convinced that our State faces a very unusual

period of challenge in the decade ahead...a watershed, in a sense, from which we can either emerge at a national leader...or as an also run...

or perhaps even worse...as an Appalachia...

Quite frankly, the choice will be ours...whether we choose

to continue our tendency of recent years to spend our resources only to meet the needs or desires of the moment... or whether we can develop the vision, courage, and discipline to invest in the future of this state...not just for this year or next...but for the next generation...our children...

The Bad News of the past several years...

Familar Ills which dominate the headlines

The budget deficit The trade deficit Displaced workers

Marginal Industries

More serious

Trade deficits show little improvement despite a shart drop in the dollar

Past areas of strength such as steel and durable goods manufacturing are declining

Even industries like semiconductors and computers are vulnerable to competition from abroad

The bad news for Michigan is obvious...

Industries of great economic importance to our nation such as steel and automobiles have fallen victim to intense competition from abroad...

Plants have closed...our cities are filled with cronically unemployed...

Michigan's per capita income has now dropped below the national average...

Michigan has dropped to 20th in per capita income (and at \$15,393 is now slightly behind the national average of \$15,481)

Our unemployment rate consistently is at the top...

In Michigan we no longer worry about nuclear war and and the bomb because we believe that "The odds are greater that America will be bought up by the Japanese than blown up by the Russians..."

What is happening?

The world economy is now in control
However, it is misleading to blame all our ills on
international competitiveness alone!
Something else is happening...

The Challenge of Change

1) THE CHALLENGE OF DRAMATIC ECONOMIC CHANGE

Traditional industry economy is shifting to a new

knowledge-based economy, just as our industrial economy evolved from an agrarian society at the turn of the century.

The days of low interest rates, limited foreign competition, slow-moving technology, stable markets, and mass production processes that once allowed our industries to thrive in a sheltered environment have long since passed.

This change has gripped the Rust Belt...

A transition is occurring in which...

Intellectual capital has replaced

financial and physical capital as key to economic development

The challenge today is to develop an agenda to achieve and sustain prosperity in a new environment of intense international competition and rapid technological change.

Some examples:

 Industrial production is steadily switching away from material and labor intensive products and processes to knowledge intensive processes:

In a car, 40% materials, 25% labor...

In a chip, 1% materials, 10% labor, 70% knowledge!!!

- 2. Our nation's future has probably never been less constrained by the cost of natural resources. Future areas of growth are likely to come from the application of technologies that require few natural resources. Indeed, OTA study suggests that the optimal use of new technology could result in a 40% to 60% decline in the use of natural resources, even when there is rapid economic growth."
- 3. Increasing manufacturing production has come to mean decreasing blue collar employment!

In the 1920s, 1 of 3 was a blue-collar worker today 1 in 6 and dropping fast

probably to about 1 in 20 within a couple of decades...

Indeed, UM economic studies suggest that less than 5% of General Motors' work force will be unskilled labor by the year 2000.

 Recent Office of Technology Assessment report: 40% of all new investment in plant and equipment goes to purchase information technology

Fundamental transformation underway in economy that is "likely to reshape virtually every product, every service, and every job in United States."

In all developed countries, "knowledge" workers have already become the center of gravity of the labor force.

As Erich Bloch, Director of the National Science Foundation puts it, we have entered a new age, an "Age of Knowledge in a Global Economy"

And in this age, it has become clear to most states, indeed, to most nations, that research universities are the key element in the infrastructure to provide for prospersity and social well-being. change is technology, itself.

Without these key producers of advanced knowledge and the graduates who know how to apply it, a region will quickly slide into the backwater of the age of knowledge that we are now entering.

2) THE INTERNATIONALIZATION OF AMERICA

It will be a future in which America will become "internationalized"... in which every aspect of American life must be viewed from the broader context of participation in the global community...

Whether through travel and communication, the arts and culture, the internationalization of commerce, capital,

and labor, we will become increasingly dependent on other nations and other peoples.

Some facts of life:

7-fold increase in international trade since 1970
Market for nearly all significant manufacturing industries
has become world-wide

70% of goods we produce now must compete against merchandise from abroad

In slightly more than 5 years, US trade deficit has taken us from the world's largest creditor to its largest debtor nation.

Market for nearly all significant manufacturing industries has become worldwide

The fact is, a truly domestic US economy has ceased to exist.

Today, imports and exports represent about 10% of GNP...

70% of goods we produce compete directly with foreign goods.

Jack Welch, CEO of GE, noted last November:

"Within the next 2 to 3 years, at most, the most importanct alliances will be forced in every signflicant global industry--medical, autos, defense, materials, and so on. Those who are slow to recognize the emergence of these global alliances or to act in forming them will find themselves locked out of the game as we enter the 1990s."

US is no longer self-sufficient or self-sustaining. We are not immune to the shocks of the world society. We have never been more vulnerable.

US is the destination of about half the world's immigrants
Probably 10 million this decade alone...
One-third of annual population growth is immigration
Indeed, now that native fertility rates have stood since
mid-1970s at 1.8 (below replacement level of 2.0),
immigration promises to become the main determinant
of future population variability

America is evolving into the first true "world nation", shifting rapidly away from Eurocentricity into a society with strong ethnic ties to all parts of the globe-with a growing focus on the nations of the Pacific Rim.

3) THE NEW MAJORITY...

There seems little doubt that America of the 21st century will probably be the most pluralistic, multicultural nation on earth...and perhaps in history...

Our nation will face a challenge of diversity and pluralism in the years ahead that will determine our strength and vitality.

Today minorities comprise 14%...by 2000, 22% will be Blacks and Hispanics...by 2020, 30%...

Less than 15% of new people entering the labor force of the 1990s will be white males.

Put another way, unskilled minorities are a growing fraction of the workforce and unless their abilities are upgraded, the nation's overall skill level will not be sufficient for tomorrows economy.

NOTE: We must make special efforts to expand participation by these groups...not just because that is good social policy, but because we cannot afford to waste their talents!

In particular, we face the challenge of reaching out to increase the participation of those racial ethic, and cultural groups who have faced serious inequity and discrimination in our society... to prevent them from becoming an "underclass"

The State of Michigan Response

As we look to the knowledge-intensive future of Michigan, we recognize as have so many other states that it will be our great research universities that will hold the key to our collective prosperity.

Why?:

Key factors in technology-based economic development

Technological innovation

Technical manpower

Entrepreneurs

Produce talented engineers to implement new technology Through research produce creativity necessary for innovation Attract "risk capital" through massive federal R&D support Key to technology transfer

Traditional: graduates, publications

Entrepreneurs

Startups

Importance of world-class research universities

Look around:

New England: --> MIT

Bay area-Silicon Valley --> Stanford & UCB

Southern California --> Caltech

Astin --> U. Texas

A fact of life:

Only world-class research universities are capable of major impact Must play in the big leagues...with MIT, Stanford, Berkeley...

To attract the outstanding faculty and students

and massive resources necessary for technological leadership

Development of Unique State-University Partnership

Universities committed themselves to:

Strategically realigning activities into key thrust areas

of major importance to State...

Attracting leading scientists, engineers, and professionals

to staff these programs...

Developing new mechanisms for technology transfer...

State government committed itself to:

Establishing higher education in general and the state's

research universities as a high priority

Providing seed resources to sustain key thrust areas

Developing novel institutions to act as catalysts in these activites

University of Michigan Actions:

The Unversity views itself as a partner with state

government, business, industry, and labor in addressing

the needs of the State of Michigan.

Key:

Began to think and act strategically...how to better position ourselves Hence, we chose as our thrust areas...

Complex manufacturing systems

CRIM - ITI -- The Center for Research on Integrated Manufacturing, responsible for the basic research and instruction necessary to sustain the Industrial Technology Institute...and to maintain the momentum of Automation Alley now developing in Michigan.

Machine Intelligence

CMI - EDS -- The Center for Machine Intelligence, an exciting new venture formed with the participation of industry and federal government to explore the whole new technology of thinking machines -- machines taht can perceive their environment, think, and act. First applications will be in manufacturing. However next generation of thinking machines will be designed and built by

intelligent machine!!! (Note address is 2001 Commonwealth)

Advanced electronics and optics technology

CAEOT -- The Center for Advanced Electronics and Optics Technology, aimed at research into the marriage of electronics and optics -- laser on a chip. It is now the largest university laboratory in the nation specializing in ultra high speed, high frequency electronic devices and advanced electronic materials such as galium arsenide.

Information Technology

Goal: To use the University as a gigantic laboratory to design the knowledge-based organization of the 21st C

CITI -- The Center for Information Technology Integration, essentially a skunkworks operation exploring the forefront of modern computer telecommuncations with several fo the leading companies in the nation. The U of M itself has become the laboratory, the "test bed", for this exciting venture.

Center for Collaboration Science and Technology
Cognitive Science and Machine Intelligence Laboratory

Merit and NSFnet

MITN

Health Sciences

\$500 M capital investment in Medical Center

(R&D growing at 20-25% per year)

Drug industry in Michigan (UpJohn, Warner-Lambert)

Particular thrusts

Molecular Medicine

Cancer Center

Geriatrics Center

Substance Abuse Center

Hughes Medical Research Institute

Social Sciences

UM has perhaps the strongest set of social sciences

of any university in nation...

Institute of Social Research...

Directing attention toward the nature of rapid economic change...

Social Work and Education

Focusing on problems of urban environment...

Problems of underclass

Other steps

- 1. Recruiting key people...
- 2. Modifying ways we interact with outside world...

Strengthened interactions with industy

Research Partnership Programs...

Break down the ivy-covered walls surrounding the campus

3. Intellectual property policies

Allowed ownership by faculty and staff

Allowed equity interest by university

Building a high quality IPO organization...service oriented

4. Michigan Information Technology Network...

Cultural Changes

Reaffirmation of the importance of individual achievement, of excellence...We have once again recognized the ability of talented people to do great things -- if we will only get out of their way and let them!

Importance of establishing an intense, entreprenureal environment...a no-holds barred, go-for-it culture...in which individual initiative, achievement, and the quest for excellence are deminent elements.

for excellence are dominant elements

Clouds on the Horizon

Maintaining America's competitive edge requires attention to our traditional strength -- people and research -- and

a strong offensive strategy based on these resources.

Taxes, trade, and fiscal policies influence economic competitiveness. But in the long run, a strong base of science and engineering research and education is more important.

Central theme is that education, broadly defined, will play a pivotal role in the coming economic transition and its impact on individuals.

Previous economic transformations were closely assocaited 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.

WARNING SIGN 1: Michigan is slipping

No question that we have lost lead in many areas Industrial productivity and heavy manufacturing Steel, durable goods, ...

The bad news for Michigan is obvious...

Industries of great economic importance to our nation such as steel and automobiles have fallen victim to intense competition from abroad...

Plants have closed...our cities are filled with cronically unemployed...which may well exceed 10% along the I-75 corridor...

In Michigan we no longer worry about nuclear war and and the bomb because we believe that "The odds are greater that America will be bought up by the Japanese than blown up by the Russians..."

Michigan's per capita income has now dropped below the national average...

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To do this, all the major imputs into our economy--quality of workforce, amount of capital investment, level of technology, and skills of managers--must be as good as the equivalent inputs going into the economics of our major competitors.

WARNING SIGN 2: A Serious Skilled Manpower Shortage Traditional source of human capital for business and industry, that of young adults, is declining rapidly as we slide down the backside of the postwar baby boom.

25%-30% falloff in HS graduates by 1992 Composition of young adults is also changing...

By 2020 30% will be composed of Blacks and hispanics... students who have not traditionally had the opportunity for the education necessary for knowledge-intensive careers.

WARNING SIGN 3: Labor force faces a particular challenge...

Michigan is undergoing dramatic change in industry...

Unskilled labor will lose relevance in a world dominated by microelectronics, computers, and automation.

Statistical quality control and just-in-time inventory systems require production workers with mathematical abilities that are far beyond the present level.

Of all the inputs into our economy, the quality of our workforce is probably the most critical.

There is a very serious question as to whether we are providing adequate educational resources to produce the quality of workforce necessary for the knowledge-intensive future of this state.

Warning Sign 4: The Dangers of Underinvestment

Perhaps the most ominous dark cloud on the horizon of all is the increasing evidence that we as a people we have not yet recognized either the nature or the magnitude of the investments we must make to achieve prosperity in an age of knowledge.

While we all give the "age of knowledge" lip service, the evidence suggests that in reality, we long for a return to the agricultural and manufacturing economies that once made us reach...

- Over the past several years, numerous studies have suggested that Michigan is seriously underinvesting in its "knowledge infrastructure"...by as much as 30% to 40% relative to other states.
 - Interestingly enough, studies performed by both the Democratic adminstration and the Republican Senate agree with this prognosis...and yet nothing has happened...and we slip even further behind!
- Particular concern has been focused on the "education pipeline" in Michigan...from pre-school through K-12 education through higher education to lifelong education.
 - Two-thirds of new jobs are in professional, managerial, and sales area...just 5% go to unskilled workers...as Michigan economy shifts from manufacturing to knowledge-based and service jobs.
- The challenges faced by K-12 education were well-summarized in a recent editorial in a Detroit paper:
 - "If Michigan is to prepare tomorrow's workers for tomorrow's jobs, major structural changes are needed in public education, both in classroom quality and in the adequacy and fairness with which the system is financed."
 - "What is required is a strengthened commitment in Lansing to school finance reform and improving the quality of basic and higher education, and a greater political willingness to stand up to special interests who would thwart those long-term goals to pursue short-term objectives. The opportunity to eliminate chronic unemployment in Michigan may be never more within our graps than between now and the end of the century. The alternative is a growing mismatch of job opportunities and job training that threatens not only the state's recent prosperity, but its very solvency." (Free Press editorial, 1/5/89)
 - Yet, we continue to be paralyzed in our efforts to come to grips with school finance reform or major structural changes necessary to achieve quality in public education.

Lottery
Instead, we continue to rely on gimmicks...such as the
State Lottery, which in effect robs from those most

in need of state assistance...

Furthermore, since these Lottery funds flow into the General Fund, and since state support of education has clearly not tracked the increase in lottery revenues, it is clear that lottery revenues are, in effect, going to build and operate more prisions (the only part of the state budget which has growth at this pace).

Some irony here, since the Lottery, in effect, is

transferring funds from the deprived components of our population..

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

While the quality of Michigan higher education today is very high, the long term prognosis remains guarded...

The Investment in Higher Education

Our state has dropped from 6th in the nation in its support of higher education to 35th over the past two decades... into the bottom third!!!

Indeed, we have dropped to 32nd in tax revenue for higher ed--7.8% compared to 11.4% for California!

We are being outspent by 30 - 40% in state support per student...
Not simply by prosperous states like California...but by neighbors such as Indiana and Ohio!

- Over the past 10 years, high tech states such as California, New Jersey, Massachusetts, and New York have seen real dollar increases in higher education appropriations of roughly 20 to 30%. In sharp contrast, over this period Michigan has declined by 4.5%...
- Certainly these states are prosperous...but they are also investing substantially more of their resources in higher education...in preparation for a knowledge-based future...than are we.
- Indeed, one measure of the importance of higher education in the state budget is the ratio of tax dollars per enrollment ratio... a measure by which Michigan ranks 47th in the nation!
- It seems clear that higher education faces a serious challenge in Michigan. Our present level of public support is clearly inadequate to maintain a system that is competitive on a national basis.
- We are attempting to compete in this knowledge-intensive future with an underfunded public system of higher education... and no private capacity (such as a Stanford, MIT, or Caltech).
- Only the autonomy granted to our public universities have allowed then to "overachieve" their public support through higher tuition and other sources of financial support.
- This has given public higher education in Michigan some capacity to face the devastating impact of the past decade...but it is rapidly losing this capacity...and there seems little doubt that the quality of our system will probably be gone in the next 10 to 20 years if the present trends of inadequate state support coupled with tuition constraints continue.
- 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 inadequate to maintain over the long run a system of higher education that is competitive on a national basis.
- Despite herculean efforts by the Governor and the State Legislature in recent years to restore adequate support for higher education in Michigan after the devastating cuts of the early1980s, we continue to fall further behind the national average in state support.
- And what will then happen to Michigan. We will become a "have not" state, competing in low wage industries in dying industries. We will have rejected the age of knowledge!

5. Prisons

In fact, the only area where we now lead the nation is in our prison system...
We are now investing more in prisons than in higer ed...that is, we spend more money putting people into jail than we do in keeping them out of jail!

Over the past 5 years, the Corrections budget has increased by 141%, compared to a 25% increase for higher education.

Corrections will be \$633 in FY88-89 (compared to \$1,137 M for higher ed and \$2,144 M for social services), but projected to grow to \$2 B in 1990s.

Each of 25,000 inmates require \$22,000 per year...

Furthermore, we have spent over \$1.3 B to build new prisons...every penny of new construction funds... and now appear prepared to launch a second wave of prison construction, even though demographics suggest that many of these prisons will remain empty.

Further, while state revenues are projected to increase 5% in the year ahead, the exploding corrections budget (\$140 M additional just to operate the new prisons) will eat up this growth, thereby crippling other state priorities such as education and social services.

What has happened to our priorities?

What is wrong here???

Who is to blame???

Our schools and colleges???

Certainly they must take stronger actions to improve quality...and strive harder to operate in a more cost-effective manner...

But their present situation reflects as much as anything else our own personal priorities...

- ...as parents
- ...as volunteers...
- ...as citizens and voters...

What about our elected public officials???

It is certainly not their fault!!

Listen to their recent messages...

whether it be the Governor's State of the State address...

- ...or the response from the state Republican leadership...
- ...or the President's State of the Union address last week...

It is clear that our elected leaders, whether in Washington or Lansing or our local communities...

Would like nothing better than to make education their highest priority.

To become

- ...the Education Governor
- ...or the Education Party
- ...or the Education President

They understand clearly the importance of investing in our human resources, and they are searching valiantly for creative ways to improve the quality of our schools and provide adequate and equitable financial support.

But they also face formidable constraints, since in the end they must be responsive to the wishes of the electorate...and face it, gang...the electorate today says:

- i) no more taxes...
- ii) no more crime...
- iii) no more cuts in social services or national defense...

and our public officials have no choice but to respond.

No, the real finger of blame for the crisis we face in education should be pointed, as Michael Jackson would say, at "The Man in the Mirror"... ...at you and at me...

We are the ones who fail to demand the highest quality in our educational institutions in Michigan...

We are the ones who steadfastly resist a tax base adequate to support both our needs and desires...and provide an adequate level of support for quality education in this state.

We are the ones who block any effective efforts to achieve equitable financing of education in Michigan.

We are the ones who generally are too busy to help our own children in their studies or participate in their activities.

And we are the ones who insist on building more and more prisons, even when we know that this investment comes out of the hide of education and social services-which are, of course, the only true long term solutions to crime!

We are the ones who complain about higher tuition costs at our public institutions, even though we know that these fees represent only one-third to one-fourth of the actual costs of an education on our campuses...

and that our colleges provide adequate financial aid to offset the burden of even these modest costs to those in need...

Indeed, there is a particularly tragedy in this disturbing recent trend, because when combined with the serious limits on public support which now exist in our state, successful efforts to prevent adequate tuition levels for those who can afford to pay them, will not only undercut our capacity to provide financial aid to those less fortunate, but beyond that, will force our institutions down a path of towards mediocrity.

Let there be no doubt about it...

In higher education, as in every thing else in life, if you want bargain basement prices...you will eventually end up with bargain basement quality...

If there is one common theme to these trends, it can be summarized by that old T-shirt expression:

"Eat dessert first, life is uncertain"

We have become a "live for the moment society"

The "Me Generation" of the 1960s has now up into mature Yuppiehood?

For many years now we simply have not been

willing to invest in our future...and the future of our children...

We have chosen instead to mortgate this future to pay for mistakes make in our past.

The attitude we have taken toward our most precious resource, our youth, is both callous an alarming.

I simply cannot accept the excuse that "we can no longer afford this investment in the educational opportunities we offer our youth".

To be sure, the immense social needs for welfare assistance, medical care, prisions, and all of the other programs that drain our tax dollars are compelling.

However, by choosing to meet these needs with resources taken away from our system of public education rather than through reforms in our tax structure or political system, we have in reality mortgaged our future by withdrawing the educational opportunities from our youth.

Michigan has had a long tradition of wealth and a caring attitude for its populace. But it seems clear that if priorities are

not changed, Michigan will become poorer and poorer and finally it will not be able to meet the "caring needs" of its people. It will then have become a "have not" state.

Yet the writing on the wall could not be clearer:

As we prepare to enter the Age of Knowledge, our ability to sustain the strength of our state and our nation...to achieve the quality of life for our citizens...will be determined, more than any other factor, by how we develop, nurture, and educate that most precious of resources, our people.

Hence, let me conclude my brief remarks by tossing at you--and at meseveral challenges:

Concluding Remarks

To Us...

In a very real sense, our state has entrusted to us its most valuable resources...its youth...and its future.

To be responsible stewards of the public trust, it is clear that we must strive to achieve greater cost-effectiveness in our use of public funds...and I can assure you that we intend to do just that.

But even beyond this, we must become staunch guardians for the quality of our institutions...

For in education, as in every other aspect of American life, quality will be the key to our future.

Hence, to us falls the responsibility of taking the forceful and courageous actions necessary to sustain and enhance this quality...in the long run the people of this state both demand and deserve nothing less!

To You...

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

It is indeed the case that our state and our nation have developed the finest systems of higher education in the world...

But we must also remember this resulted from the willingness of past generations to look beyond the needs and desires of the present and to invest in the future by building and sustaining educational institutions of exceptional quality--

Institutions that have provided those of us in this auditorium today with unsurpassed educational opportunities.

We have inherited these marvelous institutions because of the commitments and the sacrifices of previous generations...and it is our obligation as responsible stewards-not to mention as responsible parents--to sustain them to serve our own children and grandchildren.

It seems clear that if we are to honor this responsibility to future generations, we must re-establish the priority of both our **personal** and our **public** investments in education, in the future of our children...and hence in the future of our state and our nation.

A different way to look at it:

The Investment in Human Capital...

The real issue here is not the investment in education...

it is the priority that we as a nation place on investing in our children.

We should feel both embarrassed and ashamed for robbing our youth to pay for our own excesses...

But let's take the cynical view that responsibility and stewardship will simply not be a compelling enough argument to reprioritize the importance of investing in human capital...in our youth.

There is another viewpoint, however...

If we do not invest in the youth of today, they will not become a

sufficiently productive workforce to keep the checks coming

to those of us who retire in future years!!!

By 2000, there will be only three workers to support each retiree...and one of these will be minority!

Look at it another way...which is the better investment...

\$3000/y to keep a preschool kid on track

\$5000/y to achieve a strong K-12 education

\$10,000/y to sustain strong college education

or \$25,000/y to put someone in jail...

The Need for a New Coalition

Today Michigan faces serious challenges that will clearly determinine its future prosperity and well being...

the challenge of pluralism...

the challenge of participation in a global community...

the challenge of the Age of Knowledge

the challenge of change itself...

If we are to respond, we simply must reorder the priorities of this state...

We must shift away from the temptation to

address only the needs and desires of the moment

And, instead, we must begin to make some of the key investments necessary for the long term...

The key investments in our people...

in our children...

This is not just the worry of local communities or

state government or public institutions

It is everybody's concern!

Each of us must step forward and unite to

face the challenge of the future.

We must work together to build new coalitions including

the public and private sectors...state government,

education, business, industry, and labor...to

develop an agenda appropriate to secure the

future of our children, our state, and our nation.

Michigan continues to be blessed with abundant natural resources,

a people of great strength, and a system of higher education of a quality envied by the rest of the

nation...indeed the world!

But, the writing is on the wall...

If Michigan is to prosper in the age of knowledge

that is amost certainly our future, we must join together

now to restore both our public and

personal investments in education...

...in our people and their ideas...

...in our children...

...and in our future