Financing the Future
Resources for the 1990's and Beyond
Executive Officer Responsibilities

- **Resource Acquisition** ("Revenues")
- **President**
- **Provost**
  - **Resource Deployment** ("Expenditures")
- **VPCFO**
  - **Asset Management** ("Net Worth")
UM Revenue Portfolio (FY90)

U OF M Academic Programs $892

- State Support $267M
  - Operating Approp
  - Capital Outlay

- Tuition & Fees $269M
  - Tuition Instate (33%)
  - Outstate (67%)

- Federal Support $256M
  - R&D
  - Student Aid

- Gifts & Endowment $100M
  - Gifts ($75M)
  - Endowment Income ($25M)

- Auxiliary Activities $728M
  - U Hospitals
  - Housing
  - Intercollegiate Athletics
UM Resource Portfolio
(Not including UM Hospitals)
UM Resource Portfolio
("Public" vs. "Private")

- Tuition
- Gifts
- Other
- State
- Federal

50% Private University
50% Public University
UM Resource Portfolio
("State" vs. "National")

- State University: 25%
- National University: 75%
Projecting Resource Needs

To do next year what we did last year, we must increase our resources by the Higher Education Price Index, e.g., by $80 million if the HEPI is 8%...
Resource Options

**Revenues:**

- State Support
- Federal Support
- Tuition and Fees
- Gifts and Endowment Income
- Auxiliary Activities

**Expenditures:**

- Enhanced Productivity and Efficiency
- Downsizing ("Smaller But Better") Strategies
- Growth Strategies (nontraditional education)

**Hybrid Strategies**

- Mixed Public/Private Strategies
- National University Strategies
- "Unbundling" Strategies
State Support
Storm Clouds on the Horizon

1. Over the past two decades, state support of higher education in Michigan has dropped from 6th in the nation to 37th in the nation. Over the past decade, Michigan ranks 45th nationally in the change in its support of higher education.

2. Over the past two decades, the University of Michigan (Ann Arbor) ranks last among public universities in the State both in change in annual appropriation and in State capital outlay funding for academic facilities. It has received an operating appropriation increase at the system average or above in only one of the last 10 years.

3. The past several years have seen increasing evidence of State government assaults on institutional autonomy (the Governor's efforts to control tuition levels, MET, legislative efforts to set instate/outstate enrollments, admission criteria, curricula, investment policies).
Storm Clouds on the Horizon (cont'd)

4. Similar intrusions by federal government (administration, Congress, the courts) across a broad range of issues.

5. The erosion in public confidence in higher education stimulated by issues such as the rising costs of tuition, scandals in intercollegiate athletics, perception of academic misconduct, a perceived imbalance between research and teaching (Profscam), and a string of "isms" including elitism, racism, sexism, radicalism, conservatism,...

6. The increasing "what have you done for me lately" attitude that characterizes many of higher education's diverse constituencies.

7. An apparent deterioration in the public will to invest in education at all levels.
## Michigan's Rankings Among the States on Various Measures of Funding of Higher Education

<table>
<thead>
<tr>
<th>Measure</th>
<th>National Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax Dollars Spent per FTE Student</td>
<td>33rd</td>
</tr>
<tr>
<td>Higher Ed Appropriations per Capita</td>
<td>24th</td>
</tr>
<tr>
<td>Appropriations as % of Tax Revenue</td>
<td>35th</td>
</tr>
<tr>
<td>Appropriations as % of Personal Income</td>
<td>37th</td>
</tr>
<tr>
<td>Annual Increase in State Appropriations</td>
<td>35th</td>
</tr>
<tr>
<td>Two-Year Increase in State Appropriations</td>
<td>42nd</td>
</tr>
<tr>
<td>Ten-Year Increase in State Appropriations</td>
<td>45th</td>
</tr>
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</table>
## Ranking of UMAA Annual % Increase in State Appropriation Relative to 15 Michigan Public Universities

<table>
<thead>
<tr>
<th>Year</th>
<th>Ranking</th>
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</thead>
<tbody>
<tr>
<td>FY81</td>
<td>10th</td>
</tr>
<tr>
<td>FY82</td>
<td>9th</td>
</tr>
<tr>
<td>FY83</td>
<td>14th</td>
</tr>
<tr>
<td>FY84</td>
<td>4th</td>
</tr>
<tr>
<td>FY85</td>
<td>14th</td>
</tr>
<tr>
<td>FY86</td>
<td>4th*</td>
</tr>
<tr>
<td>FY87</td>
<td>15th</td>
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<tr>
<td>FY88</td>
<td>15th</td>
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<td>FY89</td>
<td>15th</td>
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<td>FY90</td>
<td>15th</td>
</tr>
<tr>
<td>FY91</td>
<td>15th</td>
</tr>
</tbody>
</table>

* 15th w/o REF
Annual Percent Growth in State Appropriations
Michigan Public Universities: FY71 to FY89
What can we expect from the State during the 1990s?

**Operating Appropriations?**
- Education is a priority of new administration...BUT
- Commitment to 20% decrease in property tax
- Difficulty in reallocating within current resource
- Continuation of trend toward increasing support of private colleges

**Conclusion:** The best we can expect is for state appropriations to track the inflation rate (and even this may be too optimistic in the next 2-3 years).

**Capital outlay?**
- Not until budget deficit is brought under control
- Even then, UMAA is unlikely to get anywhere near what its public peers get ($25-$50 M / year)

**Attacks on Institutional Autonomy?**
- Not likely to continue with new administration
Federal Support
What can we expect from the Feds during the 1990s?

**Federal R&D Support**

- Deficit reduction measures will constrain resources
- UM will continue to hold its own -- as long as we have the capacity to attract outstanding faculty!
- Increasing pressure on indirect cost recovery rates

**Federal Financial Aid**

- Clearly not a priority (50% decline in 1980s)

**Other Federal Tendencies**

- Increasing regulation (health, safety, conflict of interest, academic integrity, foreign involvement)
- Weakening of Michigan (and Midwest) congressional base with reapportionment in 1992
A Shift in Public Policy

The evolution of our public institutions has been shaped by the public principle: the public university is established and supported through general taxation to benefit society. The basic premise is that support should be by society as a whole since society gains benefits from the institution, just as do those individuals participating in its particular educational programs.

Yet, in recent years, both state and federal government have taken actions which shift the costs of public higher education from general tax revenue to the students (and their parents) who benefit most directly from this education.
Tuition and Fees
Concerns about the Costs of Education

**Concerned Constituencies:**

- Frustrated parents, frightened that the promise of a college education is being priced beyond their reach
- A generation of students openly skeptical about whether the degrees they seek are worth the stated price
- Public officials who are learning that just saying no to tuition hikes makes for eminently good politics
- Frustrated and disappointed trustees...

**Reality:**

- The cost of a college education relative to personal income has not changed in the past couple of decades.
- Strong financial aid programs have protected access for the most disadvantaged of students
- However, it is clear that one can no longer simply "work one's way through college"...
Tuition vs. National Rankings

Tuition and Fees

$15,000

$10,000

$5,000

30 20 10 1

Michigan

Harvard

MIT

Princeton

Stanford

Yale

J Hopkins

Chicago

Columbia

Caltech

Brown

Penn

Northwestern

Cornell

Duke

Rice

Notre Dame

Washington U

Georgetown

Vanderbilt

Pennsylvania

Michigan

UCLA

Virginia

U North Carolina

X X X

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X X

X X

X X
Tuition "Prices" vs. "Costs"

- Private: $35,000 Tuition, $0 Subsidy, $35,000 Actual Cost
- UM Outstate: $20,000 Tuition, $15,000 Subsidy, $35,000 Actual Cost
- UM Instate: $15,000 Tuition, $10,000 Subsidy, $25,000 Actual Cost
## Tuition vs. Subsidy

<table>
<thead>
<tr>
<th>Institutional Type</th>
<th>Tuition</th>
<th>Subsidy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>40%</td>
<td>60%</td>
</tr>
<tr>
<td>UM Outstate</td>
<td>60%</td>
<td>40%</td>
</tr>
<tr>
<td>UM Instate</td>
<td>18%</td>
<td>82%</td>
</tr>
</tbody>
</table>
Potential of Additional Tuition Revenue

Current private tuition levels: $15,000
Current average UM tuition: $5,000
Difference $10,000

Maximum additional tuition capacity (gross):
35,000 students x $10,000 = $350 million

Discounting for financial aid (-33%):
(2/3) x $350 million = $230 million

Hence, net additional tuition capacity is roughly equal to present state appropriation:
Max Additional Tuition = $230 M = State Aid
Political Constraints

The MET Gorilla

Instate Tuition

$5,000

$3,200
Gifts and Endowment Income
The Importance of Private Support

Private Gifts

The Margin

The Foundation

Endowment Income

Excellence

Research

State Support

Tuition and Fees

Federal Support

Base Needs:
- Faculty
- Facilities
- Staff
- Research
- Financial Aid
Flexibility and Fungibility

- Faculty
- Facilities
- Staff
- Research
- Financial Aid

The Margin

- Excellence
- Endowment Income

Fungibility

- The Foundation
- Federal Support
- Tuition and Fees
- State Support
- Research Financial Aid
The Possibility of Strong Private Support

Present Situation:

Gifts: $83 M gifts + $28 M pledges

Shows good growth...but still far from where it should be

Endowment: $450 M

Very low for an institution of this size and quality. UM ranks 29th among all universities (and 5th among public universities).

Challenge:

It seems clear that the UM must use the 1990s to make a major effort to substantially increase both private giving and endowment.
A Fund-Raising Goal for the 21st Century

Increase Endowment to $2 Billion

Double Fund-Raising to $150 million/yr

1990

$90M/yr

Gifts

Endowment Income

2000

$250M/yr
Auxiliary Activities
Auxiliary Activities

*University Hospitals*

- Possibility of more resource flow from Hospitals to health profession academic programs (Medicine, Nursing, Pharmacy, Public Health, Dentistry)
- But long term prognosis for "profits" is guarded

*Intercollegiate Athletics*

- Without major expenditure reduction, revenues cannot cover even the present level of activities
- Introduction of Tier II sports may require student fees

*Housing*

- Some possibility of resource flow into academic programming in residence halls (through fees)

*Other Ideas: spinoffs, commercial ventures*
Enhanced Productivity and Efficiency
"Restructuring" Approaches

Private Gifts

Endowment Income

State Support

Federal Support

Tuition and Fees

Research Financial Aid

The Foundation

The Margin

Cost-containment, Down-sizing, Restructuring, Increasing productivity, Total quality management

Base Needs:
- Faculty
- Facilities
- Staff
- Research
- Financial Aid

The Foundation Capacity for Excellence
Opportunity for Impact

Private Gift

Endowment Income

"Restructuring" Approaches

Cost-containment, Down-sizing, Restructuring, Increasing productivity, Total quality management

Base Needs:
- Faculty
- Facilities
- Staff
- Research
- Financial Aid

The Foundation Capacity for Excellence
Opportunity for Impact
Possible Growth Strategies

• More creative integration of UMF and UMD into University-wide strategic activities

• Year-round operation (since we now have 70% of campus air-conditioned)

• Telecommunications
  • television (MITN, cable)
  • computer networks (MERIT, NREN)

• Continuing Education (Lifelong education)
  Professional education (Bus Ad, Eng, Med, ...)
  Personal enrichment (Alumni University, ...)

• Niche Markets
  Seminars for government leaders
  International education
  Summer language institutes
Mixed Public/Private Strategies

Models:

Cornell: Mixture of state-supported and endowed schools
Penn: Operates as private institutions with strong state support

Possible Approaches:

1. Allow selected schools to attempt to become "private" both in funding and operation (e.g., Law, Bus Ad, Medicine), while others (LS&A, Music, ...) receive state "subsidy".

2. Make the argument that Michigan's weakness as a state is that it has no great private universities to give its knowledge infrastructure more resilience to cyclical economic impact. U of M essentially plays this role and hence should be allowed more latitude in its operation.

3. Develop a strategy in which we determine the real costs of a Michigan education (at various levels), and then offer the State the opportunities to purchase as many positions for Michigan residents at whatever tuition level they choose -- provided they offset the real costs with adequate appropriation "subsidy".
National University Strategies

General Argument:

Great midwestern public research universities were built during a time of great prosperity when agriculture and manufacturing were the economic engines of America.

These universities have now developed into national resources, producing much of the leadership and research for the nation.

Yet, these institutions are at great risk as the economic strength of the country has shifted to the coasts (associated with international commerce), and the Midwest has been overwhelmed by other priorities (corrections, health care, social services).

Questions:

Is it in the national interest for these institutions to be pulled down by the relative prosperity of their regional economies?

Could we build a Midwest Congressional coalition to pass a new "land-grant act" to provide federal assistance?
The U of M, Inc.

*Product Lines:*

i) Degrees (BS/BA, MS, Ph.d, professional degrees)

ii) Research

iii) Public Service

iv) Economic Impact

v) Prestige (...pride...morale)

vi) Health Care

vii) Entertainment ( = intercollegiate athletics)
Inputs and Outputs

The U of M, Inc.

Inputs
- Tuition & Fees
- State Appropriation
- Federal R&D
- Federal Fin Aid
- Private Giving
- Auxiliary Activities

Outputs
- Degree Output
- Research
- Public Service
- Prestige
- Health Care
- Entertainment

Inputs

Outputs
"Unbundling" Strategies

"Unbundle" Products:
Mid-career training, nontraditional education, niche markets

"Unbundle" Pricing:
Differential tuitions and fees

"Unbundle" Costs:
Link specific revenues to specific outputs
Restructure labor deployment (teaching, research, service)

"Unbundle" Distribution:
Telecommunications, networks,...
Some Final Observations
Some Facts of Life

1. The University is presently underfunded -- with respect to our present size, breadth, and quality -- by $200 M to $300 M/y (as determined by peer comparisons).

2. Further, the University is entering one of the most intensely competitive periods in its history (for faculty, students, funds).

3. It is unlikely that the State of Michigan will have the capacity-- or the will -- in the near term to increase our state appropriations beyond their present levels (in real terms).

4. Federal support will become more constrained and competitive.

5. Resident tuition levels are seriously underpriced -- with respect to actual costs, state "subsidy", and the availability of financial aid -- yet they are also constrained by political factors. Nonresident tuition levels are constrained by the private marketplace.

6. The present "corporate culture" of the University will make significant cost reductions, productivity increases, and even control of growth difficult. Some degree of "restructuring" will be necessary.
Caveat # 1: A Lesson Learned

The "smaller but better" strategy of the early 1980s was a disappointment...

i) We didn't get any smaller. (Indeed, we continued to grow!!!)

ii) We didn't save much money.

iii) Rather than creating a psychology of prioritization and cost-effectiveness, the strategy clobbered the morale of the University community and created a spirit of distrust and cynicism that we are only now beginning to emerge from.

Moral of story: We have to be VERY careful in using "doom and gloom" strategies. Instead we must base our efforts on building a sense of pride and leadership so that we can "restructure" our activities to enhance productivity, quality, and innovation.

Put another way, we should take the more positive approach represented by the "total quality management" efforts developed in the private sector.
Leading Undergraduate Programs †

1. Stanford
2. Harvard
3. Yale
4. Princeton
5. UC-Berkeley
6. Dartmouth
7. Duke
8. Michigan
9. Chicago
10. Brown

†US News & World Report
## Leading Professional Schools

### Law
1. Harvard
2. Yale
3. **Michigan**
4. Stanford
5. Columbia
6. Chicago
7. UC-Berk
8. Virginia
9. NYU
10. Penn

### Engineering
1. MIT
2. Illinois
3. Stanford
4. UC-Berk
5. Cal Tech
6. **Michigan**
7. Purdue
8. Cornell
9. CMU
10. Texas

### Business
1. Stanford
2. Harvard
3. U of Penn
4. MIT
5. Chicago
6. N'western
7. **Michigan**
8. CMU
9. Columbia
10. UC-Berk

### Medicine
1. Harvard
2. Johns Hopkins
3. Penn
4. UC-San Fran.
5. Yale
6. Washington U.
7. Stanford
8. Duke
9. Columbia
10. Cornell

† US News & World Report
Financial Resources per Student †

1. Princeton
2. Harvard
3. Cal Tech

10. UCLA
11. UC Berkeley

14. U North Carolina

20. Duke

30. Michigan

†US News & World Report
How do we compare in resources?

A crude measure: Total "academic" expenditures per FYES student

\[
\text{Total academic expenditures} = \text{General Fund} + \text{Designated Fund} + \text{Expendable Restricted Fund}
\]

For example, for UMAA in FY89-90, this amounts to

\[
533 \text{ M} + 54 \text{ M} + 302 \text{ M} = 889 \text{ M} / 36,000
\]

\[
24,000 \text{ per student}
\]
FY 1990 Expenditures per Student

<table>
<thead>
<tr>
<th>University</th>
<th>Expenditures per Student</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harvard</td>
<td>$40,000</td>
</tr>
<tr>
<td>Stanford</td>
<td>$40,000</td>
</tr>
<tr>
<td>Cornell</td>
<td>$40,000</td>
</tr>
<tr>
<td>U Cal</td>
<td>$30,000</td>
</tr>
<tr>
<td>UNC</td>
<td>$20,000</td>
</tr>
<tr>
<td>U of Mich</td>
<td>$10,000</td>
</tr>
<tr>
<td>Illinois</td>
<td>$10,000</td>
</tr>
<tr>
<td>OSU</td>
<td>$10,000</td>
</tr>
<tr>
<td>MSU</td>
<td>$10,000</td>
</tr>
</tbody>
</table>
An Interesting Comparison

<table>
<thead>
<tr>
<th>Source</th>
<th>Harvard</th>
<th>Michigan</th>
</tr>
</thead>
<tbody>
<tr>
<td>State Appropriation</td>
<td>$0</td>
<td>$250</td>
</tr>
<tr>
<td>Income on Endowment</td>
<td>250</td>
<td>25</td>
</tr>
<tr>
<td>Tuition</td>
<td>250</td>
<td>250</td>
</tr>
<tr>
<td>Gifts</td>
<td>200</td>
<td>125</td>
</tr>
<tr>
<td>Federal Support</td>
<td>200</td>
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<td>Other</td>
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<tr>
<td>Enrollment</td>
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<td>36,000</td>
</tr>
<tr>
<td>Revenue/Student</td>
<td>$60,000</td>
<td>$27,000</td>
</tr>
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</table>
Another way to look at the challenge of cost containment and restructuring...

Stanford, Harvard: Cadillac → Buick

Cornell, Penn: Buick → Oldsmobile

Michigan: Chevrolet → Saturn
Caveat # 2: The importance of a balanced strategy

Three objectives:

- Increasing resources available to University
- Constraining costs and enhancing quality of University
- Protecting assets (financial, physical, human) of University

We must achieve a balance among the attention, energy, and effort directed at each objective.

Example:

i) It is clear that the University of Michigan presently achieves a quality (and capacity) comparable to peer institutions at only a fraction of the cost. Indeed, one could make the case that we are probably the lowest-cost, world-class university in the nation.

ii) Hence, while our cost containment efforts will be very important, they will not solve the problem of our serious underfunding relative to peer institutions. Revenue enhancement must receive equal emphasis.
Some Theorems Concerning
the Costs of Higher Education

HTS Theorem #1: There has never been enough money to satisfy the legitimate aspirations of a truly enterprising faculty or administration.

HTS Theorem #2: The cost of quality in teaching and excellence will rise faster than the total resource base of most institutions.

DEVH Theorem: Over a sufficiently long time, no resource constraints are rigid. All can be managed or changed.
Principal force driving up costs in higher education:

**Competition**

...for the best faculty
...for the best students
...for the best programs
...for private resources
...for public resources

*To be #1...*
Observation

Since the top institutions will compete in the same marketplace—for the best students, for the best faculty, for R&D funding from Washington, from grants from industry and foundations—they will, of necessity, become increasingly similar. That is, the differences between the best public and private research universities will tend to vanish over the next two decades.