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

- President
  - Provost
    - Resource Deployment ("Expenditures")
  - VPCFO
    - Asset Management ("Net Worth")

- Resource Acquisition ("Revenues")
UM Revenue Portfolio (FY95)

U of M Academic Programs
$1.3 B

State Support
$290M

Tuition & Fees
$419M

Federal Support
$326M

Gifts & Endowment
$225M

Auxiliary Activities
$1.2 B

$14M

Operating Approp
Capital Outlay
Tuition
Instate (33%)
Outstate (67%)
R&D
Student Aid
Gifts ($160M)
Endowment Income ($65M)
U Hospitals
Housing
Intercollegiate Athletics
UM Resource Portfolio
(Not including UM Hospitals)

- Gifts
- Tuition
- State
- Federal
- Other

(Not including UM Hospitals)
UM Resource Portfolio
(“public” vs. “private”)

- 60% Private University
- 40% Public University

- Gifts
- Tuition
- Other
- Federal
- State
UM Resource Portfolio
(“state” vs. “national”)

- Federal
- Tuition
- Gifts
- Other
- 80% National University
- 20% State University
To do next year what we did last year, we must increase our resources by the Higher Education Price Index, e.g., by $61 million if the HEPI is 4%...

increased by HEPI x 1.04
Resource Options

Revenues:

- State Support
- Federal Support
- Tuition and Fees
- Private support, Endowment and other 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 29th in the nation. Over the past decade, Michigan ranks 31st 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 (efforts to control tuition levels, MET, legislative efforts to set instate/outstate enrollments, admission criteria, curricula, investment policies).
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>37th</td>
</tr>
<tr>
<td>Higher Ed Appropriations per Capita</td>
<td>23rd</td>
</tr>
<tr>
<td>Appropriations as % of Tax Revenue</td>
<td>21st</td>
</tr>
<tr>
<td>Appropriations per $1000 of Personal Income</td>
<td>29th</td>
</tr>
<tr>
<td>Annual Increase in State Appropriations</td>
<td>28th</td>
</tr>
<tr>
<td>Two-Year Increase in State Appropriations</td>
<td>33rd</td>
</tr>
<tr>
<td>Ten-Year Increase in State Appropriations</td>
<td>31st</td>
</tr>
</tbody>
</table>
### Ranking of UMAA Annual % Increase in Enacted State Appropriation Relative to 15 Michigan Public Universities

<table>
<thead>
<tr>
<th>Year</th>
<th>Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY81</td>
<td>10th</td>
</tr>
<tr>
<td>FY82</td>
<td>9th</td>
</tr>
<tr>
<td>FY83</td>
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<td>FY84</td>
<td>4th</td>
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<tr>
<td>FY85</td>
<td>13th</td>
</tr>
<tr>
<td>FY86</td>
<td>4th*</td>
</tr>
<tr>
<td>FY87</td>
<td>2nd*</td>
</tr>
<tr>
<td>FY88</td>
<td>15th</td>
</tr>
<tr>
<td>FY89</td>
<td>11th</td>
</tr>
<tr>
<td>FY90</td>
<td>15th</td>
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<td>FY93</td>
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</tr>
<tr>
<td>FY94</td>
<td>15th</td>
</tr>
<tr>
<td>FY95</td>
<td>14th</td>
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</table>

* 15th w/o REF
### Compound Growth in State Appropriations

#### Michigan Public Universities FY71 to FY95

<table>
<thead>
<tr>
<th>Institution</th>
<th>Growth Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>GVSU</td>
<td>0%</td>
</tr>
<tr>
<td>SVSU</td>
<td>1%</td>
</tr>
<tr>
<td>UM-F</td>
<td>2%</td>
</tr>
<tr>
<td>UM-D</td>
<td>3%</td>
</tr>
<tr>
<td>LSSU</td>
<td>4%</td>
</tr>
<tr>
<td>NMU</td>
<td>5%</td>
</tr>
<tr>
<td>MTU</td>
<td>6%</td>
</tr>
<tr>
<td>MSU</td>
<td>7%</td>
</tr>
<tr>
<td>CMU</td>
<td>8%</td>
</tr>
<tr>
<td>FSU</td>
<td>9%</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
</tr>
<tr>
<td>OU</td>
<td></td>
</tr>
<tr>
<td>WSU</td>
<td></td>
</tr>
<tr>
<td>WMU</td>
<td></td>
</tr>
<tr>
<td>UM-AA</td>
<td></td>
</tr>
<tr>
<td>EMU</td>
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</tbody>
</table>
What can we expect from the State during the remainder of the 1990s?

Operating Appropriations?
• Education has been a priority of Engler administration...BUT
• Proposal A...corrections and K-12...
• Difficulty in reallocating within shrinking resource base...
• Continuation of trend toward increasing support of private colleges...
• Political favoritism in appropriations priority (...MSU-WMU-GVSU surprise!!!...)

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 5 years).

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

Attacks on institutional autonomy?
• Likely to continue with current legislature
Federal Support
What can we expect from the Feds during the remainder of the 1990s?

**Federal R&D Support**

- Deficit reduction measures will reduce resources (25% - 30% decline in federal R&D)
- 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 (capping of rate?)

**Federal Financial Aid**

- Clearly not a national 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 and new Republican Congress
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"...
Trends in Annual Cost to Michigan Undergraduates vs Trends in Michigan Per Capita Income

Income

Costs
Tuition & Fees

$25,000

$20,000

$15,000

$10,000

$5,000

$0

Tuition vs. National Rankings

Tuition & Fees

National Rankings

Michigan

MIT

Harvard

Stanford

Notre Dame

Emory

Vanderbilt

Washington U

Georgetown

Dartmouth

Cornell

Columbia

Duke

Northwestern

Caltech

Penn

Virginia

Rice

UC-Berkeley

Princeton

Yale

Chicago

J Hopkins
Tuition "Prices" vs. "Costs"

- **Private UM**
  - Actual Cost: $60,000
  - Tuition: $40,000
  - Subsidy: $20,000

- **UM Outstate**
  - Actual Cost: $30,000
  - Tuition: $20,000
  - Subsidy: $10,000

- **UM Instate**
  - Actual Cost: $30,000
  - Tuition: $20,000
  - Subsidy: $10,000
## Tuition vs. Subsidy

<table>
<thead>
<tr>
<th>Institutional Type</th>
<th>Tuition</th>
<th>Subsidy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>34%</td>
<td>66%</td>
</tr>
<tr>
<td>UM Outstate</td>
<td>49%</td>
<td>51%</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: $20,000
Current UM resident tuition: $6,000
Difference $14,000

Maximum additional tuition capacity (gross):
22,000 students x $14,000 = $308 million
15,000 students x $ 5,000 = $ 75 million

Discounting for financial aid (- 25%):
(75%) x $383 million = $290 million

Hence, net additional tuition capacity is roughly equal to present state appropriation:
Max Additional Tuition = $290 M = State Aid
Political Constraints

The MET Gorilla

- Instate Tuition
  - $10,000
  - $5,000
Gifts and Endowment Income
The Importance of Private Support

Capacity for Excellence

Opportunity for Impact

Base Needs:
- Faculty
- Facilities
- Staff

Research
- Financial Aid

The Margin

The Foundation

Private Gifts

Endowment Income

State Support

Tuition and Fees

Federal Support

The Margin
Flexibility and Fungibility

Capacity for Excellence

Opportunity for Impact

Base Needs:
- Faculty
- Facilities
- Staff

Research

Federal Support

Tuition and Fees

State Support

The Foundation

The Margin

Fungibility

Private Gifts

Endowment Income

The Margin

Financial Aid

Tuition and Fees

State Support
The Possibility of Strong Private Support

Present Situation:

**Gifts:**
$160 million
Shows good growth...but still far from where it should be

**Endowment:**
$1.3 billion ➔ $65 million/yr
Very low for an institution of this size and quality. UM ranks 22th among all universities (and 3rd 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

- **1990**: Endowment Income $90 M/yr, Gifts
- **1995**: Endowment Income $225 M/yr, Fundraising $200 M/yr
- **2000**: Endowment Income $3 Billion, Fundraising $350 M/yr

Increase Endowment to $3 Billion
Increase Fundraising to $200 M/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

Capacity for Excellence

Opportunity for Impact

The Margin

The Foundation

Private Gifts

Endowment Income

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

Base Needs: Faculty, Facilities, Staff

State Support

Tuition and Fees

Research, Financial Aid

Federal Support
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)
  broadcasting

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

Alliances
  Community colleges
  Private colleges
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 "privately supported" (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".
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)
"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
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.
Academic Reputation of Leading Undergraduate Programs †

1. Harvard
1. MIT
1. Stanford
4. Princeton
4. Yale
4. Johns Hopkins
4. UC-Berkeley
9. Michigan
9. Cal Tech
9. Columbia
9. Cornell
9. Duke

† US News & World Report
September 26, 1994
<table>
<thead>
<tr>
<th>Law</th>
<th>Business</th>
<th>Medicine</th>
<th>Engineering</th>
</tr>
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<tbody>
<tr>
<td>10. N’western</td>
<td></td>
<td></td>
<td>10. Wisconsin</td>
</tr>
<tr>
<td>10. Penn</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>10. Cornell</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>10. Texas</td>
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</tr>
</tbody>
</table>

†US News & World Report
March 20, 1995
Financial Resources per Student†

1. Cal Tech
2. Johns Hopkins
3. Harvard

10. Columbia
11. Princeton

14. Duke

20. Carnegie Mellon

29. Michigan

† US News & World Report
September 26, 1994
How do we compare in resources?

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

Total academic expenditures = General Fund
+ Designated Fund
+ Expendable Restricted Fund

For example, for UMAA in FY94, this amounts to

$709 M + $71 M + $417 M = $1.2 B / 36,500

$32,800 per student
FY 1994 Expenditures per Student

Stanford  Harvard  Cornell  UM-AA  Berkeley  UNC  Illinois  MSU  OSU
## An Interesting Comparison

<table>
<thead>
<tr>
<th></th>
<th>Harvard</th>
<th>Michigan</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>State Appropriation</strong></td>
<td>$0\text{M}$</td>
<td>$261\text{M}$</td>
</tr>
<tr>
<td><strong>Income on Endowment</strong></td>
<td>283</td>
<td>16</td>
</tr>
<tr>
<td><strong>Tuition</strong></td>
<td>368</td>
<td>351</td>
</tr>
<tr>
<td><strong>Gifts</strong></td>
<td>176</td>
<td>9</td>
</tr>
<tr>
<td><strong>Federal Support</strong></td>
<td>234</td>
<td>311</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td>139</td>
<td>104</td>
</tr>
<tr>
<td><strong>Total (less Aux. &amp; Hospitals)</strong></td>
<td><strong>$1,238</strong></td>
<td><strong>$1,134</strong></td>
</tr>
<tr>
<td><strong>Enrollment</strong></td>
<td>26,000</td>
<td>36,500</td>
</tr>
<tr>
<td><strong>Revenue/Student</strong></td>
<td>$47,615</td>
<td>$31,068</td>
</tr>
</tbody>
</table>
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.
Another way to look at the challenge of cost containment and restructuring...

Stanford, Harvard: Cadillac → Buick

Cornell, Penn: Buick → Oldsmobile

Michigan: Chevrolet → Saturn
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.