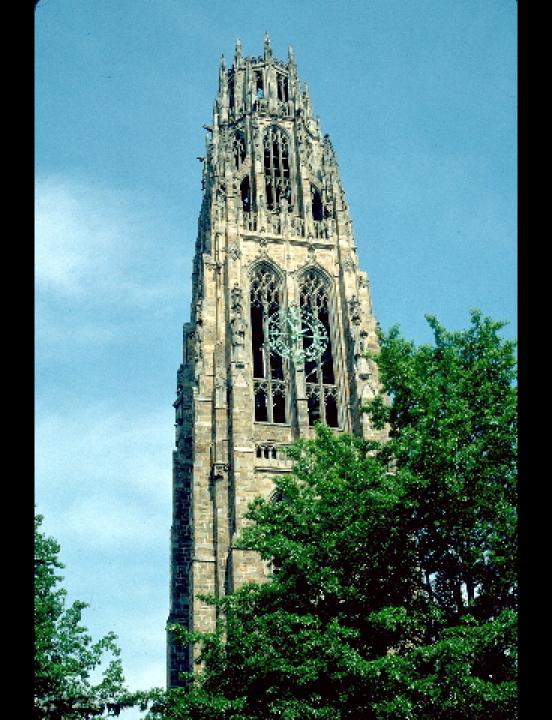
### **The Present**

#### And a bit of "personal" history

### From Yale...







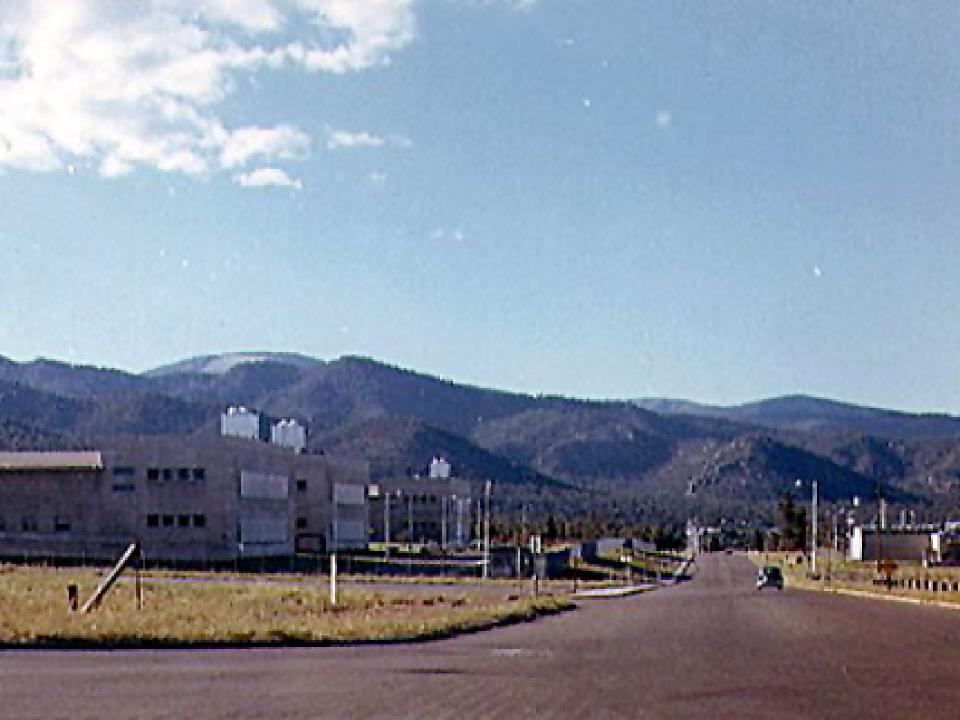


#### To Los Alamos ...

















#### To Caltech ....









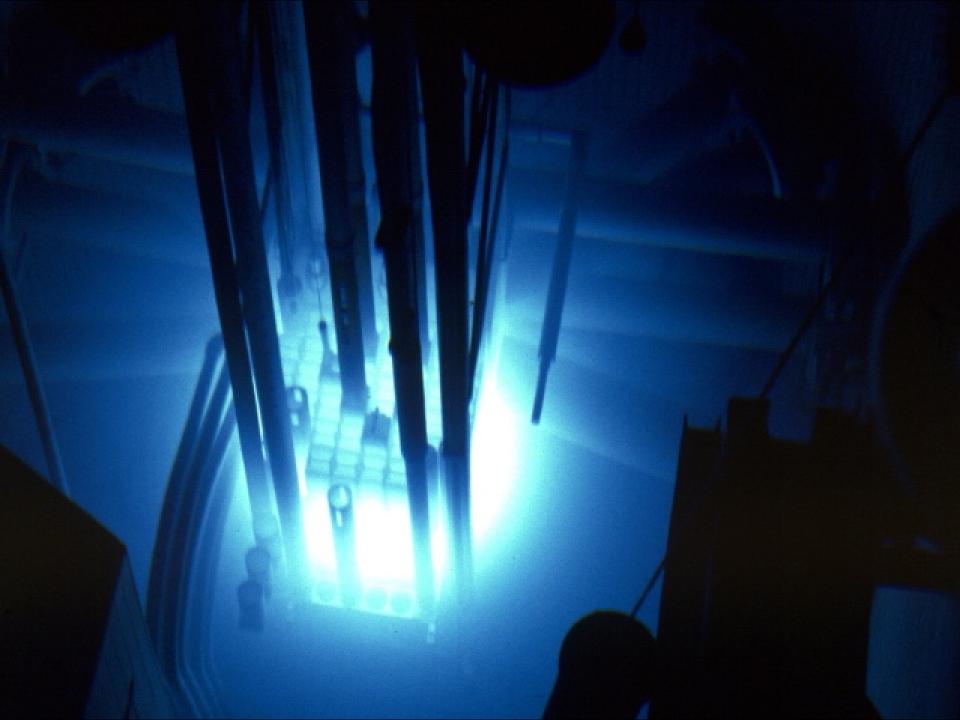




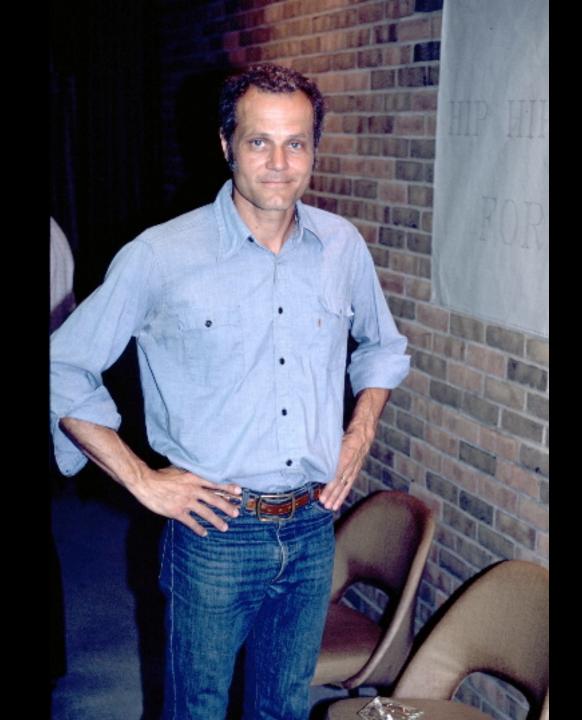
# To Michigan ...

















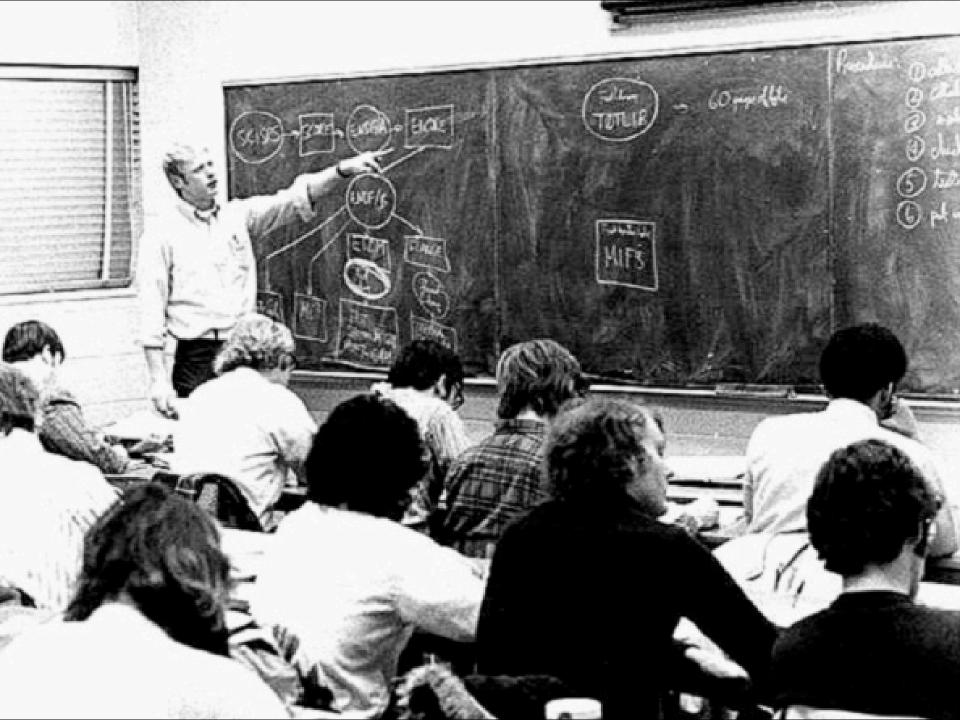




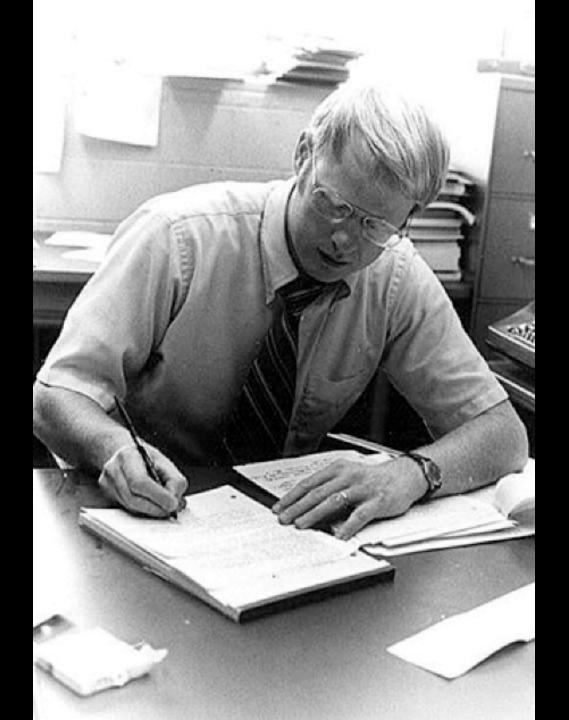


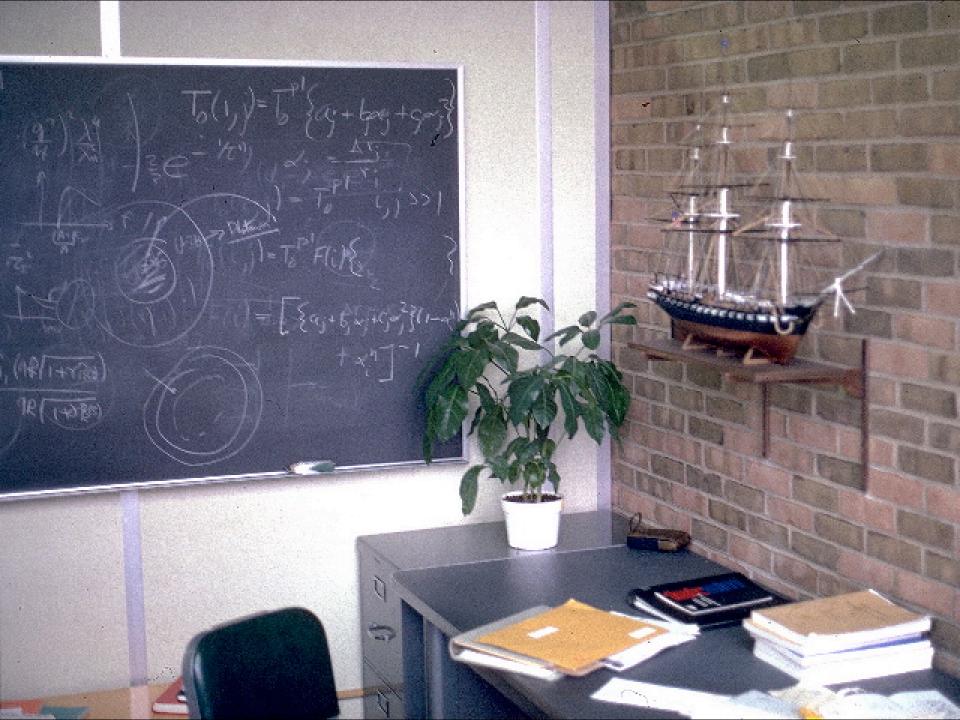
## From Teaching ...

D. Montgomery, Phys Fl. 18. 203 (1975); Progras 821, (111)(1976) Highedgeorie Turbulance T.H. Duples, Plays F. II, 100 (1974) J. Mc Sauglins & P. (. Martin, Phys Res A 12, 186 (1975) ('Int Contrado bien flied & planted Vit I - Feynan Situr of Plagoo (i) byfordysaic is find theory Hundare is laved on: (2+4.8) u= - Vp + ~ Vu + F which a fleat D.U=O (i) hopes - tubber to the 50 all velythe

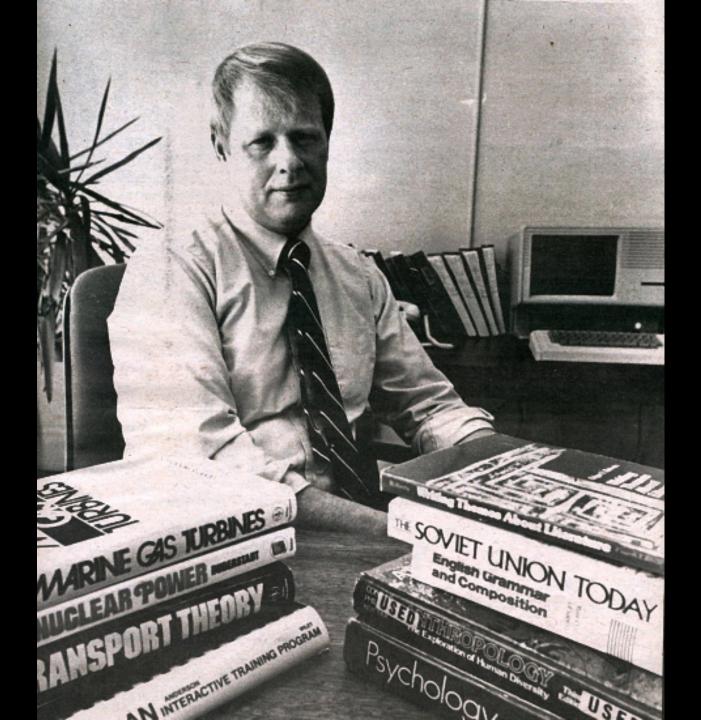


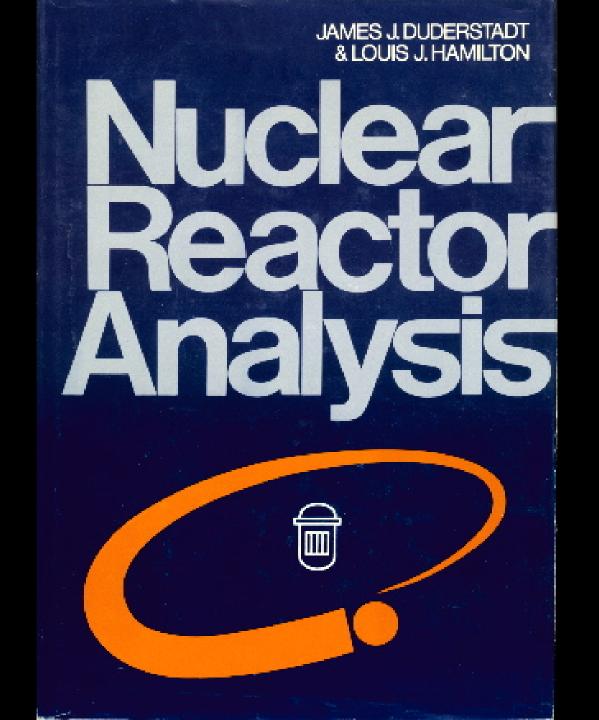
## To research ...

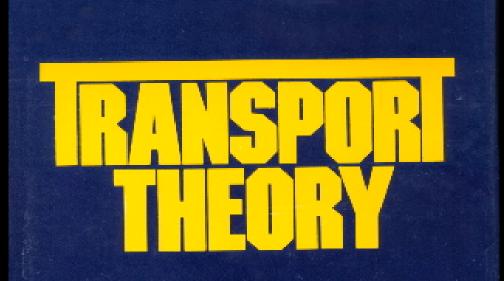




## To writing ....







## James J. Duderstadt William R. Martin

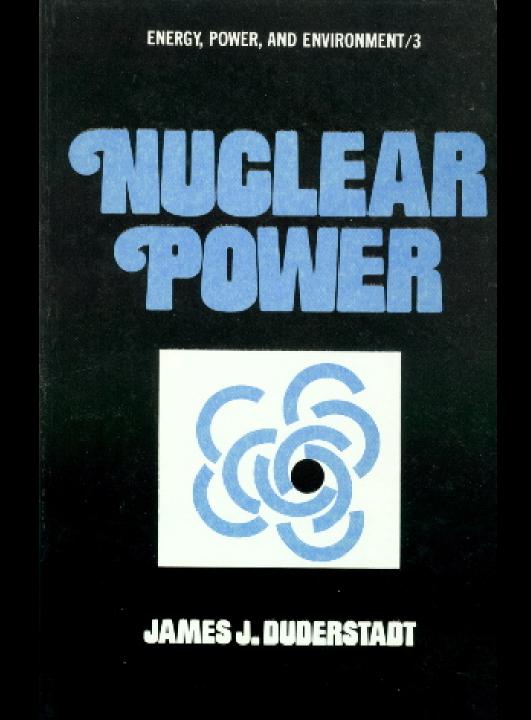
# **POWER**

Technology on Trial

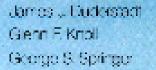
James J. Duderstadt Chihiro Kikuchi

# INERTAL CONFINEMENT FUSION

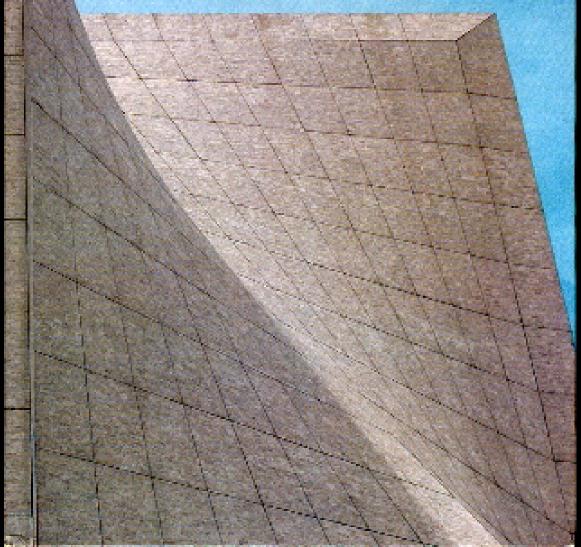
James J. Duderstadt and Gregory A. Moses

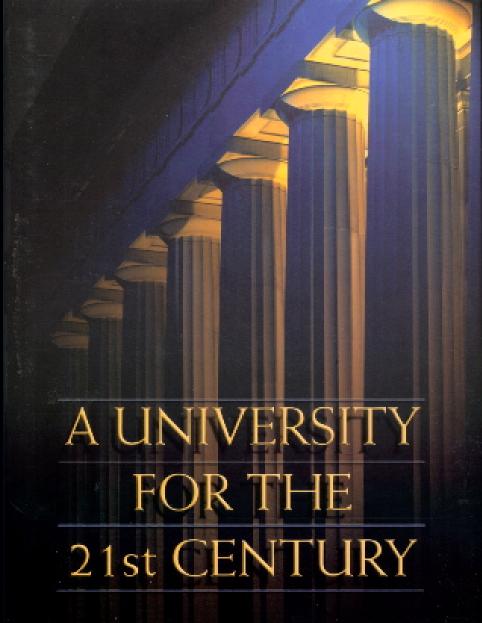






### PRINCIPLES OF ENGINEERING





JAMES J. DUIDERSTADT

## Intercollegiate Athletics and the American University

A UNIVERSITY PRESIDENT'S PERSPECTIVE

### JAMES J. DUDERSTADT



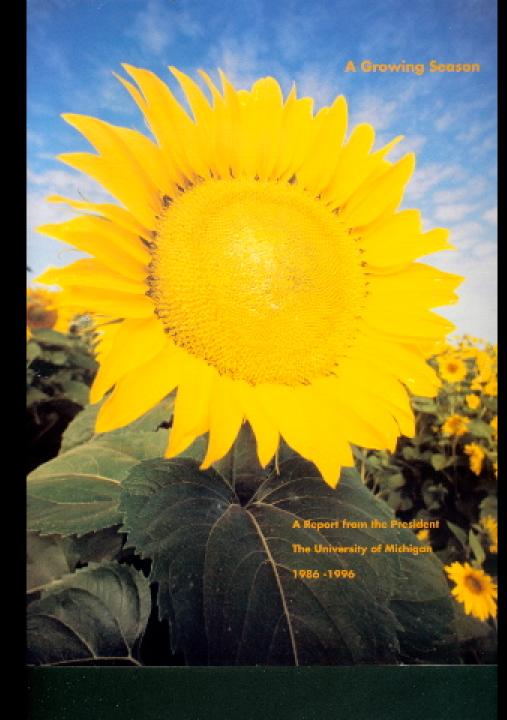
AMERICAN COUNCIL ON EDUCATION

## HIGHER EDUCATION IN THE DIGITAL AGE

TECHNOLOGY ISSUES AND STRATEGIES FOR AMERICAN COLLEGES AND UNIVERSITIES

JAMES J. DUDERSTADT DANIEL E. ATKINS • DOUGLAS VAN HOUWELING

ACE/PRAEGER SERIES ON HIGHER EDUCATION



THE FUTURE OF THE PUBLIC UNIVERSITY IN AMERICA

## BEVOND THE CROSSROADS

JAMES J. DUDERSTADT FARRIS W. WOMACK

..................

10

# PREPARING FOR THE

Information Technology and the Future of the Research University

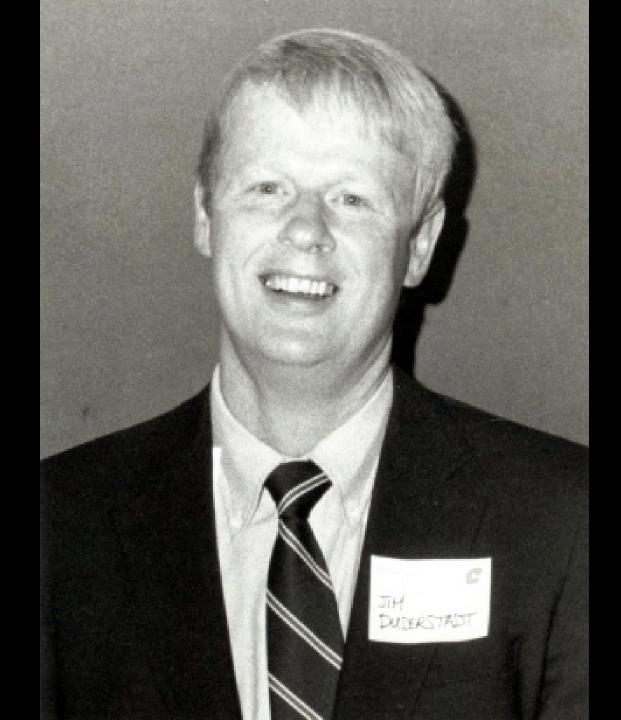
> ATIONAL RESEARCH COUNCIL OF THE NATIONAL ACADEMIES

### OBSERVATIONS ON THE PRESIDENT'S FISCAL YEAR 2003 FEDERAL SCIENCE AND TECHNOLOG BUDGET

NATIONAL ACADEMY OF SCIENCES NATIONAL ACADEMY OF ENGINEERING INSTITUTE OF MEDICINE OF THE NATIONAL ACADEMIES



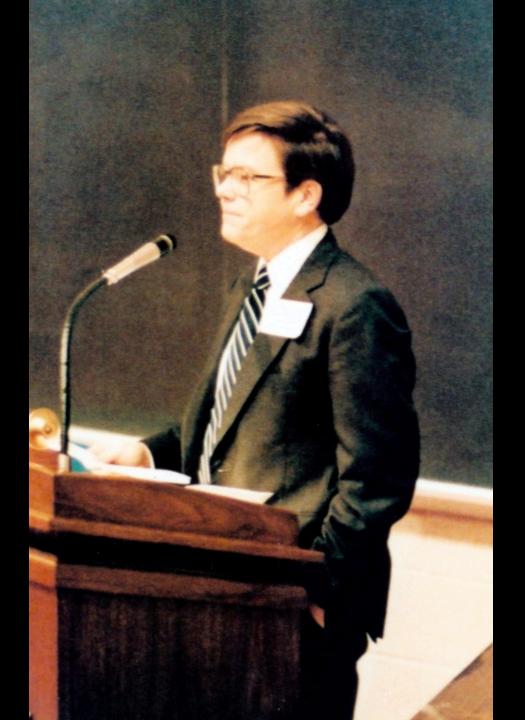
## To deaning ...

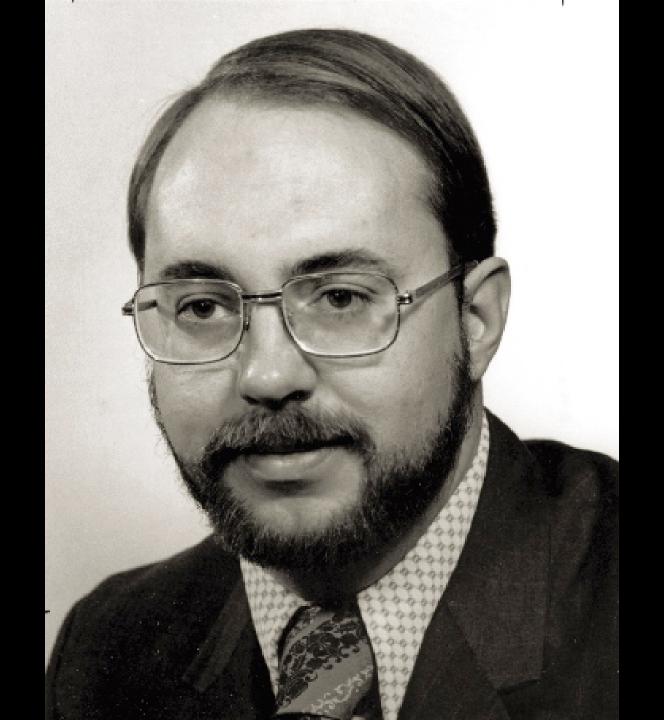




## **The Team**

















## The Challenge

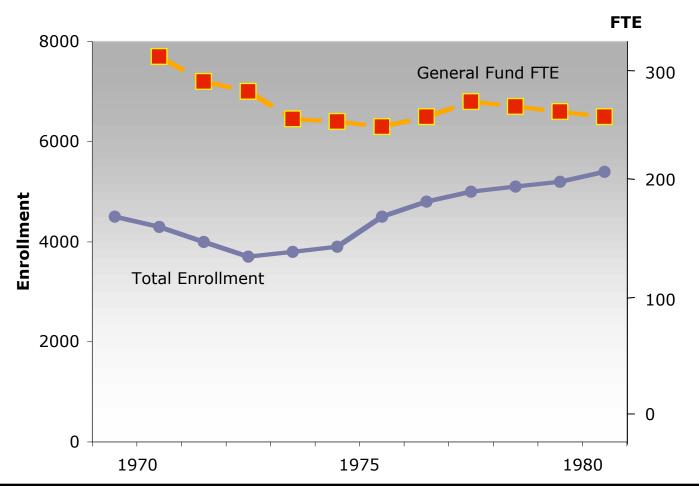
ather, THE CRISIS!!!)

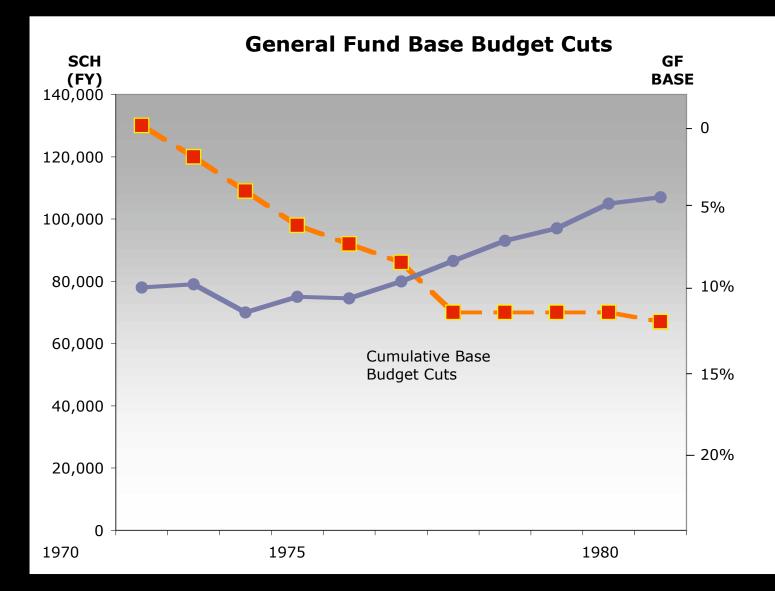


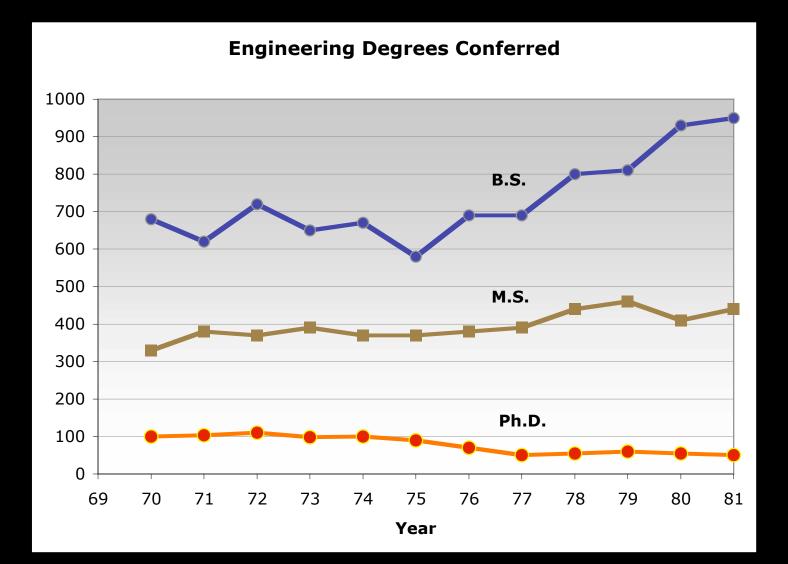
## Trauma of the 1970s

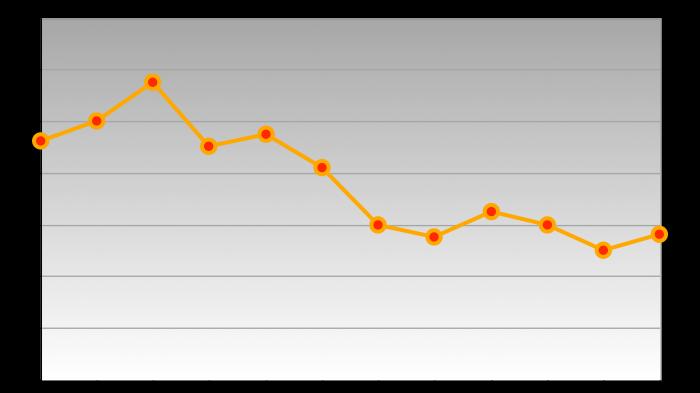
- Growth of College General Fund Budget was 1% per year compared to 7% per year for rest of University (1970-71 to 1980-81)
- College Instructional Staff declined 12% from 302 to 268.
- College Support Staff declined 9% from 152 to 138
- College Enrollment increased by 44%
- College SCH increased by 35%
- College SCH/FTE increased by 45%

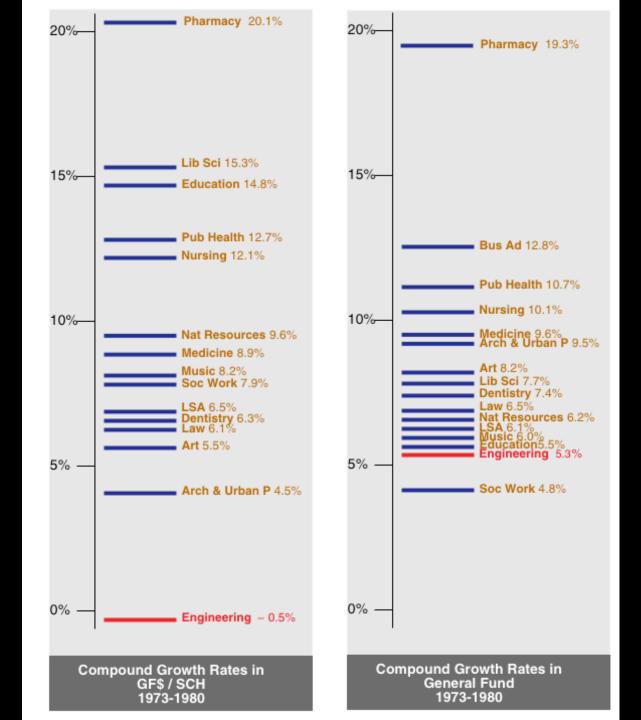
**General Fund / Enrollment** 











### **The Plan**

The College of Engineering: Status and Future

1

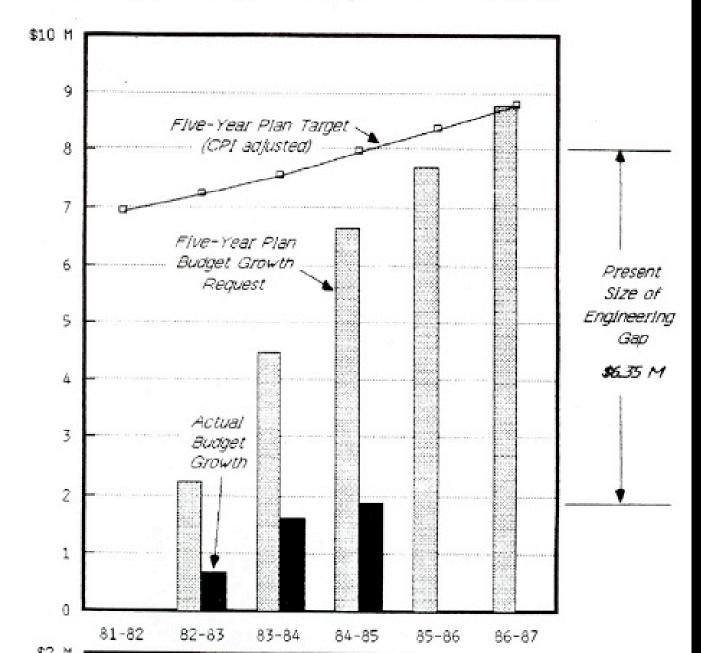
2

--- A presentation for the Executive Officers

November 4, 1981



#### College of Engineering Five-Year Plan



The University of Michigan ANYTHING GOES FUND College & Engineering \$ PAY TO DOLLARS B. E. FRYE AND CO. ANN ARBOR, MICHIGAN 44 

#### **The Move**



# **Jump-starting** ...



















# Lobbying ...







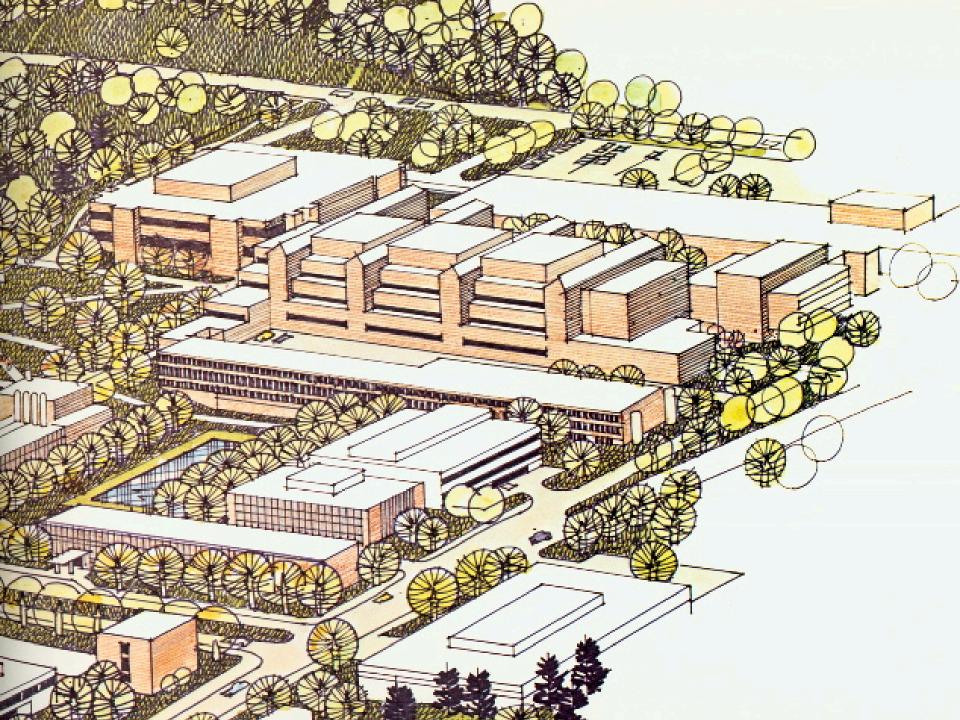






# **Building** ....



















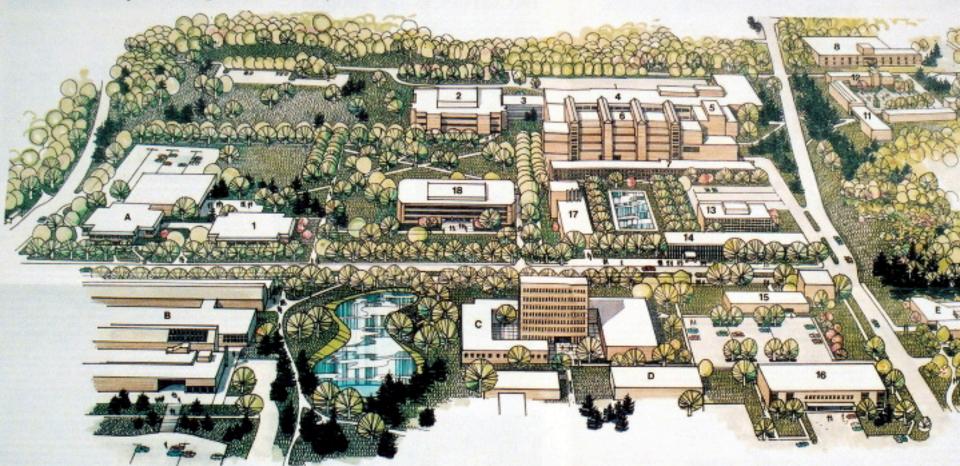








#### The University of Michigan North Campus



COLLEGE OF ENGINEERING PACILITIES		FUNDING	YEAR
	Onyxier Center Helbert H. Der Bulding Der Contection (under einschlicht) Geruper G. Brown Bulding Eingenenigt in Bulding Einerneit Engineering and Computer Science Bulding Hiermost Engineering and Computer Science Bulding Watter E. Law Automative Laborationy	Gifts Birts Gifts & Univ Fodunal State State	1968 1963 1957 (1964 Addition) 1957 (1964 Addition) 1965 1966
	Space Research Burlow New Annective and Marine Engineering Burlong Annotates Engineering Burlong ARROSPACE CLASSPACCAS AND RESEARCH LADOR/OD/ES-	Entre & Gifts Federal & Univ Federal & Gifts Federal & Univ	1985 1988 (1988 Addition) 1977 (1978 Addition) 1975 (1972 Addition)
112259	Research Astrones Building Information Coperations Engineering Machines E. Cooley Building Technical Communications Building Cellete for Research on Incorporate Manufacturing Building	Federal Unix State Unix	1963 1963 (Nasigned to College) 1953 1963 (Nasigned to College)
10.00	Phenrix Memoral Laboratory and Pard Reader NORTH CARPUS Laboratory "In Parence.	Gins	To be occupied in 1987

#### OTHER UN FACE ITES

- A Nonte Campus Commons (addition under construction)
  Art and Anothetium Building
  Instruct of Science and Technology Buildings
  Computing Center
  Bentipy Historical Likewy

# The Creation of CAEN

he Computer Aided gineering Network ... n Atkins and Dick Phillips)









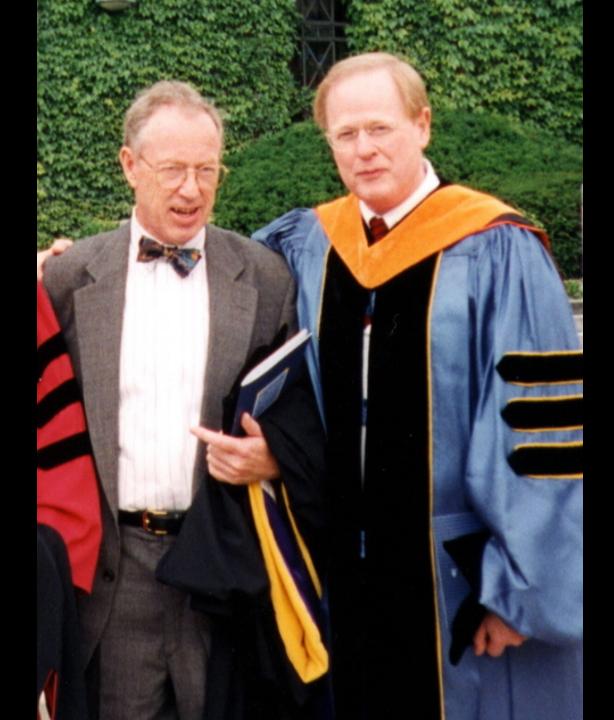








## From deaning .... to provosting ....

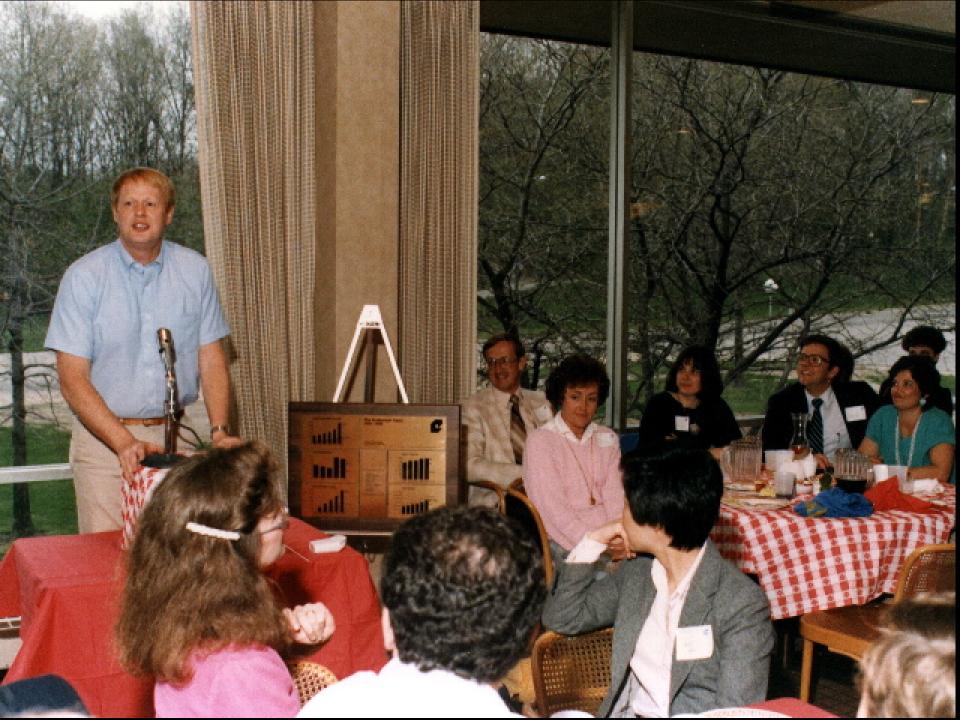


A n unusual stir of excitement and concern greeted the appointment last April of U-M Engineering dean Jim Duderstadt as the University of Michigan's new provost and vice president for academic affairs—the U-M's second in command. Replacing the mild-mannered, popular Billy Frye (now dean of the graduate school and vice president for research at Emory University), the forty-three-yearold Duderstadt is the first engineer to hold the key job.

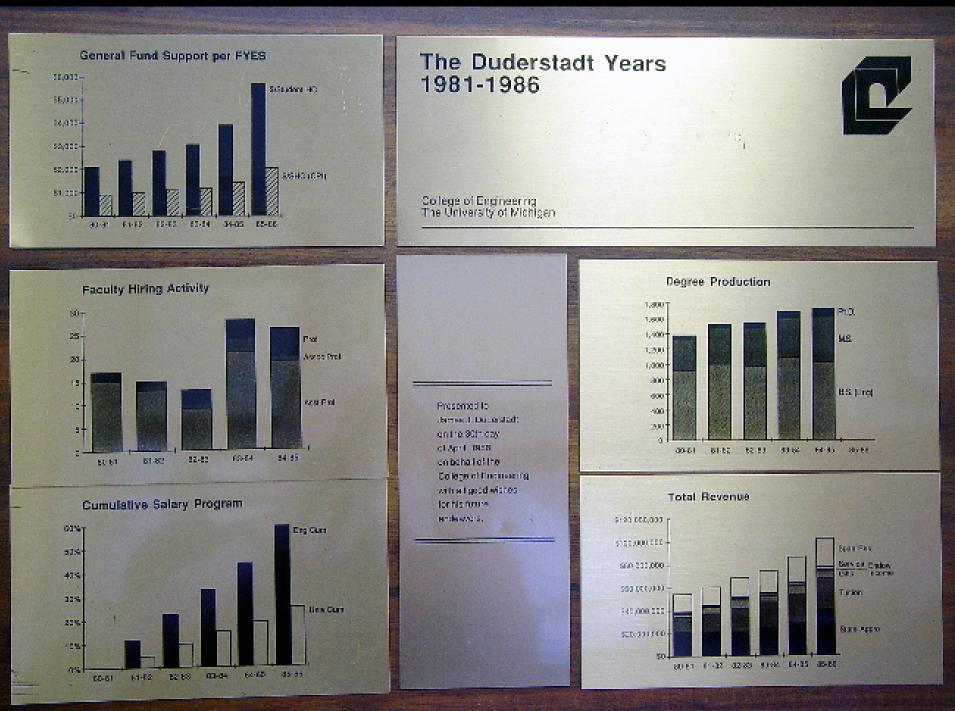
ALC: NOT THE OWNER, NAME

### Jim Duderstadt's Picnic At North Campus Commons

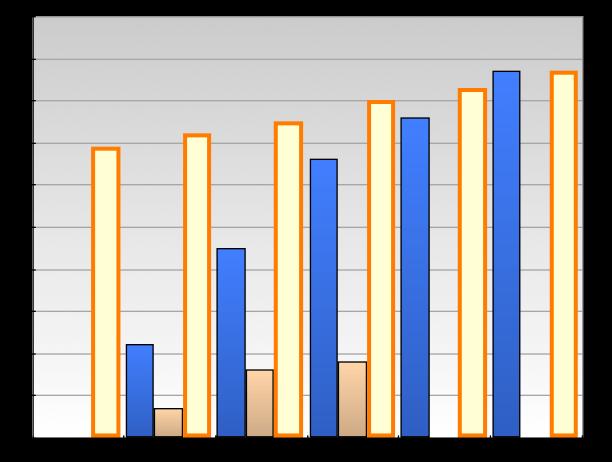


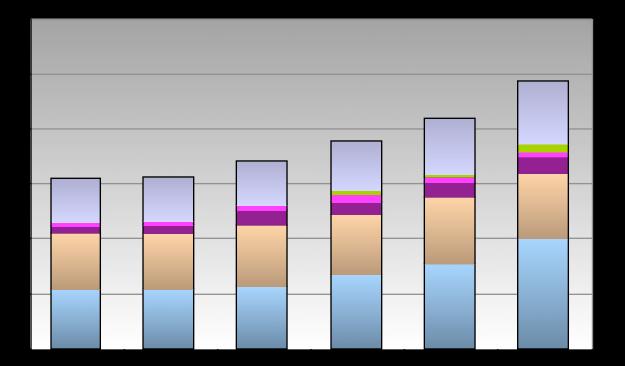




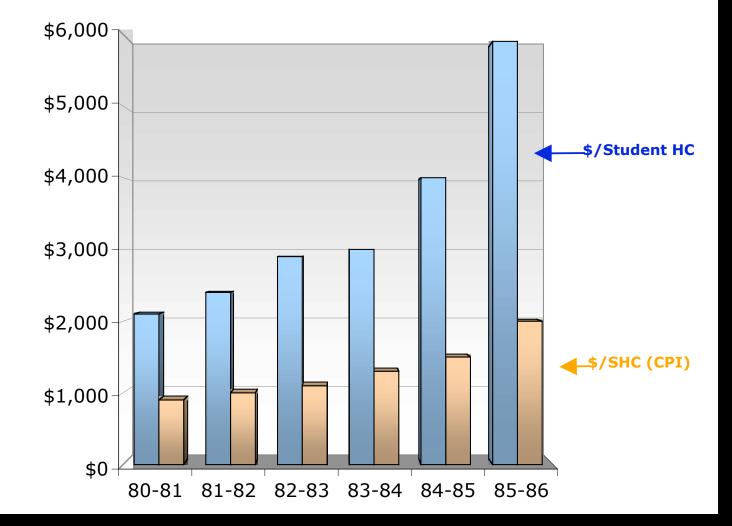


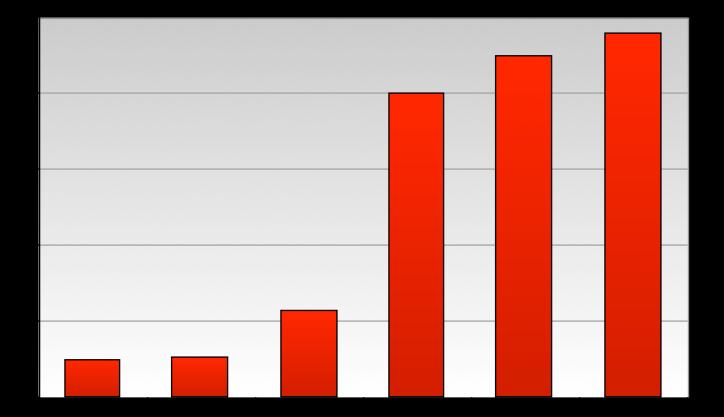
### **The Charts**

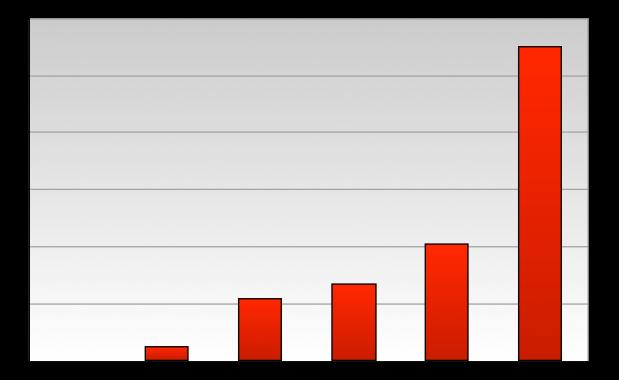


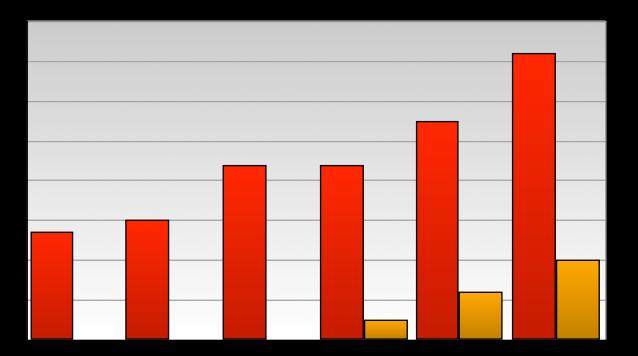


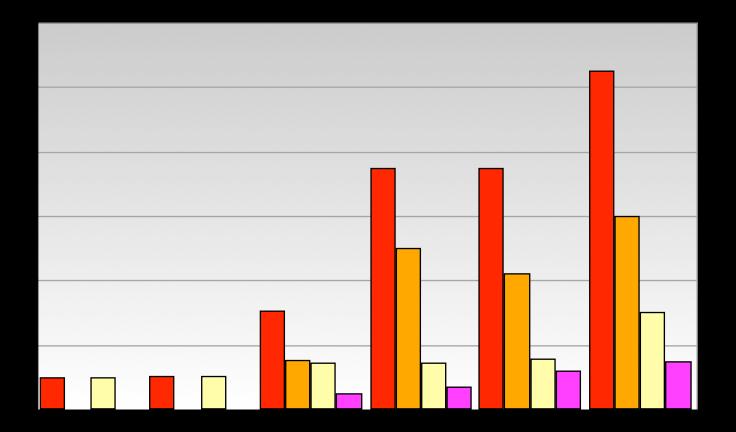
#### **General Fund Support per FYES**



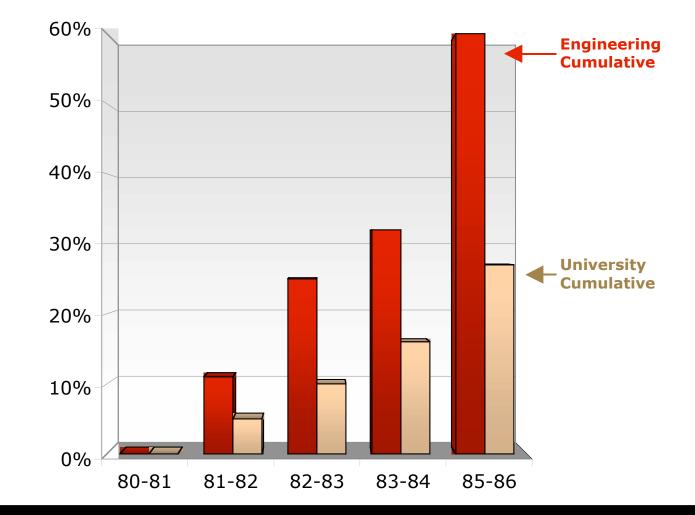




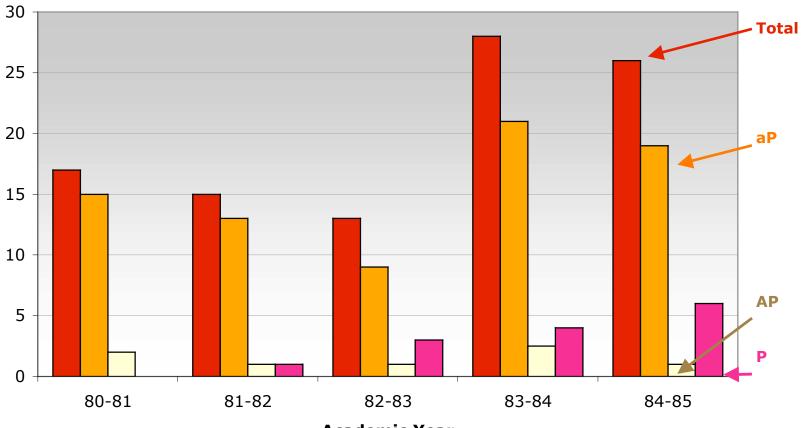




**Cumulative Salary Program** 

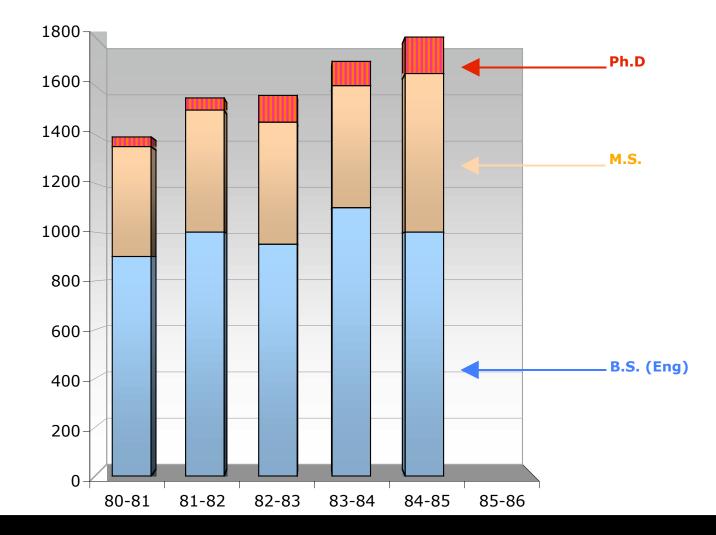


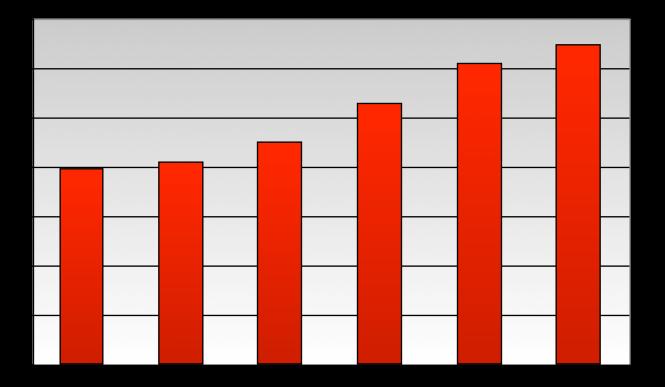
### Engineering New Faculty Hires

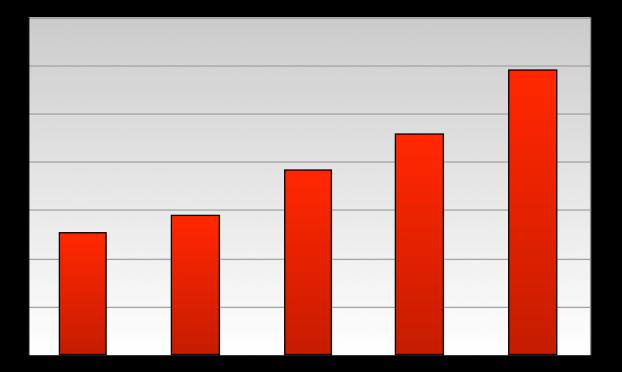


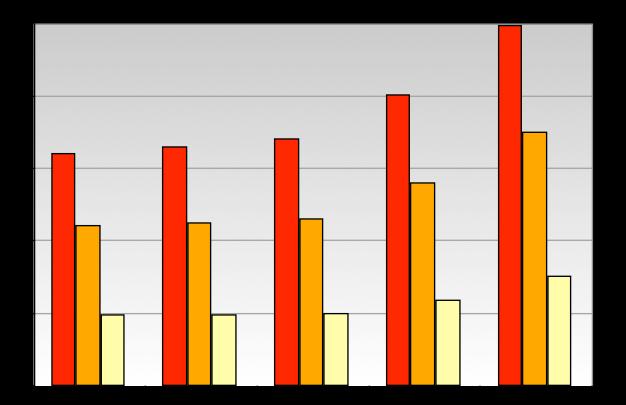
**Academic Year** 

### **Degree Production**









#### **1981-1986 Progress**

- The North Campus move of the College was finally completed.
- The General Fund budget of the College was tripled (from \$13 M/y to \$36 M/y) (including the Research Excellence Fund)
- The salaries of assistant and associate professors were doubled (with corresponding increases for selected full professors).
- 120 new faculty were hired.
- The Computer Aided Engineering Network (CAEN) was created.
- PhD production was doubled.
- Sponsored research support was doubled.

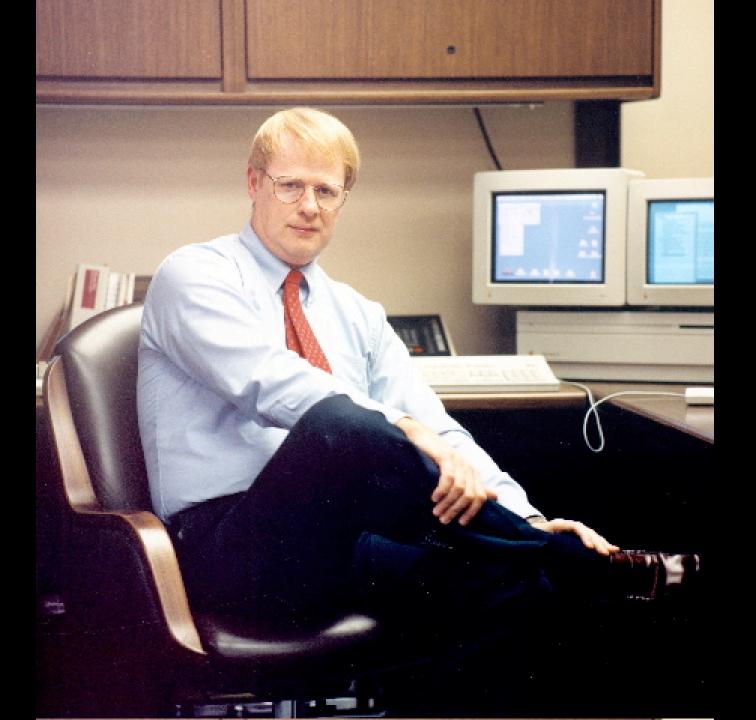
### Perhaps most important...

- Establishing the College of Engineering as a top priority of the University of Michigan and the State of Michigan.
  - Transforming the culture of the College, by raising the bar for the achievement of excellence and building the confidence it could be achieved.
    - Rebuilding the quality of the faculty of the College both through new hires and rewarding and retaining our top performers.

# From deaning .... to provosting ....

















# From provosting ... to presiding ...



Charles M. Vest Dear Jim, Domeday even they have to make a decision! When they do : 1. Comet Decision: Open (A) 2. Bad Decision : Open (B) Or else, throw up your hands and geen both now. - Chuch 6 -6 - 38 2401 EECS Building - Ann Arber, Michigan 48109-2116 - 813/764-8476







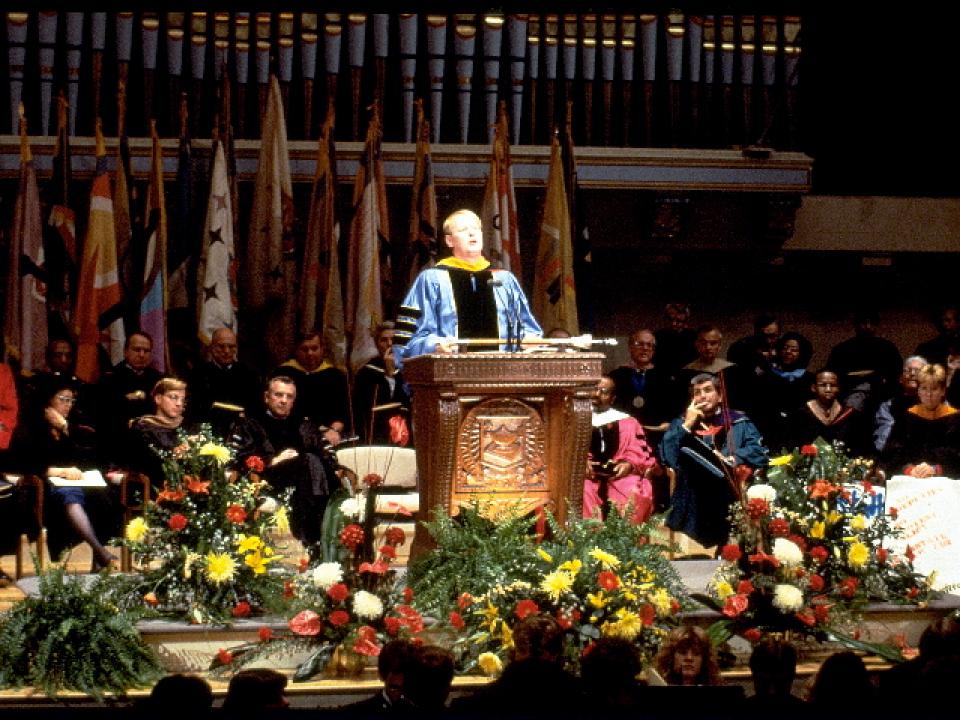
#### Big Man on Campu

he Detr

Jim Duderstadt wants to lead the U. of M. to the head of th Will his school make the grad

















































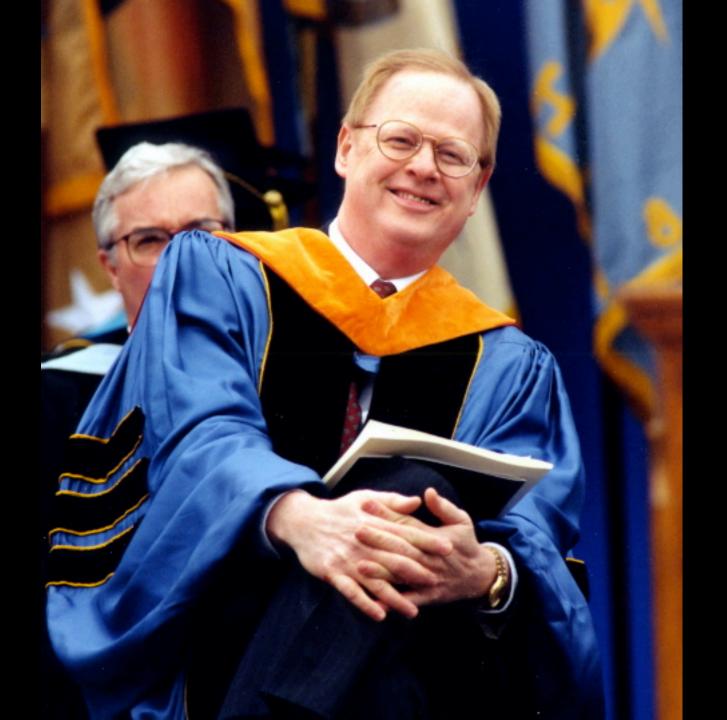














## The guardian angel

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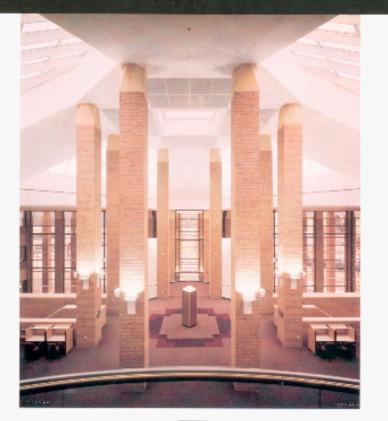








## THE UNIVERSITY OF MICHIGAN MEDIA UNION



Friday june 21, 1996 at 11:30 am



Open house and tours

🚺 lease join the Michigan community for the dedication of the until 5:00 pm University of Michigan Media Union

## OPEN TO ALL THOSE WHO DARE TO INVENT THE FUTURE









































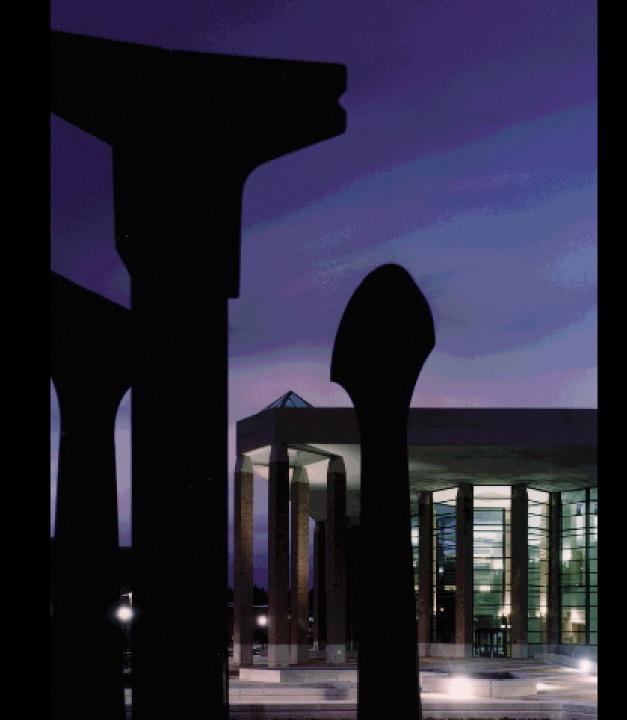












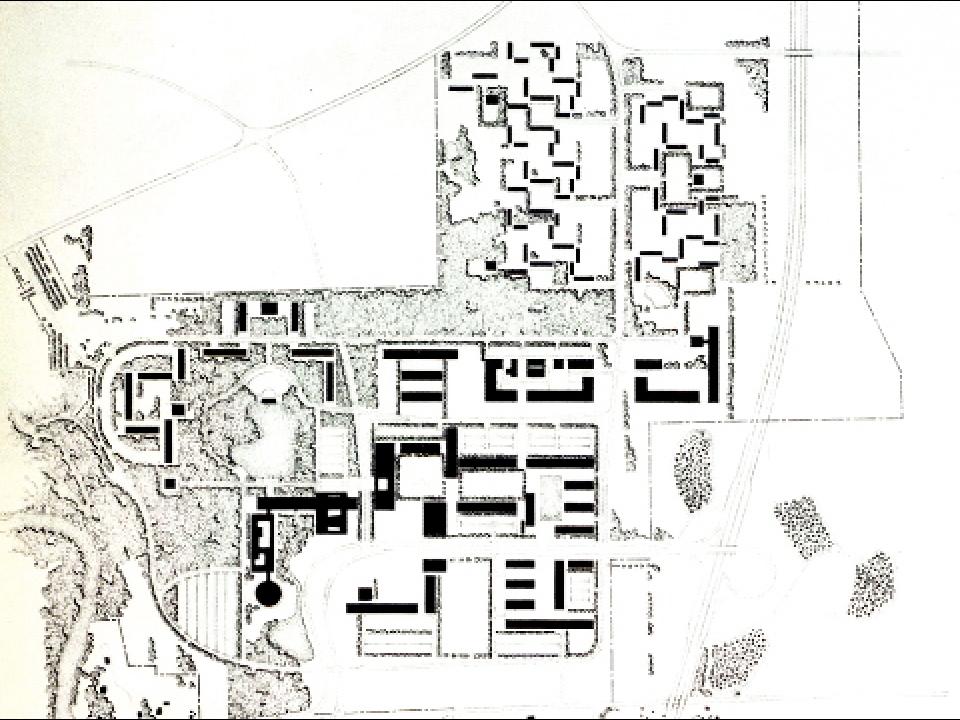




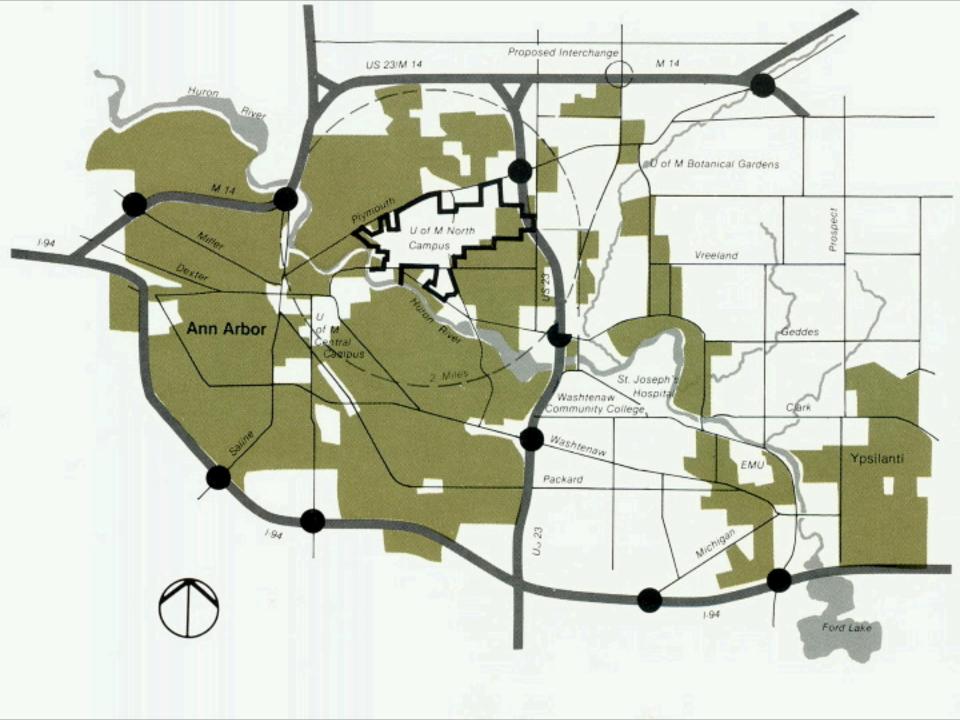
# The Future of the North Campus

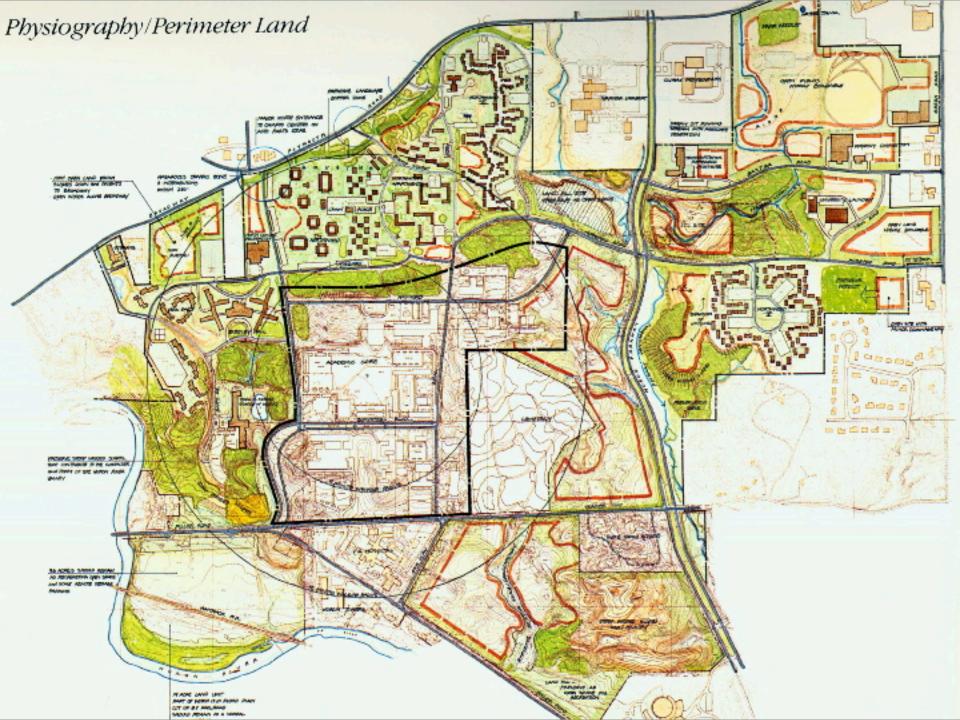


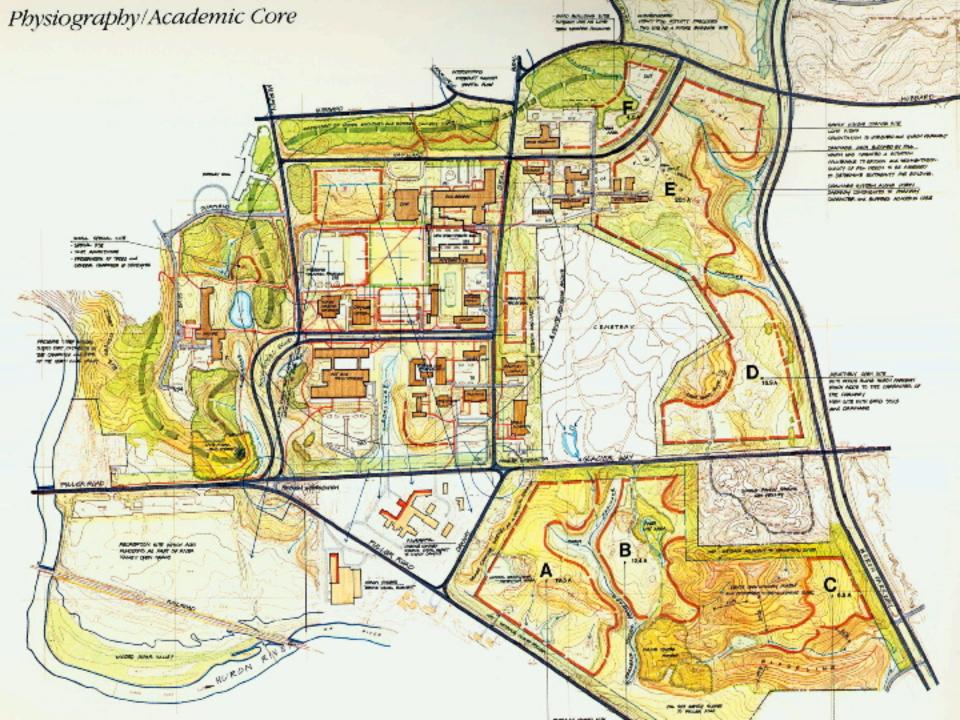
## The Evolution of the Master Plan



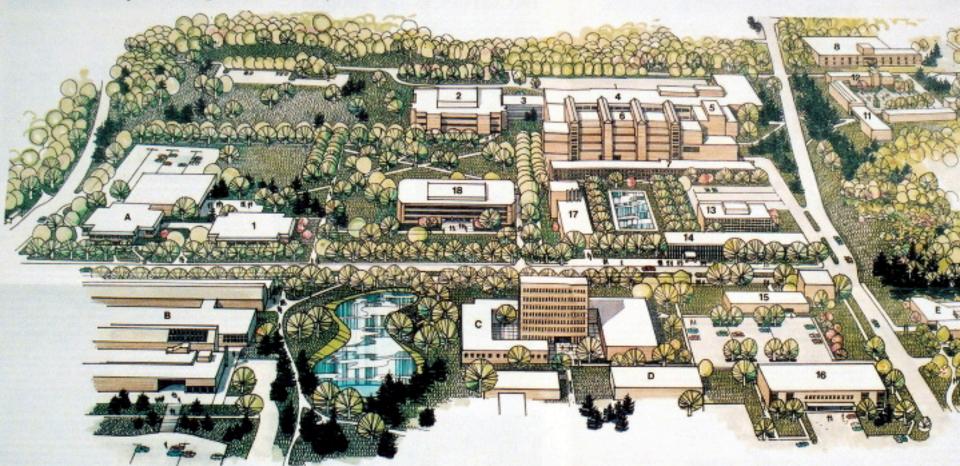








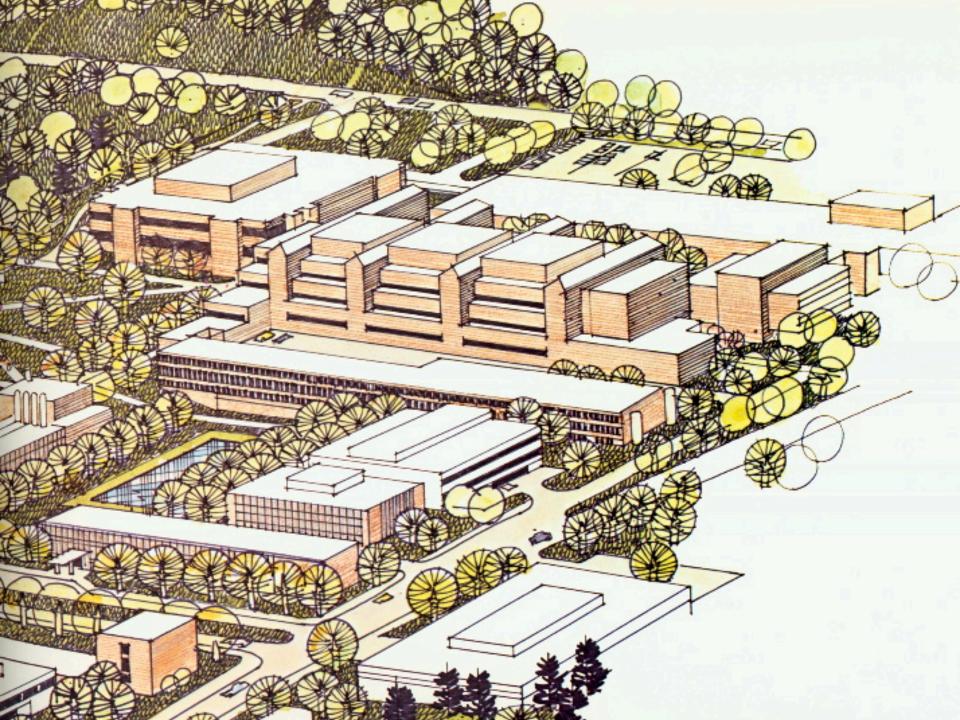
### The University of Michigan North Campus



COLLEGE OF ENGINEERING PACILITIES		FUNDING	YEAR
	Onyxier Center Helbert H. Der Bulding Der Contection (under einschlicht) Geruper G. Brown Bulding Eingenenigt in Bulding Einerneit Engineering and Computer Science Bulding Hiermost Engineering and Computer Science Bulding Watter E. Law Automative Laborationy	Gifts Birts Gifts & Univ Fodunal State State	1968 1963 1957 (1964 Addition) 1957 (1964 Addition) 1965 1966
	Space Research Burlow New Annective and Marine Engineering Burlong Annotates Engineering Burlong ARROSPACE CLASSPACCAS AND RESEARCH LADOR/OD/ES-	Entre & Gifts Federal & Univ Federal & Gifts Federal & Univ	1985 1988 (1988 Addition) 1977 (1978 Addition) 1975 (1972 Addition)
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10.00	Phenrix Memoral Laboratory and Pard Reader NORTH CARPUS Laboratory "In Parence.	Gins	To be occupied in 1987

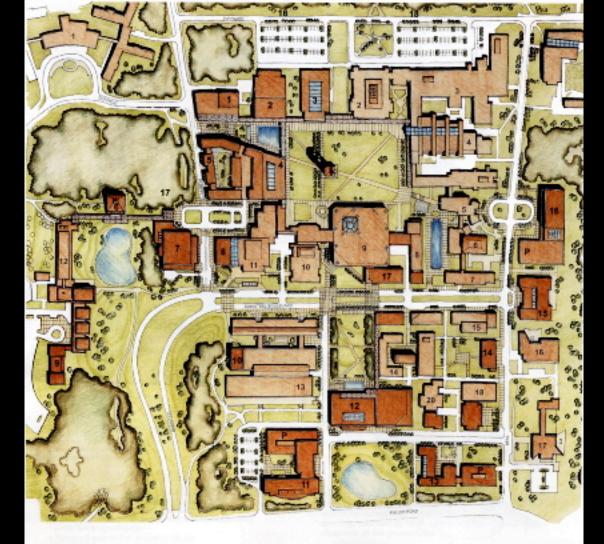
### OTHER UN FACE ITES

- A Nonte Campus Commons (addition under construction)
  Art and Anothetium Building
  Instruct of Science and Technology Buildings
  Computing Center
  Bentipy Historical Likewy





### North Campus Redux ???



- 1 Bursley Residence Hall
- 2 H.H. Dow
- 3 G.G. Brown
- 4 Electrical Engineering and Computer Science
- 5 Lurie Engineering Center
- 6 Industrial and Operations Engineering
- 7 Cooley Laboratory
- 8 Phoenix Laboratory
- 9 Media Union
- 10 Chrysler Center
- 11 Pierpont Commons

- 12 Moore Music School
- 13 Art and Architecture
- 14 Institute of Science
- and Technology 15 Center for Display Technology and Manufacturing
- 16 Bentley Library
- 17 Ford Library
- 18 Advanced Technology Laboratories
- 19 School of Information North
- 20 Computing Center

### PROPOSED

- 1 Academic Building (TBD)
- 2 School of Information
- 3 Computer Science
- Building 4 Union/"Rackham North"
- 5 Residence Hall Over Retail

Retail Edge

- 6 All Faiths Meditation Space
- 7 Walcreen Center/Arthur Miller Theater with
  - 18
- 8 Pierpont Commons Extension Over Retail

- 9 Music School Extension Art and Architecture Tower
  - Hotel/Housing

10

11

12

13

14

15

16

17

- Convention Center
- Housing or Research
- Academic Building (TBD)
- "Fleming Building" "Wolverine Tower"
- Site for Dance Center
- Sites for Market Housing
- P Parking Structure
- **PROPOSAL A**



- 1 Bursley Residence Hall
- 2 H.H. Dow
- 3 G.G. Brown
- 4 Electrical Engineering and Computer Science
- 5 Lurie Engineering Center 6 Industrial and Operations Engineering
- **Cooley Laboratory** 7
- 8 Phoenix Laboratory
- 9 Media Union
- Chrysler Center 10
- 11 Pierpont Commons

- 12 Moore Music School
- 13 Art and Architecture
- 14 Institute of Science
- and Technology 15 Center for Display Technology and
- Manufacturing 16 Bentley Library
- 17 Ford Library
- 18 Advanced Technology
- Laboratories
- 19 School of Information North
- 20 Computing Center

### PROPOSED

- 1 Residential Hall or Residential College
- 2 Computer Science Building
- 3 All Faiths Meditation Space
- Union/"Rackham North" 4 5 "Fleming Building"
- 6 Walgreen Center/
- Arthur Miller Theater
- 7 School of Information 8 Music School Extension
- 9 Art and Architecture Tower

### 10 Art and Architecture

- 11 "Wolverine Tower"
- 12 Convention Center 13 Hotel, Housing, or
  - Research Sites for Market Housing
- 14 P Parking Structure

- - PROPOSAL

Extension

- Bursley Residence Hall 1
- 2 H.H. Dow
- 3 G.G. Brown
- Electrical Engineering and 4 Computer Science
- Lurie Engineering Center 5
- Industrial and Operations 6 Engineering
- Cooley Laboratory 7
- 8 Phoenix Laboratory
- Media Union 9
- Chrysler Center 10
- **Pierpont Commons** 11
- Moore Music School 12

- Art and Architecture 13 14 Institute of Science
- and Technology 15 Center for Display Technology and
- Manufacturing
- 16 Bentley Library
- Ford Library 17
- 18 Advanced Technology Laboratories
- 19 School of Information North
- 20 Computing Center



### PROPOSED

- Academic Building (TBD) 1
- 2 School of Information
- 3 Computer Science Building
- Union/"Rackham North" 4
- 5 Residence Hall Over Retail
- All Faiths Meditation Space 6
- Walgreen Center/Arthur 7 Miller Theater with Retail Edge
- Pierpont Commons 8 Extension Over Retail
- Music School Extension 9
- 10 Art and Architecture Tower
- Hotel/Housing 11
- 12 **Convention Center**
- Housing or Research 13
- Academic Building (TBD) 14
- 15 "Fleming Building"
- 16 "Wolverine Tower"
- 17 Site for Dance Center
- 18 Sites for Market Housing
- P Parking Structure

View to the northeast.





- 1 Bursley Residence Hall
- 2 H.H. Dow
- 3 G.G. Brown
- 4 Electrical Engineering and Computer Science
- 5 Lurie Engineering Center
- 6 Industrial and Operations Engineering
- 7 Cooley Laboratory
- 8 Phoenix Laboratory
- 9 Media Union
- 10 Chrysler Center
- 11 Pierpont Commons
- 12 Moore Music School

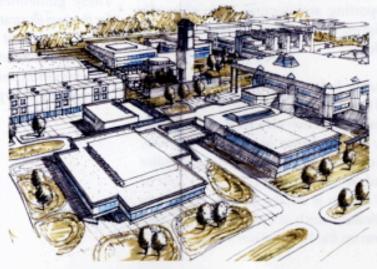
- 13 Art and Architecture 14 Institute of Science
- and Technology
- 15 Center for Display Technology and Manufacturing
- 16 Bentley Library
- 17 Ford Library
- 18 Advanced Technology Laboratories
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- 20 Computing Center

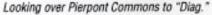
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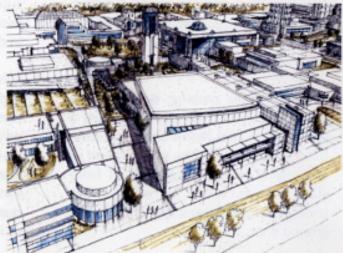
PROPOSED

- Residential Hall or Residential College
- 2 Computer Science Building
- 3 All Faiths Meditation Space
- 4 Union/"Rackham North"
- 5 "Fleming Building"
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- 7 School of Information
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- 10 Art and Architecture Extension
- 11 "Wolverine Tower"
- 12 Convention Center
- 13 Hotel, Housing, or Research
- 14 Sites for Market Housing
- P Parking Structure









Looking toward "Diag" between new residential hall on the left and new "superunion" on the right.

instruction of the second s

### The North Woods Master Plan

