

Listen and Learn-1993

Introduction

Good afternoon.

I want to thank Society Bank
for inviting me to speak to you today
as part of the "Lunch & Learn" series.

Today I'd like to make a few remarks
about the economic future of our state...
...and the role that both Ann Arbor
and the University of Michigan might play.

Over the past couple of years I have spoken
frequently about the serious structural problems
faced by our state...as evidenced by some
very painful symptoms...
...the bad news from Michigan industry
 ...plant closings...Willow Run, Kalamazoo, Pontiac
 ...the massive losses of GM
...the degree to which we have slipped in key
 indicators of the quality of life
 30th in per capita income
 37th in child well-being
 39th in housing affordability
 41st in overall employment
 48th in business climate
 48th in high school graduate rates
 49th in return on federal tax dollars
...or risen in other statistics...
 14th in teenage unemployment rates
 13th in incarceration rates (and rising rapidly)
 13th in percentage of children in poverty--with one-third of
 our children now classified as impoverished
 12th in property tax burden
 10th in infant mortality

4th in public aid recipients
1st in mortality from major diseases
-and 1st as well in smoking, I might add

In reality this tragic litany in statistics
just represents symptoms of
the broader dimensions
of Michigan's failing economic health.

My colleagues have frequently referred to this as
my "Lecture from Hell" ...
and I admit that it was indeed crafted in
as a "fire and brimstone" sermon
to use as a 2x4 to get our attention
focused on the real challenges before our state.

However let me put you at ease...
...you are not going to get that sermon today.
Indeed much of the recent economic news is good
...the economy seems to be on the upswing
...unemployment in Michigan has dropped to
the national average (lowest since 1990)
...retail sales are up
...the mood of the country seems more upbeat
than in years

And yet it is also clear that
while the recent symptoms are more encouraging,
the patient is far from cured.

Indeed, our most fundamental challenges still remain
and must be faced.

And that will be the subject of my remarks today...
...What to do...
...To position both Michigan and Ann Arbor
to regain both economic prosperity
and quality of life for future generations.

So What Is Going On?

Why have we seen such hard times lately?

Has it been due to those aggressive Japanese?

Or perhaps the numbing influence of media and TV sound bites?

Perhaps it is an aging America that has forgotten
its responsibilities to its children?

No, these are just symptoms of underlying forces.

Few of us realize the full implications of the
ever-accelerating pace of change in our world,
our nation, and perhaps most of all, in our state.
Change is transforming our world.

Who would have predicted several years ago that:❑

...Communism would be rejected around the world,
swept away by the winds of freedom?❑

...that the Berlin wall would crumble, and that Germany
would be reunified?❑

...that Eastern Europe would break away from the Soviet
block to embrace democracy and unite with Western
Europe?

...that the Soviet Union would literally disintegrate from
the centrifugal forces of freedom and nationalism?❑

Yet the changes we have seen thus far are just the tip of the iceberg.

Indeed, many believe that we are going through
a period of change in our civilization just as profound
as that which occurred in earlier times such
as the Renaissance and the Industrial Revolution
--except that while these earlier transformations
took centuries to occur,
the transformations characterizing our times
will occur in a decade or less!❑

Today we are evolving rapidly to a new post-industrial,
knowledge-based society, just as a century ago our
agrarian society evolved through the Industrial Revolution.

Key element in transformation, is the emergence of knowledge

as the new critical commodity, as important as mineral ores,
timber, and access to low skilled labor were at an earlier time.

This new critical commodity knows no boundaries.

It is generated and shared wherever educated, dedicated,
and creative people come together...and, as we have learned,
it spreads very quickly--worldwide, in fact.

In a sense, we are entering a new age, an age of knowledge,
in which the key strategic resource necessary for our
prosperity, security, and social well-being has become
knowledge--educated people and their ideas.

I used to portray the 1990s as the countdown toward a new millennium,
as we found ourselves swept toward a new century
by these incredible forces of change.

But the events of the past two years suggest
that the twenty-first century is already upon us, a decade early.

But change itself is not our real problem.

Our problem is that as a people we are not facing up
to the challenge of change.

We are not yet prepared to face a world whose economy, culture,
and politics are driven by the explosion of knowledge.

This is particularly true in our state.

The Challenges Before Our State

The Challenge of Change

My wife and I have lived in Michigan for almost twenty-five years,
paid taxes here,
brought up a family,
and have seen our state go through wrenching changes.

In the past our industrial base -- our economy --
has relied on the fortunes of a few large companies
--and one large industry.

For most people, there was never any reason
to be particularly entrepreneurial
or to worry about anything more than occasional

uptakes and downturns in the economy.

Only during the last decade have many of us begun to understand that the old economy will never return, that even if successful firms become even more successful, the huge economic base upon which all of our policies were formed will never return. ▣

Michigan is midway through a several decade-long transition from a state dominated by a single industry and a few large companies to one dependent upon tens of thousands of small, dynamic companies competing in a broad spectrum of world markets

A transition from

...low skill, high pay jobs

to high skill, high pay (or low skill, "no" pay) jobs

...from a transportation industry state

to a communication industry state

...from the Industrial Age to the Age of Knowledge

in which educated people and ideas have become the key strategic commodities

determining economic prosperity,

national security, and quality of life

Unfortunately, Michigan is currently not well-positioned to make this difficult transition

since over the years our state has evolved

...in tax policy

...regulatory policy

...social services

...investment strategy

...and politics

to serve 3 very large companies and one very large union.

The old alliance -- big business, labor, and big government

-- is now gone,

yet we are still propping it up.

The question is: What is the new alliance that we will build,
and which enterprises will comprise it?

A look at the past decade provides a hint...

Even as we were losing thousands of jobs
with the decline of the auto industry,
we were also gaining over 200,000 new jobs
from thousands of new companies.

Professor John Jackson makes a strong point that,
despite the doom and gloom of plant closings,
Michigan still has a very dynamic economy.

Yet, unlike the past, the growth and maturation of
these new companies is far more rapid,
and they also have shorter life spans,
since they are swept along by
the rapid pace of technology.

He uses the analogy of a forest,
where mature trees gradually fall or are harvested
and young saplings grow in their place.

From this perspective it seems clear:

we must restructure our state
to create, attract, and support
the tens of thousands of new companies
on which our future will depend
to enable them to function in a
rapidly changing
frighteningly competitive
and knowledge-intensive
world marketplace.

Michigan's challenge is not dissimilar
to that faced by industrial corporations
by government
by universities themselves

We must restructure ourselves to serve the future...

...rather than simply perpetuate the past.

Or more to the point, how do we restructure our state,
our business and industry, our government, and our institutions
to prosper in the Age of Knowledge that is already upon us. ▣

We must face up
both to the challenges
and the opportunities
before us.

The Old Systems--Still In Place

Yet, at the present time, however,
the old structures are still in place
and are an impediment to future prosperity.

Let me give some examples:

Our Tax System

Our tax system,
which has remained the same for decades,
is designed for a 1950s/1960s economy.

UM economist Paul Courant,
who understands the Michigan tax system
as well as anyone, suggests that virtually
all of our taxes in Michigan
contain special provisions that give an advantage
to some economic activities relative to others - i.e., loopholes.

Over time, special interests, the industries with the most clout,
have tilted the scale so that the tax system
has become largely inefficient. ▣

A good example:

Michigan's tax abatement law...
...provides big industry (primarily big auto)
with \$292 million in tax breaks
...at the expense of small business
...school financing
...and other social needs.

And with little positive return...
It is not that Michigan as a state is overtaxed
--indeed, its total per capita tax has now dropped
somewhat below the national average.
Rather it is that its present tax system is
...obsolete,
...unnecessarily burdensome,
...and intensely unfair.
Further, Michigan's tax system
is not strategically aligned to Michigan's future.▣
It subsidizes and perpetuates the past
while strangling the future.▣
Our reliance on property taxes,
the Single Business Tax ,
and tax abatements
and other tax “expenditures” or loopholes,
which benefit special interests
subsidizes and perpetuates the past
while strangling the future.
It does little, if anything, to promote economic growth.
...to encourage saving and investment.
Simply put, the tax system is out of date
and it is time for tax reform.
And here it is important to add that
we need a total overhaul...
...not simply a quick patch-up job.
For example, simply reducing property taxes
may relieve some serious inequities
but in and of itself,
it will not accomplish
what really needs to be accomplished.
Indeed, simply cutting taxes
could well destroy the ability

to make strategic investments in areas
critical to Michigan's future
such as education and infrastructure.

Rather our goal should be
to restructure Michigan's tax system
-- streamlining and simplifying it--to make it
...less burdensome to small business,
...more fair to taxpayers,
...and capable of supporting key investments in our future. ▣

State Expenditures and Investments

We need to take a harder look
at state spending policy generally,
to really ask the question:
what is the role of state government,
and how should resources be allocated.

For decades Michigan was fabulously wealthy.

We developed a culture of expensive practices and
expectations

--employee benefits, health care, social services, litigation.

Yet today, as Michigan's economy attempts to adjust
to a brave, new world, it still attempts to support
a Cadillac appetite with a Ford income. ▣

We are not investing our resources strategically.

We are tending to deploy them to pay for past sins
(corrections, social services, entitlements)

or sustain and perpetuate the past (tax abatements)
rather than than investing in the future

by creating new knowledge, new skills, and new jobs. ▣

The Key: Education AND Knowledge Creation

We urgently need a unified, strategic approach
to restructuring our state's tax and expenditure policies
in a way that looks to needs of future generations
rather than simply our own present desires.

One of the strongest beliefs I hold

is that the key to economic growth is education,
not economic development programs.

Education is the only enterprise that will save us
from becoming a backwater economy.

It is a point of "lift off," from which we can create
new markets, processes, and skills. ▣

Over the next five years, we must make some hard choices
and reform our K-12 system.

We are closer to designing a system
that lets students, teachers and parents
know what is expected of them,
that uses international benchmarks
to compare our schools.

But we are still far away from getting parents
to understand that there indeed IS a problem
and we are still focused on school finance vs.
a clear vision of what will make better schools.

Michigan children may be able
to compete with children from Ohio,
but they are far behind children in Beijing.

K-12 reform is imperative
and that message must be delivered
more forcefully not just in Lansing, but around the state.▣

But there is something else...

Even if we are successful in our reform of K-12 education,
it is clear that we must make additional investments
to create the new jobs that can employ these graduates.

This jobs presently do not exist in our state.▣

And that leads me to a second critical area
for strategic investment: R&D

Job Creation in An Age of Knowledge

It is important to realize that increasing
the competitiveness of existing industry,

while perhaps retaining market share and sustaining profits, will NOT retain jobs (since doing things with less people is a frequently a key to increased productivity).

Efforts such as total quality management, shorter cycle times, just-in-time inventory, will not create new jobs but, at best, will only preserve existing jobs.

Rather, in an Age of Knowledge, new knowledge itself is necessary to create new jobs.

From this perspective it seems increasingly clear that new jobs in Michigan are not going to be spawned by existing industry but instead will be created by entirely new activities, e.g.,
...genetic medicine,
...biotechnology,
...information technology and computer networking
...optic, lasers, ultra high speed technology
...automated manufacturing

From this perspective it is clear that the most powerful economic engines in Michigan may well turn out to be our two great research universities: the University of Michigan and Michigan State University.

Why?:

Key ingredients in technology-based economic development

Technological innovation

Technical manpower

Entrepreneurs

Through research produce creativity necessary for innovation

Attract "risk capital" through massive federal R&D support

Produce scientists, engineers, and entrepreneurs

to implement new technology

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.

UM and MSU are among the best in the world

-- and we can take advantage of the talent and resources

that reside in them right now -- today.

But to do so, we must think and act far more strategically

than we have done in the past.

The Strategy

Evidence:

Already more than 150 companies can trace their roots
to the University.

In Washtenaw County there are some 148 high tech firms
employing 13,500--6,000 jobs within the City of Ann Arbor
generated over \$11 million in property taxes.

An Example:

National Center for Ultrafast Optical Science (Gerard Mourou)

Already spawned 3 new spinoff companies

Developed research collaborations with 19 companies

Attracted 5 SBIR grants from NSF

Produced 6 optical products that are already out in the
marketplace

Note the dominant activity in the Center is the basic exploration

of the frontiers of optical science.

But this is just the type of new knowledge that generates spinoffs, new companies, and new jobs.

Key Commitment

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...

More of this kind of growth can occur if we can successfully transfer the technology at our research universities. Hundreds of UM faculty members are involved in technology transfer activities already through publication, conferences, and consulting arrangements.

We would like to take this one step further and develop a plan for creating real, economic growth, with hundreds of small, growing firms clustered around the University of Michigan as an R&D center. The goal we have in mind is nothing less than to make Ann Arbor an economic engine of the Midwest.

To accomplish this, we have already begun to lay the foundation at our own institution, now the nation's leading research university. We have developed a greater market orientation than ever before, and we are working to promote a more entrepreneurial environment.

Step 1: Attract the People

Educators, coaches, business people, and other people who want to create successful, winning teams know that recruitment is everything.

As a dean, I looked for raw talent, people who were early in their careers, who had the potential to do great things.

I sought people from around the country -- indeed the world -- who would allow me to build a critical mass in Engineering.

To keep them there and to make things exciting, I worked hard to build an environment where they could flourish,

making their great ideas become reality.
My predecessors laid a lot of groundwork;
my successor continues to find ways to make
the School the best anywhere.

"Crazy" people with crazy ideas are given
the freedom to create and innovate.■

Step 2: Create the Knowledge

Last month it was announced that UM has moved ahead
of MIT in the magnitude of our research activity...
to assume the ranking as America's leading
research university...and let me assure you,
this particular #1 ranking won't be lost next week...
...it will last at least a year!
...now at \$334 million per year

This past year our research expenditures amount to
\$334 million--almost all of which was attracted
from the federal government and private industry
through the competitive efforts of our faculty.

Our medical scientists continued their revolutionary work
in mapping and identifying genes
responsible for devastating diseases such as
cystic fibrosis, neurofibromatosis, and breast cancer.
(You've probably read about this work, which frequently
makes the front pages of the New York Times and
Wall Street Journal.)

World's first clinical trials in using modified
human genetic material to treat human disease
(hypercholesterolemia and malignant melanoma)
...and the first clinical trials for treating cystic fibrosis
have been approved and will start at Michigan in
several months.

Michigan scientists and engineers managed to build
the world's most powerful laser...operating at 55 terawatts!

UM experiments were carried on five of NASA's space shuttle missions, including the HRDI satellite developed by the UM Space Physics Research Lab...and, unfortunately, the tethered satellite experiment that was "hung up" in early August.

Michigan, in partnership with IBM and MCI, continue to operate and expand the National Research and Education network, the computer network that now links together over 4 million users throughout the world!

UM as world leader...

Step 3: Create the Culture

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, entrepreneurial environment...a no-holds barred, go-for-it culture...in which individual initiative, achievement, and the quest for excellence are dominant elements

We are committed to educating the research community about the benefits of technology transfer, and by the way, we welcome the public to join in at our technology transfer seminar series. We're ready to advise you as we advise our faculty 'how to'-- everything from applying for a patent to determining upfront licensing fees. Just be aware that it doesn't all happen overnight.

Step 4: Facilitate the Transfer of Knowledge

2. Modifying ways we interact with outside world...

An important element in technology transfer is the need for *strategic alliances*, comprised of R&D centers such as the University of Michigan, industry and government. A good example of this, one that you've probably all heard of by now is Sematech, the group working on semiconductor research in Austin, Texas.

Increasingly, universities like Michigan will be joining with industry and government on applied research projects. We plan

to play a major role advising industry and government on new technologies such as genetic medicine, biotechnology, information technology, and optics technology.

Strengthened interactions with industry

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

Step 5. Form (or Attract) the New Companies

Step 6: Help Them To Grow and Flourish

University Enterprise Zones

An Idea: University Enterprise Zones

As I have noted earlier, the U of M is

now the #1 research university in the nation

...indeed, in the world...at least as measured

by R&D expenditures.

Hence we clearly have the source of fundamental knowledge

necessary to act as a powerful job creation engine.

Let me suggest a way that we might think about

developing a strategic approach to taking

advantage of this extraordinary resource.

Suppose we approach this challenge...

...at least in a conceptual way

by attempting to build about Ann Arbor

a "University Enterprise Zone"

where we would do everything possible

to stimulate knowledge transfer and

convert it into forms that benefit society

...new companies...new jobs...new prosperity

We would form a partnership involving

...the University

...local, state, and federal government

...business and industry
...our financial institutions
in which all would commit themselves to adopting
the best practices learned from other successful
areas across the nation or around the world
...from Portland to Austin to Route 128
...from Hong Kong to Cambridge to Stuttgart

We might think of the University Enterprise Zone
as a type of free trade zone,
free of excessive regulations
and the burden of an antiquated tax system

Where a number of strategic alliances are formed
through commitments from higher education,
state and local government,
organized labor,
the business community,
and the financial community.

For example, the University of Michigan would commit itself:

...to attracting key thought-leaders and entrepreneurs to Ann Arbor
...to making strategic investments in key intellectual areas
...to building knowledgeable advisory boards of experts
from around the world
...to expanding its already successful efforts to secure more
R&D funding from Washington and industry...
...the “venture capital” necessary for knowledge generation
...to overhauling its knowledge transfer activities
...from intellectual property policies
...to spinoff efforts
...to forming strategic alliances with other institutions
...and to creating more of a risk-taking, entrepreneurial
culture among its faculty, staff, and students.

State government would, in turn,

...make the strategic investments in both the operating budget

- and capital facilities necessary to sustain a world-class university
- ...assisting with key university-industry partnerships
- ...protecting companies within the enterprise zone from
 - ...excessive regulation
 - ...burdensome taxes (an antiquated tax system)

Local governments would

- ...take a far longer term, strategic issue toward planning and economic develop
- ...shift from an adversarial to a cooperative relationship with the private sector
- ...make the necessary commitments to build a world-class K-12 school system

Private companies would

- ...shift from a short-term, “what’s in it for me” to a long-term strategic growth strategy
- ...agree to participate with the University and government as partners, rather than use the public sector merely as a source of “deep pockets”

Organized labor would

- ...agree to back off a bit
- ...allow small companies to grow, unfettered from suffocating labor contracts

Financial institutions would

- ...adopt a higher-risk, entrepreneurial strategy
- ...giving higher priority to local economic development

In a sense the concept of a “University Enterprise Zone”

is really a challenge to both the public and private sectors,
to state and local government
to business and labor
and to the University itself
to think and act more strategically,

To position Ann Arbor as the economic engine

of the Midwestern United States.

Can we do it?

Certainly...

Will we do it?

That's the real question!

A Caveat: The Threat of Disinvestment

Despite the fact that Governor Engler has recognized the importance of education to Michigan's future, and has protected it from the deep budget cuts experienced by other sectors of state government, nevertheless we have seen hard times for the past two decades.

Despite this reality, the state has been systematically disinvesting in these research institutions

...state appropriations today--in real terms--are 20% below 1970s

...state appropriations have lagged behind inflation for each of the past 6 years...

...campuses are crumbling because of inability of state to fund critical infrastructure needs (almost unique among the states)

...state has been unable to invest in key R&D efforts for many years (e.g., ITIC, MSU Ag Sciences)

A data point: U of M

i) UM has become nation's leading research university

...attracts more R&D than any other university (\$340 M)

...clearly the nation's leader in key technologies

...genetic medicine

...computer networking

...optics, lasers, ultra high speed science

ii) Yet, UM's state support has deteriorated today to the point

where the state appropriation is less than 12% of UM's budget

iii) Further, in sharp contrast to essentially every other

public university in the nation,

UM has received only token state support for facilities...

...two academic facilities in 25 years

...averaging \$3 M/y...compared to \$30 to \$40 M/y year
for UC, OSU, UI, UW, UM...

iv) Indeed, key facilities that could have great impact on the
state's future have been deferred for years because
of state impasse in capital outlay

...use ITIC as example

...paralyzed...irrational...building indoor football stadiums
rather than key R&D facilities!

Ditto for MSU...

Once again the same dilemma is painfully apparent:

...the state simply has not demonstrated

...an understanding

...a capacity

...or a willingness

to invest in its future!

Most states would key their eye-teeth for UM and MSU.

Yet, our state, for almost two decades, has ignored
the needs of these marvelous institutions

Forcing them to evolve from

...state-supported

...to state-assisted

...to state-related

...and now just to "state-located" institutions...

A great tragedy--and shows the bankruptcy of public policy

...and the tyranny of porkbarrel politics...

But, clearly the Governor understands these challenges,

and now that the grid-lock in Lansing seems to have been broken,
we have hopes that this disinvestment

in Michigan's research universities will turn around.

The Future of Michigan

As we scramble to deal with

the daily reality of continuing fiscal crisis,
it is easy for all of us
to lose sight of the larger forces at work
here in Michigan and across America.

It is easy, too, to look for scapegoats
--to blame Democrats or Republicans,
the Japanese or the Germans,
for the problems of our economy and society.

But that would be wrong.

It also diverts us from reality. ▣

Michigan's problems are not partisan.

Michigan's problems are not political.

Our problems can't be laid at foreign doors.

Michigan's problems are structural.

Our political and economic system cannot produce
the revenues needed to meet the demands placed upon it. ▣

As a result of this fundamental structural inadequacy,
we are being forced to meet our urgent current needs,
to protect invaluable resources such as our schools,
to balance our current budget
--by shifting burdens to future budgets,
where they will become even more painful. ▣

We are held hostage by our outdated tax system,
a lack of understanding of what knowledge can do
in creating economic growth.

In this state, we simply are not increasing
our base of knowledge quickly enough,
nor are we investing adequately
in funding knowledge creation.

Like much of American industry,
state government has become too large and bureaucratic,
no longer responsible to its citizens.

In his first years as Governor,

John Engler took the very difficult and painful steps
to begin to turn that around.

Nobody likes to do it, but it had to be done
if we were to thrive again as a state.

In this effort, Governor Engler and his colleagues in Lansing
have cut away much of the undergrowth that was clogging
government and the economy.

While it has been painful,
over the last two years
Michigan has indeed been unique among the states
in its capacity to eliminate a massive funding deficit
while holding the line on taxes,
downsizing unnecessary government,
and protecting education as its highest priority.

But now it is time to build once again.

Instead, the state MUST invest if it wishes to create
...new knowledge
...new industry
...new jobs
...and make the transition to prosperity
in the next century

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

We are leaving behind our industrial economy,
once prosperous due to an abundance of natural resources,
unskilled labor, and--to some degree
--constrained, slowly moving domestic markets.

Our future will be quite different:

Michigan must compete in a knowledge-based economy,
characterized by intensely competitive world markets,
rapid technological change,
and--most important of all--
--its dependence upon educated people and their ideas. ▣

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

We face another five to ten years of low economic growth
as we make the transition to a knowledge economy.

Times are going to be much worse before they improve.

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

Will we 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 will we fail to heed the warnings,

fail to make the necessary investments and sacrifices today
necessary for strength and prosperity tomorrow,
and instead become an economic backwater in the century ahead. ▣

We have to roll up our sleeves right away and try new things,

open our minds to new possibilities,
to try to understand what businesses need to grow,
and to take advantage of some of our greatest assets,
such as the University of Michigan and Michigan State. ▣

We must work together on a radical plan for our future

-- let's try to do what hasn't been done before.

Now we must blaze new trails,

encourage new industry to replace the old,
encourage individual initiative in the best American tradition.

It is time to become a lean, mean, economic machine.

That is what needs to happen.

As long as we live by the old standards

of protectionism and special interest government,
we will merely shore up the past.

There is an old saying in politics...

"Democracies always do the right thing
. . . after they have tried everything else."

Well, I think that's where we find ourselves today.

We have tried everything else.

Now the time has come to do the right thing.

It's up to us.□

Appendix (if time permits...)

The Challenges of Our Times

Well, I promised to be upbeat...

...not to sermonize

But I can't let this opportunity go by

without making some more general observations

...painting on a broader canvas.

We can face up to the challenge of our times

and change our behavior, or we can continue

to deny reality and face certain ruin.

Let me suggest several of these challenges.

Challenge 1: Quality and Competence

You would think that the lesson

we should have learned during the 1980s

--in Michigan of all places--

is the importance of quality in everything we do,
in everything we buy, sell, and produce.

It is this culture of competence

--a set of attitudes, expectations, and demand
s--that is often missing in America today.

Ultimately, competence requires that people and institutions
be held accountable for their performance.

Competition helps improve performance.

But too often we spend our time trying
to protect ourselves from accountability and competition.

Further, we fall victim to those age-old forces of populism

--a distrust of expertise and excellence.

Dr. William Hubbard, former CEO of Upjohn, used to point
to one of the great character flaws of the Midwest as
"our extraordinary intolerance of extreme excellence."

We see these character flaws as well when it comes

to key investments in our people, such as education and
worker training.

We seem hell-bent on insisting on bargain-basement prices, even if it means bargain-basement quality.

A few years back I actually had a state official say to me that quality was a luxury that students had no right to expect from a public university.

If they wanted quality, they could pay the extra price and go to a private university.

The guy who said this had gone to Harvard.

I suppose this was his version of "Let them eat cake."

Challenge 2: Investment

The real issue is thinking long-term, providing for our future rather than spending every available dime or borrowing to take care of immediate needs and wants.

By almost any measure, our nation lags behind all other industrialized societies in our willingness to invest in the future, whether it is in new manufacturing capacity or in infrastructure, or in our people.

Throughout the past three decades, personal consumption as a share of GNP has risen steadily from 60 percent to now over 66 percent. In fact, for the last decade the federal government and the business community have combined in a gigantic spending and speculative binge.

As a nation we have been spending our children's future to pay for greedy consumption and quick fixes.

Instead of investing in our schools, we have squandered our money on junk bonds and leveraged buyouts, on payouts and write-offs to people who already have enough--or more than enough. ▣

Challenge 3: Education

In this Age of Knowledge the skills of our work force and the quality of our infrastructure will give us the capacity to compete in the new world economy.

The most ominous dark cloud on the horizon is
the increasing evidence that as a people
we have not yet recognized either the importance of
education
or the magnitude of the investments we must make
to achieve prosperity in the Age of Knowledge.

At the national level, per student public expenditures
have now dropped below those of eight other nations,
including Sweden, Norway, Japan, Denmark, Austria,
Germany, Canada, and Switzerland.

The same is true of colleges
--both federal and state governments have backed away
from higher education, which has seen the lowest increases
in thirty years.

At a time when other nations in Europe and Asia
are investing heavily in education,
we seem to be pulling back,
becoming consumers rather than investors in our future.

It is clear that major structural changes are needed
in K-12 public education, both in classroom quality
and in the adequacy and fairness with which the system is
financed.

Yet, we continue to be paralyzed in our efforts to come to grips
with either school finance reform or the major overhaul
of primary and secondary education necessary to improve
quality.

The situation is somewhat different,
if no less acute, for higher education,
particularly in the State of Michigan.

While the quality of our public universities is still high, we are at
risk.

Over the past twenty-five years, our state has dropped from
a position as a national leader to among
the lowest in public support for higher education.

Last year, despite an effort by the Governor and the Legislature to place a priority on the support of education, we were cut yet another 2.5 percent in our baseline budget. Recently, we have heard that education will be exempted from Executive Orders cut. We are grateful. But more is needed.

As a highly industrialized state, undergoing a dramatic change to a knowledge-intensive economy, Michigan is critically dependent upon quality education. We need well-educated citizens and creative ideas.

Challenge 4: Creativity and Productivity

During the past decades we have diverted too much of our resources to non-productive ancillary activities such as litigation and financial gymnastics.

In the United States we *want to make quick money*.

In Japan and Europe they want to *make products* of excellence because they know this pays a far greater long-term return.

The professions dominating the late 20th Century have been those

that rearrange wealth rather than create it: law, business, accounting, politics.

Higher education must shoulder some of the blame for this.

But the key to the future, to the twenty-first century, is creativity.

The driving forces of our society will be provided

by people who want to create, by inventors, builders, architects, engineers, artists --people who build and make things.

We must place a premium on these activities.

Challenge 5: Civic Virtue

Both the pace and the nature of the changes occurring in our world today

have become so rapid and profound
that our present social structures
--in government, education, the private sector
--are having increasing difficulty in even sensing the changes
(although they certainly feel the consequences),
much less understanding them sufficiently
to allow institutions to respond and adapt.

Perhaps nowhere is this more obvious, or more disturbing,
than in government itself.

For some time, the polls have been indicating that, as usual,
the American people are way ahead of most of their political
leaders,
both in understanding that we have fundamental problems
and in being willing to sacrifice to do something about them.

I think we saw clear evidence of this phenomenon in November,
although a clear pattern did not emerge--voters wanted term
limits,
yet most voted their incumbent representatives back in.

But the key point is that the turnout was high,
and the electorate seems to be more attentive.

(And, of course, Mr. Perot waits in the wings...)

Most fundamentally the American political process
at the highest national level has failed to identify
the critical nature of the transition through which
the nation and the world are passing.

Both political parties continue trapped in the past,
fighting old battles that simply miss the point.

The issue is not more or less taxes,
nor is it more or less government,
or more or less entitlement programs.

The issue is whether we have the capacity, the will,
the determination, and the vision to face the profound
changes

now characterizing our society and prepare for this future. ▣

What Can We Do?

The problems we face are complex,
and the important thing to accept is that working
toward a true and lasting recovery won't be easy.
There are no quick fixes, no effortless Hollywood endings.
In many respects the answer is the same
for government for communities and groups, as for individuals.
And you really don't need me or any experts to point the way.
Your grandmother probably would do just as well as a guide
--maybe better.

It is just as simple as it is hard.
We have to kick our bad habits and
get back to some basic principles and values. ▣

First, it is clear that we must all
--on a personal level, as institutions, and as a nation
--go through a period of sacrifice, of pulling back,
of generating savings and making wise investments.

We need to shift our focus from "I" to "we."

Believe me when I say that there is absolutely no way
that you or your profession or your class or your race
or your religion or your children or your town
or your business or your institution
are going to survive while fellow citizens and communities
keep falling further behind.

We are all in this together.

There is just one spaceship here for all of us,
and if it fails for any reason, we will all perish together.
There is no special rescue available for the privileged few.
We need only look at those other countries
where extremes of wealth and poverty exist.
They soon reach a point where money
can no longer buy enough security.
They become totalitarian and collapse

under the weight of their own injustice.

Our country was founded under more democratic principles,
and we need to get back to them in a hurry.

A decent society cares for its children, its sick and its elderly,
for the less fortunate.

We cannot continue to feed our own appetite off of our children's
future.

Change will not come easy.

We have a lot of excesses to pay for, a lot of lost time to make up.

We need to accept whatever we have to do to lower our
crippling debt

and increase our long-term investments.

And, let's face it, to improve our productivity

everyone will have to sacrifice--some more than others.

For example, if better performance means fewer bureaucrats,
then we must cut unnecessary administrative layers
while helping those workers find more productive and satisfying
employment.

We must set the highest standards of quality
in what we produce and the services performed.

We need to be competitive again--to do and to be the best

We also need to balance the long-term needs of our children with
short-term needs.

Every one of us must save and invest in solid, productive
enterprise.

We must accept stewardship

and conserve resources and the environment

--no more wasteful self-indulgence,

no more vulgar extravagance in our own lives,

in our communities, as a nation.

We need to build a culture that conserves resources and values its
people.

It is clear that our behavior must be governed

not by conservative values that preserve the past,

but by conserving values that preserve the future.
The failure of our generation to invest in the next
has broken a continuous chain of faith and investment
from one generation to the next
that has characterized American society for over two centuries.
Perhaps it is just the inevitable outcome of three generations of
affluence,

which in turn created a culture of high expectation,
and a politics premised on high assumptions and high
consumption,
in which expectations became entitlement. ▣

Or perhaps it is due to an aging America,
willing to place highest priorities on the needs of a retired
generation,
while leaving too little for the young.

Perhaps it is the "me generation" of the 1960s now grown up
into comfortable yuppiehood
--a generation that has vigorously defended its rights
but all too frequently failed to step up to its responsibilities. ▣

I don't know about you...

but I am not willing to sit back and be a part of
the first generation in the history of America
that is unable--or, more to the point, unwilling--
to provide for a better future for the next generation.
for our children and their descendents.

There is an old saying in politics...

"Democracies always do the right thing
. . . after they have tried everything else."

Well, I think that's where we find ourselves today.

We have tried everything else.

Now the time has come to do the right thing.

It's up to us. ▣