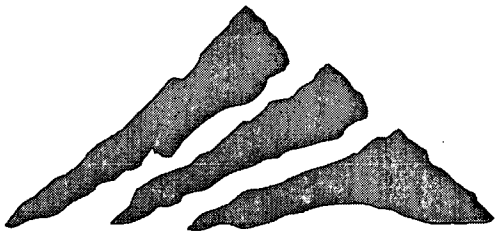
DOCUMENT RESUME

ED 467 980 JC 020 597

TITLE	MHCC 2010 Institutional Master Plan.
INSTITUTION	Mount Hood Community Coll., Gresham, OR.
PUB DATE	2001-12-00
NOTE	69p.
AVAILABLE FROM	For full text: http://www.mhcc.cc.or.us/campus/campus_info/allabout/research/institutional_master_plan/main.htm.
PUB TYPE	Reports - Descriptive (141)
EDRS PRICE	EDRS Price MF01/PC03 Plus Postage.
DESCRIPTORS	Community Colleges; *Educational Facilities Planning; *Educational Planning; Facility Planning; Institutional Mission; Long Range Planning; *Master Plans; Organizational Objectives; Two Year Colleges
IDENTIFIERS	*Mount Hood Community College OR

ABSTRACT

The Mt. Hood Community College (MHCC) (Oregon) Institutional Master Plan is divided into two sections: the education plan and the facility plan. The education portion presents the institutional mission, vision, and core values, along with key demographic and population projections for the next decade. The report then outlines the goals, action strategies, and key indicators that MHCC administrators will use to monitor progress towards achieving the 2010 vision. The themes emphasized in the institutional goals include: (1) a knowledge-based workforce; (2) access and diversity; (3) transitions; (4) student success; and (5) requirements of economic development. In addition to the institutional vision, the report also shares organizational unit plans for both the support services and information technology divisions. Part 2 of this document outlines the MHCC Facilities Master Plan, which describes the steps required for the school to physically manifest an image that represents the 2010 vision both internally and externally. The facilities plan is divided into three areas: (1) adaptation; (2) expansion; and (3) related planning. It provides a brief discussion of the necessary facility improvements, expansions, and expenditures for each MHCC campus. (Contains 18 references.) (RC)



MT. HOOD
COMMUNITY COLLEGE

MHCC 2010
INSTITUTIONAL MASTER PLAN

December 2001

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Message from the President ....

As we enter the new millennium it is only appropriate that the district and college community take stock and anticipate future service needs. *MHCC 2010*, institutional master plan, is filled with opportunities as well as challenges. The East County area is undergoing unprecedented growth and development with MHCC expected to play a critical role in shaping the community's response to the challenges that lie ahead. Without a successful master planning effort to help shape a desired future, we face the prospect of being overwhelmed. If MHCC cannot or will not respond accordingly, other providers surely will.

If current forecasts hold, MHCC will be more than one-third larger in enrollment in 2010 than it is today. Accommodating such growth will require additional staff, facilities and resources. The master plan provides a road map for realizing a vision in which the college fulfills its purpose and mission. Completion of the master plan is only the first step. We now must find the energy and spirit to implement and bring about our shared vision for MHCC. This effort will require the highest degree of collaboration both within the college and with the community at large. We have systematically compiled input from within the college and the community in formulating the master plan. We have sorted and prioritized the various interests and needs identified. The master plan represents our best thinking in how we might better serve our community and facilitate student success.

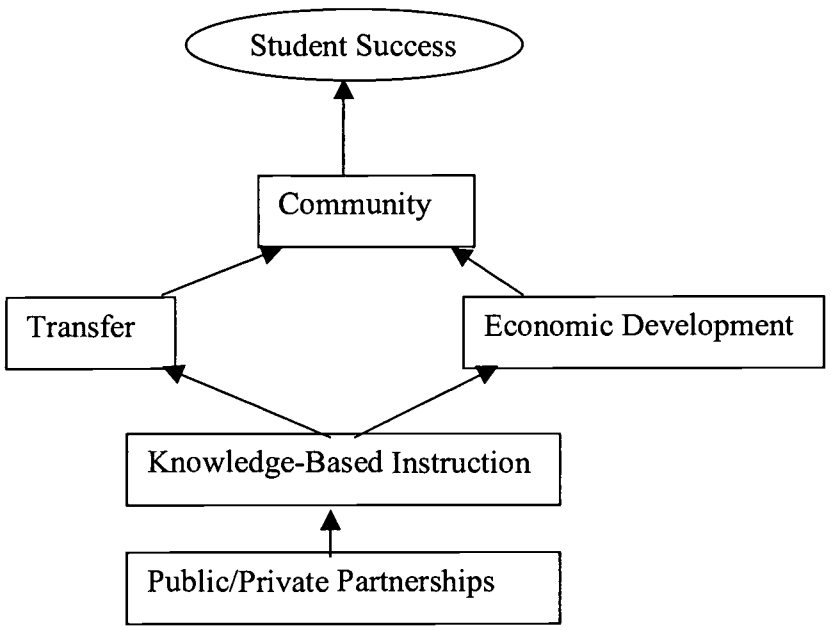
We are now embarking on a great adventure and I ask that both the college and larger community continue to be involved and work toward new levels of achievement. MHCC was founded on the ideal of quality, both in its facilities and programming. It is this quality of education and service that distinguishes MHCC and makes it such a wonderful place to work and grow professionally. Given the high level of dedication and performance of faculty, staff and management and with continued support from the community, I am confident that we can realize the vision contained in *MHCC 2010.*

Robert Silverman,
President

MHCC 2010
INSTITUTIONAL MASTER PLAN

Education Plan Executive Summary

"Knowledge for Success" is the theme driving the development and implementation of *MHCC 2010*, institutional master plan. Whether building community within the classroom, within and across college departments, or with external partners, the key to achieving this mission is building strong partnerships with other organizations within East County and beyond.



The values underlying the master plan are *integrity, respect, innovation and service* (IRIS). By living these values, we can create a college community that cannot only achieve its goals but can also be a professionally and personally rewarding environment for teaching and learning.

Mission -- A COMMITMENT TO THE COMMUNITY

Mt. Hood Community College affords all people a knowledge-based education, giving them the ability to make life choices; adapt to change; build strong communities; contribute to and derive benefit from the new economy; and become part of a skilled workforce.

Vision

The College is dedicated to:

- Student learning as the most important outcome.
- Being a comprehensive community college with initiatives in information, engineering, bio-medical and biological technologies.
- Seamless transfer opportunities to colleges, universities and careers.
- Continued, directly applicable, learning at all stages of career and life.
- Striving to meet learning needs when and where students prefer.
- Providing learner support.

Implications

The master plan charts the course for realizing this vision, both in the educational programming and facility requirements. The gaps between the vision and current reality have been identified and strategies developed to close the gaps. Major implications of the education master planning effort include the following.

- Based on the enrollment forecast model, MHCC FTE enrollment is expected to grow by over 3,000 by 2010. Since MHCC is at near capacity in facility utilization, additional facilities will be needed to accommodate expected growth.
- Organizational collaboration will be even more prominent in the future teaching and learning environment. This will include joint planning and programming with K12, four-year colleges and universities, business and industry, local government, and workforce development agencies among others. An example of this collaboration is the **Center for Advanced Learning** (CAL), a joint use facility being developed by the local school districts, business and industry and MHCC. The Center is scheduled to open in 2003 and provide a minimum of 500 students from four local high schools with programs in Information Technology, Medical/Health Careers, and Pre-Engineering/Manufacturing. Another example is the **University Center** to be established at MHCC in partnership with four-year colleges and universities. This Center will provide an opportunity for local residents to pursue upper division and graduate course work without having to leave the East County area. Shared use and support for facilities will be required with creative financing and administrative systems to facilitate a flexible and distributed system of instruction throughout the college service area.
- Technology-enhanced learning is a theme across almost every area of instruction and support services. Existing college facilities were not originally designed with the information age in mind. A strategic information technology plan has been completed as part of the master planning process and will need to be incorporated into future operational planning. Technology planning will also need to be integrated with future development of the

MHCC Library. A new library and computer center are being planned as part of the University Center.

- "Learning-centered" instruction is another major theme across the instructional areas expressed in numerous ways. This includes "individualized" learning, which interconnects with the emphasis on technology. Other expressions include "small group study" and "learning communities". Facility design needs to adjust to new pedagogical approaches. Although the need for large lecture classrooms will continue, the number of such rooms needed in the future will be relatively fewer and will be utilized differently than in the past.
- The future economic growth and development of East County is contingent to a great deal on the provision of a skilled workforce. A critical shortage of skilled labor currently exists in the **health area**, especially Nursing. An area of future need will be in **biotechnology**, which spans across multiple industries. Meeting these needs will require both educational program development and new facilities.
- Central to the service plan is the "Ash Mountain" project, which involves a redesign of student services. The goal of the redesign is to offer MHCC student services that are easily accessible, convenient, efficient and affordable. Although an interim solution is currently being implemented, final development of this project requires implementation of the facilities master plan.

The next steps in educational planning involve organizing results of the master plan around college goals and annual priorities. These goals and priorities will then be translated into operational plans and budgeting procedures to ensure that we make steady progress in realizing our mission and vision.

Facility Plan Executive Summary

(BOORA Architects, Inc., Portland, Oregon, John Meadows, Principal, with Facilities Needs Analysis by Chuck McIntyre, Director, Computer Aided Planning, Sacramento, California)

The Facility Plan is a physical representation of the Education Plan. It is based on capacity and condition of existing facilities, future demand, the gap between demand and supply, and strategies and projects to close the gap.

Focus

- Facility improvements – protect the community investment in the college
- Remodel and upgrade outdated and dysfunctional existing facilities
- Facility expansion to accommodate current and future programs and population

Facility Improvement Needs

- Reconfigure and resize classrooms
- Improve access to information technology campus wide
- Relieve overcrowded support spaces
- Provide for interactive, multi-media learning environment
- Improve safety, seismic, energy efficiency, and access (ADA)

Facility Expansion Needs

- Provide state-of-the-art facilities to meet the demand for health occupation and biotechnology workers
- Through partnership with universities, provide a University Center so that local residents can obtain upper division coursework and degrees without having to leave the East County area

Facilities Development Projections – Assignable Square Feet (ASF)				
	Existing	**Add by 2005**	**Add by 2010**	**Total in 2010**
Maywood	37,000	**4,500**	**4,800**	**46,300**
Gresham	605,084	**158,600**	**104,900**	**868,584**
Total ASF	**642,084**	**163,100**	**109,700**	**914,884**
	2/3 of existing space in need refurbishment			
Total FTE	**9,168**	**11,500**	**13,000**	
FTE/Sq. Ft.	**70**			**70**

Projects

- Renovation and remodeling
- One-Stop Student Services Center
- University Center (with library and computer center)
- Health Occupations and Biotechnology building
- Mixed Use space based on public/private partnership (revenue stream to support operational costs of new space.

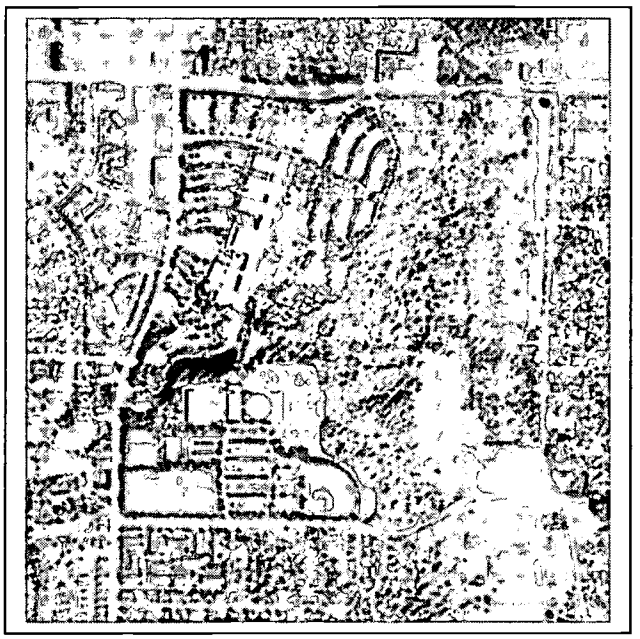
Costs

Capital Outlay Cost Estimates (in $ millions)

	2002-2005	2006-2010	2011-2015
Maywood Campus			
Plans, Drawings, Fees	$ 0.2	$ 0.2	$ 0.2
Construction	0.8	0.9	1.0
Equipment	0.1	0.2	0.1
Sub-total	$ 1.1	$ 1.2	$ 1.3
Gresham Campus			
Plans, Drawings, Fees	$ 6.8	$ 6.2	$ 0.0
Construction	28.7	19.0	13.3
Equipment	5.4	2.7	2.2
Remodel, New Use	8.6	0.0	0.0
Remodel, Upgrade	12.0	12.0	12.0
Other	0.1	0.1	0.0
Sub-total	$ 61.6	$ 40.0	$ 27.5
Grand Total	**$ 62.7**	**$ 41.2**	**$28.8**

Facilities Design Goals

- Improve campus visibility
- Create mixed-use development opportunities
- Centrally locate University Center (library and computer center)
- Easy access to Student Services Center
- Improve security and access from parking
- Identify potential streetcar line
- Create vibrant and active-breaks through the berm



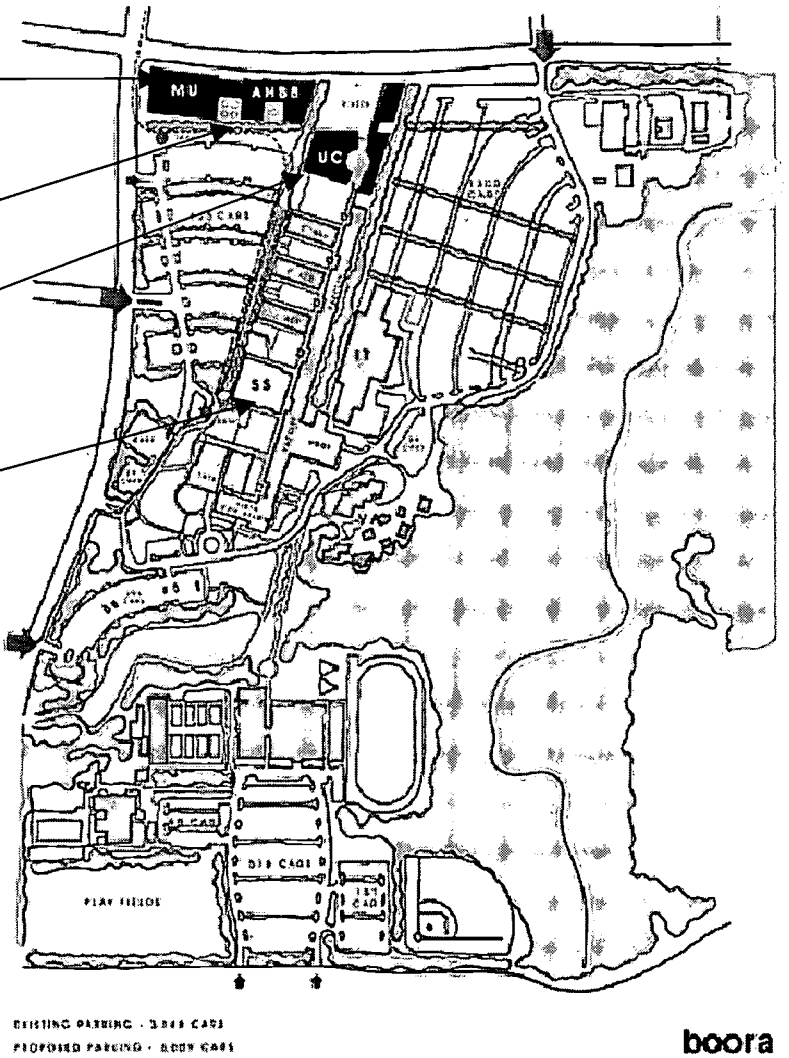
MHCC 2005

MU – future mixed-use facility based on public/private partnership.

***AHBB** – Allied Health and Biotechnology Building

***UC** – University Center (with library and student computer center)

***Facility Improvements** – throughout and includes One-Stop Student Service Center in vacated old library



***Bond Measure**

Facility improvements	$	25,790,000
University Center		27,000,000
Allied Health/Biotechnology		15,610,000
Grand Total	$	**68,400,000**

MHCC 2010

MU – future mixed-use facility based on public/private partnership.

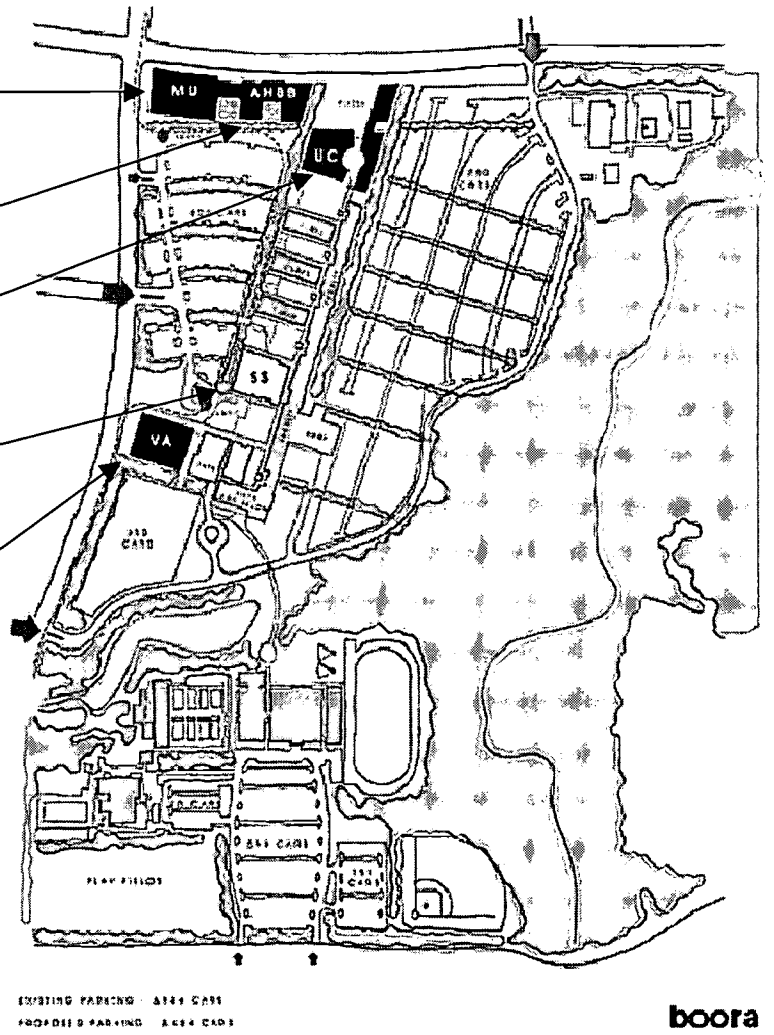
AHBB – Allied Health and Biotechnology Building

UC – University Center (with library and student computer center)

Facility Improvements – throughout and includes One-Stop Student Service Center in vacated old library

VA – Visual Arts Center (future)

Industrial Technology Building (removed and replaced with parking – Industrial Technology programs moved to Troutdale)



Strategic Planning Council 1999-2000 through 2000-2001

Jackie McCrady, Library
Debbie Derr, Student Development and Services
Valerie Ward, Business & Computer Technology and Media Arts
Joe Fischer, Student Life
Phil Johanson, Business Office
Mary Doherty, Maywood Campus
Joann Zahn, Business Office/Budget
Dawn Barberis, Head Start
Kris Pearson, Child Development Center
Elizabeth Gomez, MHCCD Foundation/Budget
Garie Zordich, Language & Literature
Bill Grandey (retired), Language & Literature/TLC
Catha Loomis, Career Planning and Counseling
Malcolm McCord, Career Planning and Counseling
Dave Todd, Engineering, Computer Science and Mathematics
Joan Oliver, Allied Health/HPE
Lisa Wittenberg, Developmental Education and Part-Time Faculty
Sally Skelding, Social Science/PVA
Chris Gorsek, Social Science/PVA
Georganne Watters, Social Science/PVA
Paula Gubrud, Allied Health/HPE
Tamsie Ringler, Social Science/PVA
Lee Mitchell, Science & Industrial Technology
Tim Polly, Science & Industrial Technology
Paul Morris, Business & Computer Technology and Media Arts
Elizabeth Renguso, ABE/GED/ESL
Dan Walleri (chair), Research & Planning
Don Wallace (ex officio), Facilities Management

President's Council

Al Sigala, Director, Government Relations/PFO
Mary Doherty, Maywood Campus
Bill Becker, Executive Vice President, Administrative Services
Paul Killpatrick, Vice President, Instructional Services and Community Development
Michael Durrer, Vice President, Instruction
Debbie Derr, Vice President, Student Development and Services

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Part I. Education Plan

Background

Mt. Hood Community College opened in 1966 and now enrolls nearly 30,000 students each year. Classes are offered at the 200-acre main campus in Gresham, the MHCC Maywood Campus, and evening education centers at district public schools. College revenue is derived from local property taxes, state reimbursement, student tuition, and grant programs. Local voters established the college tax base in 1968 and approved tax base increases in 1970 and 1980. The college has developed an ongoing partnership with business and industry to meet the needs of a current and future workforce. Board members are elected to four-year terms, meet the second Wednesday night of each month and serve without pay. The first president of the college was Dr. Earl Klapstein. He served until 1976 and was followed by Dr. R. Stephen Nicholson until November 1985. Dr. Paul E. Kreider served as president from February 1986 to June 1996. Dr. Joel Vela became MHCC's fourth president in August 1996, serving through September 2000. The college is currently under the direction of Dr. Robert Silverman.

The previous master planning effort occurred in 1993-94, but focused almost exclusively on facilities and lacked a coherent educational and programming element. A local bond measure was submitted to the voters in 1995 to fund the facility master plan but was defeated by a wide margin. In fall 1997, MHCC underwent its ten-year accreditation review, and one of the recommendations from that review was that the college should devote greater effort to long-term planning. In response, the current master planning effort was initiated in 1998-99.

Following is a summary of actions taken since 1995 to address the issue of long-term development of the college.

1. Fall 1996 – review and revision of mission and purpose (MHCCD Board review).
2. Winter/Spring 1997 – development of new operational planning process.
3. Summer 1997 – President's Council identifies initial set of college goals and annual priorities (MHCCD Board review).
4. Fall 1997 – unit operational plans for 1997-98 and 1998-99 developed in conjunction with budget for 1998-99.
5. Winter/Spring 1998 – College Plan and budget for 1998-99 finalized; revised planning form developed (MHCCD Board review).
6. Summer 1998 – College Plan and unit operational plans revised to conform to new format.
7. Fall 1998 – College and unit operational plans reviewed and revised in conjunction with the budget development process for 1999-2000 (plan covers 1998-99 and 1999-2000). **Master planning process initiated.**
8. Fall 1999/Spring 2000 – operational plan converted to Plan Builder software. Operational plan for 1999-2001 and proposed budget for 2000-2001 completed. **Draft education master plan completed. Facilities planning initiated.**
9. Fall 2000/Spring 2001 – continuation of operational planning with closer integration with budget development process. **Initial draft of master plan completed**
10. Fall 2001 – master plan completed.

Master Plan Process

The President's Council has provided overall leadership and direction while the Strategic Planning Council (SPC) has been charged with designing and coordinating the process. With the operational planning process in place, the SPC was charged with developing a process for preparing an institutional master plan in fall 1998. Key steps taken in development of the master plan include the following.

- Several firms have been engaged to provide needed expertise. The Metro Data Resource Center completed an analysis of population and demographic information for the MHCC service area, including projections through 2020 (see **Appendix I**). Based on the East County area (MHCC district plus contiguous area), an estimated population of 477,000 in 2000 is projected to increase to over 565,000 by 2010 and over 630,000 in 2020.

- Charles McIntyre was engaged to develop an enrollment-forecasting model for MHCC (see **Appendix II**). The resulting model is based on multiple regression analysis using historical MHCC data on enrollment, tuition and fees, and budget expenditures among other factors, and local demographic and economic data and projections (including results from Metro study described above). The variables influencing MHCC enrollment, in order of importance, are budget expenditures, outreach and growth orientation, tuition and fees, unemployment rate, population, and PSU tuition and fees. In the model, the key determinant of future enrollment is the economic forecast for Portland and Oregon. The logic is that continued economic expansion will ensure adequate state funding which, in turn, will allow MHCC's budget to expand to accommodate enrollment demand. A positive economic forecast indicates an enrollment growth of about 3,000 FTE between 1998-99 and 2010-2011. A significant economic downturn with resulting budgetary constraints indicates relatively stable enrollment over the next ten years with no significant growth. The actual modeling software is included in the contract, thus, MHCC retains the ability to run alternative scenarios and update the model as needed.

- Paulien & Associates were engaged to assist the college with design and implementation of the process described in this document. Dan Paulien has visited MHCC several times, facilitated college and community forums designed to capture input for the master plan, and has reviewed drafts of the master plan.

- BOORA Architects have been engaged to assist with development of the facility master plan. The results of their work are found in Part 2 of this report.

The following table summarizes key activities involved in producing a master plan.

Educational Master Plan	*Facility Master Plan*
• Initiate program review. • Gather input from faculty, staff and program advisory committees on program/curricular offerings anticipated for the next 5-10 years. • President's Council review of unit input, formulate initial recommendations. • Survey of local employers. • Enrollment forecast. • Campus forums to review current and discuss alternative directions and strategies.	
• Compile fact sheet and other documentation on alternative directions and strategies. • Initiate public involvement campaign.	
• Conduct series of community input/feedback sessions. • Campus forum to refine educational master plan. • Present preliminary recommendations to MHCCD Board.	• Review of deferred maintenance. • Update facility master plan document – space needs analysis.
• Continue community input/feedback sessions. • Finalize educational master plan.	• Conduct facility impact analysis of major alternatives/initiatives identified in educational master planning effort. • Complete space utilization and needs analysis. • Present preliminary recommendations to MHCCD Board.

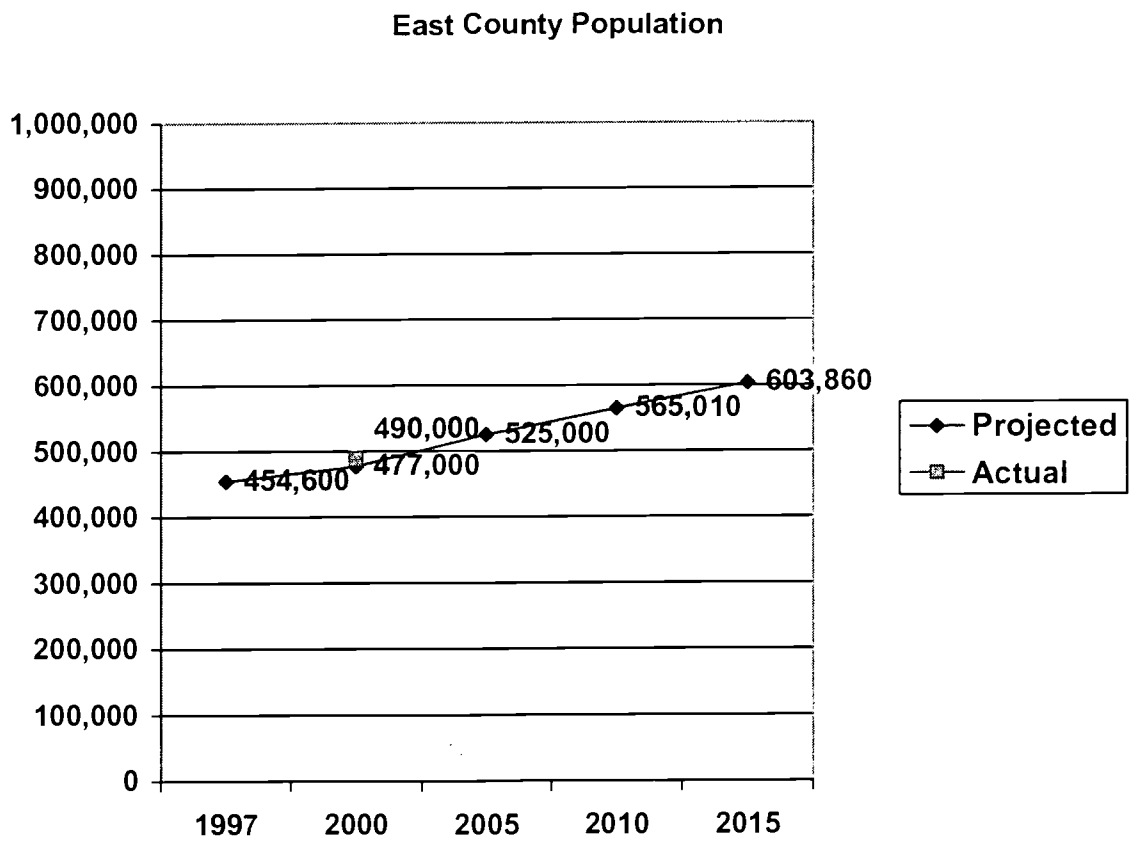
Major milestones in carrying out the above process include the following.

- April 1999 – SPC publishes and President's Council approves, *Guidelines for College/Community Involvement in Development of Educational and Facility Master Plans for Mt. Hood Community College* (see **Appendix III**).
- May 1999 -- Representatives of SPC meet with each division and department of the college to review master plan process and facilitate initial input from the divisions/departments to the educational master plan (see **Appendix VII**).
- June 1999 -- Approximately 100 college staff and community members attend College Forum on June 4, 1999 to review initial input to educational master plan (see **Appendix VI**).
- July 1999 – survey of and focus groups with employers in the East County area completed (see **Appendix IV**).
- October 1999 – Community Forum held to gather expectations of the community for the college (see **Appendix VI**).

- August 1999 through present – presentations at meetings of various community organizations (see **Appendix V**).
- Fall 2000 – SPC members visit college divisions and departments to gather feedback on education plan and identify priority facility needs. College Forum held in November to review master plan with specific focus on college purpose and mission (facilitated by Richard Alfred and Patricia Carter from the Consortium for Community College Development).
- Fall 2001 – in September 2001, the MHCCD Board adopted a new mission statement, including a new vision statement and core values.

Population and Demographic Projections

The Metro Data Resource Center (Portland metropolitan regional government responsible for land use planning among others) completed an analysis of population and demographic information for the MHCC service area, including projections through 2020 (see **Appendix I**). Based on the east county area (MHCC district plus contiguous area), an estimated population of 477,000 in 2000 is projected to increase to over 565,000 by 2010 and over 630,000 in 2020. Based on Census 2000, actual population for East County in 2000 is 490,000.



Within this overall growth there will be considerable variability in the demographic profile of the East County area. Major trends are summarized below.

- ***Age Distribution.*** The 18-29 year old population is expected to increase by 15,469 between 1997 and 2010. The 18-20 years of age group alone will grow by 4,894. If MHCC continues to hold its market share of recent high school graduates, enrollment, especially in FTE since these students tend to attend on a full-time basis, will increase significantly. The number of high school graduates (see table below) is not expected to peak until 2008. The 30-45 age group is expected to decline by 11,905 by 2010. This change will have a negative impact on professional technical programs, which tend to enroll older students compared to the four-year transfer curriculum. The 45-64 years of age group is projected to grow by 61,611 while the 65 and older segment is expected to grow by 19,661. Thus, educational programming targeted at older adults will be an increasingly important market segment for the college.

Forecast of HS Graduates		
YEAR	NUMBER OF LOCAL HS GRADS	NUMBER ATTENDING MHCC
1991-92	1,888	600
1992-93	1,952	589
1993-94	1,944	494
1994-95	2,050	603
1995-96	1,910	552
1996-97	2,002	481
1997-98	2,063	542
1998-99	2,207	626
1999-2000	2,372	547
2000-2001	**2,322**	**650**
2001-2002	**2,419**	**677**
2002-2003	**2,516**	**704**
2003-2004	**2,613**	**732**
2004-2005	**2,712**	**759**
2005-2006	**2,762**	**773**
2006-2007	**2,812**	**787**
2007-2008	**2,800**	**784**
2009-2010	**2,712**	**759**
Numbers in bold are projections		

The above projection is conservative and assumes that MHCC will not increase its "capture" rate from local high schools (currently at 28%). Note that an equal number of recent high school graduates attend MHCC each fall from other high schools, primarily in Oregon. Among all the colleges and universities in Oregon, MHCC has one of the highest capture rates of Oregon high school graduates.

- ***Race and Ethnicity.*** Assuming that the college district will change as the region changes, the expectation in future years is that the district population will become more diverse. This is based on regional and national projections in which the share of the white population declines over the long run. In 1990, only 9% of the East County

population was minority compared to a projected 15% by 2010 (this is a conservative estimate since the minority population is probably undercounted). Hispanics and Asians will account for the majority of the growth in minority population. Much of this growth is being fueled by in-migration, which accounts for the growing demand for English as Second Language courses. Ethnic/Race distribution by grade level, see table below, provides a picture of changing demographics that will impact the college in future years. The most striking finding from a review of the table is the large percentage of Hispanic students at the lower grade levels. Since 25-30% of local high school students attend MHCC, one can easily see the impact that this will have on the future Ethnic/Race distribution of the MHCC student population. For all grades and area-wide, Hispanics currently account for 10% of school enrollment. However, at the Kindergarten level, Hispanics account for 17% of enrollment, 16% for grade 1, 13% for grade 2, and 12% for grade 3.

School Districts within MHCC Service Area: Percentage of Students in Each Grade who are in Each Race/Ethnic Group, Fall 1999

Grade	White	Black	*Hispanic*	Asian	American Indian
Kindergarten	73.5%	3.2%	*16.8%*	5.7%	0.9%
Grade 1	73.3%	4.0%	*15.6%*	6.4%	0.8%
Grade 2	77.5%	2.9%	*13.1%*	5.4%	1.2%
Grade 3	77.4%	3.8%	*12.0%*	5.8%	1.0%
Grade 4	79.6%	2.8%	*10.9%*	5.8%	0.9%
Grade 5	78.7%	3.3%	*10.4%*	6.0%	1.7%
Grade 6	81.5%	3.1%	*9.4%*	5.0%	1.0%
Grade 7	82.5%	2.8%	*8.5%*	5.2%	0.9%
Grade 8	83.8%	2.6%	*7.2%*	5.4%	0.9%
Unclassified Elementary	77.2%	8.7%	*10.9%*	2.7%	0.5%
Grade 9	83.4%	2.5%	*8.3%*	4.9%	0.9%
Grade 10	84.6%	2.0%	*6.6%*	5.5%	1.2%
Grade 11	85.0%	2.3%	*6.4%*	5.7%	0.6%
Grade 12	86.2%	1.7%	*5.3%*	5.7%	1.0%
Unclassified Secondary	58.1%	1.4%	*35.1%*	5.4%	0.0%

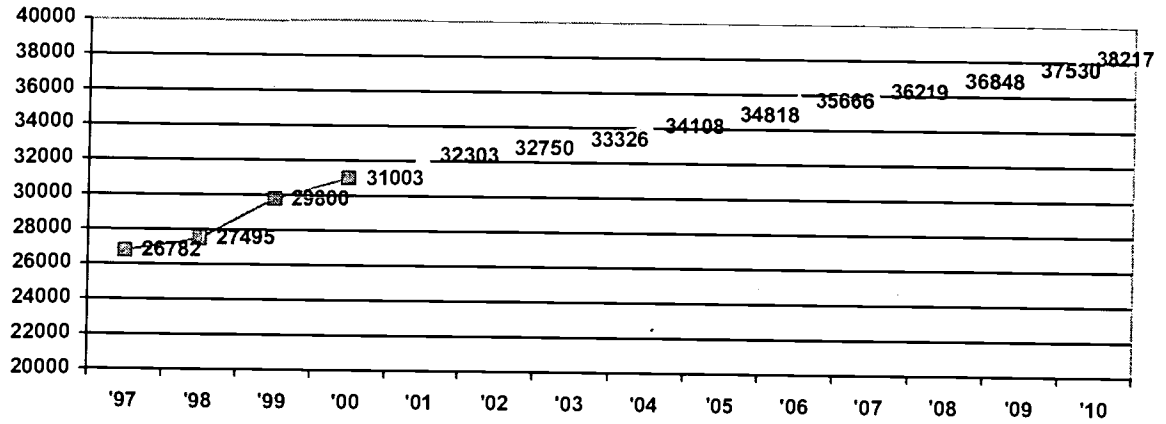
- ***Educational Attainment.*** Based on the 1990 Census, over 18% of the East County adult population does not have a high school diploma or GED. Nearly 50% of adults have not attended college, and less than a quarter of adults have an Associate's Degree or higher. This level of education attainment is not expected to change significantly over the next ten years. Although college attendance is expected to increase overall, any gains will be offset by in-migration of people with only a high school diploma or less.
- ***Household Income.*** Based on 1990 Census and constant 1990 dollars, about a quarter of East County households have under $17,500 in income, another quarter between $17,500 and $29,999, about 20% between $30,000 and $42,499, and 30% over $42,500. East County has the highest absolute level of low-income households in the Metro area. Based on income and other indicators (single parent households, public assistance, and children living in poverty), the disadvantaged of East County are concentrated in the southwest corner of the district but also within pockets throughout

the area. The basic 1990 income distribution is not expected to change significantly through 2010, again due to in-migration offsetting gains achieved by base population. Thus, MHCC will continue to be challenged to facilitate upward mobility for a growing disadvantaged population.

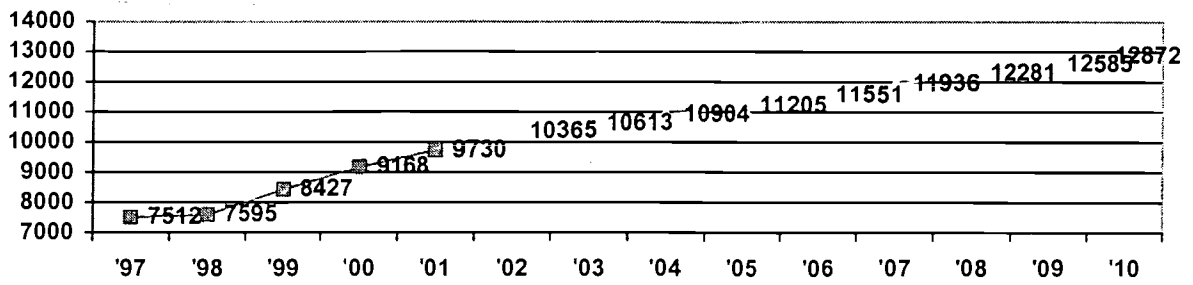
Enrollment Forecast

Charles McIntyre built the enrollment simulation and planning tool under contract to the college. The resulting projections are displayed below.

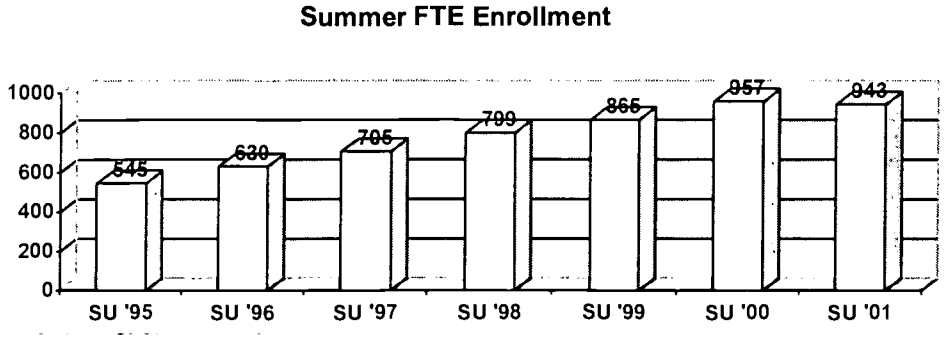
Annual Headcount Enrollment and Projections



Annual FTE Enrollment and Projections



Recent enrollment growth has exceeded results from the original forecasting model developed in 1999. For example, the projected FTE enrollment for 1998-99 was 8,369 versus the 8,427 actually realized. The forecast presented in the above tables is current as of October 2001. Enrollment growth is influenced by policy, and current enrollment policy is growth-oriented. This is reflected in the recent growth seen in summer enrollment (see chart below).



Enrollment growth began to level off in summer 2001. The downturn in the economy has resulted in reduction in projected State of Oregon revenues, which in turn, requires budget reductions for all state programs, including the community colleges. Budget constraints can reduce the ability of the college to respond to enrollment demand. Thus, if this trend continues, MHCC might not be able to achieve projected or targeted enrollment levels.

In terms of budget, facilities and other infrastructure needs, the mix of enrollment is as important as the total. The table below describes current FTE enrollment categorized by lower division transfer, professional technical, developmental and continuing education. Although all four areas are expected to grow over the next ten years, the distribution is likely to change as projected for 2010 (this is a rough estimate since there is no way to accurately project – the trend is what's important). That is, lower division, developmental and continuing education are likely to increase their share of total FTE relative to professional technical and is primarily a function of demographic trends.

FTE Category	**1999**	**% of Total**	**2010**	**% of Total**
Lower Division	3,669.79	44%	6,179	48%
Prof/Tech	*2,789.18*	*33%*	*3,347*	*26%*
Dev Ed	1,256.47	15%	2,188	17%
Continuing Ed	711.57	8%	1,158	9%
TOTAL	8,427.01	100%	12,872	100%
Headcount Category	**1999**	**% of Total**	**2010**	**% of Total**
Lower Division	8,508	29%	11,300	31%
Prof/Tech	*7,885*	*26%*	*8,200*	*19%*
Dev Ed	6,048	20%	8,700	22%
Continuing Ed	7,359	25%	10,300	28%
TOTAL	8,427.01	100%	38,500	100%

The reasons for these changes are summarized below.

- ***Lower Division.*** The key factor here is growth in number of high school graduates who tend to enroll in lower division course work.

- ***Professional Technical.*** As discussed above, the 30-45 age group is expected to decline over the next ten years and these older students tend to enroll in professional

technical programs. Other factors are the college budget and state funding. Professional technical programs tend to be most expensive to operate and state funding is based strictly on FTE with no allowance for type (cost) of instruction. Professional technical includes occupational upgrading courses and apprenticeship, which currently accounts for much of the enrollment growth in this area.

- ***Developmental Education.*** The relatively large low-income, disadvantaged population in East County combined with in-migration will continue to fuel demand for adult basic education and English as a Second Language (ESL) instruction.

- ***Workforce Development and Continuing Education.*** The Center for Community and Workforce Development, which includes customized training and education services for business and industry, has and will continue to experience high demand and growth. Especially within the environment of a strong economy with a shortage of skilled labor, businesses tend to focus on recruitment, retention and upgrading of the workforce. This relationship was confirmed by recent events with the economic downturn and resulting decline in The Center's enrollment. The need for continuous upgrading of the existing workforce was especially pronounced in the employer survey and community input into the master plan (see **Appendix IV** and **Appendix VI**). The Maywood Campus also plays a very important role in meeting the needs of workforce development for East County with programs targeted on the low income and disadvantaged. Grant-funded programs are affiliated with the Maywood Campus, which address critical social needs through quality (award winning) social service programs such as Steps to Success (welfare to work), Head Start and the Dislocated Worker program. Continued demand and enrollment growth is expected to continue in this area, although contingent to a great extent upon availability of grant funds.

There are fundamental changes occurring in society that have and will continue to influence the development and evolution of the master plan and enrollment trends in particular. Some of these changes include:

- The continuing and pervasive influence of information technology – on-line, distance learning is a rapidly growing choice for the education consumer.
- The increased competition for students and educational dollars, especially from the private, for-profit sector.
- The growing demand for short-term, practical, skill-specific courses, especially among employers for their employees, packaged and delivered in non-traditional ways.
- The continued increase of low-income and transitional population as a percentage of the total population served by MHCC.

These and other trends identified via the community input process are incorporated into the educational plan presented below.

Community Linkages and Partnerships

Following is a compilation of some of the major partnerships and initiatives currently underway between MHCC and other organizations within the region. These collaborations and initiatives have and will continue to influence the future direction of the college.

- Mt. Hood Regional Consortium is a longstanding cooperative effort involving the K12 districts, MESD and MHCC. Tech Prep 2+2, 2+2+2, and Early Collegiate Opportunity courses comprise the main focus of this collaboration. The current educational reform effort in Oregon will continue to create demands and opportunities for the college to work with the K12 districts to enhance educational opportunities, especially for high school students.
- Microelectronics Consortium is an ongoing initiative involving LSI Logic, Fujistu and MHCC. This has been a very successful collaboration resulting in a state-of-the-art regional training center including a "clean room".
- The Center for Advanced Learning is a joint effort among local school districts, MHCC and business & industry to develop and deliver career pathways that meet industry standards. This Center is scheduled to open in 2003.
- Troutdale property – a 6.24 acre site with a 65,000 sq. ft. facility will soon be declared surplus by the Army Corps of Engineers, and will then be transferred to the college. Educational use of the facility is currently being assessed as part of the master plan, including potential participation of the local K12 districts.
- Gateway Re-Development Project is an initiative by the Portland Development Commission. The Gateway district is located at a major freeway interchange and regional transportation hub (light rail and bus). Portland State University and MHCC have been invited to participate in this initiative with the expectation of including a higher education center as part of the development effort.
- MHCC is in the process of forging partnerships with four-year colleges and universities to bring a University Center to the Gresham campus. This Center would allow East County residents to earn upper division and graduate course work without leaving the local area.
- Workforce development efforts include Steps to Success, Dislocated Workers Project and Head Start. Efforts continue to link these programs with other MHCC divisions such as the "Equipped for the Future" program involving Steps to Success, Head Start and Developmental Education.

Mission, Vision and Values

Review and discussion of mission and vision within the college community came into focus during the 2000-2001 year, including a College Forum in November 2000. The MHCCD Board of Education developed a final draft in June 2001 and completed adoption in September 2001.

Mission -- A COMMITMENT TO THE COMMUNITY

Mt. Hood Community College affords all people a knowledge-based education, giving them the ability to make life choices; adapt to change; build strong communities; contribute to and derive benefit from the new economy; and become part of a skilled workforce.

Vision

The College is dedicated to:

- Student learning as the most important outcome.
- Being a comprehensive community college with initiatives in information, engineering, bio-medical and biological technologies.
- Seamless transfer opportunities to colleges, universities and careers.
- Continued, directly applicable, learning at all stages of career and life.
- Striving to meet learning needs when and where students prefer.
- Providing learner support.

Values

As part of the master plan effort, the college community participated in an effort to identify the four or five core values of Mt. Hood Community College. This is an important task because it lays the foundation for the college's institutional master plan.

The college's core values are those principles that guide the college as it fulfills its mission. They are enduring and they will be the same in the future as they are now. Characteristics of core values are as follows.

- Qualities that have intrinsic value and importance to the people inside the organization – deep personal beliefs;
- Qualities that need no external justification;
- Values we would hold regardless of current environment, competitive requirements or management fads;
- Are not what we think we ought to believe; they are what we do believe.

Identifying the college's core values is no easy task. They are the central guiding principles for the college, which will be as true a descriptor of the college's values in 2010 as they are today. They aren't subject to the pressures of demographics, financial resources or cultural changes. Also, core values are not strategies or directions the college may take in response to the external environment. They are the fundamental principles that define the heart of MHCC.

The **core values** statements are as follows:

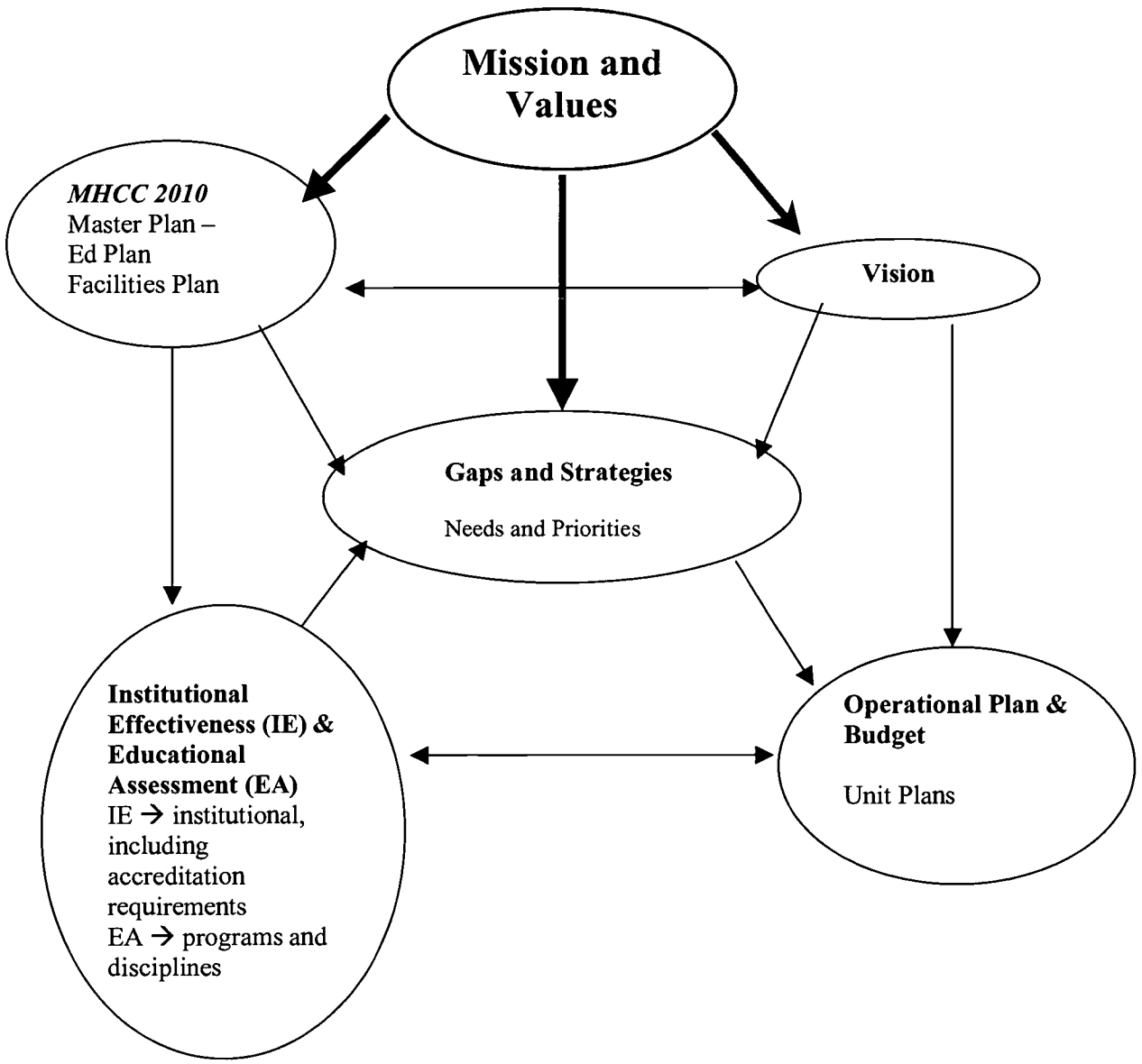
Integrity: infusing high standards into all MHCC efforts.

Respect: showing thoughtful consideration for all MHCC community members.

Innovation: promoting creativity and flexibility in all aspects of the MHCC experience.

Service: enhancing opportunities for student achievement and success.

The following graphic illustrates the relationship between mission/vision/values and master plan, operational plan and assessment activities.

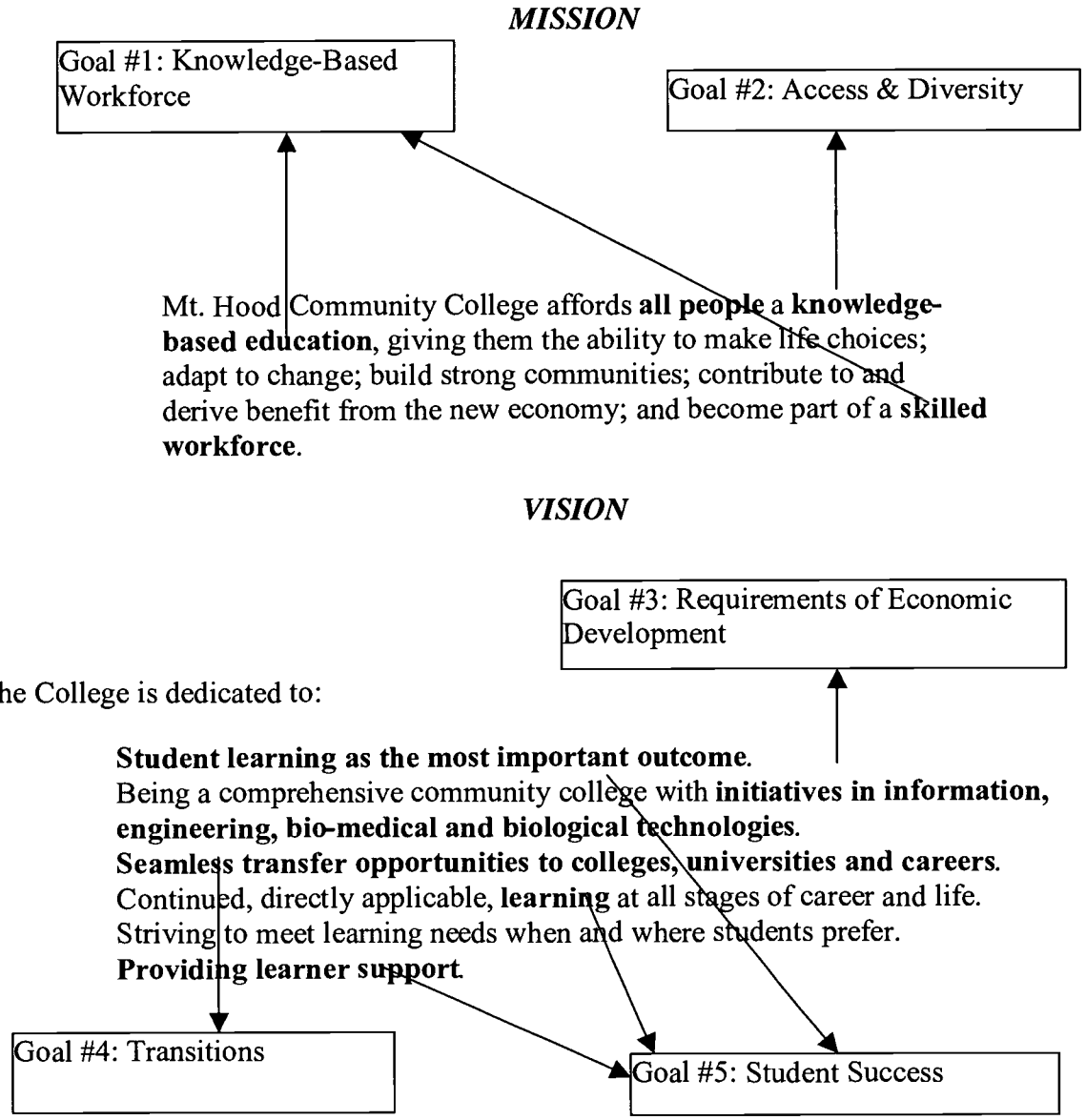


College Goals and Action Strategies

As previously reviewed, the division and departments have submitted their vision and plans for 2010 and an ongoing effort has been compiling community input. The President's Council has reviewed this information and conducted several sessions with the aim of integrating this information in order to develop an overall vision for MHCC in 2010. The steps followed by President's Council in this analysis and synthesis included:

1. Identification of gaps between current reality and the vision.
2. Developing strategies to close the gaps and assignment of strategies to the college goals. This final step links the vision for 2010 to the college operational plan, which provides the incremental mechanism for monitoring progress toward achievement of the vision.

FROM MISSION/VISION TO GOALS/ACTION STRATEGIES



Goal #1. Knowledge-Based Workforce. Provide knowledge-based educational offerings to meet student and community needs, with a complementary set of student and community support services.

Action Strategies

1.1 Strengthen instructional program with the aim of achieving highest standards in preparation and outcomes.
1.2 Develop an outcomes-based integrated General Education program to compliment discipline-specific preparation.
1.3 Develop exemplary instructional improvement and evaluation systems (faculty evaluation and educational outcomes assessment).
1.4 Design and implement activities to enhance the recruitment, hiring, orientation and mentorship of all college employees to support achievement of a knowledge-based learning community.
1.5 Strengthen business and industry partnerships with focus on the education and training needs of incumbent workers.

Goal #2. Access & Diversity. Provide affordable and attractive option for members of the community seeking a post-secondary education and/or careers, including the creation of an environment in which diversity thrives.

Action Strategies

2.1 Increase annual FTE by 3%.
2.2 Increase access throughout the district through the development of partnership-based community centers.
2.3 Strengthen student recruitment efforts.
2.4 Increase the number of local high school graduates attending MHCC.
2.5 Strengthen developmental education preparation such that the achievement of under-prepared students will equal that of entering students not needing remediation.
2.6 Conduct targeted outreach efforts and create an environment that provides support for an increasingly diverse student population to be successful.
2.7 Increase the participation rate of local high school students in dual credit programs.
2.8 Enhance employee sensitivity and appreciation of diversity.
2.9 Improve employee recruitment to achieve a college workforce reflecting the diversity of the community.
2.10 Develop a Distance Education program to provide learning independent of time and place.
2.11 Develop and implement an interactive college Web site such that students can obtain comparable services via Web that they can in-person.

Goal #3. Requirements of Economic Development. Develop programs in emerging technologies with emphasis on information, engineering, bio-medical and biological technologies.

Action Strategies

3.1 Design programming in high priority areas -- information, engineering, bio-medical and biological technologies.
3.2 Strengthen partnerships with local governments, workforce development agencies, and higher education.
3.3 Strengthen programs to prepare a skilled workforce to support economic development in the region.
3.4 Act as a catalyst to stimulate economic development.
3.5 Design and implement a job development program.

Goal #4. Transitions. Provide seamless transfer opportunities to colleges, universities and careers.

Action Strategies

4.1 Strengthen university articulation and increase the number of MHCC students transferring to four-year colleges and universities.
4.2 Strengthen career services and increase the job placement rate for MHCC graduates.
4.3 Increase number of GED, ESL and other outreach program completers who successfully transition to college-level programs.
4.4 Plan, design and build partnerships for establishment of a University Center at MHCC, allowing students and local residents the opportunity to earn a four-year Degree without leaving the area.

Goal #5. Student Success. Provide infrastructure and support services to ensure student success.

Action Strategies

5.1 Increase overall student retention rate by 3%.
5.2 While preserving existing assets and facilities, plan and propose strategies for facilities expansion to meet the increasing demands of a community undergoing significant growth and cultural transformation.
5.3 Provide sufficient state-of-the-art technology and equipment to support knowledge-based education (Information Technology Strategic Plan).
5.4 Develop a comprehensive resource development program to ensure that financial requirements are secured.
5.5 Enhance/increase student financial aid.
5.6 Enhance childcare services for students.
5.7 Enhance instructional support services (tutoring, mentorships, etc.).

Key Indicators of Institutional Effectiveness

Progress on the above college goals and action strategies will be monitored through quarterly performance reports prepared by President's Council. In addition, the following

indicators will be used to produce an annual summative evaluation in the form of the Institutional Effectiveness Report.

Goal #1. Knowledge-Based Workforce. Provide knowledge-based educational offerings to meet student and community needs, with a complementary set of student and community support services.

Key Indicators

1.1 Graduation/Completion. Maintain level of graduates as a percentage of total annual FTE equal to or greater than that of comparable community colleges in the State of Oregon.
1.2 Ninety-five percent of MHCC graduates will pass licensure/certification examination results.
1.3 Living Wage. Minimum of $10 per hour or $400 per week. Weekly income of professional technical graduates employed after attending MHCC (1st quarter following graduation).
1.4 Achieve General Education outcomes (TBD).
1.5 Faculty Participation. One hundred percent of faculty participate in at least one professional development activity per year.
1.6 Faculty Satisfaction. At least 70% of the faculty rate the performance of the TLC as excellent or very good.
1.7 Customer Satisfaction. Ninety percent of employers/employees rate customized training services as excellent or very good.
1.8 Marketing. Expenditures and measures of effort relative to enrollment levels and growth. Benchmark to be determined.

Goal #2. Access and Diversity. Provide affordable and attractive option for members of the community seeking a post-secondary education, including the creation of an environment in which diversity thrives.

Key Indicators

2.1 Enrollment. Increase annual FTE by 3% for 2002-2003.
2.2 Community Satisfaction. From The Nelson Report (2001) Survey Research Report: "Mt. Hood Community College enjoys an excellent reputation in the community, garnering an extremely high positive rating of 67% (excellent – 20%, pretty good – 47%).
2.3 Increase market share of local high school graduates by 10%.
2.4 Performance of Guided Studies Students. Successful Guided Studies students will achieve retention and academic performance levels comparable to those of non-Guided Studies students.
2.5 Jump Start Enrollment. Increases by 5% in 2002-2003.
2.6 Employee Profile. Percentage of protected classes among MHCC employees approximates community profile.
2.7 Student Body Profile. Percentage of protected classes among MHCC students approximates community profile.

2.8 Performance. Students from protected classes will matriculate, maintain standards of academic progress and complete programs of study at rates similar to students in non-protected classes.
2.9 Cost/Revenue. Comparable to peer colleges.
2.10 Achieve interactive Web timelines (student registration, etc.).
2.11 Distance Education program development. Ten new courses developed each year.
2.12 Distance Education enrollment – increase by 1,000 by 2002-2003.

Goal #3. Requirements of Economic Development. Develop programs with emphasis on information, engineering, bio-medical and biological technologies.

Key Indicators

3.1 Meet Program development and enrollment targets (TBD).
3.2 Meet economic development and job creation targets (TBD).

Goal #4. Transitions. Provide seamless transfer opportunities to colleges, universities and careers.

Key Indicator

4.1 Job Placement (Graduates). Seventy percent of professional technical graduates are Employed or continuing their education in field of training.
4.2 Job Placement (Non-Graduate Core Class Completers, 60/30 core credits completed for associate degree/certificate). Sixty percent of professional technical leavers are employed or continuing their education in field of training.
4.3 Number of Transfers. Maintain level of transfer majors attending Oregon University System institutions.
4.4 Transfer Performance. Ninety percent of MHCC transfer students to OUS system maintain a minimum of 2.00 GPA.
4.5 Seventy percent of students completing GED, ESL and other outreach programs who desire to will successfully transition to college-credit programs.

Goal #5. Student Success. Provide infrastructure and support services to ensure student success.

Key Indicators

5.1 Retention. Increase overall retention rate by 3%.
5.2 Student Satisfaction. Maintain "excellent/good" overall level of satisfaction with the college in general.
5.3 Course Success. A minimum of 75% of students will receive a C grade or higher.
5.4 Student Satisfaction. Maintain "excellent/good" overall level of satisfaction with the college in general.

5.5 Increase Library base budget by 10% per year.
5.6 Implement Facilities Master Plan.
5.7 Facilities maintenance schedule is implemented according to specified timelines.
5.8 Facilities Management customer satisfaction -- TBD.
5.9 Fund Raising. Ten percent increase annually.
5.10 Capital Campaign. Targets achieved.
5.11 Technology Funding Level. Maintain budget target for technology funding (currently 2.25% of annual operating budget).
5.12 Computer User Satisfaction. Maintain "excellent/good" overall level of satisfaction.
5.13 Equipment Objective. Provide sufficient state-of-the-art equipment (monitored by funding distribution across areas).
5.14 Campus Climate. Benchmark for campus climate established in survey conducted in spring 2000 with plans to repeat the survey each year. Indicator question: percentage agrees with statement that "MHCC is a supportive environment in which to work."
5.15 Increase number of students receiving financial aid (target TBD).
5.16 Increase number of childcare slots for students (target TBD).
5.17 Increase number of students receiving instructional support services (target TBD).

Organizational unit level planning is a critical link between operations and the vision contained in this master plan. The 2010 vision statements for the divisions and departments are contained in **Appendix VII**.

Service Plan

Support services play both a direct and indirect role in realizing the education plan, from providing efficient and customer-friendly student services to an environment conducive to teaching and learning. Aspects of the service plan have already been touched on with regard to technology and facilities, the latter being given fuller development in Part 2 of the master plan.

Central to the service plan is the "Ash Mountain" project. On October 11, 1999, the college received a check for over $2 million as Mt. Hood's portion of the settlement of the Ash Mountain lawsuit filed by the Oregon Attorney General's office nine years ago. The lawsuit alleged that developers misused low cost federal loans to build a for-profit housing development known as Ash Mountain. The Attorney General has set strict guidelines for the use of the settlement monies. Approval was granted for a "redesign" of student services. The goal of the redesign is to offer MHCC student services in a central "one stop" location, making them easily accessible, convenient, and efficient.

Areas that will be impacted by the settlement include enrollment services, services for evening and weekend students, student services at Maywood Campus, cultural diversity programs and childcare services. Also targeted to receive funds is the newly acquired Troutdale campus. BOORA Architects are currently assisting college staff with this project, results of which will be integrated into the master plan.

The theme for the redesign of student services is perhaps best expressed as "high tech/high touch". For example, web-based services, such as web registration and web access to student

information, comprise one element of high tech. On the other hand, the student population served by MHCC includes a large number of low-income and disadvantaged without easy access to the Internet and/or ability to use Web-based services effectively. Thus, the college also needs to provide personalized service in addition to technology-based systems. Balancing these sometimes competing interests will be key to successful completion of the redesign project.

Example expressions of student services' vision for 2010 are as follows.

- Enrollment Services (admission, financial aid, cashiers, advising, and registration) are not centralized for students, faculty and staff. Goal: Redesign space so services are centralized.
- Training of Enrollment Services staff to automate admission, financial aid (automatic packaging) registration (telephone & web) and degree audit modules. Once staff is trained, they must be trained to train others throughout the campus to use the technology.
- Lack of multilingual staff and services for a more culturally diverse student population.

Information Technology Plan

In December of 1999, Baltzer-Sutton Associates was engaged by MHCC to facilitate the process of developing a new five-year Information Technology Strategic Plan. To accomplish the development of the IT Strategic Plan, Baltzer-Sutton Associates proposed a two-step process:

- Step 1: Review of existing documentation and development of planning timeline.
- Step 2: Facilitation of a series of planning sessions geared toward the development of a five-year IT Strategic Plan.

- The approach taken for development of the IT Strategic Plan was based on a participative process using an Information Technology Strategic Planning Team composed of approximately 30 individuals who represent a cross-section of the internal college community. Results of this effort are summarized below (see **Appendix VIII** for the complete plan).

Mt. Hood Community College has made significant advancements in its acquisition and use of information technology since 1995 when the college's last information technology strategic plan was completed. The college has made steady investments in technology, through the use of Certificates of Participation (COPS) and by dedicating 2% of the annual college budget, to improve both instruction and administrative services.

In January of 2000, the MHCC Information Technology Planning Team began a collaborative process of developing a new Information Technology Strategic Plan for 2000-2005. As a result of this process, a new IT Vision Statement and a series of Information Technology Goals were identified for the college. As part of this IT Strategic Plan, specific departments and/or groups have been assigned ownership of strategies designed to assist MHCC in achieving its information technology goals.

Information Technology Vision

Mt. Hood Community College is dedicated to the creative and responsible use of information technology to:

- *provide flexible and responsive access to learning and services,*
- *enhance the teaching and learning process,*
- *develop, deliver and manage technology-enhanced instruction,*
- *increase efficiency and effectiveness in the use of our resources, and*
- *meet the diverse needs of our community.*

Information Technology Goals

1. Use technology to enable student learning and success.
2. Provide appropriate and adequate technology in all learning spaces college-wide to support teaching and learning.
3. Use a variety of distance learning media to retain market share and to develop/deliver courses and programs to students learning at a distance.
4. Encourage and recognize the creative use of information technology in support of the college's mission and goals.
5. Use information technology to document and promote institutional effectiveness.
6. Create and support ongoing opportunities for technology-related professional development and training.
7. Use information technology to facilitate communication throughout the organization.
8. Establish and communicate policies, processes and procedures for prioritizing and implementing information technology initiatives.
9. Establish and maintain technology infrastructure ahead of the curve of the implementation of other technologies.
10. Provide consistent high quality technology support across all college locations.
11. Identify and allocate fiscal resources for acquisition and support of technology.

Implications

The master plan charts the course for realizing this vision, both in the educational programming and facility requirements. The gaps between the vision and current reality have been identified and strategies developed to close the gaps. Major implications of the education master planning effort include the following:

- Based on the enrollment forecast model, MHCC FTE enrollment is expected to grow by over 3,000 by 2010. Since MHCC is at near capacity in facility utilization, additional facilities will be needed to accommodate expected growth.
- Organizational collaboration will be even more prominent in the future teaching and learning environment. This will include joint planning and programming with K12, four-year colleges and universities, business and industry, local government, and workforce development agencies among others. An example of this collaboration is the **Center for Advanced Learning** (CAL), a joint-use facility being developed by the local school districts, business and industry and MHCC. The Center is scheduled to open in 2003 and provide a minimum of 500 students from four local high schools with programs in Information Technology, Medical/Health Careers, and Pre-

Engineering/Manufacturing. Another example is the **University Center** to be established at MHCC in partnership with four-year colleges and universities. This Center will provide an opportunity for local residents to pursue upper division and graduate coursework without having to leave the East County area. Shared use and support for facilities will be required through creative financing and administrative systems to facilitate a flexible and distributed system of instruction throughout the college service area.

- Technology-enhanced learning is a theme across almost every area of instruction and support services. Existing college facilities were not originally designed with the information age in mind. A strategic information technology plan has been completed as part of the master planning process and will need to be incorporated into future operational planning. Technology planning will also need to be integrated with future development of the MHCC Library. A new library and computer center are being planned as part of the University Center.
- "Learning-centered" instruction is another major theme across the instructional areas expressed in numerous ways. This includes "individualized" learning, which interconnects with the emphasis on technology. Other expressions include "small group study" and "learning communities". Facility design needs to adjust to new pedagogical approaches. Although the need for large lecture classrooms will continue, the number of such rooms needed in the future will be relatively fewer and will be utilized differently than in the past.
- The future economic growth and development of East County is contingent to a great deal on the provision of a skilled workforce. A critical shortage of skilled labor currently exists in the **health area**, especially Nursing. An area of future need will be in **biotechnology**, which spans across multiple industries. Meeting these needs will require both educational program development and new facilities.
- Central to the service plan is the "Ash Mountain" project, which involves a redesign of student services. The goal of the redesign is to offer MHCC student services that are easily accessible, convenient, efficient and affordable. Although an interim solution is currently being implemented, final development of this project requires implementation of the facilities master plan.

Some of the technology and support implications have already been identified in previous sections. The technology implications will be especially challenging. Increased enrollment and an increased number of classrooms at varying sites (particularly computer classrooms) will have a direct bearing on service. The growth in number of computers being maintained will increase the number of service technicians required. Placing the labs at various distributed sites further increases the number of technicians -- each site that has daytime and evening classes (without weekend offerings) will require two technicians for coverage. Any open labs at these locations will also require lab support staff to monitor the use of the lab during times they are open to the public.

Increasing class offerings over Friday evenings, Saturday and Sunday will require technician availability during those times for support of the computers themselves as well as the network.

To provide that coverage at just the existing main sites would require the increase of at least three FTE to provide this coverage. Extending instruction to seven days per week, and with the inclusion of distance education requiring systems working seven days by 24 hours, has an equipment impact as well. A 7 by 24 schedule of operations does not allow for the "down time" needed for system maintenance and backup. The only practical method that leaves is redundant systems that can stand in for each other while the counterpart system is being pulled off line and maintained. Redundant systems will double network area equipment costs for servers. The K-box for CARS should also be considered in this category of server duplication.

With the increased load on use of the CARS system during the same expanded time frames, the server running that system will also need to be upgraded and duplicated. The use of web-based registration and student information retrieval from that system will also contribute to the need to upgrade and duplicate. Rather than having 60 – 80 users connected and retrieving information at one time as we do today, there would be several hundred as each student and faculty member logged in through the web as a connected user will draw resources from that machine.

Similar analysis to the above will be required across the college in terms of setting appropriate levels of faculty and staff. Financial projections will need to be prepared so that as college enrollment and demand for service increases, appropriate budget strategies can be developed.

The facility implications of the educational plan are specified in Part 2 of this document.

Part II. Facility Plan

BOORA Architects, Inc.
Portland, Oregon
John Meadows, Principal
With
Facilities Needs Analysis
By
Chuck McIntyre, Director
Computer Aided Planning
Sacramento, California

Relationship Between Education Plan and Facilities Plan

The MHCC Education Master Plan outlines a new mission, vision, and priorities for development. The programs and organizational development spring from an agreed upon goal to find out what the diverse parts of the community need and provide for those needs. This is in contrast to simply establishing a learning institution. Community linkages and partnerships will only enhance the image of MHCC and the importance of its role in the urban environment.

Population growth alone is not significant enough to require fundamental change at the college. The population is changing in numbers, in diversity, in demographics and in its needs. The college, if it is to keep pace, must increase in size, in its ability to welcome non-Anglo community members, in its support of the economically challenged and in the types of programs the community requires. As the college works with businesses and high schools to provide for their specific needs, the school must also maintain an institution that provides for all individuals, a community that provides knowledge and resources for a larger diverse community.

From a facility standpoint, MHCC must convey to the community its progressiveness and competency manifest through the technology that it provides. From an educational standpoint, MHCC must match between facilities and technological reforms in teaching and learning processes. The technological world is moving rapidly, and MHCC must keep pace. The MHCC of the future should be viewed as one large "tech center."

The community's perception of the college is a critical factor. The school must physically manifest an image to the community that represents the 2010 Vision both internally and externally. MHCC must enhance its image and become a responsible steward within the community. One way this can be addressed is in providing a unique scope of programs and services that draw individuals, such as providing short-term, practical skill training. School facilities must adapt to create opportunities to provide for changing instruction and multiple skill levels. Both traditional and non-traditional classes and their instruction are evolving to accommodate community needs.

The Facilities Master Plan analysis is broken into three critical areas:
- Adaptation
- Expansion

■Related Planning

Adaptation must first be approached in ways to get the most out of the existing facilities. The existing campus is well laid out, but due to changes in education and growth in student population, MHCC must be evaluated to make sure the current spaces are being utilized adequately. Space usage must be maximized while at the same time providing for newer teaching and learning technologies. Spaces must become more flexible and more general. The Facilities Master Plan will incorporate interdepartmental coordination of design space and proposed usage as well as determine the requirements for expansion.

The main campus is based on a solid design that fundamentally works well. Additional space added to the current campus must address three criteria:

■Where can space physically and realistically be added?
■How will the added space enhance the existing organization?
■How does a space physically enhance the physical presence of the school for a community perspective?

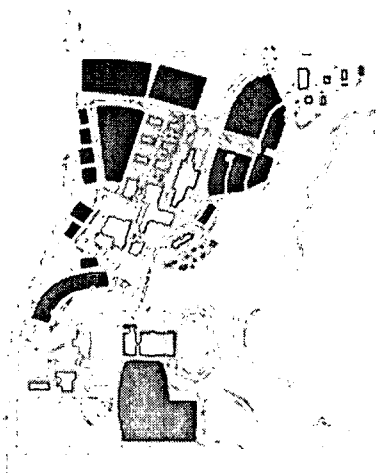
The Facilities Master Plan addresses expansion by exploring opportunities and ramifications of satellite venues, including current satellite facilities, proposed facilities or facilities under construction and a framework for consideration of other satellite venues. The main campus and potential satellites are referred to in the Facilities Master Plan as "elements".

The integrated plans have equal importance to the adaptation and expansion of the physical campus itself. Circulation, Site, Deferred Maintenance, ADA Facilitation and Seismic Upgrades are some of the issues that need to be considered in the Facilities Master plan. For example, parking and access into and out of the main campus is already a concern, but with the possibility of campus expansion, these issues will have to be considered during the design process. The landscaping and site-related issues such as lighting and pedestrian pathways will also become part of the design and social concerns the MHCC 2010 campus will have to address. With the existing college, there are also concerns with its structural stability, accessibility, electrical and mechanical systems and technological changes. The Facilities Master plan will deal with each of these issues and integrate them into the Master planning process.

Community Setting

The community that surrounds the Main Campus is rapidly being urbanized. Where the college was once relatively isolated in a suburban, almost rural setting, it will shortly become a component in the urban fabric.

This urbanization brings with it a substantial cultural mix. Where the school was once an institution passively dedicated to providing education for white, middle-class suburbanites, it now is faced with not only the physical encroachment of the built environment, but with the issue of how to deal with changing demographics.



Gresham Campus

Mt. Hood Community College is the major academic, cultural and civic institution in East Multnomah County. Founded in 1966, it has been an important community resource for over 30 years.

Located on over 200 acres, there are five distinct building clusters that make up the Main Campus. The Main Academic Building is the largest cluster with nearly 500,000 square feet. It houses most of the instructional, administrative and support spaces for the college. The Industrial Technology Building, to the east of the Main Academic Building, houses the industrial technical programs.

Horticulture and Fisheries are located on the northeast side of campus. They are physically disconnected from the rest of campus. The Visual Arts Complex is comprised of freestanding studios totaling 26,000 square feet.

The Physical Education cluster is located approximately 1000 feet south of the Main Academic Building. It houses the gym and related activities, the aquatics center and the G.E. Building. The tennis courts and the track and stadium are located in this cluster.

The Gresham campus is combination of six main academic, administrative and support spaces with a very dramatic and wooded landscape. MHCC campus is also laid out in a combination of tightly knit interior and exterior spaces and a vast spread of facilities hindered by topographical elements.

The campus has served its community for over 30 years, and continues to serve a growing academic community. Both students and community members utilize the 200-acre campus daily. However, changes in community and educational needs have facilitated the Master Plan. In light of these impacts and the aforementioned growing population, the campus must examine interior and exterior elements in order to build a sound institution.

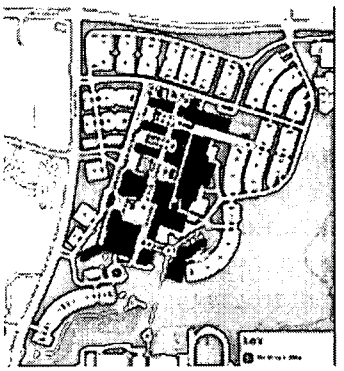
Topography. The main academic campus is located on 200 acres at the corner of 257th and S.E. Stark. The physical qualities of the site are diverse. Formerly a strawberry field, the site slopes from the college buildings to the east into heavily wooded wetlands. Views of Mt. Hood and the surrounding areas are spectacular.

The extensive landscaping of the campus has created a setting for higher education that is truly unique. A large portion of the campus is covered by steeply sloped forested wetlands. Beaver Creek runs through the eastern portion of the campus in a north-south direction. This part of the campus, roughly 75 acres, is protected by the Natural Resource overlay zone and is off-limits to development of any kind.

There is an artificial pond that divides the campus into its north and south components. The pond was part of the original campus site development and serves as a storm water-settling basin for the City of Gresham.

The campus is bordered on the north, west, and south perimeter by a twenty to thirty foot wide landscaped berm. This buffer zone effectively screens the parking areas from view and provides a pleasant background for the campus buildings. It also conceals the campus from community view.

MHCC is bordered to the north, west and south perimeter by a 20-30 foot wide landscaped berm. Its purpose is to screen the parking areas from the academic portion of campus. It also conceals the campus for any public view.



The main academic building houses five courtyards of various sizes. These courtyards are sheltered from the strong east wind by the east wing of the main building. Plantings in these courtyards are extensive and mature.

The comprehensive landscaping of the campus provides a unique collegiate setting. The grounds are extremely diverse and have provided faculty, students and the community with a lasting image of a wooded community college campus.

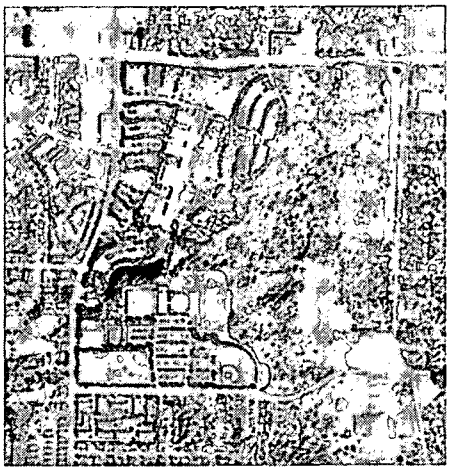
As a "wooded enclave," MHCC has gone from being an educational facility in the midst of the countryside to a facility hardly recognizable to the urbanized public.

- Lack of community presence – no views into campus
- Solid wall of Evergreen trees along Stark Street
- Large trees and overgrown native plantings along Kane
- Poor visibility and signage at entrances
- Overgrown courtyards along main academic building ground level

Space. The physical space at MHCC is organized into landscaping, parking and facilities. The proximity of some of the buildings creates a network of interior and exterior space, while the vastness of others allows for landscape and landscape features.

Over time, however, the growing population and changes in the academic institution have nearly outgrown the existing campus. Analysis of the existing spaces to maximize their usage is key. In addition, opportunities for new spaces must be examined and identified.

Organization. The MHCC organization comprises six instructional divisions, the library resource center, and enrollment, business, student, auxiliary and administrative services. Within the six divisions are over 60 various professional technical programs, ranging from Automotive Technology to Nursing. The programs offered include two-year transfer subject areas, professional-technical certificate programs, two-year professional technical programs, and recognition of completion and occupational extensions. Services such as Extended Learning and Instructional Technology, business training and distance learning are also provided.



Current Gresham Campus

Circulation. Analysis of traffic patterns and circulation in and around the MHCC area identifies the following as issues.

- The significant capacity issues are not apparent on the street system; however, there are some queuing problems at the intersection of Kane and Stark Streets.
- Future widening of Stark Street (east of Kane) will become increasingly important as part of general circulation.
- A weaving issue exists for vehicles exiting the northern access, and turning left onto Stark.
- The safety history of Kane, Stark and existing cross streets indicates that both pedestrian and vehicular accidents occur. A considerable amount of the vehicular accidents are due to speeding.
- Minor street movements at the un-signalized site accesses on Stark Street and on Kane Drive are difficult due to high major street volumes. Stark street access may require a traffic signal in order to make it a major access.
- There is no definition of main access points.
- Internal circulation routes (vehicular and pedestrian) are primarily through parking lots.
- There are limited internal connections, specifically at the horticulture and athletic facilities.

Both pedestrian and vehicular circulations, in relation to the landscape, are key issues. Pedestrian and vehicular circulation in and around campus is less than ideal in certain areas.

- Lack of pedestrian access points between campus and community.
- Lack of appropriate spaces for gatherings/events.
- Personal Safety issues exist due to poor visibility, especially visibility into and within the site.
- Conflicts between pedestrian and vehicular circulation.
- Poor signage at entrances as well as information signage around the MHCC site.

The main academic campus can be accessed by car from a number of locations. There are three access points from Kane (257th) on the west; one from Stark on the north and two access points from Cochrane on the south side of campus. There is no access from Troutdale Road on the east.

The road system forms a partial loop on the north side of campus around the main academic building. It works best on the west side where it separates pedestrian and vehicular circulation. It is less successful at both the north and east. Pedestrians must cross the road or go under it to access the campus, creating a somewhat hazardous situation.

The eastern portion of the vehicular loop is elevated from the east parking lots. This requires pedestrians to use the two tunnels under the road to reach the building. Not only are these tunnels poorly lit, but also the physical perception that the parking lot and the academic building are greatly distanced from each other leaves an underused and dangerous vehicular area. The location of the loop road on the north side of the MHCC campus separates pedestrians from the main building as well.

Approximately 500 people ride Tri-Met buses to and from campus daily. The buses use the interior campus loop route for circulation. The campus roads were not designed for bus circulation and are beginning to show the notable wear of this traffic type.

There are also problems with traffic congestion. For example, certain entries on the campus have insufficient vehicular stacking space. At peak times, these entries become congested and block the loop road.

The pedestrian circulation at MHCC is made up of a number of elements:

- Covered Walkways
- Courtyards
- Covered Mall Spaces
- Tree lined sidewalks
- Large and small-scale pedestrian plazas

The pedestrian movement within each building cluster is fairly clear. At the main academic building for example, a 1200-foot long "spine" on the upper level that runs north-to-south organizes the structure. It links all the instructional and various administrative offices and provides easy access to all five of the major public stairways. On the main level, there are five landscaped courtyards that are connected by covered exterior mall spaces that also run in a north-south direction.

Pedestrian movement from the parking lots varies in its successfulness. The parking lots to the west of the main academic building are well connected to the MHCC facility; they were designed to allow pedestrians to gain access to the building without having to come in contact with the vehicular loop. However, the parking lots to the north of Stark Street are a less than ideal situation because pedestrians have to cross the loop road to reach the academic building. And as mentioned in the vehicular circulation section, the parking lot to the east of the main academic building is separated physically by the berm and the landscape and mentally by the perceived distance between the parking lot and the building. This lot is literally abandoned. Pedestrian connections to Stark Street are also needed.

There is also a lack of appropriate pedestrian circulation between the Industrial Technology Building and the Main Academic Building, as well as pedestrian connection between the athletic

facilities and the instructional facilities. The lack of pedestrian access and movement leaves areas of isolation and disconnectedness.

Summary recommendations with regard to circulation are as follows.

- Extend pedestrian sidewalks from courtyards to perimeter streets.
- Provide sidewalk at all vehicular entrances; there are currently no sidewalks at the north entrance off Kane or at the entrance of Stark.
- Create strong pedestrian connection between the new building and lower parking lots to the east.
- Update courtyards, including the addition of more benches and tables to create a more pleasant, appealing atmosphere.
- Terrace landscaping down to courtyards from upper level to create lounging and seating areas.
- Accentuate major courtyard by the Student Union as a central element of campus.
- Establish a formal lawn above the large courtyard for festival and other campus activities.
- Create a new pedestrian corridor and gateway to campus along new west building façade.
- Open views into campus and accentuate entrances.
- Clearly identify entrances and what they serve (i.e. Visitor Parking, Student Parking, etc.).
- Reduce unnecessary vehicular movement through site with improved site distance and signage.
- Open up landscaping throughout campus to improve visibility and sight distance and to reduce the chance of vehicular/pedestrian conflict.

Landscape. General recommendations are as follows.

- Remove diseased and damaged tress, and thin others as necessary to increase visibility between parking lots, buildings and adjacent community and to improve personal safety.
- Tree removal will aid in improved street light distribution.
- Open views into campus and create major monument sign at the corner of Kane and Stark Streets.
- Open views to accentuate buildings within campus.
- Open views and access in select locations such as street and pedestrian entrances along Stark and Kane Streets.
- Manicure existing landscaping along Kane to provide a cleaner edge to the community.
- Replace shrubs with lawn panels in specific areas.
- Broaden entrances for better visibility of entrance and into campus.
- Improve signage at entrances to provide clear direction to use areas.

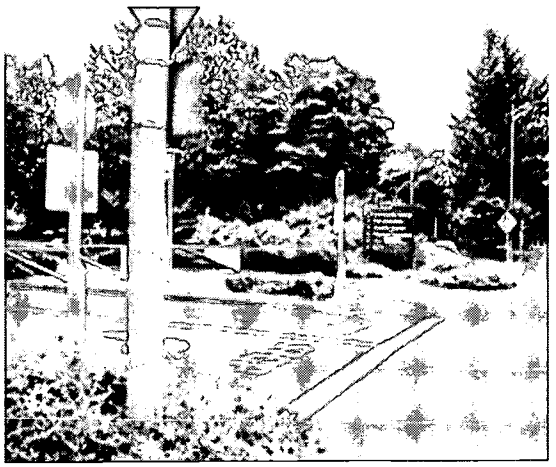
Parking. Parking and other site issues also need to be addressed. While there is adequate campus parking, its utilization is wanting.

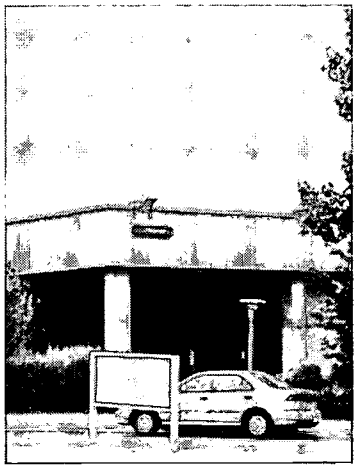
- Visual access is poor between buildings and parking lots.
- Landscape islands poorly maintained.
- Parking lots isolated from campus and community.
- Topography and mature plantings lend to safety concerns.

There are 3,144 parking spaces on the campus. While the number of parking spaces are adequate for the current MHCC enrollment, the distribution and location of parking spaces creates a negative impact on its usage. Naturally the parking closest to Kane (257th) is in high

demand, and there are many times when the demand for this parking area is greater than the supply. Although there are plenty of parking spaces in the south and east lots, their poor connections to the main building makes them isolated and unused.

Other Site Characteristics. Informational signage is fundamental on any college campus. The newcomer relies on informational signage to learn building and program locations; the informed individual also counts on this ease of way finding.



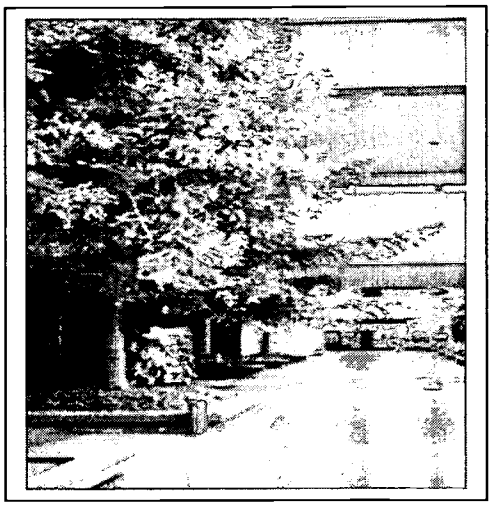


Signage is a key element that contributes to the clarity and ease of way finding on any campus. A comprehensive graphics program encompasses site signage, building signage and room signage to improve campus navigation. Also, improved signage will contribute to the success of special events held on campus, allowing first-time and occasional visitors to easily find their destination. By bringing people onto the campus who might not otherwise have reason to, and increasing community awareness of the college, these special events are beneficial to both the community and the college. In this context, it is especially important to maintain and improve upon the clarity of the campus.

Road signage is another problem that needs to be addressed. The roadway system needs signage improvement to orient visitors and first-time users of the campus as well as becoming reminders for frequent campus users.

Mature landscaping has overwhelmed the campus. Directional Signage often blends in with the surrounding landscape. This contributes to difficulties in way finding. Signage is also small in scale, and can often go unrecognized. More prominent, better-located directional signage will be needed.

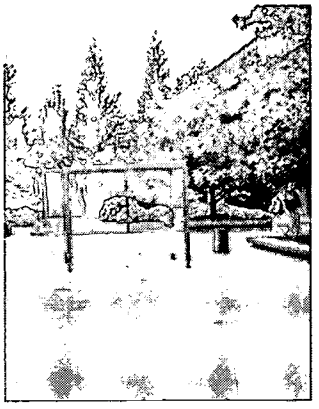
There are various types of site furniture on the campus, including several tables and chairs set up within the interior courtyards. Sign kiosks are dispersed throughout as well. But the effect is lost by the lack in quantity. In addition the kiosks are overloaded, and flyers spill out onto the building's walls.



One strong point of the campus is the interior courtyards and social spaces. An increase in site furniture will aid in creating small group or individual gathering nodes within the courtyards. Benches and seating within the landscape or in small park-like areas would also prove beneficial. Kiosks need to be replaced and signs on the buildings need to be eliminated. A greater amount of larger kiosks will alleviate the current problems. These kiosks could also act as informational and/or directional signage for the campus interior.

Because of the mature landscaping and the topography, there are concerns about safety and insufficient lighting on the MHCC campus. New facilities will help in creating clearer paths from places such as the east parking lot to the Main Building, but improved and increased lighting needs to be integrated as well. With the growing number of Evening and Weekend students as well as the projected future growth of the campus, every parking lot, pathway and roadway should be well lit and safe.

Security, especially at night, will be improved by the landscape maintenance projects and by the improved roadway and parking lot lighting. In addition to this, improved walkway lighting should be installed on all major pathways. This lighting should be mounted on medium height poles so that pedestrians' faces are illuminated. Low-level pathway lighting, like the kind currently used in some locations, does not provide the same level of security. New light fixtures need to be installed to eliminate safety and visibility issues.



Smoking enclosures are dispersed throughout the campus and need to be improved.

Facilities Maintenance. Maintenance focuses on the site and landscaping of MHCC. The wooded setting of the existing campus is filled with overgrown, mature plantings, creating a shield around the campus facilities.

There are several landscaping goals that will aid in improved plant health, reduced maintenance costs and create a better visual image for MHCC:

- Remove trees that are too close together; remove trees selectively that will open up the campus.
- Trim and prune overgrown landscaping.
- Remove landscaping that is inappropriate to its context; recreate a landscape plan with more native plants or low maintenance plantings, which will be a cost benefit in the future.
- Add more planters and delineate pedestrian paths better, so plants will not be trampled.
- Adjust the landscaping to a more appropriate scale, especially in the courtyard area.

Facilities Maintenance contributes to the quality of student life at MHCC. This service is responsible for all physical structures and grounds on the college campus. Facilities Maintenance addresses ADA, physical and environmental issues, keeps the facilities clean, safe and suitable for student needs and maintains the facility and the grounds.

The garbage maintenance will have to be evaluated as expansion occurs, and should also be investigated and integrated with the existing recycling program at MHCC. In order to be environmentally-friendly and responsive to the problems that face our community, garbage maintenance and recycling should become sensitive and responsive to present and future needs.

Estimated costs for addressing deferred maintenance are described in the following table. Total costs are estimated at nearly $9 million.

Mt. Hood Community College
Capital Needs
March 30, 2001

Roof Replacement and Repairs (Main Academic Center)	$ 2,000,000
Seismic Upgrades	$ 2,000,000
Asbestos Abatement	$ 200,000
Flooring Repairs and Improvements	$ 500,000
Painting and Renovations	$ 500,000
ADA Compliance	$ 500,000
Parking Lot and Roadway Repairs	$ 750,000
Exterior Lighting Upgrade	$ 500,000
Landscape Improvements	$ 300,000
Visitor Bleacher Replacement	$ 50,000
Visual Arts Center Repairs	$ 200,000
Theater Repairs (Fly system, Electrical)	$ 200,000
Track Resurfacing, Repairs, Drainage	$ 200,000
GE Siding	$ 70,000
GE Annex Siding	$ 30,000
Aquatic Center Dehumidifier	$ 100,000
Aquatic Center Repairs (Filter Pits, MCC, Pumps)	$ 50,000
Aquatic Center Siding	$ 40,000
Aquatic Center Renovations (Lockers, Showers)	$ 50,000
Total	**$ 8,240,000**

Maywood Campus

The Maywood Campus is located in the northeastern part of Portland, in close proximity to I-205 and Airport Way. The Maywood Campus is an extension of the Gresham campus. Maywood

offers a wide variety of educational services as well as a substantial number of self-paced instructional courses. Services include registration, a business office and a bookstore. In addition to self-paced learning and academic classes, Adult Basic Education/GED, ESL programs, Head Start and Developmental Education services are offered.

The major facility issues of the Maywood Campus can be summarized as follows.

- As the programs increase, its current facility will be outgrown.
- Would be ideal to increase student services at Maywood, which would increase the need for additional space.
- Would like to add testing services at Maywood; this would require facilities to do so.

Troutdale Campus

MHCC is in the process of acquiring surplus federal property, which is contiguous to the Troutdale Municipal Airport and has been vacated by the US Corps of Engineers. The MHCCD application requests not only the 6.24 acres and buildings of 65,000 square feet, but also all of its contents with approximately $1.2 million in value and usable equipment. The property was transferred to the Department of Education through the General Services Administration with requirements from the Federal Aviation Agency. Conveyance to MHCC has been delayed due to environmental concerns. Once these issues have been addressed MHCC will take ownership of the property.

Through the legislative process, $200,000 has been earmarked for conversion of the material-testing laboratory into a teaching/learning environment. Preliminary planning for use of this property has focused on aviation and industrial technology programming.

Extension

MHCC currently offers courses at local high schools and at business and industry sites throughout the district. MHCC is also participating in development of the Center for Advanced Learning in cooperation with the local school districts and business and industry. Finally, MHCC is working with the Portland Development Commission on potential development of a higher education center as part of the Opportunity Gateway redevelopment project. These and other satellite operations will need to be accounted for in future planning efforts.

Facility Utilization and Needs Analysis

Charles McIntyre's draft report entitled, "Facilities Planning 2000-2015," for Mt. Hood Community College, forms the basis for this section. The purpose of this report, Facilities Planning 2000-2015, is to draw information from current work by MHCC on a Vision 2010 for the College and from the 1999 Enrollment Simulation and Planning (ESP) project and:

- Build a computer-based expert system model to simulate future facilities needs.
- Project MHCC facility needs for the coming decade.

Projections of MHCC's facilities needs serve as an analytical background for development of a Facilities Master Plan that is to be part of MHCC's 2010 Institutional Master Plan.

An important component of the Facilities Master Plan is to understand how the existing facilities are currently being utilized. Once the facility utilization is understood, and inventory of

all existing spaces is completed, the next step is to forecast future demand and measure (quantify) the difference between what spaces are existing and what spaces will be needed to meet the demand.

Methodology. This project is conducted in a fashion that is sometimes described as "gap planning:"

- The supply (capacity and condition) of existing facilities are assessed,
- Future demand is forecasted,
- The gap between this demand and supply is measured, and
- Strategies and projects to close this gap are developed -- costs.

Planning Issues. In the work on the *Vision for 2010*, MHCC has identified a number of gaps between current reality and the vision, where the College needs to be:

- Comprehensive
- Diverse
- Accessible
- Technology Enriched
- A Responsible Steward

These issues all have major implications for planning the way in which MHCC instruction and services will be delivered. In assessing College facility needs, it is likely that:

- Traditional lecture and lab spaces will be replaced by "active learning spaces," with current media and the flexibility to accommodate collaborative and performance or action-oriented, worksite-like, teaching and learning methods.
- Distance education will be developed, often using "Web-enhanced" or "hybrid" courses taught both on- and off-campus.

Supply/MHCC Existing Facilities. The Gresham campus totals approximately 820,000 square feet of space of which approximately 605,000 square feet is assignable to specific areas – building clusters. The 605,000 assignable square feet (ASF) of building space has an estimated replacement value of nearly $150 million. Founded in 1966, with the core structures built at the onset, most of the building space is now over 30 years old. Because of this, many spaces are neither physically functional nor programmatically functional for the kind of learning/teaching utilized today, in contrast to the traditional lecture and laboratory models that were utilized two to three decades ago.

Gresham Campus Building Clusters

Building Cluster	*Rooms*	*ASF*	*%*	*Estimated Replacement Value*
Academic Center	955	401,742	66.4%	$98,426,790
Aquatic Center	38	20,121	3.3%	$4,929,645
Child Development Center	28	4,074	0.7%	$998,130
General Education (GE)	30	18,290	3.0%	$4,481,050
Grounds	13	3,678	0.6%	$901,110
Horticulture and Fisheries	21	15,425	2.5%	$3,779,125
Industrial Technology	63	57,900	9.6%	$14,185,500
Physical Education	79	62,436	10.3%	$15,296,820
Visual Arts	44	21,418	3.5%	$5,247,410
Gresham Campus Total	***1,305***	***605,084***	***100.0%***	***$148,245,580***

Major features of the above space include the following:

- Many of the classrooms are not sized properly and, for the most part, classrooms are not adequately equipped with the latest technology – computer and Internet/Intranet access, along with media such as projectors, smart boards, and interactive computers. These rooms lack the flexibility needed to provide for the collaborative, group and team problem solving central to the new learning/teaching emerging among MHCC faculty.

- Analysis of existing spaces suggests that possibly as much as two-thirds of the main campus needs renovation of some kind, either major or minor. We also found overcrowded and shared administrative spaces, a general lack of office space, few "delineated" faculty working spaces, a need for more computer lab space, and concern about campus security. Many campus buildings have inadequate electrical, lighting, ventilation, and other flawed systems. Electrical capacity is an important priority, given the increasing use of energy by computer- and media-aided instructional methods. Campus energy conservation becomes increasingly important as the price and delivery of electricity and natural gas increases.

- Given the condition of the main campus, it is also important to assess its capacity. Is/will there be enough facilities? To answer this question, we review existing campus space utilization, relying on a Fall 2000 inventory of space and *new*, *updated* space, utilization and planning *standards*, designed specifically for MHCC.

- The allocation of MHCC's space can be categorized into two types: "capacity" (classrooms, labs and others subject to analysis by typical space and utilization standards) and "non-capacity" or "support" spaces like field buildings, performing arts, exhibitions, maintenance, storage and other facilities that do not typically have standards for their utilization. "Capacity space" comprises 47% of all space, "non capacity support space" 53%. Of capacity, labs constitute two-fifths, lecture rooms one-fourth, and library, office and media space together just under one-third; proportions common to most community colleges.

Gresham Main Campus Allocation of Space, Fall 2000

		ASF	% of "Capacity"	% of Total
"Capacity"				
	Lecture	74,727	26.2%	12.3%
	Labs	127,800	44.7%	21.1%
	Learning Space			
	Office	50,450	17.7%	8.3%
	Library	27,681	9.7%	4.6%
	AV/TV/Media/DL	5,005	1.8%	0.8%
	Total Capacity	285,663	100.0%	47.2%
"Support"				
	Lab Support	8,637		1.4%
	Work/Conference	11,926		2.0%
	PE	53,982		8.9%
	Aquatics	20,121		3.3%
	Theater	16,284		2.7%
	Other Support	208,471		34.5%
	Total Support	319,421		52.8%
	Total Space	**605,084**		**100.0%**

- New space and utilization standards, based on typical practices and expectations at comparable community colleges, (Oregon has no community college facilities standards of its own) provide for the new "active" learning/teaching, more space per lab station, improved utilization of classrooms, adequate office spaces, proper support for distance learning, and general and supporting spaces.

  Applying these standards to the Gresham main campus, we find that it is:
  - Substantially overbuilt (by 27%) in lecture space
  - About right in laboratory and general support spaces
  - Under-built (by one-fourth) in office and distance learning support space

- MHCC lecture classrooms contain more space per station (25.4 ASF) and are used fewer hours per week (27.3) than are classrooms in other community colleges (17 ASF and 32 hours, on average). As noted, there are few classrooms at the main campus that are adequately designed and equipped to properly support the new "active learning" space concept, estimated by MHCC staff to constitute about one-fourth of the instruction currently categorized as "traditional lecture."

- There is clearly a need for more office space and, assuming continued growth in distance learning, especially in "Web-enhanced" courses, a need for more space devoted to the necessary infrastructure for faculty training, course development, distribution (servers, backup, help desks and the like), and network/system administration.
  - Administrative spaces are overcrowded and often shared.
  - Many more "delineated" faculty-working spaces are needed.
  - More computer lab space is needed.

- Office space is scarce for administrative and student support services, and especially for part-time faculty.

The Maywood Campus, located on the northwest side of MHCC's service area, offers a broad array of self-paced and academic courses, along with Adult Basic Education/GED, ESL, Head Start and Developmental Education in just over 37,000 ASF – a facility that is about 6% the size of the main campus. Applying modified space and utilization standards (as above) produces the following observations:

- Maywood has no need for support spaces such as theater and P.E. facilities.
- Maywood has slightly more space than is currently needed (overall).
- Overbuilt in classroom space (like main campus).
- Under built in office and "learning resource" space (like main campus).

Apart from the Gresham and Maywood campuses, MHCC delivers contracted and continuing education, respectively, at worksites throughout Multnomah County and at ten secondary schools and six senior centers and churches across the service area in Portland, Gresham, Sandy, Troutdale, and Corbett.

Areas at these facilities are provided to MHCC for its programs free of charge, for the most part. However, as (if) MHCC extends its use of this delivery mode, the "capital" component of instructional costs (lease, rent, equipment, etc.) should be scheduled.

Distance Learning, by definition, requires few facilities on campus. However, as noted above, there are certain facilities that are necessary for the success of this teaching method. The proposed standards for AV/TV/Media and online instruction – with library space, part of the "learning resource" space category – suggest that such spaces are lacking at MHCC.

- MHCC currently lists the following number of courses under Distance Education:

Online Web Courses	24
Web-enhanced	79
Online Continuing Education	6

- Three factors are key to decisions about use of online instruction as a substantial delivery mode in community colleges; all have facilities implications.
  - Virtually all community college students need some face-to-face contact to be successful; but virtually all classes can be taught with an online component. Consequently, the "Web-enhanced" or "hybrid" course, where part is taught on-campus, part online, is becoming more popular.
  - In cost comparisons, small online classes (less than 20 students) generally cost more than face-to-face learning; large online classes (over 40 students) cost less than face-to-face learning.
  - Colleges must decide how much of their (capital and operating) "online infrastructure" will be "in-house" as opposed to "outsourced" to an application service provider.

Demand/Future Need at MHCC. For this facilities analysis, forecasts are based on total college FTE (full-time equivalent) student enrollment, using a future scenario in which there is:

- Continuation of current MHCC policies, continued upward movement of the Oregon economy (as projected by the State Office of Economic Analysis), despite current downturn projected through 2002, and continued growth of the Portland Metropolitan area economy and east-of-Willamette River population.

- With continued (projected) growth in the Portland metro area, total forecast enrollment for MHCC grows in robust fashion over the next 15 years, with FTE increasing by about half, from 10,000 to 15,000. This growth would be sufficient to propel the College to its best-ever market penetration, an increase from 70 annual enrollments per 1,000 population to 90 per 1,000 – a 28% improvement – by 2015.

- Weekly student clock or contact hours (WSCH) – the basic metric for determining facilities needs – are derived from the FTE forecast using the standard measure of 510 clock or contact hours yearly per FTE – 34 weeks in the Fall, Winter and Spring Quarters plus five and ten week Summer Sessions.

- In order to determine the nature of MHCC's future facility needs, it is first necessary to project the way in which instructional WSCH are likely to be delivered. MHCC planning and current trends in learning techniques suggest some changes in current delivery strategies:
    - More courses will be delivered through active learning, less by lecture.
    - Laboratories will continue to generate two of every five FTE.
    - More courses will be offered online, but with a campus component.
    - Worksite instruction (Apprenticeship, Cooperative Work Experience, Clinical, etc.) will continue to increase, but with a slower rate than recently.

- The consequences of the strategies above is that the use of "active learning spaces" grows the most of all delivery methods, from 13% to nearly 20% of all instruction use over the next ten years.

- Traditional "lecture" delivery declines substantially.

- Traditional laboratory delivery continues to grow in line with overall curriculum growth.

Projected MHCC Delivery Methods						
	WSCH 2000	**%**	**WSCH 2005**	**%**	**WSCH 2010**	**%**
On-Campus Lecture	42,205	28.6%	43,336	25.0%	42,264	21.4%
On-Campus Active Learning Space	19,695	13.3%	27,687	16.0%	38,174	19.3%
On-Campus Laboratory	42,767	28.9%	49,187	28.4%	55,707	28.2%
Off-Campus Distance Learning	9,555	6,5%	14,850	8.6%	19,425	9.8%
Maywood Park Center	8,423	5.7%	9,876	5.7%	11,278	5.7%
Multnomah County Worksites	18,820	12.7%	20,779	12.0%	22,385	11.3%
Area Schools and Other	6,300	4.3%	7,387	4.3%	8,436	4.3%
Total	**147,765**	**100%**	**173,102**	**100%**	**197,669**	**100%**

- Off-campus distance learning delivery- also including field experience and independent study – rises to just about 10% of all instruction over the next decade. Despite substantial growth in online instruction, use of the hybrid or Web-enhanced course, where roughly half the work is online while half is on-campus, accounts for this.

- The Maywood Park Center is projected to grow at the same rate as the College overall, from 564 FTE in 2000 to 752 FTE by 2010. Rather than attempting to significantly expand this center (if that were even physically possible), it may be more productive – from the standpoint of overall service market penetration – to develop additional centers elsewhere. The possible merit of this approach depends upon demand across MHCC's service area.

Previous work by Charles McIntyre (1999) shows that MHCC's market penetration across a broadly defined service area east of the Willamette River varied substantially in 1995, from a high of 188 annual enrollments per 1,000 adult population in Gresham to 28/1,000 in the southeast Portland area (also served by Portland Community College's Southeast Center). While these differences are to be expected, others reported in that study are more difficult to explain (analysis of area market penetration and growth to be added in the next phase).

Since the space needed for lab stations varies so dramatically by discipline – form 30 ASF in business management to 200 ASF in automobile technology – it is necessary to plan laboratory space by specific discipline or cluster of disciplines (to be added in the next phase).

With continued growth in enrollment, MHCC staff will continue to grow. Staff FTE counts, required for estimating the future need for office space, are derived using several key assumptions:

- The overall ratio of FTE students to FTE Faculty at MHCC should peak at 32:1, then decline, settling at 30:1 in 2003 and beyond.

- The existing balance of WSCH taught by full-and part-time faculty will continue without substantial modification.

- The ratio of support staff FTE to faculty FTE at MHCC will vary around 1.0 for the next seven years before settling at 1.035 for the remaining eight years of the planning forecast.

Conceptual Design (Closing Gap Between Supply and Demand)

The facility master planning process is designed to produce the following outcomes.

- Improve space utilization
- Develop Maywood Park and other off-campus sites
- Expand distance learning
- Remove, renovate/reconfigure and construct new Gresham campus facilities.

Gresham Campus Opportunities. In its original design, the campus was laid out in a horizontal fashion, creating a series of buildings connected by a partially open interior "spine" and a series of courtyards. In its thirty years of operation, facility additions have followed this horizontal approach. Future development can follow these traditions but at the same time help to overcome some of the disadvantages of the current topography, circulation and visibility. That is, the area at north end of campus (Kane and Stark) and then east to the lower parking lots is ideal for new buildings. Development of this area would create a greater public visibility, provide a strong physical link between the Academic Center and parking lots on the east side, and improve circulation through the campus.

A multi-storied building that is sensitive to the topographical changes can provide a strong physical link between the main academic building and the parking lots. A new pedestrian plaza will create another link from the front to the rear of the campus. Landscape alterations and new lighting will help improve safety concerns on campus. New buildings will help utilize the east parking lots more effectively, especially with clearly delineated paths and plazas.

Three decades ago, MHCC was designed in the traditional community college standards– as a wooded enclave in the middle of nowhere. Visibility from Kane and Stark is almost nonexistent. Brief glimpses are all the passerby is allowed. In the 21st century, the idea of the community college has evolved dramatically. Colleges like MHCC are now becoming urban community focal points. The community uses their colleges in many of the same ways as the enrolled student does. And in turn, the more involvement from the community, the stronger the links become. It is easier to seek community backing if they feel attached to their cause. Additionally, community colleges are competitive and appearance and image are selling points to the potential student. The community college should create environments that make the individual want to stay, even if their activity is complete.

The Education Plan identifies the University Center (with new library and student computer center) and an Allied Health/Biotechnology building as centerpieces for the Kane/Stark presence. These buildings will be funded from the 2002 bond measure and capture the 2005 vision for MHCC. Subsequent development, including a multi-use facility based on a public/private partnership, would be added by 2010.

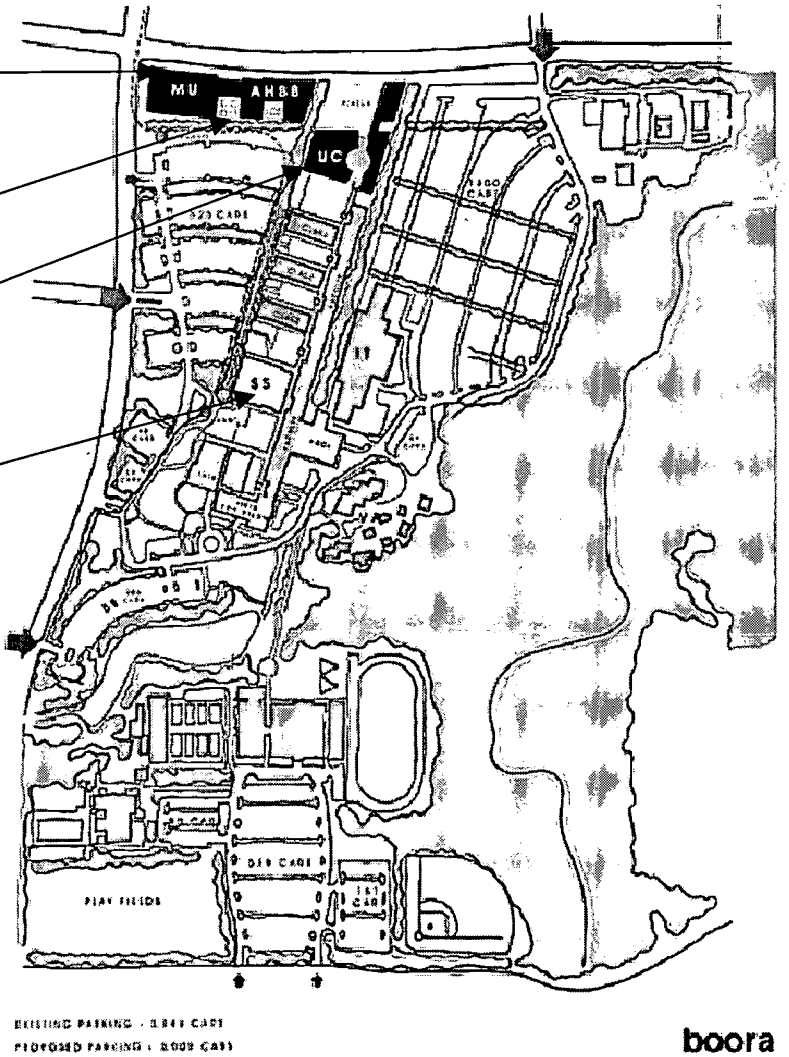
MHCC 2005

MU – future mixed-use facility based on public/private partnership.

***AHBB** – Allied Health and Biotechnology Building

***UC** – University Center (with library and student computer center)

***Facility Improvements** – throughout and includes One-Stop Student Service Center in vacated old library



***Bond Measure**

Facility improvements		
University Center	$	25,790,000
Allied Health/Biotechnology		27,000,000
		15,610,000
Grand Total	$	**68,400,000**

MHCC 2010

MU – future mixed-use facility based on public/private partnership.

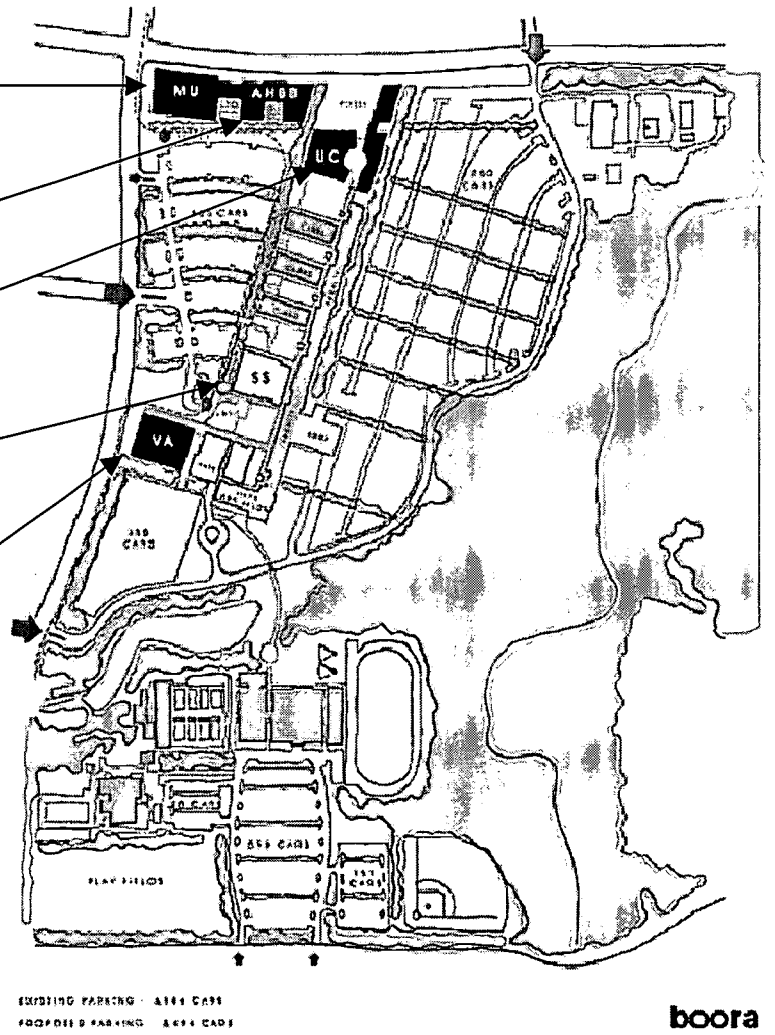
AHBB – Allied Health and Biotechnology Building

UC – University Center (with library and student computer center)

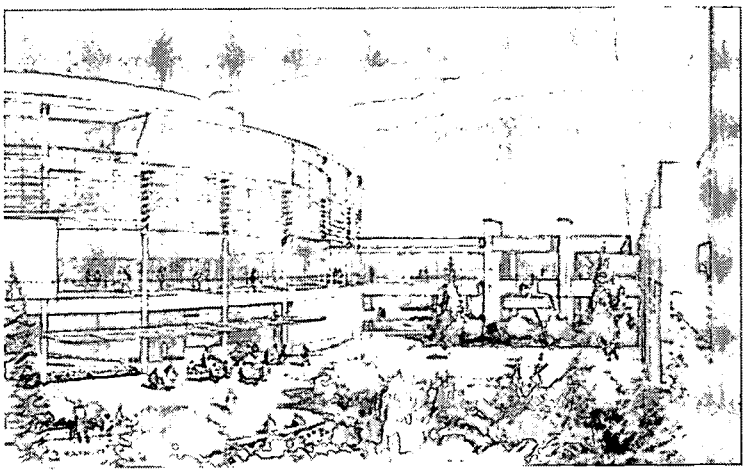
Facility Improvements – throughout and includes One-Stop Student Service Center in vacated old library

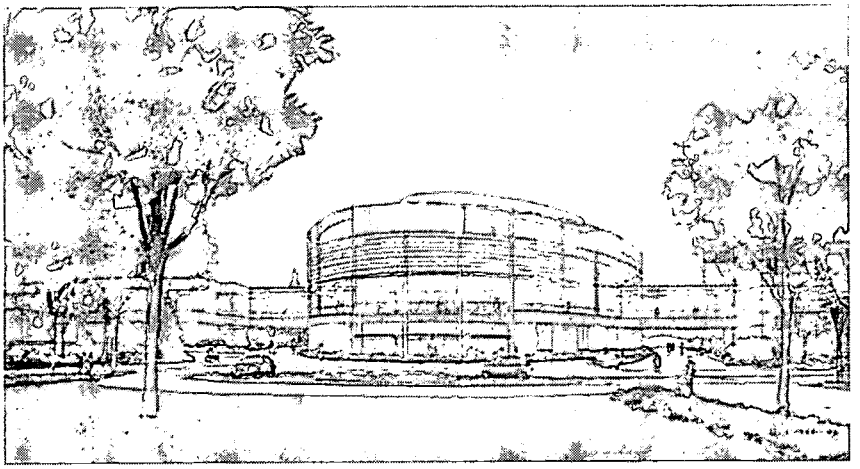
VA – Visual Arts Center (future)

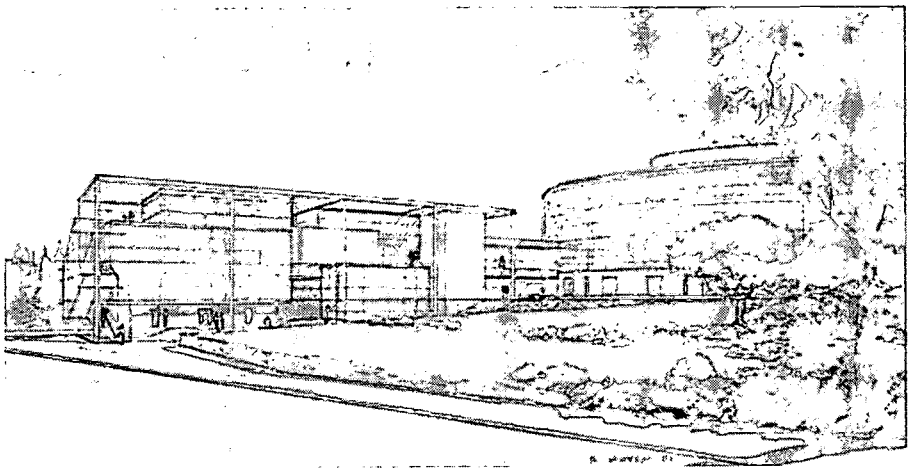
Industrial Technology Building (removed and replaced with parking – Industrial Technology programs moved to Troutdale)



Conceptual Design – University Center and Allied Health/Biotechnology Buildings







Improving Utilization. Community college instruction methods are changing form traditional lecture and lab approaches to a more flexible "active learning space" program and to the use of online, Web-enhanced learning that takes place away from the main campus. This plan recommends a new set of space and utilization standards based on the following:

- A new category of space, for "active learning," that reflects the new more flexible, group and technology-supported methods of instruction.
- Increased room hour utilization of lecture and lab rooms at MHCC, as obsolete spaces are renovated.
- More appropriate floor space for both lecture and lab stations.
- Offices for full-time faculty and areas in which part-time faculty may work, along with explicit recognition of support staff needs.
- Recognition that old standards for libraries are too liberal, combining them with standards for AV/TV Media and adding space for faculty training and other support for online distance learning instruction in a new category space called "learning resources".
- Continued development of necessary support space.

Applying these standards will bring the "capacity" and "support" space from its current 91% of need to 99% by the end of the decade.

Develop Maywood Campus and Other Off-Campus Sites. While the McIntyre simulation shows Maywood Park with a current "excess" of space, expected growth in student demand at the Center indicates that its capability should be increased in the following increments:

ASF	Planning Period
■ 4,500	2003-06
■ 4,800	2007-10
■ 5,200	2011-14

(Each *planning period* represents, in a rough sense, the time from preliminary plans and working drawings, through construction and equipping, to occupancy of a new facility. Smaller projects take three to four years, larger projects four to five years.)

- MHCC delivers instruction off-campus in at least two other kinds of venues:
  - Workforce training, often contracted, at worksites throughout Multnomah County.
  - Continuing education at schools, churches senior centers and other sites.
- Analysis of MHCC's area market penetration and aging population may suggest the need for additional off-campus locations (to be added in the next phase of work).

Expand Distance Learning. For facilities planning, use of distance learning by MHCC (particularly the on-line component) involves projecting:

- Total amount of WSCH to be generated in online instruction.
- Portion of this WSCH offered physically on-campus as opposed to virtually online.
- Cost savings from on-campus space that otherwise would be required.
- Cost savings to students from reduced commuting, child-care, and other expenses.
- Cost of space (probably on-campus) required for online support functions.

- Virtually all online support functions involve added staff and equipment that otherwise wouldn't be required; thus, the need for added space, for the most part is on the Gresham campus. To approximate this need, an established standard for AV/TV and Media is increased form 0.05 to 0.15 ASF per WSCH to include online instructional support in a new category of "learning resources."

Gresham Campus Renovation and Construction. Gresham Campus Improvements:

- Remove obsolete structures.
- Renovate and reconfigure dysfunctional existing facilities.
- Construct new facilities.

Demolition (and replacement) of approximately 15, 000 SF is recommended or 2.5% of total existing space:

- Demolition of Child Development Center.
- Demolition of free-standing Visual Arts outbuildings.

Types of Spaces:

- **Lecture** – Up to 34,000 ASF of classroom lecture space should be remodeled into "active learning" space.
- **Active Learning** space will be needed as follows:
  - 34,000 ASF (remodel) by 2003
  - 9,600 ASF (new) by 2007
  - 9,900 ASF (new) by 2010
  - 14,500 ASF (new) by 2014
- **Laboratory** space needed as follows:
  - 26,800 ASF by 2005
  - 32,600 ASF by 2010

Near term lab space needs may be greater when analyzed by discipline.

- **Office.** MHCC has a substantial need for office space now and through the decade as staffing continues to grow in relation to student growth.
  - 24,500 ASF needed (new) by 2003
  - 20,900 ASF (new) by 2009

As a practical matter, these offices are generally designed into space, together with other, more specific project needs such as "dedicated" labs. Given the lack of dedicated spaces for faculty, some of the existing excess lecture space might be reconfigured for faculty offices, especially to provide group areas for part-time faculty.

- **Learning Resource.** The expansion of distance learning, described above, will require more support services on the Gresham campus. This plan recommends new standards for this purpose, which suggest that MHCC:
  - Add and occupy nearly 20,000 ASF of "Learning Resource" space by 2002 (or as soon as it is possible to plan, build, equip and occupy such a facility)
  - Remodeling of the existing library space to Student Services will create the need for another 30,000 ASF for this library function.
- **Support Spaces**. There are no existing space and utilization standards for "non-capacity" support facilities such as the gymnasium, theater, galleries, physical education facilities, warehouses, maintenance buildings and the like. Student services are included among these

support spaces. Based on proposed standards, remodeling of 27,000 ASF of AC library space into a "full service" student support area would be followed by other additions:

- 27,000 ASF (remodel) by 2003
- 47,700 ASF (new) by 2004
- 41,500 ASF (new) by 2010
- 46,400 ASF (new) by 2014

■**Remodeling and Renovation.** MHCC's main campus equipment and facilities must be maintained in order to support (1) their existing use and (2) changes in the programs housed, technology of delivery, and/or standards or codes of building use. The amount of funds that should be set aside for the future to preserve the value of the College's physical plant assets can be derived from periodic audits of facility conditions and/or from formula approaches. Two categories of remodeling are identified in the planning model for this project:

- Remodeling for a new use
- Remodeling where use is unchanged

Remodeling of space where the *use* is *unchanged* is based largely on building condition, and can be termed a remodeling *upgrade.*

■**Summary of Specific MHCC Facility Projects**

1. Remodel of Library into full-service student service facility
2. Remodel of classroom Lecture space into active learning space
3. Campus Energy Conservation and Retrofit
4. Learning Resources (support of online and other distance learning)
   Addition of specific laboratory, active learning, and office spaces
5. University Center (Library and Student Computer Center)
6. Allied Health and Biotechnology Building
7. Industrial Technology Addition (instructional support spaces)
8. Visual arts Facilities
9. Child Development Center
10. General Education Remodeling
11. Expansion of Maywood Park center

Master Plan Costs

The costs (and savings) of this analysis can be described in four ways:

■On-campus Facilities
■Improved utilization
■Off-campus Facilities
■Distance Learning

"Savings" are the difference between (1) the cost of facilities and equipment for housing and delivering instruction at off-campus centers or sites or by distance learning and using more rigorous planning and utilization standards, and (2) the costs if that same instruction were meant to be delivered on-campus at Gresham through more traditional means, and at existing levels of facilities utilization.

■**On-campus Facilities**. Estimates for planning, constructing and equipping new facilities are based on projected space (ASF) needs, cost per ASF (RS Means Cost Guide) and ENR (Engineering News Record) construction cost index. Total Gresham campus capital outlay costs for the next decade total **$102 million**.

■**Estimated Gresham Capital Outlays, 2001-15**

	2001-2005	2006-2010	***2001-2010***	2011-2015	***2001-2015***
Plans, Drawings, Fees (15%)	$6.8	$6.2	***$13.0***	$0.0	***$13.0***
Construction	$28.7	$19.0	***$47.7***	$13.3	***$61.0***
Equipment (20%)	$5.4	$2.7	***$8.1***	$2.2	***$10.3***
Remodel, New Use	$8.6	$0.0	***$8.6***	$0.0	***$8.6***
Remodel, Upgrade	$12.0	$12.0	***$24.0***	$12.0	***$36.0***
Replace Equipment					
Other	$0.1	$0.1	***$0.2***		***$0.2***
TOTAL (in 2001 $ millions)	$61.6	$40.0	***$101.6***	$27.5	***$129.1***

■**Estimated Gresham Outlays by Kind of Space, 2001-15**

	2001-2005	2006-2010	***2001-2010***	2011-2015	***2001-2015***
Lecture	$0.0	$0.0	***$0.0***	$0.0	***$0.0***
Laboratory	$7.6	$9.2	***$16.8***	$0.0	***$16.8***
Active Learning Space	$8.0	$3.0	***$11.0***	$3.1	***$14.1***
Office	$6.3	$4.1	***$10.4***	$0.0	***$10.4***
Learning Resources	$14.1	$0.7	***$14.8***	$3.7	***$18.5***
Support	$13.5	$10.9	***$24.4***	$8.7	***$33.1***
Remodel, Upgrade	$12.0	$12.0	***$24.0***	$12.0	***$36.0***
Replace Equipment					
Other	$0.1	$0.1	***$0.2***		***$0.2***
TOTAL (in 2001 $ millions)	$61.6	$40.0	***$101.6***	$27.5	***$129.1***

Among the several categories of space, the largest outlays during the first five years are for labs, learning resources and support spaces. This is due largely to the proposed remodeling of the existing library space into student services, relocating the library, and adding space for support of online learning and other mediated on-campus active learning.

Improved Utilization. Current disparities in use of main campus facilities include (1) a severe lack of office and learning resource spaces and (2) an excess of poorly sized lecture classrooms.

Better planning and provision of office and learning resource spaces will add substantial value to MHCC's operations. The excess of poorly sized lecture classrooms amounts, conservatively, to nearly 16,000 ASF. The value of this space, at current costs, is *$3.9 million*, which – in a real sense – could be viewed as a savings or as value-added if it is converted to a more effective use, such as for active learning or office space.

Off–Campus Facilities. This plan proposes adding space at the Maywood Center to accommodate some of the College's expected growth; continued expansion of space at worksites, schools, churches and other sites; and exploration of the possible need for new Centers elsewhere in order to even the College's market penetration and provide for access to special populations (like seniors and others) across the MHCC service area.

Generally, the cost of delivering instruction at off-campus sites will be less than on-campus because supporting facilities are not required and the space is often provided at no cost to MHCC (Maywood Park is an exception since it is owned by MHCC).

Distance Learning. Delivery of 12% of MHCC's curriculum by "Web-enhanced" or "hybrid" classes (part on-campus, part online) by 2010 would result in both cost and savings during the decade:

- Capital costs for online support facilities.
- Capital savings resulting from reduced need for on-campus facilities.
- Savings to students from reduced commuting and childcare.
- Savings to non-students in Multnomah County from reduced traffic.

There is a potential net savings of more than $20 million over the next decade for online delivery (over main campus delivery):

	Gresham Campus	Online	Net Savings
(In $ millions)			
College Facilities and Equipment	$14.4	$5.7	$8.7
Student Transportation and Child Care	$11.6		$11.6
Improved environment	---------	N/A	N/A
TOTAL	$26.0	$5.7	**$20.3**

Cost Summary

Capital Outlay Cost Estimates (in $ millions)			
	2002-2005	2006-2010	2011-2015
Maywood			
Plans, Drawings, Fees	$0.2	$0.2	$0.2
Construction	$0.8	$0.9	$1.0
Equipment	$0.1	$0.2	$0.1
Subtotal	$1.1	$1.2	$1.3
Gresham Campus			
Plans, Drawings, Fees	$6.8	$6.2	$0.0
Construction	$28.7	$19.0	$13.3
Equipment	$5.4	$2.7	$2.2
Remodel, New use	$8.6	$0.0	$0.0
Remodel, Upgrade	$12.0	$12.0	$12.0
Other	$0.1	$0.1	$0.0
Subtotal	$61.6	$40.0	$27.5
GRAND TOTAL	**$62.7**	**$41.2**	**$28.8**

Gresham Campus Capital Outlays by Function			
	2002-2005	2006-2010	2011-2015
Lecture	$0.0	$0.0	$0.0
Laboratory	$7.6	$9.2	$0.0
Active Learning Space	$8.0	$3.0	$3.1
Office	$6.3	$4.1	$0.0
Learning Resources	$14.1	$0.7	$3.7
Support	$13.5	$10.9	$8.7
Remodel, Upgrade	$12.0	$12.0	$12.0
Other	$0.1	$0.1	$0.0
TOTAL	**$61.6**	**$40.0**	**$27.5**

Thus, total estimated capital construction costs over the next 15 years is estimated at $132.7 million. Combined with the estimated facilities maintenance costs of over $8 million (see section 2.3.6), the grand total of capital costs is **$140.7 million**.

Bond Measure

The 2002 bond measure will allow MHCC to address the top priority items of the 2010 vision as outlined below.

Facility improvements	$	25,790,000
University Center		27,000,000
Allied Health/Biotechnology Building		15,610,000
Grand Total	$	**68,400,000**

Facility Improvements

Site Improvements

Parking Lot, Road, Sidewalk, ADA, Grounds, Lighting, Energy, Security
$2,550,000

Physical and technology upgrades

Roof Replacement
2,000,000
Seismic Upgrades
1,500,000
Signage Upgrade
200,000
Facility/ Energy Upgrades
1,940,000
Remodel 113,000 sq ft
17,600,000

Sub-Total $ 25,790,000

Site Improvements
$2,550,000
- Parking Lot Resurfacing
- Road Base Course
- Walkway Improvements
- Grounds and Berms
- Exterior Security Lighting
- Energy Improvements
- Site Accessibility – ADA
- Security Improvements

Roof Replacement
$2,000,000
High Priority
Main Building
Arts

Seismic Upgrades
$1,500,000
Library
$1,000,000
Other
$500,000

Signage Upgrades
$200,000
- Improved Wayfinding
- Campus Identity Markers

Facility/ Energy Upgrades
$1,940,000
Chiller Replacement
$800,000
New East Windows
$350,000
Siding
$340,000
Others
$450,000

Remodel
$17,600,000
Mall Level
Major Remodel 16,430 sf
Instructional Upgrade 24,400 sf
Upper Level
Major Remodel 60,500 sf
Instructional Upgrade 11,670 sf
Total 113,000 sf
(Selective Upgrades and Improvements Throughout the Campus)

Classroom of the Future
- Adaptable to current teaching methods
- Flexible furnishings, configurations & lighting
- Wired for technology, data & internet
- Multi-media capability built-in
- Invigorating environment: lighting, colors & materials, fresh air

University Center

Library		$ 13,500,000.00
	41,033 square feet	
Computer Center		$ 4,500,000.00
	13,678 square feet	
University Center		$ 7,000,000.00
	23,490 square feet	
Center for Advanced Learning		$ 2,000,000.00
Sub-Total	78,201 square feet	$ 27,000,000.00

Health Occupations/Biotechnology Building

Relocate + expand allied health programs 19,185 square feet	$	8,000,000
New Biotechnology programs 18,249 square feet	$	7,610,000
Sub-Total 37,434 square feet	$	15,610,000

Other Considerations

Described below is an analysis of other major facility concerns that need to be further addressed in development of the MHCC 2010 vision.

General Education Building. The General Education (G.E.) Building was one of the first buildings to be built on the southern end of Gresham campus. It is constructed of tilt-up concrete walls with a wood truss roof structure. The building is not insulated or cooled, but does have heating. The building currently houses storage space and a thrift store.

The warehouse qualities of the building make it ideal for high-bay storage space. Given the extreme lack of storage space on campus, the college should consider relocating the thrift store and converting the G.E. Building into a storage center. With the addition of either pallet racks or a modular mezzanine system, the overall storage space on campus could be greatly increased and organized. This increase in storage capacity will permit the demolition of the various storage buildings behind the G.E. Building and near the Child Care Center. These buildings have become a security problem and haven for vandals.

However, the college has also discussed converting the G.E. Building into a "Student Wellness Center." The G.E. Building provides an excellent opportunity to add to the Athletics Complex. Instead of using this historic building as storage, the G.E. Building could become a dynamic facility and one that emphasizes the physical and mental interaction of the MHCC family. By creating an open weight room/aerobics studio, the G.E. Building could be used for these specific functions as well as an athletic lab space. The facility could be used for team practices or athletic classes.

While it can be argued that the G.E. building is relatively inaccessible and warehouse-like in structural quality, its high ceilings and walls of storefront make it an ideal area for athletic classes, such as aerobics or kickboxing.

In order to fully explore the potential of the G.E. Building, the relocation of the tennis courts should be considered. In their absence, a link, such as a plaza, could be made to the G.E. Building and the existing Athletic Complex. There is even the possibility for a physical connection and an opportunity to create some new, shared spaces.

Industrial Technology. An addition to the current Industrial Technology building can create a stronger link between IT and the main academic building. Currently there is no connection, and what exists is an "alley" that has become more for maintenance activities than for faculty and student use.

By creating a new multi-storied building in this space, several opportunities arise. In addition to the new link between campus facilities, the new alley can become a more intimate way of approach. The new facility will create space for new Industrial Technology administrative and instructional space as well as a wing of general-purpose classrooms and labs.

In addition, the facility will create a new building edge, along with the addition of the University Center and Allied Health/Biotechnology buildings, to further emphasize the creation of a new pedestrian plaza stretching from the lower parking lots to the main academic building. The new plaza will become an extension of the interior courtyard created by the existing main building and create a new pedestrian node.

On the other hand, the current Industrial Building is of relatively low quality. It might make more sense to move the Industrial programs to the new Troutdale campus, demolish the current building, and convert the area to parking.

Visual Arts. The existing visual arts facilities at Mt. Hood Community College were designed to be separate, discrete programs housed and taught in separate facilities or studios. Departmental faculty have found that this is not as successful as it was in prior decades. An interdisciplinary approach for students in a concentrated facility is the ideal situation for the present and the future.

There are several space opportunities available to create a new Visual Arts Complex and strengthen both the CPVA Division as well as the link between the community and MHCC. The current College Center provides an opportunity to create some general art studios. With some remodeling and landscape repair, the College Center could be opened up a little more and the existing windows could be fully utilized. There is also a basement level for other studios or for storage.

The existing Visual Arts Building could then be renovated and a new addition could be added. This could house a number of Visual and Graphic Art programs as well as a more centralized CPVA administrative staff. The new addition could also add to and frame in the courtyard area between the College Center and the existing Visual Arts building. This would create a stronger link between the athletic and academic components of the MHCC campus. The new terminus is now functional as a social gathering area and an outdoor art gallery.

The existing group of freestanding art facilities could then be replaced (additional parking spaces, etc.). The newer facilities will provide an improved environment for current and future programs and technologies.

Lastly, a new art gallery could be located on the Westside of campus, abutting the existing MHCC theater. This new facility can become a more modern, more dynamic showcase for student, faculty and community art. The gallery will provide a cultured "community" facility. Artistic events, such as art showings, lectures or small social events could occur within a new facility as well.

An alternative opportunity is the Gateway redevelopment project, which includes a proposed Higher Education Center. One focus of this Center under consideration is visual and performing arts. Thus, another option is relocation of some of the arts programs at the Gresham campus to the proposed Gateway facility.

Hospitality and Tourism Center. As one of the world's largest industries (estimated at over $2 trillion annually), tourism and hospitality play an important part in the development and diversification of economies. The economies of Oregon and Southwest Washington are no exception. In Oregon alone, the visitor industry generates more than $5 billion annually, increasing approximately 5.4% each year. This sort of growth exceeds our region's trained labor base, creating a demand for trained workers to fill the challenging and well-paying career opportunities.

In response to this necessity, The Hospitality and Tourism Management and Cosmetology programs at MHCC propose an exciting and bold initiative: building and operating a 33-room training hotel to provide students with real-life, hands-on operating and management experiences. With amenities such as a day spa and conference facility, the Training Center will not only provide excellent preparation for students but also help link MHCC with other regional training programs at the center of the Northwest tourism industry. In practice, the MHCC Hospitality and Tourism Management program will focus on running the facility, the MHCC Cosmetology and School of Hair Design will provide full-body skin care services in the spa facility, linking the two programs and adding spa services to the Training Center. This Center will be funded from private sources but needs to be integrated into the master plan.

References

Additional background information on the MHCC master planning process can be found at http://www.mhcc.cc.or.us/ci/allabout/research/mhcc2010/main.htm. Probably the single most comprehensive resource on master planning is the Society for College and University Planning (SCUP). The Web site for SCUP is http://www.scup.org. Here you find links to master plans from colleges and universities across the nation and other resources. Under books you will find such works as *Planning for Student Services: Best Practices for the 21st Century*, edited by Martha Martha Beede and Darlene Burnett; *Planning for Master Planning* by John R. Reeve and Marion B. Smith; *Transforming Higher Education: A Vision for Learning in the 21st Century* by Michael G. Dolence and Donald M. Norris; and *Doing Academic Planning: Effective Tools for Decision Making*, edited by Brian P. Nedwek. At the SCUP Web site, there are also links to many other relevant resources.

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