MHEC
MARYLAND HIGHER EDUCATION COMMISSION

A Study of the Capacity of Maryland's Teacher Preparation Programs

March 2006

MARYLAND HIGHER EDUCATION COMMISSION
839 Bestgate Rd. • Suite 400 • Annapolis, MD 21401-3013

MARYLAND HIGHER EDUCATION COMMISSION

Kevin M. O'Keefe, Chairman

Donald J. Slowinski, Sr., Vice Chairman

Joann A. Boughman

Anne Osborn Emery

Ilona Modly Hogan

Emmett Paige, Jr.

Sherman L. Ragland, II

Nelson J. Sabatini

Paul L. Saval

Mario F. VillaSanta

Colleen Welch

Calvin W. Burnett
Secretary of Higher Education

Robert L. Ehrlich, Jr.
Governor

Michael S. Steele
Lt. Governor

EXECUTIVE SUMMARY

Maryland, like most other states, faces a challenge in recruiting an adequate number of qualified teachers. The State's public school systems will need to hire nearly 7,500 new teachers in the 2006-2007 academic year, more than double the number required 10 years ago. However, Maryland's teacher preparatory programs produced just slightly more than one-third of the number of teachers needed by the school systems in the State this coming year. The *2004 Maryland State Plan for Postsecondary Education* recommended that "the State and colleges and universities should work to increase the capacity of Maryland's colleges and universities to fulfill the hiring needs of the local school systems throughout the State, particularly in content fields that are declared critical shortage areas and with regard to hiring males and minorities." This study, which updates a report prepared by the Commission in 2000, examines the capacity of teacher preparation programs at Maryland colleges and universities to increase their production of new teachers.

The study analyzes both the supply and demand aspects of the capacity issue in Maryland. On the supply side, it looks at the intended majors of college-bound high school graduates, the number of students who enroll in teacher preparation programs and how many additional students could be accommodated within current resources, participation in the Professional Development School internship, enrollments and completers in community college teacher education transfer programs, the number of certified teachers being produced, and the anticipated number of teacher candidates expected. Figures are presented by subject area and institution. On the demand side, it examines the number of new hires by Maryland school systems and the sources from which they were recruited, the certification areas in which shortages are expected, and the number of new teachers by subject area who are expected to be needed by Maryland schools in 2006-2007. The statistical information was supplemented by the responses to questions posed to the heads of all teacher preparation programs in Maryland. The study concludes with policy questions arising from the results.

These are highlights of the study:

The Supply of Prospective Teachers

- The percentage of Maryland's college-bound high school seniors who have expressed an intention to major in education has steadily fallen from 8.1 percent to 6.6 percent in the past five years – the lowest level since 1990.

- Undergraduate and master's level graduate enrollment in Maryland's teacher preparation programs in 2004 totaled 9,610 – or 2,040 fewer than five years ago. Nearly three-quarters were undergraduates and two-thirds were full-time undergraduates.

Principal author: Michael J. Keller

- Elementary education represented 45 percent of the students in undergraduate teacher preparation programs, followed by early childhood education (17 percent). Thirty percent of the master's level enrollment came in elementary education and 24 percent in special education.

- Public colleges and universities accounted for 89 percent of all undergraduate teacher preparation students, while independent institutions enrolled 54 percent of all masters-level graduate students.

- The teacher preparation programs indicated that they could absorb an additional 2,706 students (slightly more than half of these full-time undergraduates) within their current resources.

- Nearly 2,000 students were enrolled in Professional Development School (PDS) internships, and the teacher preparation programs reported that they could accommodate an additional 940 within their present circumstances.

- Nearly 4,300 community college students were enrolled in teacher education transfer programs – one-third of them in the Associate of Arts in Teaching. Of the 313 completers, 67 received an AAT.

- Maryland produced 2,553 new teachers last year, nearly all from one of the State's approved, traditional teacher preparation programs.

- Seven institutions, led by Towson University and University of Maryland College Park, produced nearly 80 percent of the newly eligible teacher candidates in Maryland last year.

- The number of new teachers produced in Maryland is expected to rise to 3,048, or by 17 percent, by the end of the 2005-2006 academic year. Elementary education and special education graduates are anticipated to make up approximately half of the total growth.

The Demand for Teachers in Maryland

- The number of new teachers employed by Maryland public schools has fluctuated in the past 12 years. Hirings more than doubled between 1993-1994 and 2000-2001 to 7,649, fell to 5,929 over the next three years, then rebounded to 6,617 in 2004.

- The percentage of the new hires who were beginning teachers -- recruited from a teacher preparatory program in or outside Maryland – fell to less than half (48.1 percent) in 2004-2005. This is the first year that most new teachers employed in the State had prior experience in the profession.

- Maryland recruited more than 40 percent of its new teachers from out-of-state in each of the past 12 years.

- Just 21.7 percent of the new teachers hired in 2004-2005 were beginners recruited from a teacher preparation program in the State or the resident teachers program. This represents an historical low. Beginners trained in Maryland made up more than one-third of newly-employed teachers in 1993-1994. In each of the past five years, Maryland public schools have drawn a larger percentage of beginning teachers from outside the State than from Maryland sources.

- The certification subjects identified by the Maryland State Department of Education as constituting "critical shortage areas" for 2005-2007 are certain art areas (dance and theater), career/technology education, computer science, early childhood education, ESOL, mathematics, non biological sciences, Spanish, and special education. All or nearly all of the school systems indicated that they anticipated shortages of new teachers in mathematics, special education and science during the next five years.

- The certification fields in which the largest number of new, beginning teachers graduated from a Maryland-based program were art, early childhood education, elementary education, and social sciences. Those subjects with the lowest number, which included many critical shortage areas, were career/technology education, music, science, mathematics, English, special education, ESOL, foreign languages, and health and physical education.

- Maryland public schools estimated that they will need to hire 7,456 new teachers in 2006-2007. However, Maryland schools will be unable to hire 1,299 teachers in "critical shortage areas" where the demand is outstripped by the number of candidates in the entire expected hiring pool both within and outside the State.

- The heads of the teacher preparation programs at Maryland colleges and universities indicated that they are giving priority to growth in critical shortage certification areas. Asked to identify the additional resources they would need to accommodate enrollment increases beyond current capacity, most called for more faculty, graduate assistants, and staff (especially those supporting the PDS internships). Retention of existing teachers was identified as the most effective strategy for dealing with the teacher shortage, outside of increasing production. Many also advocated financial incentives for teacher candidates.

INTRODUCTION

One of the most pressing workforce issues facing America is finding a sufficient number of qualified teachers for its schools. The U.S. Department of Education estimates that 2.2 million new public school teachers will be needed nationwide in the next 10 years or an average of more than 200,000 annually. Elementary and secondary school enrollments are expected to climb through 2008 as a result of the "baby boom echo" and immigration will continue to swell attendance after this date. These numbers will be impacted further by the national drives to reduce class size and to expand the education of pre-schoolers. This comes at a time when the No Child Left Behind law requires schools to notify parents of the number of teachers in core subjects who are not "highly qualified".

However, school staffing is challenged by a variety of factors. First, teaching has a high attrition rate. According to the National Center for Education Statistics, 20 percent of new teachers leave the profession within their first three years and half do so after five years. Turnover is higher for teachers who work in urban districts with a large concentration of impoverished residents. Second, teachers as a group are older than the general population, and a large number have reached or will soon be reaching retirement age. Almost three-quarters of a million teachers will have retired in the 10 year period ending in 2009. Third, the teaching pipeline is leaking in the sense that the number of current college graduates who are joining the profession is not sufficient to meet the growing demand. The National Commission on Teaching America's Future reported that only 60 percent of those trained as teachers each year actually enter the classroom. Fourth, changes in the economy have provided graduates, and particularly women, with job opportunities that offer salaries that teaching cannot match. Finally, cumbersome hiring policies of some school districts may discourage qualified applicants from entering the profession. Urban areas, particularly those with a large proportion of low-income and minority residents, and rural communities are expected to face the greatest difficulty in filling vacant teaching positions. These schools are far more apt to have teachers who are inexperienced, lack full certification, or provide instruction in subjects outside their field of study.

Maryland is not immune from these trends. The Maryland State Department of Education (MSDE) has predicted that public schools will need to hire nearly 7,500 new teachers in the 2006-2007 academic year—more than double the number required in 1995-1996. All of the counties in the State and Baltimore City are expected to experience shortages of certified teachers, especially among men and minorities. The problem is compounded by looming retirements and by the State's efforts to reduce the number of teachers with conditional certificates to five percent and to cut those teaching outside their fields. State and school officials have implemented a number of incentives and strategies to make a teaching career more attractive and attainable. These include alternative certification routes for career-changers to enter the teaching profession, scholarship and loan-forgiveness programs, the establishment of the associate of arts in teaching degree program at community colleges, tax credits to offset tuition costs, signing

bonuses, increased mentoring for beginning teachers, reemployment of retired teachers with no loss of pension benefits, creation of *Maryland's Initiative for New Teachers* program, and payment of the assessment fee for teachers seeking national certification. In addition, federal funds are available to states to implement programs to recruit qualified teachers.

One way to deal with the issue is to increase the State's capacity for preparing new teachers. The 22 Maryland colleges and universities that offer teacher preparation programs do not turn out nearly enough prospective teachers to meet the demand. The 2,553 teachers produced by Maryland's teacher preparation programs in 2004-2005 represented just 34 percent of the total that is expected to be needed by the school systems in the State in 2006-2007, and many of these students take jobs outside the classroom, go to graduate school, or accept teaching positions outside the State. Historically, Maryland's postsecondary institutions have never prepared enough teacher candidates to meet the needs of school systems. Accordingly, the *2004 Maryland State Plan for Postsecondary Education* included the following action recommendation: "The State and colleges and universities should work to increase the capacity of Maryland's colleges and universities to fulfill the hiring needs of the local school systems throughout the State, particularly in content fields that are declared critical shortage areas and with regard to hiring males and minorities."

Because of the importance of this issue, the Leadership Council of the Maryland Partnership for Teaching and Learning K-16 encouraged the Maryland Higher Education Commission to update its 2000 study of the capacity of teacher preparation programs at Maryland colleges and universities to increase their production of new teachers and help to provide the number of teachers needed by the State. The Commission has replicated this study in cooperation with MSDE, the school systems, and the teacher preparation programs at the various colleges and universities.

This report examines both supply and demand aspects of the capacity question. On the supply side, it looks at the percentage of Maryland high school graduates who express an intention to pursue a career in education, the number of students who enroll in each teacher preparatory program in Maryland by subject and institution and how many additional students each program could absorb with quality within its current resources, the number of undergraduates enrolled in the one-year Professional Development School (PDS) internship program in teacher preparatory programs and how many more students each one could accept, enrollments and completers in teacher education transfer programs at Maryland community colleges, the number of certified teachers that are being produced in the various academic fields and at each institution, the campuses which the school systems identified as their chief suppliers of teachers, and the anticipated number of teacher candidates in each certification area.

On the demand side, it analyzes the number of new hires by Maryland school systems by certification area and the sources from which they were recruited, the fields for which school systems expect to experience the greatest shortages in the number of new teachers during the next five years, and the number of new teachers by subject who are projected

to be needed by Maryland public schools in 2006-2007 and whether there is an expected surplus or shortfall.

Numerous sources were used for this study, including data obtained from The College Board, MSDE, Maryland school systems, follow-up surveys of bachelor's degree recipients conducted by the Commission, and a survey of the teacher preparation programs at Maryland public and independent colleges and universities. A copy of the questionnaire is appended to this report. A draft of the questionnaire was shared with the State Teacher Education Council and the heads of the teacher preparatory programs at Maryland colleges and universities prior to its administration, and changes were made as a result of the comments received. The statistical information in the report is supplemented by a review of the literature on the critical issues in teacher supply and demand and by responses to open-ended questions posed to the heads of the teacher preparation programs. Comparisons were made with the results of the 2000 study as deemed appropriate.

The study concludes with policy questions that were raised by the findings.

THE SUPPLY OF PROSPECTIVE TEACHERS IN MARYLAND

Emerging trends in the career patterns of young Americans can often be spotted in the questionnaires they complete when taking the standardized entrance tests sponsored by The College Board and the American College Testing Program. College-bound students are asked to identify their intended major, and the results have reflected accurately both future enrollments in higher education and interest in occupations.

Recent patterns show a decline in the attractiveness of the education profession to Maryland youth. During the past five years, the percentage of Maryland high school seniors taking the SAT who indicated that they planned to major in education has steadily fallen from 8.1 percent in 2001 to 6.6 percent in 2005 (Table 1). This is the lowest proportion of college-bound students who have expressed plans to study education since 1990.

A more immediate gauge of how many teachers will be entering the profession is the current enrollment in teacher preparation programs. To identify the number of students who have enrolled in these programs at Maryland colleges and universities, a questionnaire was sent to the heads of the departments and schools of education at each institution. The survey sought figures about the number of undergraduates, Masters of Arts in Teaching graduate students, and those seeking post baccalaureate certificates who were enrolled in the teacher preparation program of the campuses in fall 2004 on the basis of the areas of teacher certification used by MSDE. Respondents were asked not to include master's-level graduate students enrolled for in-service education. This survey was necessary because little of this information is available at the Commission. Most secondary education students in Maryland major in their actual disciplines, and the

Commission's data systems do not identify these individuals on this basis. All of the 22 colleges and universities which offer teacher preparation programs in the State and certify teachers responded to the survey. The figures for Peabody Conservatory of Music were combined with those from The Johns Hopkins University.

Tables 2 and 3 contain the enrollment figures by certification area and institution respectively. In fall 2004, the number of individuals attending teacher preparatory programs at Maryland campuses as undergraduates or masters-level graduate students totaled 9,610. Nearly three-fourths of these (6,974) were undergraduates, and two-thirds (6,410) were full-time undergraduates. One-fourth (2,434) were masters-level graduate students, of whom 1,462 were enrolled full-time. Fewer students were enrolled in education programs in 2004 than in 1999 when there were 11,650 – and this figure does not include those seeking a post baccalaureate certificate.

Elementary education represented the largest number of students enrolled in undergraduate teacher preparation programs by far (45 percent), followed by early childhood education (17 percent), social sciences (7 percent) and special education (6 percent). A majority of the enrollment at the master's degree level came in elementary education (30 percent) and special education (24 percent). Public colleges and universities accounted for 89 percent of all undergraduate teacher preparation students. Towson University had 30 percent of these students, followed by University of Maryland College Park and Salisbury University (19 percent each). Sixteen percent attended one of the State's historically black institutions. In contrast, 54 percent of the master's level graduate students in teacher preparation were at independent institutions. The Johns Hopkins University absorbed the largest number of these students (47 percent), followed by McDaniel College, College of Notre Dame, and Loyola College. Bowie State University, Towson University and University of Maryland Baltimore County led in master's level graduate enrollments among public postsecondary institutions, representing nearly three-fourths of those in this sector.

To get a sense of the capacity of the teacher preparation programs to expand within existing resources, the institutions were asked to estimate the number of additional students their individual certification areas could absorb with quality within their current faculty and staff situation, facilities capacity and operating budget. Tables 4 and 5 display the responses on the basis of subject and campus. **Statewide, the teacher preparation programs indicated that they could take on over 2,700 more students within their present circumstances.** Slightly more than half of these (1,391) represented full-time undergraduate enrollments. A sizeable majority of these additional students (61 percent) fell into the certification fields of science (454), elementary education (441), special education (433), and early childhood education (278). These are the same fields which the 2000 study found could absorb the greatest number of additional students. Sixty percent of the extra enrollment (1,628) was at public campuses. Seven campuses represented more than two-thirds of the additions: University of Maryland College Park (355), Loyola College (310), Towson University (307), Bowie State University (270), Coppin State University (250), College of Notre Dame (173), and Goucher College (161).

Undergraduates enrolled in the one-year internship feature of teacher preparatory programs reflect individuals who are close to the completion of their studies and who are virtually certain to enter the profession upon graduation. These students are a good measure of the minimum number of new teachers produced by Maryland institutions who will be available for employment in a short period of time. Table 6 shows the number who took part in the PDS program during the 2004-2005 academic year and the additional students that campuses could absorb with quality within their current resources. Statewide, there were nearly 2,000 students in the internship program and institutions reported that they could have accommodated an additional 940. Students in elementary education (881) and early childhood education (306) had by far the greatest participation. Four programs accounted for almost two-thirds of the additional students who could be accepted into the internships: elementary education (215), science (179), special education (124) and early childhood education (101).

Community colleges have been one of the pipelines for the preparation of teachers for many years, and the establishment of the Associate of Arts in Teaching (AAT) program has expanded the opportunities for prospective educators that wish to start their studies at a two-year campus. Table 7 displays enrollments in community college teacher education transfer programs in fall 2004 and the number of completers in the 2004-2005 academic year. Nearly 4,300 community college students took part in these programs, of which nearly half (48 percent) were enrolled full-time and almost one-third were seeking the AAT. Of the 313 completers in all teacher education transfer programs, 67 earned an AAT. The largest enrollments and number of completers were at Community College of Baltimore County, Anne Arundel Community College, College of Southern Maryland, Howard Community College, Harford Community College and Carroll Community College. These six colleges constituted 62 percent of the total statewide enrollment in community college teacher education transfer programs and 65 percent of the completers.

As would be expected, the teacher candidates produced in the State closely follow the enrollment patterns at the colleges and universities. As Table 8 shows, the supply of new teachers in Maryland totaled 2,604 in 2003-2004. Nearly all of these (2,553) graduated from approved, traditional teacher preparation programs. Only a handful emerged from alternative mechanisms offered by the campuses, such as the resident teacher certificate program which is aimed at career changers and liberal arts graduates. Eighty percent of those in the 2003-2004 teacher pool had been prepared in five disciplines: elementary education (1,163), special education (286), early childhood education (273), social sciences (197) and English (154). This is virtually identical to the breakdown of programs in 1999-2000.

Although 22 colleges and universities have certification programs, Table 9 shows that seven institutions were responsible for nearly 80 percent of the newly eligible teacher candidates educated in Maryland: Towson (584), UMCP (429), Johns Hopkins (264), Salisbury (240), Notre Dame (224), UMBC (136) and Frostburg (135). However, these numbers provide a partial picture of the importance of campuses to the school systems in

the State. Most school systems are dependent on the resources of institutions proximate to their location, and some campuses which produce fewer teachers than those cited above have important appeal to school officials in some of the State's largest jurisdictions. This is demonstrated by the figures in Table 10.

Maryland's superintendents were asked to identify the teacher preparation programs which have been, and are likely to remain in the future, the chief suppliers of teachers for their schools. Responses were received from all but one school system (Dorchester). Towson, which certifies the single largest number of teachers, was one of two institutions to be mentioned by a majority of the superintendents (16), including those from all of the largest jurisdictions in Maryland. Salisbury had almost as much appeal, cited by 15 superintendents, including those from all of the biggest jurisdictions and by all of the school systems on the Eastern Shore. UMCP was mentioned by the school systems in the Washington, DC suburbs as well as by several large counties in the Baltimore suburbs. Frostburg was identified by all of the school systems in Western Maryland and the Washington, DC suburbs.

The number of teacher candidates who earn their certification in Maryland is expected to show moderate gains by the end of the 2005-2006 academic year from the levels achieved in 2003-2004 (Table 11). MSDE, which prepares projections of teacher supply annually, predicts that the pool of prospective new teachers will increase by 17 percent over the two year period to 3,048 or by 444 new teachers. Nearly three-fourths of the growth is expected to take place in the same fields that are generating the largest enrollments in Maryland's teacher preparation programs (elementary education with 110 new teacher candidates, special education with 104 and early childhood education with 45), as well as in two acute shortage fields (science with 32 and mathematics with 31).

THE DEMAND FOR TEACHERS IN MARYLAND

Maryland's public schools have experienced fluctuation in the recruitment of teachers during the past 12 years. The number of new teachers selected by the State's school systems more than doubled from 2,955 in 1993-1994 to 7,649 in 2000-2001. Hiring then fell to 5,929 over the next three years before rebounding to 6,617 in 2004-2005 (Table 12). Maryland's public schools have turned dramatically in the past two years to experienced teachers, chiefly those within the State, to fill vacancies. The percentage of new hires who were beginning teachers dropped from 58.8 percent in 2002-2003 to 48.1 percent in 2004-2005 – marking the first time that most of the new teachers hired in a year had previously worked in the profession. In 1993-1994, beginning teachers represented 62.4 percent of new hires. Maryland also recruits many of its new teachers from outside the State. More than 40 percent of new teachers in Maryland classrooms in each of the past 12 years and a majority of those in four of the last seven years were attracted from other states. Nonetheless, the proportion which out-of-state residents has constituted of new hires declined in the past two years.

Notably, the percentage which beginning teachers who were prepared in Maryland represented of all new hires sunk to an historical low in the latest year. Just 21.7 percent of the new teachers hired in 2004-2005 were beginners drawn from a traditional teacher preparation program in Maryland or the resident teachers program (an alternative certification route). In comparison, beginners trained in Maryland accounted for 34.3 percent of the newly hired teachers at Maryland public schools in 1993-1994. In each year since 1998-1999, Maryland's public schools have recruited a larger percentage of beginning teachers prepared in other states than in Maryland. This phenomenon is not occurring because most new Maryland-trained teacher preparation graduates are taking teaching positions outside the State. Follow-up surveys of bachelor's degree recipients from Maryland colleges and universities in 1997, 1999, 2001 and 2004 found that between 65 percent and 84 percent of those who took full-time positions as teachers were working in Maryland one year after graduation. Figures from earlier surveys were comparable.

The percentage of freshly hired teachers who were recruited directly from Maryland campuses varies by subject area. In 2004-2005, beginning teachers recruited from a traditional teacher preparation program or the resident teacher program made up a lower than average percentage of the new hires in the certification fields of career/technology education (10.7 percent), music (12.4 percent), science (12.8 percent), mathematics (15.7 percent), English (16.3 percent), special education (16.6 percent), ESOL (19.4 percent), foreign languages (19.4 percent), and health and physical education (21.1 percent). Higher than average percentages of new hires came from Maryland prepared candidates in art (32.2 percent), early childhood education (30.8 percent), elementary education (28.2 percent) and social sciences (26.9 percent). These results were similar to those in the 2000 study, except that several additional disciplines fell into the lower-than-average category.

Most of the certification areas in which Maryland public schools have experienced the greatest shortage of qualified teachers coincided with those in which they have recruited the smallest percentage of their new teachers from Maryland prepared sources. *The Maryland Teacher Staffing Report 2005-2007* identified certain art areas (dance and theater), career/technology education, computer science, early childhood education, ESOL, mathematics, political science, non biological sciences, Spanish, and special education as "critical shortage areas" for the next academic year.

Asked to name the subject areas in which their schools expect shortages in new teachers during the next five years, all of the school systems selected mathematics and special education and all but one identified science (Table 14). Foreign languages (notably Spanish), technology education, English, and speech pathology also was cited by a large number of the school systems.

The following table shows the certification areas in which there is a serious shortage of new teachers and in which the percentage being hired from Maryland's teacher preparation programs is below average. It also shows the fields in which there has been

no shortage or a surplus—and in which the proportion of new teachers hired from Maryland campuses has been above average.

	Critical Shortage	Surplus or No Shortage
Above Average Hiring	Computer Science, Early Childhood Education	Elementary Education, Social Sciences
Below Average Hiring	Career & Technology Education, Dance, ESOL, Mathematics, Science, Spanish, Special Education, Theater	English, Health & Physical Education

In several certification areas, there will be insufficient supply from any source to meet the demand from Maryland schools. In 2006-2007, Maryland's public school systems estimate that they will need to hire 7,456 new teachers (Table 15). The anticipated staffing pool from which the schools will recruit these students is 6,441, and this figure reflects sources both within and outside Maryland and both beginning and experienced teachers. The shortfall will be particularly great in several of the certification areas which have been described as "critical shortages": career/technology education, computer science, ESOL, mathematics, non-biological natural sciences, Spanish, and special education. To fill these vacancies, additional candidates would have to be produced by Maryland's campuses or recruited in some other way. Statewide, Maryland public schools will require an additional 1,299 teachers in "critical shortage areas" beyond the number that is projected to be available in the current pool. These additional teachers will be needed in the following certification areas:

Special Education	315
Generic: Birth – Grade 3	166
Severely and Profoundly Disabled	53
Generic Grades 1-8	49
Visually Impaired	29
Hearing Impaired	18
Science	283
Physical Science	171
Earth/Space Science	47
Chemistry	34
Physics	28
Early Childhood Education	278
Mathematics	220
Career/Technology Education	78
Family & Consumer Sciences	56
Technology Education	22
Computer Science	44
ESOL	39
Spanish	30
Art	12
Dance	11
Theater	1
Political Science	3

At least some of Maryland's teacher preparation programs indicated that they could expand the number of students in the above certification areas. The following are

institutions which had enrollment in the above "critical shortage" certification areas in 2004; those in bold indicated that they could absorb at least some additional students within their current capacity.

Special Education	
Generic: Birth-Grade 3	**Bowie, Towson, UMCP, Johns Hopkins, Loyola**
Severely Disabled	UMCP, Johns Hopkins
Generic: Grades 1-8	**Bowie, Towson, UMCP, UMES, Columbia Union, Goucher, Hood,** Johns Hopkins, **Loyola,** Mt. St. Mary's, **Notre Dame**
Visually Impaired	Johns Hopkins
Hearing Impaired	McDaniel
Science	
Physical Science	**Johns Hopkins**
Earth/Space Science	**Frostburg, Towson, UMBC,** UMUC, **Johns Hopkins, Loyola**
Chemistry	**Bowie, Frostburg,** Salisbury, **Towson, UMBC,** UMCP, **UMES,** UMUC, **Morgan, Goucher, Hood, Johns Hopkins,** Loyola, McDaniel, **Notre Dame,** Washington
Physics	**Frostburg,** Salisbury, **Towson, UMBC,** UMCP, **Morgan, Johns Hopkins, Loyola,** McDaniel, **Notre Dame,** Washington
Early Childhood Education	**Bowie, Coppin,** Frostburg, **Salisbury, Towson, UMBC, UMCP,** St. Mary's, **Columbia Union, Hood,** Johns Hopkins, **Notre Dame, Villa Julie**
Mathematics	Bowie, **Coppin,** Frostburg, **Salisbury, Towson, UMBC, UMCP, UMES,** UMUC, **Morgan,** St. Mary's, **Columbia Union, Goucher, Hood, Johns Hopkins, Loyola,** McDaniel, Mt. St. Mary's, Notre Dame, Washington
Career/Technology Ed	
Family & Consumer Sci	**UMES**
Technology Education	**UMES**
Computer Science	UMUC
ESOL	**Salisbury, UMBC,** UMCP, **Johns Hopkins, Notre Dame**
Spanish	Salisbury, **Towson, UMBC,** UMCP, **Goucher, Hood,** Johns Hopkins, Loyola, Mt. St. Mary's, **Notre Dame,** Washington
Art	
Dance	Towson, **UMBC, Goucher**
Theater	**UMBC,** UMCP, Washington

Note: Political Science was not listed as a certification area on the questionnaire.

PLANS AND PERSPECTIVES OF TEACHER PREPARATION PROGRAMS

How the teacher preparation programs at the State's colleges and universities intend to respond to the demand from the school systems will have great bearing on the approaches taken in Maryland to deal with this workforce issue. Hence, in addition to providing statistical information for this report, the teacher preparation programs were invited to identify their short-term plans for growth or retrenchment, any additional support needed to serve more students, and alternatives beyond increasing capacity for satisfying the demand of the school systems for more qualified teachers. Observations were offered by nearly all of the teacher preparation programs.

Most of the programs planned some type of expansion in the next several years. These are summarized below. Many are pursuing ventures in certification areas where the State faces critical shortages. A few institutions indicated that they did not anticipate new initiatives. None reported any anticipated reductions in their programs, although some stated that they were near or at full capacity in at least several areas.

Bowie State University	Planning to revise and update MAT. Checking into offering middle school certification.
Coppin State University	Offering MAT program and a doctoral program by distance learning. Targeting paraprofessionals to obtain bachelor's degrees in elementary education program. Offering MAT, M.Ed, MS.S programs at off-campus sites.
Frostburg State Univ.	Dual elementary and special education program in Hagerstown. Expanding number of MAT cohorts. Support the development of C.A.S.E. program in local public schools. Increase the number of candidates in special education, reading, and curriculum and instruction programs.
Salisbury University	Addition of an undergraduate degree and certification program in ESOL. Placement capacities may force a cap on enrollments in areas where sufficient quality placements cannot be found in either PDS or non PDS schools. Plans to allow students to pursue cohort-based MAT program in more flexible ways. Making methods courses more accessible to local teachers who are provisionally certified.
Towson University	Almost all programs are at maximum capacity. Special education and elementary education enrollments are expected to increase. Anticipated approval of new educational leadership programming.
UM Baltimore County	Plans to continue the expansion of the MAE degree with several school districts to improve the preparation of teachers in science, technology and mathematics. Plans to expand the undergraduate and graduate certification model to accommodate "late deciders" in education. The ESOL program is poised to offer graduate certificates to currently certified teachers.
UM College Park	Rebalancing programs to focus on recruitment efforts in special education, language education, ESOL, mathematics and sciences. Working with Montgomery County Public Schools and USM at Shady Grove to offer a master's degree program for teachers seeking ESOL certification.
UM Eastern Shore	Want to expand existing programs.
UM University College	Developing a modification of the MAT to a 2+2+1 program for AAT graduates.
Morgan State Univ.	A five-year program leading to an M.S. in elementary mathematics education or elementary science education. Secondary education students will have the opportunity to complete a fifth year of professional education courses, leading to the MAT.
St. Mary's College	Creation of an MAT program in the place of the undergraduate program.
Hood College	Planning a certification program in Art (K-12). Implementing a dual degree/certification program in elementary/special education.
Johns Hopkins Univ.	Offering participants in the Teaching Residency Program of Baltimore City Public Schools the opportunity to enroll in MAT program. Seeking to increase enrollments modestly in high need areas such as mathematics, physical sciences, and ESOL.
Loyola College	Discussing options for RTC programs in mathematics, physical science, physics, and middle school science with several school districts. Discussed cohort programs in special education with Baltimore County and Howard County.
Mt. St. Mary's Univ.	Pursue foreign language and computer science certifications.
Villa Julie College	Expansion of the early childhood and elementary education programs.

The teacher preparation programs were asked to identify the additional resources that would be needed to accommodate enrollment growth beyond current capacity at their institution. More personnel was, by far, the most cited need: regular and adjunct faculty, graduate assistants, and a variety of staff, particularly those supporting the PDS internships and those serving in new teacher mentoring programs. There also were calls for expanded clinical supervisory resources for PDS operations, additional PDS sites, and

more facilities and space in general. Said the director of one program: "Two kinds of resources are necessary – faculty resources and resources to support the internship/PDS portion of professional preparation. In order to substantially impact capacity, additional faculty resources will need to be added in order to offer additional sections of courses. Additional clinic resources would enable development or refining PDS sites – faculty liaison positions, mentor teacher training, assessment of site, intern and preK-12 student learning could all be impacted." Commented another: "The growth of 2+2 programs and additional programming at the regional higher education centers require additional collaborative and oversight efforts, and this necessitates administrative and staff resources as well as faculty."

Beyond increasing capacity, the retention of those currently in the classroom was viewed by the teacher preparation program professionals as the most effective strategy for increasing the number of teachers. "We know that teacher retention is a major issue and probably one that we will need to address in the future," said the director of one program. "Not only do we see more teachers leave the profession within the first few years, but we see fewer who are willing to make a commitment to teaching as their entire career. Part of this is true across all economic sectors – career changing is a way of life. The teaching force is now being impacted more by this than at any time in the past." Increasing the salaries and benefits of teachers, improving working conditions in the schools (notably offering more flexibility in the selection of curricula), providing additional resources for mentoring programs for beginning teachers in their first few years on the job, and expanding the number of PDS sites (particularly in critical shortage certification areas) were the most frequently mentioned suggestions for improving teacher retention.

Many respondents also called for financial incentives for teacher candidates, and the ideas included the continuation or restoration of state-funded scholarships for teachers who pledge to work in Maryland, tuition reimbursement or reductions for those enrolling in teacher preparation programs or transferring to a four-year institution with an AAT degree, fee waivers for those taking the Praxis tests, and stipends for PDS participants or allowing those taking part to continue to hold full-time jobs during the internship period. "The continuing increases in tuition have already begun to have an effect on the number of candidates at both the graduate and undergraduate levels," said the director of one program. "Students may be unwilling to incur substantial debt to prepare for low-to-mid salary careers." Several others advocated expanding "fast track" options to certification for career changers or students who decide late in college that they want to teach.

POLICY ISSUES

The squeeze which Maryland school districts face in finding sufficient teachers for their classrooms, especially in shortage areas, compels policy makers to consider alternative strategies, options and actions for dealing with the situation. Judgments must be made regarding the recruitment of teachers over both the short and long term. A key question is what can be done by the State in general and Maryland higher education institutions in specific to respond to this need, in what areas, in what ways, and with what resources. These are policy issues emerging from this study.

Maryland is not producing or attracting enough teachers to fulfill the staffing requirements of the State's school systems, especially in high need certification fields.

Maryland is confronting a shortage of teachers over the next two years. Maryland's schools are unlikely to recruit enough teachers from any sources to meet classroom demand. Maryland's public school systems estimate that they will need to hire nearly 7,500 new teachers in 2006-2007, but the entire pool of prospective candidates both within and outside the State is 6,441. The problem is largely concentrated in several of the certification areas that MSDE has identified as posing a "critical shortage": career/technology education, computer science, ESOL, mathematics, non-biological natural sciences, Spanish, and special education. In these fields, demand exceeds the available supply by almost 1,300. Even in the subjects in which there is no shortage of teachers or even a surplus (elementary education, social sciences, English, and health and physical education), there is no guarantee that all school systems will be able to find sufficient qualified teachers.

Maryland's teacher preparation programs had 3,167 students enrolled in the critical shortage areas in 2004 (nearly three-quarters in early childhood education and special education), and many of them indicated that they could increase their enrollment in these areas with quality within their current resources. Several of the teacher preparation programs, in describing their growth plans, cited specific undertakings aimed at increasing graduates in critical shortage areas. Such initiatives would be welcome. Further, in expanding current programs and in developing new ones, campuses would benefit by giving priority to those certification areas in which demand outpaces supply.

Maryland public schools may be overly dependent on the recruitment of experienced teachers already working in other Maryland jurisdictions or on those hired from other states.

In 2004-2005, more than one-third (34.1 percent) of the newly hired teachers in Maryland public schools were experienced educators recruited from elsewhere in the State – the highest percentage on record. An additional 44.2 percent were attracted from outside the State. Just 21.7 percent of the new teachers were beginners who had graduated from a

traditional teacher preparation program in Maryland or had taken an alternative certification route. This is an historical low. In comparison, beginners trained in Maryland represented more than one-third (34.3 percent) of the newly hired teachers in the State's public schools 12 years earlier. In each of the past seven years, Maryland's public schools have recruited a greater percentage of their beginning teachers from outside the State than from one of its teacher preparatory programs.

This phenomenon is not due, at least primarily, to any negative feeling about Maryland among new teacher candidates. Most newly-minted Maryland teachers who take teaching jobs stay in the State. The past four follow-up surveys of bachelor's degree recipients conducted by the Commission found that between 65 percent and 84 percent of those who took full-time positions as teachers were working in Maryland one year after graduation. Nor should it be occurring because of a lack of ways to receive training. The teacher preparation programs at Maryland colleges and universities reported that they could have accommodated more than 2,700 additional students within their current circumstances in 2004. Many Maryland community colleges have introduced the Associate of Arts in Teaching degree, providing an additional option for students who wish to start at a two-year institution. Nearly 4,300 students were enrolled in community college transfer programs in teacher education in 2004, and more than 300 had completed their courses of study. Maryland offers "fast track" certification options for persons seeking to enter teaching from another career or wishing to change their college major at a late date.

One explanation could be a decline in interest in teaching as a career among young Marylanders. The number of students enrolled in Maryland's teacher preparatory programs in 2004 was more than 2,000 below the levels of five year ago. And the percentage of college-bound high school students who indicated that they planned to major in education, which has been a good indicator of future college enrollments, has fallen steadily for the past five years to 6.6 percent – the lowest level since 1990.

The retention of current teachers may be as important as the production of new teachers to ensuring an adequate level of classroom staffing in the future.

Turnover of new teachers is very high nationally, and it is unlikely that Maryland is an exception. Half leave the profession within five years, and attrition is greater in schools in low-income, urban districts. Fewer are making teaching a long career, and the reasons go beyond the increasing tendency of Americans to change occupations several times over a lifetime. The heads of Maryland's teacher preparation programs suggested that strategies aimed at retaining those who have already entered the profession ought to have at least equal weight to initiatives aimed at smoothing the pathway to certification of new students. Several called for increased clinical resources to support the year-long PDS internship as well as more sites for the program, particularly in critical shortage certification areas. Preliminary research supports the argument that the PDS experience has a positive impact on teacher retention, although more studies would be desirable. The FY 2007 Maryland Executive Budget contains $2 million for expansion of the PDS program. In 2004, nearly 2,000 students at Maryland colleges and universities were

enrolled in an internship, and teacher preparatory programs reported that they could accommodate an additional 940. Other incentives for retaining teachers that were mentioned: expanded mentoring programs for starting teachers, better compensation and benefits, and improved working conditions -- especially more freedom to choose curricula.

TABLES

Table 1. Trends in the Percentage of Maryland College Bound Seniors Whose Intended College Major Was Education

Year	Percentage
1990	6.5%
1991	7.0%
1992	7.5%
1993	7.3%
1994	7.3%
1995	7.2%
1996	7.4%
1997	7.5%
1998	8.1%
1999	7.8%
2000	7.8%
2001	8.1%
2002	7.9%
2003	7.7%
2004	7.4%
2005	6.6%

Source: The College Board

Table 2. Enrollment in Teacher Preparatory Programs at Maryland Four-Year Colleges and Universities by Subject Area (Fall 2004)

	Undergraduates			Master's Level Graduate Students			Combined Figures (Including Post Baccalaureate Certificates)		
	Full Time	Part Time	Total	Full Time	Part Time	Total	Full Time	Part Time	Total
Art	**184**	**13**	**197**	**59**	**6**	**65**	**246**	**25**	**271**
Career / Technology Education	**15**	**2**	**17**	**10**	**8**	**18**	**25**	**11**	**36**
Agriculture	0	0	0	1	0	1	1	0	1
Business Education	11	2	13	9	4	13	20	7	27
Family and Consumer Services	1	0	1	0	4	4	1	4	5
Marketing Education	0	0	0	0	0	0	0	0	0
Technology Education	3	0	3	0	0	0	3	0	3
Trades and Industry	0	0	0	0	0	0	0	0	0
Health Occupations	0	0	0	0	0	0	0	0	0
Computer Science	**0**	**0**	**0**	**0**	**4**	**4**	**0**	**4**	**4**
Early Childhood Education	**1,049**	**106**	**1155**	**41**	**51**	**92**	**1098**	**180**	**1278**
Elementary Education	**2,877**	**258**	**3135**	**462**	**255**	**717**	**3348**	**517**	**3865**
English/ Language Arts	**323**	**27**	**350**	**184**	**44**	**228**	**515**	**89**	**604**
English	318	27	345	184	44	228	510	89	599
Speech	5	0	5	0	0	0	5	0	5
ESOL	**0**	**0**	**0**	**77**	**58**	**135**	**77**	**98**	**175**
Foreign Language	**91**	**13**	**104**	**34**	**11**	**45**	**126**	**28**	**154**
French	10	2	12	10	2	12	21	4	25
German	4	1	5	0	0	0	4	2	6
Italian	1	0	1	0	0	0	1	0	1
Latin	1	0	1	0	0	0	1	0	1
Russian	3	0	3	0	0	0	3	0	3
Spanish	72	10	82	24	9	33	96	22	118
Health Education	**54**	**2**	**56**	**0**	**0**	**0**	**54**	**2**	**56**
Mathematics	**233**	**16**	**249**	**61**	**84**	**145**	**298**	**115**	**413**

(continued)

Table 2 (cont). Enrollment in Teacher Preparatory Programs at Maryland Four-Year Colleges and Universities by Subject Area (Fall 2004)

	Undergraduates			Master's Level Graduate Students			Combined Figures (Including Post Baccalaureate Certificates)		
	Full Time	Part Time	Total	Full Time	Part Time	Total	Full Time	Part Time	Total
Music	**125**	**8**	**133**	**2**	**0**	**2**	**127**	**9**	**136**
Instrumental	61	3	64	0	0	0	61	4	65
Voice	32	2	34	0	0	0	32	2	34
Physical Education	**366**	**30**	**396**	**11**	**8**	**19**	**389**	**42**	**431**
Science	**150**	**18**	**168**	**105**	**74**	**179**	**257**	**98**	**355**
Biology	109	14	123	74	52	126	185	70	255
Chemistry	20	3	23	17	10	27	37	15	52
Earth/Space Science	11	0	11	4	5	9	15	5	20
Physical Science	0	0	0	0	0	0	0	0	0
Physics	10	1	11	10	7	17	20	8	28
Social Sciences	**488**	**30**	**518**	**136**	**65**	**201**	**639**	**105**	**744**
Geography	0	0	0	0	0	0	0	0	0
History	226	18	244	10	1	11	236	19	255
Social Studies	262	12	274	126	64	190	403	86	489
Special Education	**408**	**40**	**448**	**280**	**303**	**583**	**689**	**350**	**1,039**
Generic (Infant-Grade 3)	133	17	150	54	41	95	187	31	218
Generic (Grade 1-8)	113	4	117	122	98	220	236	107	343
Generic (Grades 6- Adult)	48	3	51	60	132	192	108	137	245
Hearing Impaired	0	0	0	23	14	37	23	14	37
Severely Disabled	10	1	11	21	2	23	31	3	34
Visually Impaired	0	0	0	0	16	16	0	16	16
Other Teaching Areas	**47**	**1**	**48**	**0**	**1**	**1**	**47**	**2**	**49**
Theater	12	0	12	0	1	1	12	1	13
Dance	18	1	19	0	0	0	18	1	19
Total Enrollment	**6,410**	**564**	**6,974**	**1,462**	**972**	**2,434**	**7,935**	**1,675**	**9,610**

Note: Totals for Music and Special Education are greater than the sum of their subcategories because some institutions did not provide more specific breakdowns for these two academic areas.

Source: Maryland Higher Education Commission Survey of Departments and Schools of Education

Table 3. Enrollment in Teacher Preparatory Programs at Maryland Four Year Colleges and Universities by Institution (Fall 2004)

	Undergraduate			Master-Level Graduate Students			Combined Figures (Including Post Baccalaureate Certificates)		
	Full Time	Part Time	Total	Full Time	Part Time	Total	Full Time	Part Time	Total
Public Institutions									
Bowie	374	59	433	385	0	385	759	59	818
Coppin	143	73	216	6	23	29	149	96	245
Frostburg	681	13	694	39	1	40	720	14	734
Salisbury	1,043	117	1,160	21	0	21	1,064	117	1,181
Towson	1,744	136	1,880	44	212	256	1,822	355	2,177
UMBC	273	42	315	93	86	179	366	128	494
UMCP	1,116	53	1,169	65	52	117	1,181	147	1,328
UMES	68	0	68	16	0	16	84	0	84
UMUC	0	0	0	0	37	37	0	37	37
Morgan	245	26	271	34	0	34	279	26	305
St. Mary's	31	0	31	0	0	0	49	0	49
All Publics	5,718	519	6,237	703	411	1,114	6,473	979	7,452
Independent Institutions									
Columbia Union	14	0	14	0	0	0	14	4	18
Goucher	59	0	59	37	90	127	96	90	186
Hood	63	1	64	0	0	0	74	5	79
Johns Hopkins	0	0	0	464	152	616	464	152	616
Loyola	201	0	201	0	157	157	201	194	395
Maryland Institute	0	0	0	25	0	25	25	0	25
McDaniel	108	2	110	60	138	198	168	140	308
Mount St. Mary's	47	0	47	24	0	24	71	0	71
Notre Dame	103	42	145	149	24	173	252	111	363
Villa Julie	33	0	33	0	0	0	33	0	33
Washington	64	0	64	0	0	0	64	0	64
All Independents	692	45	737	759	561	1,320	1,462	696	2,158
All Campuses	**6,410**	**564**	**6,974**	**1,462**	**972**	**2,434**	**7,935**	**1,675**	**9,610**

Source: Maryland Higher Education Commission Survey of Departments and Schools of Education

Table 4. Number of Additional Students Which Teacher Preparatory Programs at Maryland Campuses Could Absorb with Quality Within Existing Resources (by Subject Area)

	Undergraduates			Master's Level Graduate Students			Combined Figures (Including Post Baccalaureate Certificates)		
	Full Time	Part Time	Total	Full Time	Part Time	Total	Full Time	Part Time	Total
Art	27	0	27	13	0	13	45	2	47
Career/Technology Education	14	0	14	0	0	0	14	0	14
Agriculture	5	0	5	0	0	0	5	0	5
Business Education	1	0	1	0	0	0	1	0	1
Family & Consumer Sciences	5	0	5	0	0	0	5	0	5
Marketing Education	0	0	0	0	0	0	0	0	0
Technology Education	3	0	3	0	0	0	3	0	3
Trades and Industry	0	0	0	0	0	0	0	0	0
Health Occupations	0	0	0	0	0	0	0	0	0
Computer Science	0	0	0	0	0	0	0	0	0
Early Childhood	159	40	199	34	15	49	198	80	278
Elementary Education	288	47	335	76	25	101	369	72	441
English/Language Arts	94	15	109	47	23	70	146	38	184
English	94	15	109	47	23	70	146	38	184
Speech	0	0	0	0	0	0	0	0	0
ESOL	0	0	0	39	10	49	39	10	49
Foreign Language	78	0	78	38	10	48	121	10	131
French	18	0	18	5	2	7	23	2	25
German	4	0	4	4	2	6	8	2	10
Italian	0	0	0	0	0	0	0	0	0
Japanese	0	0	0	0	0	0	0	0	0
Latin	2	0	2	0	0	0	2	0	2
Russian	0	0	0	2	0	2	2	0	2
Spanish	28	0	28	8	6	14	36	6	42
Health	10	0	10	0	0	0	10	0	10
Mathematics	80	3	83	63	78	141	148	81	229

(continued)

Table 4 (cont). Number of Additional Students Which Teacher Preparatory Programs at Maryland Campuses Could Absorb with Quality Within Existing Resources (By Subject Area)

	Undergraduate			Masters-Level Graduate			Combined Figures (Including Post Baccalaureate Certificates)		
	Full Time	Part Time	Total	Full Time	Part Time	Total	Full Time	Part Time	Total
Music	**111**	**3**	**114**	**21**	**0**	**21**	**132**	**3**	**135**
Instrumental	66	3	69	10	0	10	76	3	79
Vocal	24	0	24	0	0	0	24	0	24
Physical Education	**10**	**5**	**15**	**0**	**0**	**0**	**10**	**5**	**15**
Science	**169**	**20**	**189**	**149**	**111**	**260**	**323**	**131**	**454**
Biology	53	10	63	46	19	65	99	29	128
Chemistry	57	10	67	33	14	47	90	24	114
Earth/Space Science	10	0	10	14	34	48	24	34	58
Physical Science	3	0	3	10	10	20	13	10	23
Physics	21	0	21	21	34	55	42	34	76
Social Sciences	**53**	**10**	**63**	**84**	**51**	**135**	**142**	**61**	**203**
Geography	0	0	0	2	2	4	2	2	4
History	32	10	42	25	17	42	57	27	84
Social Studies	21	0	21	57	32	89	83	32	115
Special Education	**221**	**5**	**226**	**68**	**134**	**202**	**294**	**139**	**433**
Generic Infant- Grade 3	50	0	50	8	43	51	58	43	101
Generic Grades 1-8	109	5	114	30	43	73	144	48	192
Generic Grades 6-Adult	62	0	62	30	48	78	92	48	140
Hearing Impaired	0	0	0	0	0	0	0	0	0
Severely Disabled	0	0	0	0	0	0	0	0	0
Visually Impaired	0	0	0	0	0	0	0	0	0
Other Teaching Areas	**14**	**0**	**14**	**0**	**0**	**0**	**14**	**0**	**14**
Theater	4	0	4	0	0	0	4	0	4
Dance	10	0	10	0	0	0	10	0	10
Total Enrollment	**1,328**	**148**	**1,476**	**632**	**457**	**1,089**	**2,005**	**632**	**2,637**

Note: The full-time undergraduate and master's level totals in this table are slightly less than those in Table 5 because some were identified only as "secondary education."
Source: Maryland Higher Education Commission Survey of Departments and Schools of Education

Table 5. Number of Additional Students Which Teacher Preparatory Programs at Maryland Four-Year Campuses Could Absorb With Quality Within Existing Resources (By Institution)

	Undergraduates			Master's Level Graduate Students			Combined Figures (Including Post Baccalaureate Certification)		
	Full Time	Part Time	Total	Full Time	Part Time	Total	Full Time	Part Time	Total
Public Institutions									
Bowie	130	60	190	80	0	80	210	60	270
Coppin	50	50	100	75	75	150	125	125	250
Frostburg	42	0	42	0	0	0	42	0	42
Salisbury	88	0	88	16	0	16	104	0	104
Towson	88	0	88	97	97	194	185	122	307
UMBC	98	0	98	10	0	10	108	0	108
UMCP	255	0	255	70	0	70	355	0	355
UMES	59	0	59	10	0	10	69	0	69
UMUC	0	0	0	0	0	0	0	0	0
Morgan	83	0	83	40	0	40	123	0	123
St. Mary's	0	0	0	0	0	0	0	0	0
All Publics	893	110	1,003	398	172	570	1,321	307	1,628
Independent Institutions									
Columbia Union	50	31	81	0	0	0	50	31	81
Goucher	95	0	95	66	0	66	161	0	161
Hood	85	0	85	0	0	0	100	0	100
Johns Hopkins	0	0	0	65	65	130	65	65	130
Loyola	90	0	90	0	220	220	90	220	310
Maryland Institute	0	0	0	0	0	0	0	0	0
McDaniel	0	0	0	0	0	0	0	0	0
Mount St. Mary's	0	0	0	6	0	6	6	0	6
Notre Dame	61	7	68	103	0	103	164	9	173
Villa Julie	27	0	27	0	0	0	27	0	27
Washington	90	0	90	0	0	0	90	0	90
All Independents	498	38	536	240	285	525	753	325	1,078
All Campuses	**1,391**	**148**	**1,539**	**638**	**457**	**1,095**	**2,074**	**632**	**2,706**

Source: Maryland Higher Education Commission Survey of Departments and Schools of Education

Table 6. Number of Undergraduates Enrolled in the Year- Long Internship Program in Teacher Preparatory Programs at Maryland Four-Year Campuses and the Number of Additional Students That Could Be Absorbed (by Subject Area)

List of Subjects	Number Enrolled	Additional that Could Be Absorbed
Art	**73**	**32**
Career/Technology Education	**5**	**19**
Agriculture	0	5
Business Education	3	1
Family & Consumer Sciences	0	5
Marketing Education	0	0
Technology Education	2	8
Trades and Industry	0	0
Health Occupations	0	0
Computer Science	**0**	**0**
Early Childhood	**306**	**101**
Elementary Education	**881**	**215**
English/Language Arts	**108**	**56**
English	107	56
Speech	1	0
ESOL	**22**	**10**
Foreign Language	**32**	**19**
French	5	8
German	2	0
Italian	0	0
Japanese	0	0
Latin	1	0
Russian	2	0
Spanish	22	11
Health Education	**21**	**0**
Mathematics	**68**	**87**

(continued)

Table 6 (cont). Number of Undergraduates Enrolled in The Year- Long Internship Program in Teacher Preparatory Programs at Maryland Four-Year Campuses and the Number of Additional Students That Could Be Absorbed (by Subject Area)

List of Subjects	Number Enrolled	Additional that Could Be Absorbed
Music	**66**	**14**
Instrumental	40	8
Vocal	26	6
Physical Education	**122**	**18**
Science	**35**	**179**
Biology	23	56
Chemistry	8	66
Earth/Space Science	2	14
Physical Science	0	10
Physics	2	33
Social Sciences	**132**	**60**
Geography	0	0
History	29	43
Social Studies	103	17
Special Education	**120**	**124**
Generic Infant- Grade 3	34	40
Generic Grades 1-8	61	100
Generic Grades 6-Adult	25	24
Audiology/Hearing Impaired	0	0
Severely Handicapped	0	0
Visually Handicapped	0	0
Other Teaching Areas	**2**	**6**
Theater	1	1
Dance	1	5
Total	**1,993**	**940**

SOURCE: Maryland Higher Education Commision Survey of Departments and Schools of Education

Table 7. Enrollments and Completers in Teacher Education Transfer Programs at Maryland Community Colleges by Institution (2004)

Community Colleges	Enrollments - All Teacher Education Transfers		Enrollments - A.A. Teacher Education		Completers	
	Full Time	Part Time	Full Time	Part Time	All Teacher Education Transfers	A.A. in Teaching
Allegany	118	35	7	2	21	0
Anne Arundel	236	247	213	165	29	26
Baltimore City	39	80	0	0	5	0
Carroll	151	117	36	31	27	6
Cecil	71	62	0	0	10	0
Chesapeake	44	50	42	43	5	3
CCBC	286	422	23	16	40	3
Frederick	108	81	0	0	5	0
Garrett	43	17	8	4	17	0
Hagerstown	95	88	50	42	15	2
Harford	160	117	70	30	45	10
Howard	178	231	64	37	35	6
Montgomery	115	111	111	77	0	0
Prince George's	77	187	0	0	18	0
Southern Maryland	239	244	90	52	28	0
Wor-Wic	108	114	77	77	13	11
State Total	**2,068**	**2,203**	**791**	**576**	**313**	**67**

Source: Maryland Higher Education Commission Enrollment and Degree Information System

Table 8. Supply of Maryland-Prepared Candidates By Certification Area 2003-2004

Certification Area	Total New Teacher Supply
Art	**77**
Career/Technology Education	**7**
Agriculture	2
Business Education	5
Family & Consumer Sciences	0
Technology Education	0
Trades and Industry	0
Health Occupations	0
Computer Science	**1**
Dance	**7**
Early Childhood	**273**
Elementary Education	**1,163**
English	**154**
English	150
Speech	4
ESOL	**69**
Foreign Language	**40**
French	12
German	0
Spanish	26
Latin	1
Russian	1
Other Foreign Languages	0
Health	**18**
Mathematics	**91**
Music	**36**
Physical Education	**102**
Science	**78**
Biology	54
Chemistry	12
Earth/Space Science	7
Physical Science	0
Physics	5
Social Sciences	**197**
History	58
Politcal Science	0
Social Studies	139
Special Education	**286**
Generic Infant- Grade 3	27
Generic Grades 1-8	145
Generic Grades 6-Adult	67
Hearing Impaired	14
Severely and Profoundly Disabled	33
Visually Impaired	0
Theatre	**4**
Total	**2,604**

Source: Maryland Teacher Staffing Report 2005-2007 (Maryland State Department of Education)

Table 9. Newly Eligible Maryland Teacher Candidates by Institution: 2003-2004

Institutions of Higher Learning	Number of Teacher Candidates
Bowie State University	65
College Of Notre Dame	224
Columbia Union College	9
Coppin State University	19
Frostburg State University	135
Goucher College	47
Hood College	30
Johns Hopkins University	264
Loyola College	73
McDaniel College	93
Maryland Institute, College of Art	22
Morgan State University	25
Mt. St. Mary's University	61
Peabody Conservatory of Music (JHU)	4
St. Mary's College	19
Salisbury University	240
Towson University	584
University of Maryland, Baltimore County	136
University of Maryland, College Park	429
University of Maryland Eastern Shore	20
University of Maryland University College	3
Villa Julie College	33
Washington College	18
Total	**2,553**

SOURCE: Maryland Teacher Staffing Report, 2005-2007, Maryland State Department of Education

Table 10. Maryland Teacher Preparation Progams Cited by Public School Systems as their Chief Suppliers of Teachers (By Maryland Jurisdiction)

	Bowie	Frostburg	Salisbury	Towson	UMBC	UMCP	UMES	Saint Mary's	Hood	John Hopkins	McDaniel	Mt. Saint Mary	Notre Dame
Allegany		x											
Anne Arundel			x	x	x	x				x			
Baltimore City				x									
Baltimore County				x	x	x				x			x
Calvert	x	x	x	x		x		x		x	x		x
Caroline			x	x									
Carroll		x	x	x	x	x	x		x		x	x	
Cecil				x									
Charles			x	x		x							
Frederick		x	x	x		x			x		x	x	
Garrett		x											
Harford				x									x
Howard			x	x	x	x				x			
Kent			x										
Montgomery	x	x	x	x		x	x	x	x	x		x	
Prince George's	x	x		x		x							
Queen Anne's		x	x	x	x								
Somerset			x				x						
St. Mary's				x				x					
Talbot			x										
Washington		x	x	x		x			x		x		
Wicomico			x				x						
Worcester			x				x						
State Total	3	9	15	16	5	10	5	3	4	5	4	3	3

Note: Institutions mentioned by fewer than three school systems are not included. No response was received from Dorchester

Source: Maryland Public School Systems

Table 11. Projected Teacher Candidates by Certification Area: Preparation Completed at Maryland Institutions of Higher Education 2004-2005 and 2005-2006

Certification Area	2004-2005 MD Teacher Candidate Supply	2005-2006 MD Teacher Candidate Supply
Art	**97**	**94**
Career/Technology Education	**12**	**13**
Agriculture	0	1
Business Education	10	9
Family & Consumer Sciences	0	1
Technology Education	2	2
Trades and Industry	0	0
Health Occupations	0	0
Computer Science	**1**	**2**
Dance	**12**	**12**
Early Childhood	**301**	**318**
Elementary Education	**1,220**	**1273**
English/Language Arts	**163**	**177**
English	162	176
Speech	1	1
ESOL	**48**	**63**
Foreign Language	**51**	**52**
French	10	13
German	1	3
Spanish	38	35
Latin	1	0
Italian	0	1
Russian	1	0
Other Foreign Languages	0	0
Health	**17**	**19**
Mathematics	**95**	**122**
Music	**69**	**61**
Physical Education	**120**	**125**
Science	**102**	**110**
Biology	71	69
Chemistry	13	17
Earth/Space Science	6	9
Physical Science	1	1
Physics	11	14
Social Sciences	**210**	**212**
History	56	65
Political Science	1	0
Social Studies	153	147
Special Education	**334**	**390**
Generic Infant- Grade 3	35	37
Generic Grades 1-8	151	178
Generic Grades 6-Adult	92	103
Hearing Impaired	18	20
Severely and Profoundly Disabled	31	37
Visually Impaired	7	15
Theater	**2**	**5**
Total	**2,854**	**3,048**

SOURCE: Maryland Teacher Staffing Report, 2005-2007, (Maryland State Department of Education)

Table 12. Trend Data of New Hires 1993 - 1994 to 2004 - 2005, Maryland Public Schools

		Beginning				Experienced			
Year	Total	Maryland Prepared	Percentage	Non Maryland Prepared	Percentage	Taught in Maryland	Percentage	Taught Outside Maryland	Percentage
1993-1994	2,956	1,014	34.3%	829	28.1%	525	17.8%	587	19.9%
1994-1995	3,775	1,187	31.5%	1,234	32.7%	752	19.9%	601	15.9%
1995-1996	3,624	1,123	31.0%	1,127	31.1%	533	14.7%	840	23.2%
1996-1997	4,589	1,455	31.7%	1,363	29.7%	1,112	24.2%	658	14.3%
1997-1998	5,596	1,780	31.8%	1,537	27.5%	1,362	24.3%	916	16.4%
1998-1999	6,034	1,543	25.6%	1,871	31.0%	1,426	23.6%	1,193	19.8%
1999-2000	7,330	1,665	22.7%	2,233	30.5%	2,072	28.3%	1,359	18.5%
2000-2001	7,650	1,896	24.8%	2,706	35.4%	1,860	24.9%	1,187	15.5%
2001-2002	7,386	1,694	22.9%	2,336	31.6%	1,820	24.6%	1,535	20.8%
2002-2003	7,446	1,769	23.8%	2,608	35.0%	1,633	21.9%	1,435	19.3%
2003-2004	5,930	1,420	24.0%	1,664	28.1%	1,667	28.1%	1,178	19.9%
2004-2005	6,617	1,435	21.7%	1,749	26.4%	2,257	34.1%	1,176	17.8%

SOURCE: Maryland Teacher Staffing Report, 2005-2007 (Maryland State Department of Education)

Table 13. Number of New Teachers Hired by Maryland Public Schools In 2004 Who were Recruited Directly from Maryland Colleges and Universities or Were Resident Teachers (By Subject Area)

	Total New Hires	Maryland Prepared	% of New Teachers That Were Maryland Prepared
Art	**152**	**49**	**32.2%**
Career/Technology Education	**234**	**25**	**10.7%**
Agriculture	10	3	30.0%
Business Education	69	8	11.6%
Family & Consumer Sciences	55	7	12.7%
Technology Education	56	5	8.9%
Trades and Industry	40	2	5.0%
Health Occupations	4	0	0.0%
Computer Science	**15**	**5**	**33.3%**
Dance	**6**	**0**	**0.0%**
Early Childhood	**452**	**139**	**30.8%**
Elementary Education	**2,168**	**611**	**28.2%**
English	**558**	**91**	**16.3%**
ESOL	**108**	**21**	**19.4%**
Foreign Language	**217**	**25**	**11.5%**
French	60	7	11.7%
German	7	1	14.3%
Spanish	129	16	12.4%
Latin	5	1	20.0%
Russian	0	0	0.0%
Other Foreign Language	16	0	0.0%
Health/Physical Education	**261**	**55**	**21.1%**
Mathematics	**523**	**82**	**15.7%**
Music	**225**	**28**	**12.4%**
Science	**439**	**56**	**12.8%**
Biology	213	25	11.7%
Chemistry	59	6	10.2%
Earth/Space Science	37	6	16.2%
General Science	89	6	6.7%
Physical Science	12	5	41.7%
Physics	29	8	27.6%
Social Sciences	**409**	**110**	**26.9%**
Geography	24	2	8.3%
History	69	18	26.1%
Political Science	6	1	16.7%
Social Studies	301	85	28.2%
Other Social Sciences	9	4	44.4%
Special Education	**808**	**134**	**16.6%**
K-12	28	0	0.0%
Generic: Birth - Grade 3	57	13	22.8%
Generic: Grades 1-8	329	59	17.9%
Generic Grades infant-adult	77	20	26.0%
Generic: Birth - Grade 3; 1 - 8; 6 - Adult	298	41	13.8%
Hearing Impaired	10	0	0.0%
Severely and Profoundly Disabled	5	1	20.0%
Visually Impaired	4	0	0.0%
Theatre	**14**	**2**	**14.3%**
Other Teaching Areas	**28**	**2**	**7.1%**
Total New Hires	**6617**	**1435**	**21.7%**

Source: Maryland Teacher Staffing Report, 2005 - 2007 (Maryland State Department of Education)

Table 14. Subject Areas In Which the Public School Systems Expect Shortages in New Teachers During the Next Five Years (By Maryland Jurisdiction)

	Science	English	ESOL	Science	Languages	Spanish	Mathematics	Specialist	Science	Education	Pathology	Education
Allegany		x			x		x	x	x	x		
Anne Arundel			x		x	x	x		x	x	x	x
Baltimore City							x		x	x		
Baltimore County		x			x	x	x		x	x	x	
Calvert		x		x		x	x		x	x	x	x
Caroline							x			x	x	
Carroll	x				x		x		x	x	x	x
Cecil		x			x		x	x	x	x		x
Charles		x					x		x	x		
Frederick		x	x	x	x	x	x		x	x	x	x
Garrett					x		x		x	x		
Harford				x			x	x	x	x	x	x
Howard	x	x	x	x	x		x		x	x	x	x
Kent		x				x	x		x	x		x
Montgomery	x						x		x	x	x	
Prince George's			x		x		x		x	x		
Queen Anne's		x					x		x	x		x
Somerset		x			x		x		x	x		
St. Mary's							x		x	x	x	x
Talbot			x			x	x		x	x		x
Washington		x			x		x	x	x	x		
Wicomico		x		x	x		x		x	x		x
Worcester			x		x	x	x		x	x		x
State Total	3	12	6	5	13	7	23	4	22	23	10	13

Note: Subject areas mentioned by fewer than three school systems are not included. No response was received from Dorchester
Source: Maryland Public School Systems

Table 15. Staffing Projections at Maryland Public Schools 2006-2007 (by Subject Areas)

	Projected Staffing Pool	Projected New Hires	Projected Surplus or Shortfall
Art	**149**	**132**	**17**
Career/Technology Education	**230**	**294**	**-64**
Agriculture	10	6	4
Business Education	68	62	6
Family & Consumer Sciences	54	110	-56
Technology Education	55	77	-22
Trades and Industry	39	30	9
Health Occupations	4	9	-5
Computer Science	**15**	**59**	**-44**
Dance	**6**	**17**	**-11**
Early Childhood	**443**	**721**	**-278**
Elementary Education	**2,126**	**2,142**	**-16**
English	**547**	**533**	**14**
ESOL	**106**	**145**	**-39**
Foreign Language	**213**	**234**	**-21**
French	59	47	12
German	7	8	-1
Spanish	126	156	-30
Latin	5	7	-2
Russian	0	2	-2
Other Foreign Language	16	14	2
Health/Physical Education	**256**	**266**	**-10**
Mathematics	**513**	**733**	**-220**
Music	**221**	**205**	**16**
Science	**431**	**610**	**-179**
Biology	262	161	101
Chemistry	73	107	-34
Earth/Space Science	46	93	-47
Physical Science	15	186	-171
Physics	35	63	-28
Social Sciences	**378**	**295**	**83**
Geography	9	6	3
History	68	39	29
Political Science	6	9	-3
Social Studies	295	241	54
Special Education	**793**	**1,055**	**-262**
Generic: Birth- Grade 3	65	231	-166
Generic: Grades1 - 8	372	421	-49
Generic: Grades 6-Adult	337	284	53
Hearing Impaired	10	28	-18
Severely and Profoundly Disabled	5	58	-53
Visually Impaired	4	33	-29
Theatre	**14**	**15**	**-1**
Total Teachers	6,441	7,456	**-1,015**

Source: Maryland Teacher Staffing Report, 2005 - 2007 (Maryland State Department of Education)

APPENDIX

Date: April 28, 2005

To: Deans/Directors/Chairpersons of Teacher Education
at Maryland Four-Year Higher Education Institutions

From: Ms. Dominique Raymond, Education Policy Analyst & K-16 Coordinator
Division of Planning and Academic Affairs
Maryland Higher Education Commission

cc: Dr. Michael J. Keller, Director
Office of Policy Analysis and Research
Maryland Higher Education Commission

Subject: *A Study of the Capacity of Teacher Preparation Programs in Maryland*

The Maryland Higher Education Commission is updating its 2000 report, *A Study of the Capacity of Teacher Preparation Programs in Maryland* (Capacity Study). As you will recall, the Maryland K-16 Partnership requested that the Commission and the Maryland State Department of Education (MSDE) collaborate to produce two reports concerning teacher education in the State of Maryland: the Professional Development Schools Study, completed in 2004 by MSDE, and this Capacity Study. The Capacity Study is in response to the continued expectation that Maryland, like other states, continues to face a shortage of qualified teachers. The Commission has undertaken this study, which will analyze both the supply and demand aspects of the capacity issue, in cooperation with MSDE, the local school systems, and postsecondary institutions with teacher preparation programs.

The attached questionnaire is designed to collect important information for the Capacity Study. The Commission currently does not collect this information, so we need your assistance. **Please complete the attached questionnaire and return it to the Commission by Friday, May 27, 2005. You may email, fax or mail your completed questionnaire to:**

Dr. Michael Keller
Maryland Higher Education Commission
839 Bestgate Road, Suite 400
Annapolis, MD 21401-3013
Fax: 410-260-3201
Email: mkeller@mhec.state.md.us

By letter, the Secretary of Higher Education will be advising the president of your institution about this study; you will be copied on the letter.

Thank you for your attention to this matter. We look forward to receiving your institution's response. If you have any questions regarding the Capacity Study, please contact Dr. Keller at the above email address or by phone, 410-260-4559. You may also contact me at 410-260-4585, draymond@mhec.state.md.us.

Maryland Higher Education Commission

Study to Determine the Capacity of Teacher Preparation Programs
Questionnaire To Be Completed By Four-Year Higher Education Institutions

Contact: _____
Institution: _____
Address: _____

Telephone Number: _____
Email address: _____

Best time to reach you (if we have questions about any of your responses):
Days: _____ Time: _____

1. In **fall 2004,** how many full- and part-time undergraduates and full- and part-time Masters of Arts in Teaching graduate students were enrolled in your institution's teacher preparatory program in the subject areas listed below? Full-time is defined as 12 or more semester credits (or quarter hours) for undergraduates and nine or more semester credits (or quarter hours) for graduate students. Do not include master's-level graduate students enrolled for in-service education.

	Undergraduate Students		**Master's-Level Graduate Students**		**Post-Bacc Certificate**	
	Full-Time	**Part-Time**	**Full-Time**	**Part-Time**	**Full-Time**	**Part-Time**
Art (N - 12)						
Career/technology Education						
Agriculture						
Business Education						
Family & Consumer Sciences						
Marketing Education						
Technology Education						
Trades and Industry						
Health Occupations						
Computer Science						
Early Childhood Education						
Elementary Education						
English/Language Arts						
English						
Speech						
ESOL (N-12)						
Foreign Language						
French						
German						
Italian						
Japanese						
Latin						
Russian						
Spanish						

Health Education						
Mathematics						
Music (N-12)						
Instrumental						
Vocal						
Physical Education (N-12)						
Science						
Biology						
Chemistry						
Earth/Space Science						
Physical Science						
Physics						
Social Sciences						
Geography						
History						
Social Studies						
Special Education						
Generic (Infant - Grade 3)						
Generic (Grades 1-8)						
Generic (Grades 6-Adult)						
Audiology/Hearing Impaired						
Severely/Profoundly Handicapped						
Visually Handicapped						
Other Teaching Areas						
Dance						
Theater						

2. During **fall 2004/spring 2005** (as applicable), how many undergraduate students were enrolled in the year-long internship in the subject areas listed below?

Art (N - 12) _____
Career/technology Education _____

Agriculture _____
Business Education _____
Family & Consumer Services _____
Marketing Education _____
Technology Education _____
Trades and Industry _____
Health Occupations _____
Computer Science _____
Early Childhood Education _____
Elementary Education _____
English/language arts _____
English _____

Speech _____
ESOL (N-12) _____
Foreign Language _____
French _____
German _____
Italian _____
Japanese _____
Latin _____
Russian _____
Spanish _____
Health Education _____
Mathematics _____
Music (N-12) _____
Instrumental _____
Vocal _____
Physical Education (N-12) _____
Science _____
Biology _____
Chemistry _____
Earth/Space Science _____
Physical Science _____
Physics _____
Social Sciences _____
Geography _____
History _____
Social Studies _____
Special Education _____
Generic (Infant - Grade 3) _____
Generic (Grades 1-8) _____
Generic (Grades 6-Adult) _____
Audiology/Hearing Impaired _____
Severely/Profoundly Handicapped _____
Visually Handicapped _____
Other Teaching Areas _____
Dance _____
Theater _____

3. How many additional students could your teacher preparatory program absorb **with quality** within your **current** faculty and staff situation, facilities capacity and operating budget in the subject areas listed below? For master's-level graduate students, please report M.A.T. students.

	Undergraduate Students		**Master's-Level Graduate Students**		**Post-Bacc Certificate**	
	Full-Time	**Part-Time**	**Full-Time**	**Part-Time**	**Full-Time**	**Part-Time**
Art (N - 12)						
Career/technology Education						
Agriculture						
Business Education						
Family & Consumer Sciences						
Marketing Education						

Technology Education						
Trades and Industry						
Health Occupations						
Computer Science						
Early Childhood Education						
Elementary Education						
English/Language Arts						
English						
Speech						
ESOL (N-12)						
Foreign Language						
French						
German						
Italian						
Japanese						
Latin						
Russian						
Spanish						
Health Education						
Mathematics						
Music (N-12)						
Instrumental						
Vocal						
Physical Education (N-12)						
Science						
Biology						
Chemistry						
Earth/Space Science						
Physical Science						
Physics						
Social Sciences						
Geography						
History						
Social Studies						
Special Education						
Generic (Infant - Grade 3)						
Generic (Grades 1-8)						
Generic (Grades 6-Adult)						
Audiology/Hearing Impaired						
Severely/Profoundly Handicapped						
Visually Handicapped						
Other Teaching Areas						
Dance						
Theater						

4. How many additional students can your program absorb in the year-long internship in the following areas?

Art (N - 12) _____
Career/technology Education _____
Agriculture _____
Business Education _____
Family & Consumer Services _____
Marketing Education _____
Technology Education _____
Trades and Industry _____
Health Occupations _____
Computer Science _____
Early Childhood Education _____
Elementary Education _____
English/language arts _____
English _____
Speech _____
ESOL (N-12) _____
Foreign Language _____
French _____
German _____
Italian _____
Japanese _____
Latin _____
Russian _____
Spanish _____
Health Education _____
Mathematics _____
Music (N-12) _____
Instrumental _____
Vocal _____
Physical Education (N-12) _____
Science _____
Biology _____
Chemistry _____
Earth/Space Science _____
Physical Science _____
Physics _____
Social Sciences _____
Geography _____
History _____
Social Studies _____
Special Education _____
Generic (Infant - Grade 3) _____
Generic (Grades 1-8) _____
Generic (Grades 6-Adult) _____
Audiology/Hearing Impaired _____
Severely/Profoundly Handicapped _____
Visually Handicapped _____
Other Teaching Areas _____
Dance _____
Theater _____

5. The following questions pertain to the Resident Teacher Certificate (RTC).

5a. Do you have a collaborative RTC program with a local school district?
No_____ Yes_____

If yes, which district (s)? _____

5b. How many students are involved in these programs? Number of students: _____

Of these students, are they included in your answers for questions 1-4 above?
No_____ Yes_____

5c. How many **additional** students can you accommodate in your RTC program **with quality** within your **current** faculty and staff situation, facilities capacity and operating budget?
Number of students: _____

5d. What were the number of completers in your RTC program in **fall 2003/spring 2004**?

# of completers: _____

6. Are any expansion or reductions planned for the teacher preparation programs at your college or university during the next several years? If so, what are these programs? What are the reasons for this action?
Please type your response in the space below (text will automatically scroll up per line as you type).

7. In general, what additional resources -- faculty and staff, facilities, and operating budget items -- would be needed to accommodate enrollment growth beyond current capacity at the teacher preparation program at your campus?
Please type your response in the space below (text will automatically scroll up per line as you type).

8. What options, incentives and strategies, beyond enhancing capacity of current preparation programs, would be the most effective in increasing the number of teachers in Maryland? Please type your response in the space below.

9. Please comment on any qualifications you have related to your responses to questions 1 through 5 above, and provide any other comments you may wish to make.
Please type your response in the space below (text will automatically scroll up per line as you type).

Thank you for your participation. Questions regarding this questionnaire should be directed to:

Dr. Michael J. Keller
Director of Policy Analysis and Research
Maryland Higher Education Commission
839 Bestgate Road, Suite 400
Annapolis, MD 21401
office: 410-260-4559
fax: 410-260-3201
mkeller@mhec.state.md.us

MHEC
Creating a state of achievement

Date: April 28, 2005

To: Directors of Teacher Education at Maryland Community Colleges

From: Ms. Dominique Raymond, Education Policy Analyst & K-16 Coordinator
Division of Planning and Academic Affairs
Maryland Higher Education Commission

cc: Dr. Michael J. Keller, Director
Office of Policy Analysis and Research
Maryland Higher Education Commission

Subject: *A Study of the Capacity of Teacher Preparation Programs in Maryland*

The Maryland Higher Education Commission is updating its 2000 report, *A Study of the Capacity of Teacher Preparation Programs in Maryland* (Capacity Study). As you will recall, the Maryland K-16 Partnership requested that the Commission and the Maryland State Department of Education (MSDE) collaborate to produce two reports concerning teacher education in the State of Maryland: the Professional Development Schools Study, completed in 2004 by MSDE, and this Capacity Study. The Capacity Study is in response to the continued expectation that Maryland, like other states, continues to face a shortage of qualified teachers. The Commission has undertaken this study, which will analyze both the supply and demand aspects of the capacity issue, in cooperation with MSDE, the local school systems, and postsecondary institutions with teacher preparation programs.

The attached questionnaire is designed to collect important information for the Capacity Study. The Commission currently does not collect this information, so we need your assistance. **Please complete the attached questionnaire and return it to the Commission by Friday, May 27, 2005. You may email, fax or mail your completed questionnaire to:**

Dr. Michael Keller
Maryland Higher Education Commission
839 Bestgate Road, Suite 400
Annapolis, MD 21401-3013
Fax: 410-260-3201
Email: mkeller@mhec.state.md.us

By letter, the Secretary of Higher Education will be advising the president of your institution about this study; you will be copied on the letter.

Thank you for your attention to this matter. We look forward to receiving your institution's response. If you have any questions regarding the Capacity Study, please contact Dr. Keller at the above email address or by phone, 410-260-4559. You may also contact me at 410-260-4585, draymond@mhec.state.md.us.

Maryland Higher Education Commission

Study to Determine the Capacity of Teacher Preparation Programs
Questionnaire To Be Completed By Community Colleges

Contact: _____
Institution: _____
Address: _____

Telephone Number: _____
Email address: _____

Days: _____ Time: _____

1. The following questions pertain to the Resident Teacher Certificate (RTC).

1a. Do you currently have a collaborative RTC program with a local school district? No _____ Yes _____
If yes, answer 1b, 1c and 1d. If no, skip to 2.

1b. Do you currently have a collaborative RTC program with a local school district?

_____

1c. How many students are involved in these programs?

_____ students

1d. How many additional students can you accommodate in your RTC program **with quality** within your **current** faculty and staff situation, facilities capacity and operating budget?

_____ students

1e. **In fall 2003/spring 2004,** what were the number of completers in your RTC program?

_____ completers

2. The following questions pertain to the Associate of Arts in Teaching degree (AAT).

2a. In **fall 2004/spring 2005**, how many full- and part-time students were enrolled in your college's Associate of Arts in Teaching degree program?

	Enrollments	
	Full-time	**Part-time**
Early Childhood Education		
Elementary Education		
Secondary Education		
Chemistry		
Education		
Mathematics		
Physics		
Spanish		

2b. For **fall 2003/spring 2004**, what were the number of completers in your AAT program?

	Completers
Early Childhood Education	
Elementary Education	
Secondary Education	
Chemistry	
Education	
Mathematics	
Physics	
Spanish	

3. Please comment on any qualifications you have related to your responses to the questions above, and provide any other comments you may wish to make.
Please type your response in the space below (text will automatically scroll up per line as you type).

Thank you for your participation. Questions regarding this questionnaire should be directed to:

Dr. Michael J. Keller
Director of Policy Analysis and Research
Maryland Higher Education Commission
839 Bestgate Road, Suite 400
Annapolis, MD 21401
office: 410-260-4559
fax: 410-260-3201
mkeller@mhec.state.md.us

MARYLAND STATE DEPARTMENT OF EDUCATION
Achievement Matters Most

Nancy S. Grasmick
State Superintendent of Schools

200 West Baltimore Street, Baltimore, MD 21201 410-767-0100 410-333-6442 TTY/TDD

To: Local Superintendents of Schools

From: Nancy S. Grasmick
State Superintendent of Schools

Date: February 25, 2005

Re: Teacher Education Capacity Study

Five years ago, the Maryland Higher Education Commission prepared a study of the capacity of teacher preparation programs at Maryland colleges and universities to produce the number of teachers needed by the State. The K-16 Leadership Council has asked the Commission to update this study in response to the serious shortage of qualified teachers that Maryland, like other states, continues to face. The Commission will be relying on a number of sources for this study, including the Maryland State Department of Education, the school superintendents, and the colleges and universities and their governing boards and associations.

Those preparing the study would like to have some information from you related to the hiring of teachers for your school system. I am requesting that you supply answers to the two questions on the accompanying form and return them by Friday, April 15, 2005.

Thank you for your cooperation. Your perspective on these issues is important to the study.

NSG:jf
Attachment

c: Michael J. Keller
Director of Policy Analysis and Research
Maryland Higher Education Commission

MARYLAND STATE DEPARTMENT OF EDUCATION
Achievement Matters Most

Nancy S. Grasmick
State Superintendent of Schools

200 West Baltimore Street, Baltimore, MD 21201 410-767-0100 410-333-6442 TTY/TDD

Study of the Capacity of Maryland Teacher Preparation Programs
Questions for School Superintendents

Thank you for the benefit of your observations. Please mail, fax or e-mail your responses by **Friday, April 15, 2005** to:

Dr. Michael J. Keller
Director of Policy Analysis and Research
Maryland Higher Education Commission
Fax: 410-260-3201; mkeller@mhec.state.md.us

Questions regarding this questionnaire should be directed to Dr. Keller at 410-260-4559.

Name: _____

School System: _____

Please respond to the following questions based on the experience of your school system.

1. Of the colleges and universities in Maryland that offer teacher preparation programs, which ones have been, and are likely to be in the future, the chief suppliers of teachers for your school system?

2. What are the certification areas in which your school system expects shortages in the number of new teachers during the next five years?