

VI. PLANNING CONTEXT

The framework for the Montgomery College Academic Master Plan began with an examination of Montgomery County statistics and included data developed for the College's Facilities Master Plan as well as data for several academic planning initiatives. The planning data incorporated historical data from fall 1999 to fall 2002 and projected it to fall 2012. The data were used to establish significant targets for the College's growth and development and to translate enrollments into future student credit hours (SCH) and weekly student contact hours (WSCH) and projected needs for faculty and staff. The College's planning context further considered a number of external trends that could realistically have an impact on its future, including

- demography,
- quality of life,
- economic and workforce development,
- Montgomery County education,
- technology in support of education,
- policy and legislation,
- higher education financing, and
- capacity and access.

A. Montgomery County at a Glance

Relevant demographic information from the 2000 Census⁵ outlines the communities Montgomery College serves⁶ and provides information about the county, its population, housing and households, education, employment, and land. Census data can also be retrieved by city and state.⁷

B. Academic Planning Environmental Scan

This Environmental Scan, or external trends survey, conducted for Montgomery College, considers all campuses—Rockville, Germantown, and Takoma Park/Silver Spring—and off-campus educational centers as a single entity. The curriculum offerings and activities conducted at these locations provide a rich array of academic and technical offerings consisting of mutually supported programs and unique, location-specific offerings. The Environmental Scan was used to inform the College of selected external changes that can have an impact on its many academic and academic support programs.

While many rapidly changing international events and trends may influence the College's programs and activities, most are not expected to impact the College substantially. Global

⁵ U.S. Census Bureau. Summary of Data - Montgomery County, Maryland. Population, Race and Age. [Online] Available at: http://www.mc-mncepc.org/research/data_library/census2000/countywide/section1.shtm.

⁶ U.S. Census Bureau. Montgomery County Quick Facts for Montgomery County, Maryland. [Online] Available at: <http://quickfacts.census.gov/qfd/states/24/24031.html>.

⁷ U.S. Census Bureau, American Fact Finder. Quick Tables, DP-1. Profile of General Demographic Characteristics: 2000. Census 2000 Summary File 1 (SF 1) 100-Percent Data Retrieved by City and State. [Online] Available at: <http://factfinder.census.gov>.

conflicts or economic events could alter this assumption but, for present purposes, the scan will assume that the College is most directly affected by national, regional, state, and county changes.

Many national trends, particularly those related to demography, the economy, student aid, and technology will be important to the College's future. To the extent that these changes impact the College, such trends are included. Similarly, because of the College's important geographic location and relationship to the Greater Washington region with 21 jurisdictions in Maryland, Virginia, and the District of Columbia, regional trends are reviewed for their potential impact on the College. It is virtually impossible to separate the mutuality of interest that exists between these political jurisdictions in terms of lifestyle, educational opportunities, employment, and economic development. They all have varying direct or indirect degrees of influence on the College, its programs and its funding.

The scan uses source materials provided by Montgomery College and information available from state and county offices. No interviews or surveys were conducted with College officials or regional representatives in the preparation of this scan, because these activities were determined to be outside the scope of this initiative.

C. Environmental Scan Conclusions

1. Demography

Demographic Growth and Diversity with New Demands for Education

Statewide growth in population will place pressure on the state to increase all state services, with particular attention to K–12 educational programs.⁸ Since this growth will require greater state funds, it could result in a potential reduction of state support for higher education in general and for community colleges in particular. Further, the extended life expectancy of the population will potentially increase attendance of older students seeking both formal and informal educational programs and demanding a larger array of options in terms of location, class time, content, faculty, and facilities.

Montgomery County has a very diverse population, and minorities represent the most rapidly growing segments of the population. Minority populations in Montgomery County now account for approximately 35% of the total population. In terms of population diversity, whites account for 64.8%; blacks or African Americans, 15.1%; Asians, 11.3%; and Hispanics 11.5%. Since 1990, Hispanics comprise the fastest-growing population segment in the county; almost half of the state's Hispanic population lives in Montgomery County. Montgomery County's black population (15% of the total) represents a larger share than the national rate of 13%. Among county residents five years or older in 2001, 32% spoke a language other than English at home. Among those speaking another language, 38% spoke Spanish, and 37% reported that they did not speak English well.⁹

The increase in minority populations will have a significant impact on postsecondary education and on Montgomery College. The College has a long and rich history of serving minority

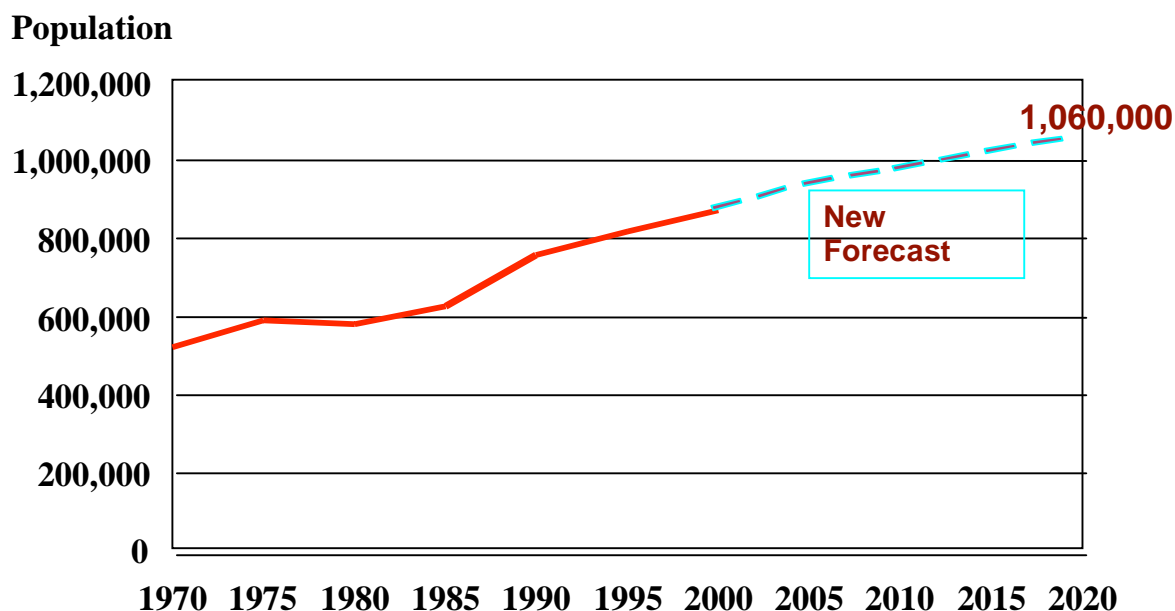
⁸Montgomery County Public Schools. [Profile of schools and facilities, students, and budget]. [Online] Available at <http://mcps.k12.md.us/about/>.

⁹ U.S. Census Bureau. Summary of Data—Montgomery County, Maryland. Population, Race and Age. [Online] [U.S. Census 2000 Demographic Profile Highlights, Montgomery County](#).

citizens within the county, not only by providing access to fully qualified minority students seeking postsecondary opportunities but also by providing an extensive array of support services for students requiring additional instruction.

Montgomery County is one of five jurisdictions that will account for an anticipated 63% of the state’s total projected growth between 2000 and 2010. Projections based on the 2000 Census indicate that by 2020, the population of Montgomery County could exceed one million. (Figure 1).

Montgomery County Historic and Projected Population
Figure 1



The 2000 Census indicates that the Greater Washington region has a very diverse population that attracts an increasing number of people from across the world. Approximately 16% of all residents are foreign born; this rich mixture of backgrounds helps to sustain the social vitality of the region. The minority population growth accounted for 52% of the population growth in Montgomery County between 1980 and 1990, and it accounted for 74.3% of the population growth between 1990 and 2000.¹⁰

The College, as an institution committed to provide open access to the county’s population, will be confronted with an increased demand for services in response to population growth that reflects a wide range of abilities and skills. The College will be pressured to increase services and programs such as English language training, adult literacy, and skills training. With the positive development of more women attending community colleges, the College also will be called upon to make accommodations in expanding class scheduling, child care services, and child care tuition scholarships. The College is one of few organizations in a pivotal position to respond to and meet the described challenges.

¹⁰ Ibid.

2. Quality of Life

Enhanced Commitment to a Quality Place to Live, Visit, Work, and Invest

Montgomery County residents are clearly and highly committed to retaining and enhancing a high level of life for themselves and those who work and invest in the area. The College's plan for campus development and expansion must be consistent with this commitment and each county sector's development plans.

Population growth and diversification in the county will add demands to the College's programs and facilities that contribute to the county's quality of life, including its health and physical education. The College should continue to investigate how its current and planned resources—arts programs, performance arenas, civic engagement, and similar offerings—can contribute further to expanding the quality of life in Montgomery County.

3. Economic and Workforce Development

Positive Indicators for the Future

Regardless of the effects of economic and security events that continue to shape American life, it is anticipated that the state of Maryland will experience a positive growth in job creation. An expanding economy is expected to provide a steady flow of state and county tax revenue, but at a lower growth and in different areas than in previous years. New demands for expenditures will increase at a faster rate than revenue growth. The growth of areas such as biotechnology, information technology, and security-related enterprises will present continuing and new opportunities for higher education programming. The federal government is expected to continue its expansion of activities within the county and will remain a major employer.

The county will continue to require a highly trained workforce (see Appendix B, Table 5). Nearly one-third of all Maryland's job opportunities in 2000 required at least a community college degree, and more than 25% additional jobs required education beyond high school. Workplace environments are also changing, with multicultural workforces and increased demands for computer literacy. Community colleges will be expected to continue to provide training for the technicians and health care workers of the region in addition to meeting increased demands for continuing education and professional development.

The county's strong economic base should permit it to continue to grow even under the scenario of slower growth than in the first years of the 21st century. A projected job growth of 41%, representing approximately 74,000 jobs by 2015, reveals a strong, stable base of county employment.¹¹ Projections of the top 50 occupations based on annual openings (Appendix B, Table 2) reinforce the role of Montgomery College in addressing a number of the county's workforce needs. This growth in jobs and business should be sufficient to permit the College to maintain its current level of county funding support.

¹¹ State of Maryland, Governor's Workforce Investment Board. State of the Workforce Report. [Online] Available at: <http://www.gwib.state.md.us/lib/sotwttotalreport2003.doc>.

Career and Employment Trends for Montgomery County

In 2003, the Governor's Workforce Investment Board (GWIB) completed a State of the Workforce Report designed to provide partners and stakeholders in the Workforce Development System with data, information, and analyses to assist in developing strategies and plans that meet the emerging workforce needs of Maryland's economy.¹² The results of this study explore seven key areas of employment information:

- Montgomery County's workforce supply,
- Montgomery County employment and employment growth (workforce demand),
- GWIB vital industries,
- top growth industries,
- Montgomery County job openings,
- occupational educational requirements, and
- key skills of leading occupations.

In this report, Maryland employment was forecast from 2000 to 2010. The question as to whether the supply of labor will meet the expected demand has been partially addressed by looking at indicators of the state's workforce and projected sector, industry, and occupational growth. Some conclusions of these key workforce indicators are derived from the tables in Appendix B.

- Total Maryland employment is projected to increase by 16% from 2000 to 2010, to a total of 2,778,266 job openings.
- Five industry clusters identified by the GWIB as vital to workforce and economic development account for 43% of total employment in Montgomery County:
 - construction,
 - health care,
 - hospitality and tourism,
 - education, and
 - high technology.
- Montgomery County's current occupational profile and projected occupational needs require a high level of educational attainment.
- The most critical skills for Maryland's leading job-creating occupations are dominated by basic skills, such as active listening, reading comprehension, speaking, writing, and service orientation.
- Maryland's employment growth will be led by gains in several key sectors of the state's economy.

4. Montgomery County Education

Expanded Strategies and Partnerships for Program Preparation and Delivery

Montgomery County has a large, diverse set of basic and postsecondary educational assets, evidence of the county's and its citizenry's commitment to education and culture. Although other public and private postsecondary educational institutions and distance learning providers are present in the county and the region, none are anticipated to represent a very significant

¹² Ibid.

competition to the College. Some institutions will, however, present opportunities to form alliances and partnerships in such areas as distance education, facilities sharing, and special academic programming.

The Montgomery County Public Schools (MCPS) population is projected to increase by 6,235 students by 2008.¹³ In Montgomery County, 74% of high school graduates will attend colleges or universities. More than one-quarter of the high school seniors surveyed in 2003 indicated that they plan to attend a two-year college full-time (19%) or part-time (7.4%). In 2005, 24% of MCPS students attended Montgomery College.¹⁴ In the High School Senior Exit Survey administered by MCPS to high school seniors (participation rate of approximately 88%), Montgomery College continues to rank second on the list of top colleges that MCPS seniors applied to most frequently.¹⁵

Concern over issues of transfer and retention of first-year students attending community colleges will likely be raised, since 24% of all entering students transfer to four-year institutions within four years and only 9% of all entering students graduate within that time. Further, of those who do transfer to four-year institutions, only one-third earn baccalaureate degrees within three years. Specialized programs, such as honors programs for gifted students, will experience an increased demand and strengthening as more students seek to prepare themselves for transfer.

In addition, articulation agreements will require re-examination to ensure that students can avail themselves of the College's programs efficiently and effectively and can maximize their ability to transfer. The College must meet the ever-changing expectations of returning adult students and their workplaces by offering programs with content that reflects both degree and non-degree options. Program delivery must facilitate the attendance of working adults, and support services must recognize the changing needs of family and social environments.

Many employers indicate a need to employ community college graduates at the present rate or an increased rate. To meet employer needs, the College must ensure continued alignment of its program offerings with county businesses and industries. The College also must place much emphasis on educational quality and collaborate with business and industry in its placement of graduates.

The College's low tuition, easy access, and diverse array of academic programs should prove to be very attractive, especially given tuition and capacity issues at other institutions. The College's open access policy may be difficult to maintain since demand could exceed available capacity of instructional space and faculty availability.

¹³ Montgomery County Public Schools. [Student enrollment data]. [Online] Available at: <http://www.mcps.k12.md.us/about/>.

¹⁴ Montgomery College, Office of Institutional Research. [MCPS Students Attending MC After Graduation](#).

¹⁵ Montgomery County Public Schools, Office of Shared Accountability. High School Senior Exit Survey: Class of 2003. Postsecondary Plans of High School Seniors and Perceptions of Their Education. [Online] Available at: <http://www.mcps.k12.md.us/departments/accountability/pdf/surveys/SeniorExit2003.pdf>.

5. Technology in Support of Education

Continual Program and Equipment Renewal and Replacement

The increased enhancement and development of technology can prove to be both an opportunity and challenge. Technology will afford the College opportunities to expand its instructional programming through the utilization of new instructional and student service delivery systems and the formation of new alliances. Instructional programs will also be enhanced through the incorporation of multiple types of media. Implementation strategies, however, will require considerable amounts of new or reallocated funding for new equipment, software, and faculty and staff training. Further, due to the rapid development of competitive programs, limited return on this investment will require the College to be strategic in its development and implementation of distance learning programs. Students will experience a potential increase in cost related to the need to purchase equipment and software. The College must be prepared to provide instruction and services in a wider variety of formats, while ensuring consistency of quality and personal attention. Many of the College's student service, administrative, and support service functions will be able to operate in a more efficient and effective manner, but they will be expensive to obtain and implement, and many will require significant personnel training.

One of the most promising opportunities could be the establishment of distance learning partnerships with various businesses and industries.

6. Policy and Legislation

State Funding

In 1991, the Maryland General Assembly adopted legislation (HB204) that created a funding formula for community colleges to take effect in fiscal year (FY) 1993. The preamble to that legislation directed that the state's share of community college operating revenues should be 46%, including state-paid benefits. In FY93, the state eliminated support for Social Security costs. By FY96, the state's share had declined from 34% (1991) to 28% of total community college revenues.¹⁶

In 1996, the Community College Financing Study Group made recommendations that were incorporated into legislation (SB462/HB1217) that became effective in FY98 in the Cade Funding Formula. Community colleges receive state operating funding per eligible full-time equivalent (FTE) student. The funding can be no less than a set percentage of the state's General Fund appropriation per FTE student to the four-year public institutions of higher education in the state as designated by the Maryland Higher Education Commission (MHEC) for the purposes of administering the Sellinger Program (to Maryland Independent College and University Association members) in the previous year.

During the 2002 legislative session, the Cade percentage tie was cut to 23.1% for FY03 and 2004, and further rescinded by 4% in 2003 and 6.3% in 2004. The Cade percentage tie was increased to 24% for FY05 and to 25% for FY06.¹⁷

¹⁶ Maryland Association of Community Colleges. Unpublished paper. 2005.

¹⁷ Ibid.

Montgomery County Operating Support

Montgomery College receives funding from Montgomery County in addition to its Cade funding from the state. In fact, the majority of the College's operating resources are obtained from the county. Approximately 43% of the College's operating budget is funded by the county. There is no local formula, and the county executive recommends funding amounts for the College in his annual operating budget for Montgomery County. After careful review and consideration of the Montgomery College Board of Trustees' Operating Budget, the county executive makes his recommendation. The County Council reviews, approves, and adopts the county executive's budget. Generally, both the county executive and the council have been very supportive of the College's needs.

Tuition

Most of the costs for education at Montgomery College that are not covered by state or county funds become the responsibility of students in the form of tuition. Within the past five years, student tuition has increased by 38 percent for in-county students and by larger percentages for out-of-county students. Tuition for in-county students has expanded from \$86.20 a credit hour in FY00 to \$123.60 per credit hour in FY05. Montgomery College's tuition and fees are the third highest among Maryland community colleges, but they are still far lower than comparable ones at four-year institutions in Maryland. In 2005, the College's tuition and fees were 48% of the average amount at University of Maryland, College Park.

With successive increases in tuition, the Montgomery College Foundation and the Montgomery College Board of Trustees have funded additional scholarships to alleviate the burden on students. Federal student aid also supports many students. Still, each year there are approximately 7,000 students who do not receive funds for which they apply. Of the students who do not receive funds, each year approximately 3,000 students do not enroll.

For the College's FY06 operating revenue, the county contributed 47.3%, the state provided 14.3%, tuition accounted for 35.2%, and 3.2% came from other sources.

Capital Support for the College

Capital funds for Montgomery College are provided by both the state and the county in a 50-50 split. During its last consideration of the Montgomery County Capital Improvements Program, the Montgomery County Council approved a 100% increase in capital funding. County capital funding includes significant funds for the College's technology replacement program. On the state level, capital resources available for community colleges have increased but still remain constrained. During the last few years, the state has funded slightly more than half of the capital needs of community colleges.

Future Funding

State and local governments continue to grapple with how best to provide high-quality higher education for their residents. Maryland continues to receive failing grades for the affordability of its higher education, due to the lack of need-based aid. Most elected officials in Maryland understand the increased demand for a college education on the horizon and the reasons for the demand. Future workforce needs are well documented and well understood; however, the public has yet to reconcile educational challenges with the resources necessary to meet them. There have been discussions about forming a Maryland commission composed of residents, elected officials, and business leaders to review how best to ensure access to an affordable high-quality

education, but no agreement regarding the need and composition of the commission has been reached.

7. Higher Education Financing

Required Diversification of Support

Nationally, public higher education is experiencing the dual problems of increased expenditures and reductions in state support. This situation, coupled with increased competition for these scarce resources, continues to have a direct impact on the amount of state funds provided to Maryland's community colleges. Colleges will have to expand other revenue streams, such as tuition, through a combination of increased rates and/or enrollments and also increase operating effectiveness while simultaneously reducing non-critical services. Between FY00 and FY03, the state's support for public higher education rose 12% annually while tuition increase was maintained at 4% at four-year institutions and 3% at community colleges. The recent increase, 5.5%, in tuition for Maryland's public universities, the largest increase in five years, may be the beginning of a series of tuition increases exceeding inflation that will also extend to the community college sector.

Although the state is expected to experience some economic difficulty over the next five years, it will not be as severe as most of the nation. Montgomery County, with a strong and viable financial base, should be even less affected during this time. Although the local economy growth rate has slowed, it should regain momentum over time. In FY00, the federal government, the largest provider of student financial assistance, provided 76% of all student aid. While an additional 16% of student aid came from institutional sources and 2% from private sources, the state provided only 6%.¹⁸

Since the College depends on three primary sources of funds—tuition and fees, state funds, and local funds—a reduction in one source creates the need for increases in another. Besides relying on increases in tuition and local support to provide necessary services in the future, the College, to fulfill its large mission, will need to identify ways to operate in a more cost-efficient manner.

8. Capacity and Access

A major change since the initial preparation of the Planning Context section is the targeted focus on meeting capacity and access challenges resulting from projected growth in enrollment demand in Montgomery County and in Maryland. A task force of the University System of Maryland (USM) and Maryland Association of Community Colleges (MACC) leaders and researchers found in 2004 that Maryland faces a pressing challenge of increased demand for higher education.¹⁹ Whether one uses an enrollment-driven model from MHEC or a broader model that looks at the demand for higher education, enrollment is projected to dramatically increase by 2010—an increase ranging from 22% to 31%. In the Washington suburbs, including Montgomery County, the demand increase could be as high as 60%.²⁰ This demand is driven in large part by the following factors:

¹⁸ Montgomery College State S-5 Financial Aid Reporting Form for FY2000.

¹⁹ Ability of Higher Education to Meet Enrollment Growth and Workforce Demands. [Online] Available at: http://www.montgomerycollege.edu/Departments/inplrsh/At_Risk.pdf.

²⁰ Ibid.

- The tremendous growth in high school graduates. Maryland is *fourth in the country* in its rate of growth of 18–24-year-olds from now through 2015.
- Maryland’s investment in these graduates at the K-12 level. Given national trends and the state’s renewed investment in K–12 education, the college-going rate of Maryland graduates is only likely to increase in the coming years.
- Recognition on the part of employers, parents, and young people that 80% of the jobs in the fastest-growing sectors require some college.

While the USM/MACC workgroup predicts that the Maryland college-going rate will climb by one percentage point a year for the foreseeable future, the actual enrollment trends in the coming years will be determined in large part by the ability of institutions to accommodate these potential new students.

Capital Issues

A severe shortage of space, particularly laboratory space, will complicate the ability of Maryland’s public colleges to accommodate new students. Using conservative estimates, the state’s space shortfall will grow to 3.16 million square feet by 2013—and this figure does not address the wear and tear on existing buildings. Even with Montgomery College’s planned new construction in the next 10 years, a net space deficit is projected. In 2014 Rockville is projected to have a deficit of 173,388 net assignable square feet (NASF; actual square footage for space in classrooms, offices, lounges, study spaces, storage, etc.), Takoma Park/Silver Spring to have a deficit of 24,216 NASF, and Germantown to have a deficit of 86,311 NASF.

The Operating Impact

The ability of colleges and universities to hire and keep adequate faculty and staffing levels, retain programs, and replace and upgrade technology is crucial to their ability to accommodate new students. If funding per full-time student were to simply increase at the rate of inflation, it would be difficult for Maryland’s public institutions to serve the entire number of students in the MHEC enrollment projections, let alone accommodate additional demand. Funding below this level would have serious consequences on accessibility, affordability, and quality of higher education in Maryland. Moreover, Montgomery College faces major retirements in its faculty and administrator ranks that will exacerbate the ability to meet this demand.

Affordability

Dramatic tuition increases in light of declining public support will almost certainly have a serious and negative impact on access. Maryland is already considered too expensive when one considers tuition levels and the state’s investment in need-based aid. In *Measuring Up 2000* and *Measuring Up 2002*, the 50-state report card prepared by the National Center for Public Policy and Higher Education, Maryland’s grade in affordability dropped from a D in the 2000 report to a D– in the 2002 report.²¹

Significant increases in need-based aid are critical to mitigate the negative impacts of rising tuition. The purchasing power of the federal Pell Grant, the largest source of need-based

²¹ National Center for Public Policy and Higher Education. *Measuring Up 2000: The State-by-State Report Card for Higher Education*. [Online] Available at: <http://measuringup.highereducation.org/2000/>; *Measuring Up 2002: The State-by-State Report Card for Higher Education*. [Online] Available at: <http://measuringup.highereducation.org/2002/reporthome.htm>.

assistance, has declined significantly over the last decade. The state's primary need-based grant for undergraduate students, the Educational Assistance Grant, has a waiting list of more than 9,000 students. At the same time, loans (48%) have surpassed need-based grants (30%) as the primary source of assistance for students. Numerous studies have shown that student loans are not effective in providing access for students from low-income families.