



**TO:** Members of the State Board of Education

**FROM:** Lillian M. Lowery, Ed.D.

**DATE:** October 28, 2014

**SUBJECT:** Maryland Teacher Staffing Report, 2014-2016  
**Approval of Critical Shortage Areas**

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**PURPOSE:**

The purpose of this item is to seek your approval of critical shortage areas proposed in the *Maryland Teacher Staffing Report: 2014-2016* (see Attachment). These recommendations impact incentives to support increasing the supply of teachers in critical shortage areas in the state. In addition, the report also recommends geographic areas of shortage, teacher shortages in diversity in the areas of race, ethnicity and gender, and those related to certain non-classroom professionals. Areas of shortage have remained the same for the past five years with one exception. Math is not an area of shortage this year.

**HISTORICAL BACKGROUND:**

The Maryland State Department of Education (MSDE) collects data annually, and publishes biennially, the *Maryland Teacher Staffing Report*. MSDE develops this report in conjunction with local school systems and institutions of higher education with teacher preparation programs. The study began as a response to 1984 state legislation requiring an annual declaration of teaching fields that are considered critical shortage areas.

The report gathers data from teacher preparation programs in Maryland colleges and universities and from human resources directors in local school systems. The Division of Educator Effectiveness in collaboration with the Division of Curriculum, Assessment and Accountability collects this data and creates this report.

The recommended critical shortage areas provide the basis for a number of incentive programs for educators, some of which are noted in the attached report. In addition, Maryland statute employs this list for earnings limitations exemptions when school systems hire retired teachers, principals and other educators to work in Title I schools, alternative schools, and schools with 50% of students eligible for free and reduced-price meals.

The United States Department of Education (USDE) annually publishes the *Teacher Shortage Area Nationwide*. USDE uses this list to qualify college graduates with federal student loans for benefits such as loan deferments or loan forgiveness based on certain criteria.

This year, MSDE is using a new format which presents portions of the data in an online web portal built with Race To The Top funds. This portal is entitled *Longitudinal Dashboard System Dashboards*. To access data cited in this report, click on [Portal web center](#).

### **EXECUTIVE SUMMARY:**

Below are four recommendations from the *Maryland Teacher Staffing Report, 2014-2016*, which identify teaching content areas of shortage (pursuant to §18-703 of the Annotated Code of Maryland), geographic areas of shortage, gender and diversity areas of shortage, and recommendations on select non-classroom professionals deemed areas of critical shortage.

**Recommendation 1:** The Maryland State Board of Education declares the following content areas as critical shortage areas:

- Career and technology areas (7-12):
  - Technology education, and
  - Family and Consumer Sciences;
- Computer science (7-12);
- Business Education
- English for speakers of other languages (ESOL) (PreK-12);
- Science areas (7-12):
  - Chemistry;
  - Earth/space science,
  - Physical science, and
  - Physics;
- Special education areas:
  - Generic: Infant/primary (birth-grade 3);
  - Generic: Elementary/middle school (grades 1-8);
  - Generic: Secondary/adult (grades 6 – adult);
  - Hearing impaired;
  - Visually impaired;
- World language areas (PreK-12):
  - Chinese, and
  - Spanish.
- The Arts
  - Art
  - Dance
  - Theatre

**Recommendation 2:** The Maryland State Board of Education declares the following twenty (20) Maryland jurisdictions as geographic areas of projected shortage of certified teachers:

- |                        |                            |
|------------------------|----------------------------|
| 1. Anne Arundel County | 12. Harford County         |
| 2. Baltimore City      | 13. Howard County          |
| 3. Baltimore County    | 14. Kent County            |
| 4. Calvert County      | 15. Montgomery County      |
| 5. Caroline County     | 16. Prince George's County |
| 6. Carroll County      | 17. Queen Anne's County    |
| 7. Cecil County        | 18. St. Mary's County      |
| 8. Charles County      | 19. Somerset County        |
| 9. Dorchester County   | 20. Talbot County          |
| 10. Frederick County   | 21. Washington County      |
| 11. Garrett County     | 22. Wicomico County        |
|                        | 23. Worcester              |

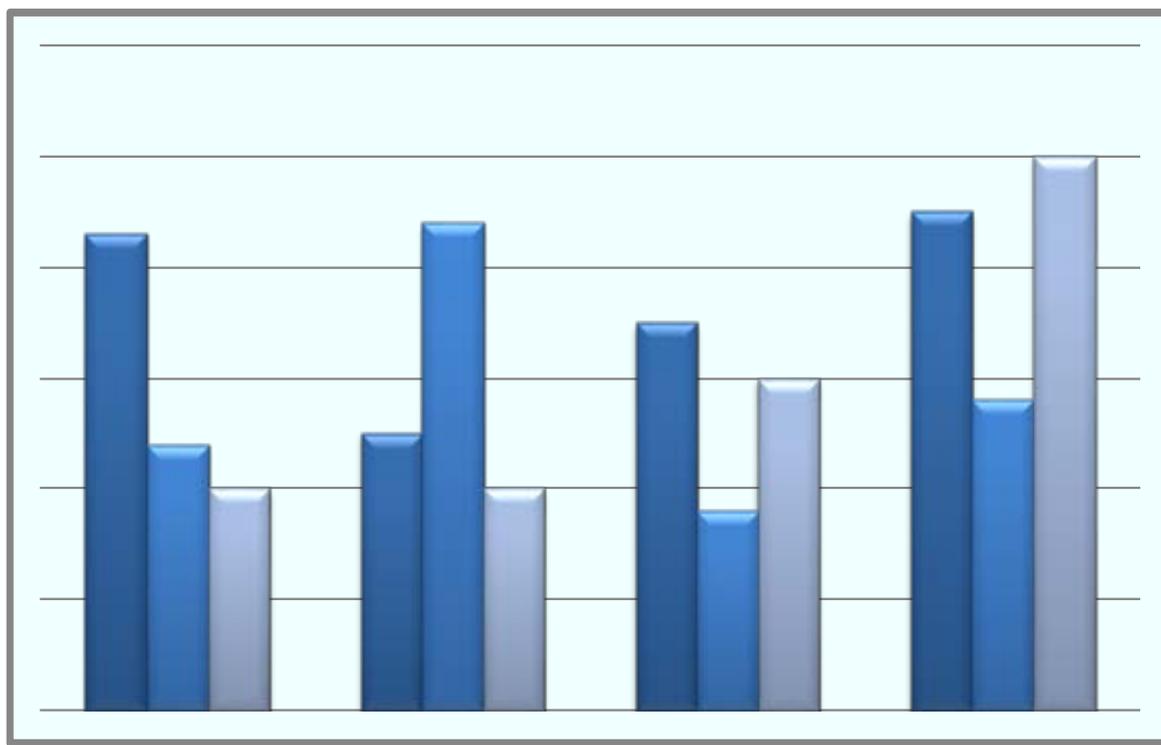
**Recommendation 3:** The Maryland State Board of Education declares a shortage of teachers who are males and teachers who are members of minority groups.

**Recommendation 4:** The Maryland State Board of Education declares a shortage of the non-classroom professional positions of library/media specialist and speech/language pathologists.

# MARYLAND

## TEACHER STAFFING REPORT

# 2014-2016



Maryland State Department of Education  
200 West Baltimore Street  
Baltimore, Maryland 21201-2595

[www.marylandpublicschools.org](http://www.marylandpublicschools.org)



October 2014

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**Martin O'Malley  
Governor**

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## EXECUTIVE SUMMARY

The Maryland State Department of Education (MSDE), in conjunction with local school systems and institutions of higher education, has conducted an annual study since 1986 to determine critical teacher shortage areas. Although some data are collected annually, since 2008 the report has been published biennially. The latest *Maryland Teacher Staffing Report, 2014-2016*, provides data on teacher candidates completing programs in institutions of higher education that have Maryland Approved Programs (MAP) and in Maryland Approved Alternative Preparation Programs (MAAPP). The report also collects the hiring needs of the local school systems to determine critical shortage areas by analyzing the data and applying the criteria agreed upon. The process includes additional data beyond the traditional formula used since the beginning of the report. It incorporates the recommendations of an Expert Panel, composed of representatives of various stakeholders, that was convened in 2008 to review the process and make recommendations. The criteria developed by the Expert Committee are now used in this study.

The scope of the report has expanded over the years, and now includes shortage areas for both teachers and select non-classroom professionals; information on traditional higher education as well as alternative preparation programs; the graduates; geographic shortage areas; teacher attrition; highly qualified teachers (as defined by the 2001 *No Child Left Behind [NCLB] Act*); and the number of retired/rehired teachers and principals. This report also includes a number of important incentives and strategies for the recruitment and retention of quality teachers and principals for Maryland public schools.

The Maryland State Board of Education, pursuant to HB 688, *Workforce Shortage Student Assistance Grants*, Education Article §18-708, adopts the critical shortage teaching areas that are then the basis for the Maryland Higher Education Commission (MHEC) to offer scholarships to qualified individuals. Students in Maryland preparing to become teachers in critical shortage areas may apply for student financial assistance if they meet specific requirements of the law. The list of critical shortage areas is also used for other purposes: teachers who teach in critical shortage areas may

qualify for deferment of loan repayment and/or loan forgiveness of several federal loan programs; grants from the TEACH Act; and the Retire/Rehire Program in Maryland, a way for local school systems to rehire teachers, mentors or principals in select schools in critical shortage areas. The list also is shared with the United States Department of Education, which annually publishes *Teacher Shortage Areas Nationwide*.

This report presents four recommendations to the Maryland State Board of Education identifying the critical shortage areas in: teaching content areas, state geographic areas, gender and diversity, and non-classroom professionals. The recommendations in this report pertain to both the 2014-2015 and 2015-2016 academic school years.

This report also provides information for higher education institutions, alternative preparation programs, and local school systems as they recruit, prepare and hire the future teachers for Maryland's schools.

The recommendations for the Maryland State Board of Education approval are:

**Recommendation 1:** The Maryland State Board of Education declares the following content areas as critical shortage areas:

- Career and technology areas (7-12):
  - Technology education, and
  - Family and Consumer Sciences;
- Computer science (7-12);
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**Recommendation 3:** The Maryland State Board of Education declares a shortage of teachers who are males and teachers who are members of minority groups.

**Recommendation 4:** The Maryland State Board of Education declares a shortage of the non-classroom professional positions of library/media specialist and speech/language pathologists.

## INTRODUCTION

The Maryland State Department of Education (MSDE), in conjunction with local school systems and institutions of higher education, conducts an annual study to determine critical teacher shortage areas. Although most data are collected annually, the report has been published biennially in *The Maryland Teacher Staffing Report* since 2008. In addition to publishing the content areas that are considered to be shortage areas, the *Maryland Teacher Staffing Report* provides information on the number of teacher candidates produced through traditional teacher education programs, Maryland Approved Programs (MAP) and alternative routes, Maryland Approved Alternative Preparation Programs (MAAPP). In addition, the actual and anticipated hiring needs of the 24 local school systems are collected. This information addresses both the supply of new Maryland teachers and the demand that local school systems expect in hiring.

This year's *Maryland Teacher Staffing Report* takes on a whole new look, one compatible with the digital age in which we live. Due to *Race to the Top* funding targeted toward the development of data systems that support instruction, MSDE was able to develop a series of "dashboards," the purposes of which are to create graphic representations of data designed to make that data accessible, easy to read, and simple to understand with a minimum of explanation. The Dashboard project makes available to the public a great deal of data heretofore written into textual reports. With Dashboard development, data becomes visual and dynamic and, in some instances where data collection is web-based and ongoing throughout the year, always up to date.

### Background

Legislation originally passed by the Maryland General Assembly in 1984 and revised in 2006 requires the state to declare teaching fields designated as critical shortage areas. This information is often used to award state grants and scholarships to prospective teachers. The General Assembly unified several pieces of legislation to include scholarships in many workforce areas. See § 18-708 **Workforce Shortage Student Assistance Grants at**

[http://www.mhec.state.md.us/financialAid/ProgramDescriptions/prog\\_WSSAG.asp](http://www.mhec.state.md.us/financialAid/ProgramDescriptions/prog_WSSAG.asp)

This bill consolidated all state grants and scholarships across professions, including teaching. In addition, **SB 663: Retirement and Pensions – Reemployment of Retirees** uses the declared teacher shortage areas to exempt certain retired teachers from an earnings limitation if they are reemployed as classroom teachers in one of the critical shortage areas and in qualifying schools. This law also includes principals and mentors.

The United States Department of Education annually publishes the **Teacher Shortage Areas Nationwide**, and allows certain students who teach in critical shortage areas to qualify for deferment of loan repayment and/or loan forgiveness. Maryland contributes its findings each year to this publication.

In 2007, Congress passed the **Teacher Education Assistance for College and Higher Education (TEACH) Grant Program**. This law continues to provide grants of up to about \$4,000 per year to students who intend to teach in a public or private elementary or secondary school in a state’s critical teacher shortage areas.

## **Summary and Overview**

The procedures for determining teacher shortage areas were established and documented to ensure systematic replication in state reports of teacher staffing as well as formative review for ongoing improvements to the report. Further, the information contained in the report helps to provide a picture of supply and demand that is helpful in planning at almost every level both in Maryland Public Schools, colleges and universities, and in alternative preparation programs.

**Most data tables are now displayed on Dashboards to which the report will provide a link.** One table that has been included in the report is **Incentives and Strategies for the Recruitment and Retention of Quality Teachers and Principals**. This information is not represented on a dashboard. All information gathered for this report is posted on the MSDE website or the Maryland Higher Education Commission (MHEC). With this report published only biennially, the website data will always be more accurate. Represented on dashboards are subsequent sections cover staffing patterns, geographic areas of projected shortage, Maryland-prepared teachers, minority and gender data, and hiring data on select non-classroom professionals. Finally, the

report includes the recommendations to the Maryland State Board of Education which provide information for higher education institutions, alternative preparation programs, and local school systems as they recruit, educate and hire future teachers for Maryland's schools.

## **Part I: INCENTIVES AND STRATEGIES FOR THE RECRUITMENT AND RETENTION OF QUALITY TEACHERS AND PRINCIPALS**

Historically, Maryland has had a shortage of qualified teachers in certain content areas. Maryland has always been an “import” state, hiring teachers from other states that produce more teachers than needed. Early-career attrition, flat teacher education graduation rates, and teacher retirements all contribute to shortages. Maryland has instituted state scholarships in all workforce shortage areas including those in education and has implemented certain strategies to attract and retain teachers. The federal government also has several programs, such as the *TEACH Act*, loan deferment and loan forgiveness programs, and *Troops to Teachers* (to attract retiring military personnel into second careers as teachers). An overview of select incentives and strategies with websites for obtaining the most current information is provided below.

### **NATIONAL AND FEDERAL INITIATIVES**

#### **Teacher Education Assistance for College and Higher Education Grant Program**

Congress created the *Teacher Education Assistance for College and Higher Education (TEACH) Grant Program* to provide grants of up to \$4,000 per year to students who intend to teach in a public or private elementary or secondary school that serves students from low-income families. Areas of need in the law are: bilingual education and English language acquisition; foreign languages; mathematics; reading specialist; science; and special education. To be eligible for a *TEACH* grant, candidates must meet certain criteria. Information is available through financial aid offices at participating institutions and the U.S. Department of Education website at: <http://www.ed.gov/index.html>.

## **Federal Student Aid and Loan Forgiveness Programs**

The federal government supports loan programs for students who wish to go to college. The amount of funding for these programs varies from year to year. Current information is located at the federal loan site: <http://www.FederalStudentAid.ed.gov>.

The federal government also has several discharge or loan forgiveness programs connected to federal loans for teachers. The programs include deferment for borrowers under the Family Federal Loan (FFEL); Federal Supplemental Loans for Students programs; debt incurred under the Federal Perkins Loan Program; reduction of teaching obligation under the Paul Douglas Teacher Scholarships Program; and the teaching obligation for recipients of the Education Assistance for College and Higher Education (TEACH) Grant Program. Details and applications are available on the FFEL website.

## **Troops to Teachers**

In 1994, the Department of Defense in cooperation with the Department of Education established the *Troops to Teachers* (TTT) Program. The program assists military personnel in making successful transitions to new careers in teaching. For information call 1-866-251-3123 or go to the website: [proudtoserveagain.com](http://proudtoserveagain.com)

The Employment Advancement Right Now (EARN) initiative and the Veterans Full Employment Act of 2013 are also implemented by MSDE. MSDE requires educators in Maryland Public Schools and in Non-Public Special Education Schools under COMAR 13A.09.10 to hold a certificate, or credential. MSDE's Division of Educator Effectiveness, Certification Branch, holds the authority to issue those credentials as individuals complete requirements. Maryland implements the Veterans Full Employment Act of 2013, effective July 1, 2013, by expediting credentialing for U.S. Armed Forces service members and their spouses seeking employment as educators in these entities.

[http://marylandpublicschools.org/MSDE/divisions/certification/certification\\_branch/certification\\_inf/apply/docs/obtain12.htm](http://marylandpublicschools.org/MSDE/divisions/certification/certification_branch/certification_inf/apply/docs/obtain12.htm)

## **STATE INITIATIVES**

### **Workforce Shortage Funding Assistance**

There are a number of stipends, awards and scholarship opportunities available for potential and continuing teachers. Since funding sometimes shifts in both incentives offered and amounts available for award, this report will direct the reader to the link below, found on the MSDE website, for the most current information.

[http://www.msde.maryland.gov/MSDE/divisions/certification/certification\\_branch/teach\\_md/teach\\_md\\_incentives.html](http://www.msde.maryland.gov/MSDE/divisions/certification/certification_branch/teach_md/teach_md_incentives.html)

Some of the same information can be found on the MHEC website which administers funding. Directions for application can also be found at this link.

[http://www.mhec.state.md.us/financialAid/ProgramDescriptions/prog\\_WSSAG.asp](http://www.mhec.state.md.us/financialAid/ProgramDescriptions/prog_WSSAG.asp)

### **State Tax Credits**

Maryland classroom teachers enrolled in college courses are eligible for an annual \$1,500 tuition tax credit on their Maryland income tax returns, designed to offset graduate tuition expenses necessary to achieve or maintain advanced teacher certification. To receive the credit, the teacher must successfully complete the courses with a grade of B or better, be employed by a local school system, have a satisfactory performance evaluation, and not have been reimbursed by the local school system for the tuition paid. Check the Annotated Code of Maryland Tax-General Article §10-717 at the website:

[http://taxes.marylandtaxes.com/Individual\\_Taxes/General\\_Information/Tax\\_Credits\\_and\\_Deductions/Quality\\_Teacher\\_Incentive\\_Credit.shtml](http://taxes.marylandtaxes.com/Individual_Taxes/General_Information/Tax_Credits_and_Deductions/Quality_Teacher_Incentive_Credit.shtml)

### **Resident Teacher Certificate**

The Resident Teacher Certificate (RTC) is designed to attract and recruit into teaching liberal arts graduates and career changers who possess academic content backgrounds in the arts and sciences, but who did not complete teacher preparation programs. All programs that use the RTC are Maryland Approved Alternative Preparation Programs (MAAPP) and operate under the authority of the Division

of Educator Effectiveness at MSDE. These programs are in partnership with local school systems and a provider, or local school systems may provide their own services.

For more information, the website link is:

<http://marylandpublicschools.org/MSDE/divisions/certification/progapproval/maapp.p.htm>

MAAPP has its own set of dashboards, as well. For a detailed look at alternative programs and their candidates, visit [Portal web center](#). In the upper left, click on P12LDS, and choose P12LDS HOME from the pull-down menu. Click on *View all Dashboards* (right side of page), click on *MAAPP*.

### **National Board for Professional Teaching Standards**

The National Board for Professional Teaching Standards (NBPTS) is an independent, non-profit, non-partisan organization established in 1987 to improve student learning in America's schools by developing a system of advanced, voluntary certification for teachers. NBPTS has established rigorous standards and a performance-based certification system to recognize quality teaching. Certification is achieved through a performance-based assessment that typically takes more than a year to complete. It is designed to measure what accomplished teachers should know and be able to do. The process requires teachers to demonstrate how their activities, both inside and outside the classroom, strengthen student performance and contribute to student achievement.

The certification process is open to anyone with a baccalaureate degree and three years of classroom experience. The certificate is valid for 10 years, after which a teacher may seek renewal. Maryland is proud that it has 2,575 Nationally Board Certified Teachers, ranking 13<sup>th</sup> in the nation. More information is on the web at: <http://www.nbpts.org/maryland>

### **Teachers of Promise**

The *Teachers of Promise* mentoring program, underwritten by the Maryland Independent Colleges and Universities Association, Comcast, the Maryland State

Education Association, Smart Technologies, and State Farm Insurance, began as an outgrowth of the Maryland Teacher of the Year Program. It capitalized on the expertise of Teachers of the Year and other award-winning teachers by matching them with the most promising pre-service graduating seniors from Maryland colleges and universities. This program is designed to provide these promising candidates with support as they transition from the role of student to the new role of teacher. Mentoring begins in the candidates' senior year and continues through summer and fall placement in Maryland schools, creating a transitional mentoring program for beginning teachers. Estimates are that one third of the nation's teachers leave the profession sometime during the first three years of teaching with 50 percent leaving after five years. Research suggests that teacher mentors assigned to work with new teachers can be crucial in encouraging them to remain in the field. The Teachers of Promise Program has developed powerful partnerships among MSDE, corporations, and higher education that together enhance the chances of success and confidence for so many of our new teachers. In 2012-2013, the Maryland attrition rate for teachers with 5 years of experience or less was 39%. This current data shows a downward trend of 3.2% from 42.3% in 2010-2011. This rate is still high, but the trend is moving in the right direction.

### **Retire/Rehire Program**

In 1999, the Maryland General Assembly passed a bill which exempted certain retired teachers and principals from an earnings limitation of their Maryland pension, provided they are re-employed as classroom teachers, substitute teachers, teacher mentors or principals. The revision in 2005 was SB 663: *Retirement and Pensions - Reemployment of Retirees*, and is aimed at rehiring teachers to work in specific schools and teach in critical shortage content areas.

These retired rehires represent experienced teachers or principals who are placed in the lowest performing schools in critical teacher shortage areas. The most recent report is below:

**Individuals by Local School System Participating in the Retire/Rehire Program  
Maryland State Department of Education  
SB663 Retirement and Pension - Reemployment of Retirees  
2013-2014**

	<b>Position Title</b>	<b>Annual Salary</b>	<b>Name of School</b>	<b>Qualifying School</b>	<b>Critical Subject</b>	<b>Date of Re-Employ.</b>
<b>BALTIMORE CITY PUBLIC SCHOOLS</b>						
1	Teacher	62,518.00	August Fells Savage Institute of Visual Arts HS	Title I	Special Education	12/14/2013
2	Teacher	80,729.00	Forest Park HS	FARM	Special Education	12/21/2012
3	Teacher	66,663.00	Baltimore Leadership School for Young Women	FARM	Special Education	6/16/2012
<b>KENT COUNTY PUBLIC SCHOOLS</b>						
4	Title I Coordinator	85,781	County-wide		Title I	8/18/2014
<b>PRINCE GEORGE'S COUNTY PUBLIC SCHOOLS</b>						
5	Teacher	86,767	Potomac High School	FARM	Special Education	8/13/2013
6	Teacher	41,422	High Point High School	FARM	ESOL	8/12/2013
7	Teacher	82,873	Rosa Parks ES	FARM	ESOL	8/26/2013
8	Teacher	51,725	Cherokee Lane ES	FARM	ESOL	8/29/2013
9	Teacher	90,843.00	Northwestern High School	FARM	Special Education	8/12/2013
10	Teacher	73,773.52	Samuel Massie ES	FARM	Special Education	8/29/2013
<b>WASHINGTON COUNTY PUBLIC SCHOOLS</b>						
11	Teacher	34,727.00	W.C. Family Center	Alternative	Math	8/15/2014
<b>WICOMICO COUNTY PUBLIC SCHOOLS</b>						
12	Teacher	48,048.00	Wicomico HS	FARM	Special Education	9/23/2013
13	Teacher Coach	48,048.00	Glen Avenue ES	Title I/FARM	Elementary/Title I	8/9/2013
14	Speech Therapist	94,500.00	Wicomico HS	FARM	Speech/Language Path	08/27/13

Revised  
9/22/14

**Summary Report of Retire/Rehire Program  
Maryland State Department of Education  
Report for 2013 – 2014**

	Baltimore City	Kent County	Prince George's	Washington	Wicomico	TOTALS
<b>Total # Rehires</b>						
Teachers	3	1	6	1	2	13
Speech Pathologist						
Principals						
<b>Total</b>	<b>3</b>	<b>1</b>	<b>6</b>	<b>1</b>	<b>2</b>	<b>13</b>
<b>Condition of Rehire</b>						
Title I	1				1	1
Alternative Education				1		1
Exception*		1				1
FARM	2		6		1	7
<b>Total</b>	<b>3</b>	<b>1</b>	<b>6</b>	<b>1</b>	<b>2</b>	<b>13</b>
<b>Content Areas</b>						
Biology						
Core Subjects*			3			3
Earth Science						
Latin						
Mathematics				1		1
Psychology*						
Physical Science						
Spanish						
Special Education	3		3		1	6
Technology Ed						
<b>Teachers</b>						<b>13</b>
<b>Speech Pathologist</b>					1	<b>1</b>
<b>Principals</b>						<b>0</b>
<b>Total</b>	<b>3</b>	<b>1</b>	<b>6</b>	<b>1</b>	<b>3</b>	<b>14</b>

\*Exceptions: The law allows a minimum of 5 exemptions per system, or 0.2% of the total full-time equivalent teachers, not to exceed 15 per school system. The exemptions may be either a regular school or a non-critical content area.

Data provided to MSRA and MSDE by the local school systems, 2013-2014 school year.

## **Comprehensive Teacher Induction Program**

In response to the Maryland General Assembly, which passed a law requiring mentoring programs, COMAR 13A.07.01 *Comprehensive Teacher Induction Program* was adopted by the Maryland State Board of Education on April 27, 2010. This law was supportive of the successful effort to secure federal *Race to the Top (RTTT)* funding to provide greater consistency in the quality of support provided to new teachers throughout the state. The law also provides training for mentors. The policy requires each local school district to “establish and maintain a comprehensive induction program for all new teachers” “until they receive tenure.” [13A.07.01.03](#); [13A.07.01.04](#); and [13A.07.01.05](#)]

State regulations also require local school systems to include their comprehensive induction program report in their Bridge to Excellence Master Plan Annual Update to MSDE. The report must include a description of the mentoring program; data, including the number of probationary teachers and the number of mentors who have been assigned; and, the effectiveness of the program is measured.

In summary, various incentives and strategies have been implemented in an effort to recruit and retain quality teachers and principals. The strategies have been implemented to attract and retain teachers for public school classrooms. This report makes no effort to assign causality to improved early retention rates as mentioned above, but MSDE’s efforts through the programs mentioned here will continue as will data tracking in the search of continuous and ongoing improvement.

## **Part II: STAFFING PATTERNS**

This section presents information on the number of new hires by Maryland’s local school systems, by certification area. Included also is the methodology for determining teacher shortage areas; certification areas by extent of staffing need; trend data; and teacher experience and attrition. It is also in this section where the report moves into the digital age and derives its data from the newly-created dashboards. Clicking on [Portal web center](#) will take the reader to the Teacher Supply Dashboard. (To view all of the dashboards available, go to the upper left and click on *P12LDS Home*, choose

*P12LDSHOME* from the pull-down menu, then on *View all Dashboards*, found on the right of the page. All available dashboards are displayed here.)

MSDE is dependent upon IHEs and local school systems for accuracy. All data are validated and triangulated for accuracy; however, MSDE expects some error this year as new systems are being developed concurrently with the construction of the system itself. (The data now displayed in a series of dashboard tabs were formerly found in the Appendices of the Teacher Staffing Report as well as in Tables numbered throughout the report.)

From the *Teacher Supply* dashboard, click on *Teacher Supply, **Multimedia***. This tutorial provides a preview of the dashboards and some suggestions for interpreting data. In addition to the preview, below is a listing of the tabs available on the dashboard. Not all tabs are included in the preview. However, all tabs are visible from the main page of the *Teacher Supply* dashboard in a list found on the right side of the page. This is what is shown in the order in which each tab appears on the dashboard and, consequently, in this part of the report.

### ***Teacher Supply Dashboards***

 Home

Overview

New Hires by Certification Area

New Hires: Transferred from LSS to LSS

New Hires by LSS

New Hires Trends

Teachers by Years of Experience

Teacher Attrition

Supply from MAP by Certification

Projected Candidates by MAP

Graduates by IHE

Hires from MAAPP

Trend Data : Minorities from IHE

Minority New Hires by Certification

Trend Data: Minority New Hires

New Hires by Gender

MAP Graduates by Gender

When reading this dashboard, just open the dashboard and directed above, and leave it open on the computer. Toggle back and forth between the Word document, *Teacher Staffing Report*, and the dashboard *Teacher Supply*. (Each document is, in all likelihood, at the bottom of your computer screen.) Each of the tabs on the dashboard has comment and in some cases possible interpretation of the data. Again, to get started, (your link is [Portal web center](#) ), begin with *New Hires*.

## **New Hires**

***New Hires by Certification Area*** reports the number of new hires in from October 2012 through October 2013. The new hires are in four categories, as you will see. The table also gives the number hired by certification area. There were 5,069 new hires, an increase of 1,374 new hires over 2011-2012, a dramatic increase not apparent in projections. As prompted in the Multimedia preview, be sure to go to the box entitled Academic Year and use the pull-down menu to select the most current year, 2012-2013 and then click on Apply.

Occasionally there are anomalies in hiring that show up as spikes for a particular year. The dashboard tab displays three years of data. However, the last time Maryland Public Schools hired 5,000 or more teachers was in 2008-2009. The trend would seem to mirror the economic stresses of the past six years on all segments of the country, including that of public school education with the increase in hiring perhaps reflected that more teacher of retirement age felt comfortable enough to do so, or that economic pressures have eased significantly enough to be able to hire more teachers. Data collected over the next few years should provide enough data to ascertain if this year reflects a “spike” or a true trend in hiring.

The next tab displays data on teachers who move from school system to school system, known as “within-state” movement of teachers. These teachers who change jobs within the state are reported as “new” by their school systems, although they are not new to teaching in Maryland. Since including this movement of teachers from system to system skews the number of new hires, they are extracted from the numbers. The ***Number of New Hires Who Transferred from Local School System to Local School System*** displays the number of teachers from each “sending” and each “receiving” school system. The chart lists which school systems are hiring from other in-state systems and which systems are losing teachers to other in-state systems. Attention to the within-state new hiring data is important for understanding the teacher shortage issue. The impact of what is viewed as the teacher shortage areas is mitigated by within-state movement, which is analyzed only rarely as a component of new hire data. The number of teachers who moved within the state for 2012-2013 was 351, or 6% of the new hires. Again, be sure to select the appropriate year to meet your need.

***New Hire Trends*** shows the number of new hires for the past three years prepared in Maryland and prepared outside of Maryland. Maryland remains a state that imports more new teachers than it prepares; however, the rate of those prepared outside of Maryland, both new to teaching and experienced, has dropped 7% points since 2011-2012. Again, this is an area that will be watched closely for the next few years for significant trends.

The next chart shows the total number of teachers by LSS and the years of experience of those teachers. Don’t forget to select the year for ***Teachers by Years of Experience***. Comparison of the three years of data reveals no significant changes in the levels of experience of teachers in Maryland Public Schools. These data have remained very nearly flat for the past three years.

Once having selected the appropriate year, the user finds information about when teachers are leaving the classroom by LSS for 2012/2013 in ***Teacher Attrition***. The three-year comparison shows no marked increases or decreases either in the rate of attrition or the number of years in the teachers’ career when separation occurred.

Not only is it critical to capture what LSS hiring needs appear to be, but also the production of teachers by providers of preparation programs in Maryland. The next chart, ***Supply from MAP by Certification Area***, shows the number of teachers who completed college or university programs in 2012/2013 by certification areas, as the title suggests. Clicking on the **blue** hyperlink in the table reveals the results by IHE. As has been the case for a number of years, both production and the areas in which program completers are being certified have remained relatively flat.

IHEs are also asked to project their production of teachers for the succeeding two-year period. The next chart, ***Projected Candidates by MAP***, follows the same format as the one preceding it and provides in the same format as the earlier chart the means to track those projections by IHE. In this chart, if the user selects 2010-2011, the two projected years are 2011-2012 and 2012-2013. As can be seen by comparing the projections with the actual completers, the actual production in 2012-2013 fell somewhat short of the projected figures. Although students were in the pipeline to complete at the specified time, many factors (economic, academic, life situations) can influence a delay in completion, including the decision not to complete.

In addition to college and university traditional teacher education programs, Maryland has a robust and rigorous alternative route to certification that utilizes the Resident Teacher Certificate, as described earlier in this report. The data collection for Maryland Approved Alternative Preparation Programs is web based, meaning that whenever a user submits new data, it is reflected on the dashboard. You will also note that a number of years of historical data can be found. This dashboard is called ***Hires from MAAPP***. All MAAPP graduates represent new hires in the above charts since candidates are only accepted into a program based on the projected need of the LSS, and are automatically hired into the LSS, if successful in the preparation program. Again, for complete data on MAAPPs, go to the MAAPP dashboard.

Research indicates that it is an advantage to students to have instructors who “look like them”, who reflect to as great extent as possible the demographic population of the school setting. IHEs are held accountable for not only the recruitment of a diverse population of teacher candidates, but providing them with the experiences

necessary to teach a widely diverse population of children. The next dashboard shows the number and percentage of minority program completers over a six-year period by certification area. Follow the directions for clicking on the **blue** hyperlinks to see the results by IHE. This dashboard is ***Trend Data: Minorities from IHE***. From a high of 21.3% minority program completers in 2008-2009, minority representation in the completing class of 2012-2013 has actually fallen by 2.6% to 18.7% of the total population.

The next dashboard, ***Minority New Hires by Certification***, offers additional information about the demography in the Maryland-produced supply of and LSS demand for teachers. MAAPPs are somewhat more successful in recruiting recent college graduates and career changers from minority populations. In 2012-2013, 48% of those who began employment as Resident Teachers belonged to a minority group.

Just as the minority status of supply and demand is tracked, so is the gender of those prepared and hired in Maryland. The next dashboard, ***New Hires by Gender***, shows the results.

The final dashboard supplies the production side of the equation for program completers by gender. It is ***MAP graduates by Gender***. While not as successful in closing the gender gap in those completing teacher education programs, MAAPPs were able to recruit 30% males into the Resident Teacher class of 2012-2013. It should be noted both when discussing minority and gender trends in MAAPPs that there are many career changers participation in them. A number of resident teachers, therefore, have already had successful careers and often are not in search of the financial rewards that opportunities outside of education may afford, but see teaching as a way of “giving back” to the community. There are significant differences between the young college graduate and the more mature career changer which may be an unintended, but welcome, consequence when examining the diversity of the candidates.

While this report is primarily designed to be read electronically in order to make use of the dashboard data displays, certain pieces of information traditionally found in the *Teacher Staffing Report* are not displayed electronically, but are still included here.

For example, the new hire data provided above in dashboards represents teachers who hold many different types of Maryland certificates, including those holding a Conditional Certificate.

The chart on the next page reflects a two-year comparison of the total number of conditionally certified teachers by local school system. ***Newly Hired Maryland Teachers with Conditional Certificates*** reports the total number of newly hired teachers in 2012-2013 and 2013-2014 holding Conditional Certificates.

**Teachers Issued a Conditional Certificate: Two-Year Comparison\***  
**Maryland Public Schools**  
**2012-2013 and 2013-2014**

Local School System	2012-2013**			2013-2014***		
	Number of Teachers	Number of Conditional Teachers	Percent of Conditional Teachers	Number of Teachers	Number of Conditional Teachers	Percent of Conditional Teachers
Allegany	646	3	0.5%	634	2	0.3%
Anne Arundel	5,333	48	0.9%	5,405	64	1.2%
Baltimore City	5,393	91	1.7%	5,284	91	1.7%
Baltimore	7,406	60	0.8%	7,440	84	1.1%
Calvert	1,052	7	0.7%	1,049	9	0.9%
Caroline	401	6	1.5%	405	4	1.0%
Carroll	1,897	14	0.7%	1,897	22	1.2%
Cecil	1,143	2	0.2%	1,149	3	0.3%
Charles	1,708	14	0.8%	1,704	13	0.8%
Dorchester	375	7	1.9%	373	4	1.1%
Frederick	2,709	12	0.4%	2,704	12	0.4%
Garrett	301	1	0.3%	295	0	0.0%
Harford	2,722	3	0.1%	2,826	4	0.1%
Howard	3,846	44	1.1%	3,858	42	1.1%
Kent	149	3	2.0%	161	1	0.6%
Montgomery	10,178	36	0.4%	10,394	30	0.3%
Prince George's	7,930	72	0.9%	8,364	155	1.9%
Queen Anne's	497	2	0.4%	510	5	1.0%
St. Mary's	1,075	7	0.7%	1,069	5	0.5%
SEED School	39	3	7.7%	39	1	2.6%
Somerset	219	1	0.5%	224	3	1.3%
Talbot	316	0	0.0%	316	2	0.6%
Washington	1,523	4	0.3%	1,532	7	0.5%
Wicomico	1,090	14	1.3%	1,089	11	1.0%
Worcester	596	4	0.7%	594	2	0.3%
<b>STATE TOTAL</b>	<b>58,544</b>	<b>458</b>	<b>0.8%</b>	<b>59,315</b>	<b>576</b>	<b>1.0%</b>

\* A conditional certificate is issued at the request of the local school systems from one year to individuals who do not meet full requirements of a professional certificate. The local school system may request a renewal according to state regulations.

\*\* Based on teachers employed by local school systems as of October 2012.

\*\*\* Based on teachers employed by local school systems as of October 2013.

SOURCE: Maryland State Department of Education, 2014

## Data Sources for Determining Shortages

The Staffing Report determines the critical teacher shortages based on three different sources. They are described below.

Statewide Projection Formula. The Division of Curriculum, Assessment and Accountability (CAA) prepares new hire and projection tables and figures based upon information provided by local school systems. Using data from the past five years, a staffing rate is extrapolated to project anticipated staffing for the next year. These projections are compared with local school system staffing reports submitted each October. Using these data, staff traditionally has projected a surplus or a shortage in each content area. The formula used is below.

$$\text{RATE} = 1 + \left( \frac{((\# \text{ of new hires in } 2013\text{-}2014) - (\# \text{ of new hires in } 2008\text{-}2009))}{\# \text{ of new hires in } 2008\text{-}2009} / 5 \right)$$

The formula calculates the rate of five years of change, with 1 as the rate base; it is subject to some variability if significant spikes occur within the five-year period on which it is based. To determine the “projected staffing pool” for 2013-2014, the rate is multiplied by the number of new hires in 2010-2011. The number of “projected new hires” is provided by the local school system.

**Criterion 1: If the difference between the “projected staffing pool” and “projected new hires” is 85% or less, the certification area is identified on the *Rubric for Determining Critical Shortage Certification Areas* as a statewide teacher shortage.**

In a given certification area, the “projected new hires” statewide also must be greater than 10 to be considered as a critical teaching shortage area since the formula would not be appropriate for small numbers.

August Statewide Survey of Vacancies. The Office of Academic Policy surveys the human resource directors in each of the local school systems in late August to provide a view of school staffing for the opening of school (see Appendix G: *Annual Survey of Local School System Vacancies, August, 2011*). The survey requests

projected teacher needs, actual teachers hired, remaining vacancies, and recruitment difficulties. These data from each local school system provide the most recent available information at the time the critical teaching shortage areas are being identified.

**Criterion 2: If 5 or more local school systems report recruitment difficulties in a certification area, that area is identified on the *Rubric for Determining Critical Shortage Certification Areas* as a statewide teacher shortage.**

The entire 2014 report from the local school systems can be found in Appendix 2.

**Criterion 3: If 10% or more of the classrooms in a certification area are not being taught statewide by highly qualified teachers (HQT), that area is identified on the *Rubric for Determining Critical Shortage Certification Areas* as a statewide teacher shortage. Since not all content areas are considered core academic subjects by the rules of *No Child Left Behind*, the rubric was adjusted so that non-core academic subject areas (e.g., all Career and Technology areas, physical education and health) are not penalized through the use of the rubric.**

The Division of Curriculum, Assessment and Accountability (CAA) also provides data on the number of classes in Maryland public schools that are being taught by highly qualified teachers. That table that follows adds a column that reflects the number of classes **NOT** taught by HQ teachers.

**Number and Percentage of Classes Taught by Highly Qualified Teachers  
Kindergarten Through Grade 12  
Maryland Public Schools  
2013-2014**

<b>Core Academic Subject</b>	<b>Number of Classes</b>	<b>Classes Taught by HQ Teaches</b>	<b>Percent of Classes Taught by HQ Teachers</b>	<b>Percent of Classes Not Taught by HQ Teachers</b>
<b>English</b>	<b>26,311</b>	<b>24,288</b>	<b>92.3%</b>	<b>7.7%</b>
<b>ESOL</b>	<b>5,188</b>	<b>4,942</b>	<b>95.3%</b>	<b>4.7%</b>
<b>Language Arts/Reading</b>	<b>8,848</b>	<b>8,118</b>	<b>91.7%</b>	<b>8.3%</b>
<b>Foreign Languages</b>	<b>9,597</b>	<b>8,305</b>	<b>86.5%</b>	<b>13.5%</b>
French	1,795	1,631	90.0%	9.1%
German	249	232	93.2%	6.8
Latin	244	188	77.0%	23%
Russian	26	20	76.9%	23.1%
Arabic	19	19	100%	0%
Chinese	278	227	81.7%	18.3%
Italian	105	74	70.5%	29.5%
Japanese	59	50	84.7%	15.3%
Spanish	6,346	5,606	88.3%	11.7%
Other Foreign Language	132	45	34.1%	65..9%
Multiple Language Course	344	213	61.9%	38.1%
<b>Mathematics</b>	<b>27,767</b>	<b>25,336</b>	<b>90.9%</b>	<b>9.1%</b>
<b>Science</b>	<b>25,082</b>	<b>22,344</b>	<b>89.1%</b>	<b>10.9%</b>
Biology	4,642	4,220	90.7%	9.3%
Chemistry	2,314	2,010	86.9%	13.1%
Earth/Space	1,170	833	71.2%	28.8%
General Science	14,763	13,516	91.6%	8.4%
Geology	11	7	63.6%	36.4%
Physical Science	175	98	56.0%	4.4%
Physics	1,166	951	81.6%	18.4%
Environmental Science	831	709	85.3%	14.7%
<b>Social Studies</b>	<b>24,126</b>	<b>22,393</b>	<b>92.8%</b>	<b>7.2%</b>
Economics	312	290	92.9%	7.1%
Geography	851	731	85.9%	14.1%
History	6,929	6,454	93.1%	6.9%
Political Science	1,700	1,605	94.4%	5.6%
Social Studies	14,334	13,313	92.9%	7.1%

<b>The Arts</b>	<b>29,934</b>	<b>27,806</b>	<b>92.9%</b>	<b>7.1%</b>
Art	14,111	13,139	93.1%	6.9%
Dance	746	484	64.9%	35.1%
Drama/Theater	970	595	61.3%	38.7%
Music	14,107	13,588	96.3%	3.7%
<b>Elementary Education</b>	<b>42,332</b>	<b>40,380</b>	<b>95.4%</b>	<b>4.6%</b>
<b>Early Childhood (Kindergarten)</b>	<b>11,060</b>	<b>10,516</b>	<b>95.1%</b>	<b>4.9%</b>
<b>Total CAC Classes</b>	<b>210,354</b>	<b>194,428</b>	<b>92.4%</b>	<b>7.6%</b>

Data provided by the Division of Curriculum, Assessment, and Accountability, 2014.

### **Procedures for Identifying Certification Areas by Extent of Staffing Need**

The methodology used to review MSDE’s three data sources was designed by an Expert Committee, composed of constituents around the state. The process, now used by MSDE staff, was designed to culminate in (1) the categorization of certification areas by staffing need; and (2) the identification of critical teacher shortage areas for recommendation to the State Superintendent and the Maryland State Board of Education. It includes the use of a rubric for rating each certification area on the three sources of data. Staff compiled the information from the three data sources and presented the results for each certification area to be reviewed and agreed upon by the Assistant State Superintendent of Certification and Accreditation. The final step is to present the recommendations to the State Superintendent and the State Board for adoption.

### **Certification Areas by Extent of Staffing Need**

The critical shortage areas identified are valid for a two-year period, 2013-2014 and 2014-2015, since the report is now produced biennially. The results are displayed below. They have been categorized into *Shortage*, *Balanced* and *Oversupply*.

**Extent of Staffing Need**  
**September 2014**

Category	Critical Shortage	Balanced	Surplus
<b>Certification Area</b>			
<b>The Arts</b>			
Art (PreK-12)	X		
Dance (Pre-K-12)	X		
Music (PreK-12)		X	
Theatre (PreK-12)	X		
<b>Career/Technology Education (7-12)</b>			
Agriculture		X	
Business Education	X		
Family and Consumer Sciences	X		
Technology Education	X		
Trades and Industry		X	
Health Occupations		X	
<b>Computer Science (7-12)</b>	X		
<b>Early Childhood (PreK-3)</b>			X
<b>Elementary Education (1-6)</b>			X
<b>English</b>		X	
<b>ESOL (PreK-12)</b>	X		
<b>Foreign Language (7-12)</b>			
Chinese	X		
French		X	
German		X	
Italian		X	
Latin		X	
Japanese		X	
Russian		X	
Spanish	X		
<b>Health/Physical Education (PreK-12)</b>			X
<b>Mathematics</b>		X	
<b>Science (7-12)</b>			
Biology		X	
Chemistry	X		
Earth/Space Science	X		
Physical Science	X		
Physics	X		
<b>Social Studies (7-12)</b>		X	
<b>Special Education</b>			
Generic: Infant/primary (Birth-grade 3)	X		
Generic: Elementary/Middle (1-8)	X		
Generic: Secondary/Adult (6-adult)	X		
Hearing Impaired	X		
Severely and Profoundly Disabled		X	
Visually Impaired	X		

Revised 9/15/14

## **GEOGRAPHIC AREAS OF PROJECTED SHORTAGE**

Maryland legislation enacted in 1986 (Annotated Code of Maryland, Education Article §18-703) required the Maryland State Board of Education to annually identify geographic areas of teacher shortages. The intent of the legislation was to assist local school systems affected by geographical conditions that make the recruitment and retention of qualified teachers difficult. However, when the scholarship incentive to teach in a declared area of geographic shortage was repealed, MSDE made the decision to continue to collect this information for some federal loan forgiveness programs that use geographic shortage areas.

### **Procedures**

To determine the areas of geographic shortage, the following procedures were followed. The Maryland State Board of Education must have identified content areas as critical shortages for *at least three years*. Those areas identified as critical shortage areas for at least three years for this report are *computer science, technology education, ESOL, mathematics, chemistry, earth space science, physical science, physics, and most areas of special education*.

Each local school superintendent was surveyed to determine if he/she was able to satisfy the need for teachers in any of the above identified critical shortage areas and was asked to respond to two questions:

1. Did your local school system experience a critical shortage of teachers in any of the following state identified critical shortage areas: *computer science, technology education, ESOL, mathematics, chemistry, earth space science, physical science, physics, as well as all areas of special education?*

2. If yes, do you wish to have your local school system declared an area of geographic shortage?

Each local school system superintendent must agree to have his or her system designated as an area of geographic shortage, based on the above information.

## **Findings**

The following have requested designation as areas of geographic shortage.

- |                        |                            |
|------------------------|----------------------------|
| 1. Anne Arundel County | 12. Harford County         |
| 2. Baltimore City      | 13. Howard County          |
| 3. Baltimore County    | 14. Kent County            |
| 4. Calvert County      | 15. Montgomery County      |
| 5. Caroline County     | 16. Prince George's County |
| 6. Carroll County      | 17. Queen Anne's County    |
| 7. Cecil County        | 18. St. Mary's County      |
| 8. Charles County      | 19. Somerset County        |
| 9. Dorchester County   | 20. Talbot County          |
| 10. Frederick County   | 21. Washington County      |
| 11. Garrett County     | 22. Wicomico County        |
|                        | 23. Worcester              |

## NON-CLASSROOM PROFESSIONALS

At the request of the Maryland State Board of Education, MSDE has collected information for several years from local school systems and institutions of higher education on the supply and demand for select non-classroom professional positions. These positions are: guidance counselor, library/media specialist, principal, reading specialist, and school psychologist.

### Staffing Projections for Non-Classroom Professionals

*Staffing Projections of Local School Systems for Non-Classroom Professionals*, presents projected needs identified by local school systems for the next school year for five non-classroom professional positions. As with the teacher data, all numbers are lower than in past years. Again, this is likely related to the downturn in the economy since fewer professionals are retiring due to the economy.

Although speech/language pathologists are no longer certified by MSDE (they are licensed by the state), House Bill 1235 designated speech language pathology as an area of critical shortage, so they have been added to the MSDE shortage list. By declaring them a shortage area, they become eligible for the Retire/Rehire Program.

**Staffing Projections of Local School Systems for  
Non-Classroom Professionals  
Maryland Public Schools  
2012-2013 - 2013-2014**

<b>Non-Classroom Professionals</b>	<b>2012-13</b>	<b>2013-14</b>
Guidance Counselor	38	40
Library/Media Specialist	50	45
Reading Specialist	20	25
School Psychologist	27.5	31.5
Principal	108	105

Source: Local school systems, May 2014

## Supply of Non-Classroom Professionals

**Supply of Non-Classroom Professionals from Maryland Institutions of Higher Education**, presents five years of graduates, 2008-2009 through 2010-2011, and projected graduates for 2011-2012 and 2012-2013 in five professional areas. As a cautionary note, MSDE only has access to graduates of Maryland institutions, but many in-state professionals may go to nearby Washington DC, Virginia, and Delaware for their graduate degrees, given the proximity of many institutions of higher education in their areas. Additionally, many online options are now available. Therefore, the number of graduates reported here may be smaller than the personnel actually available to school systems.

### Supply of Non-Classroom Professionals from Maryland Institutions of Higher Education 2008-2009 - 2012-2013

Non-Classroom Professionals	Candidates 2008-2009	Candidates 2009-2010	Candidates 2010-2011	Projected 2011-2012	Projected 2012-2013
Guidance Counselor	133	153	217	209	188
Library/Media Specialist	56	91	72	114	70
Reading Specialist	253	230	195	201	188
School Psychologist	17	26	24	20	21
Principal	529	628	627	621	638

Source: Institutions of Higher Education, May 2014

MSDE also collects the number of graduates of non-classroom professional positions by the institution of higher education. ***Newly Eligible Non-Classroom Professional Graduates by Institution and Program***, gives the 2012-2013 graduates by program and by institution of higher education. An “NA” indicates the institution did not have an approved program in the area.

**Newly Eligible Non-Classroom Professional Graduates by Institution and Program  
Maryland Institutions of Higher Education  
2012-2013**

<b>Institution</b>	<b>Guidance Counselor</b>	<b>Library/Media Specialist</b>	<b>Reading Specialist</b>	<b>School Psychologist</b>	<b>Principal</b>
Total					
<b>Bowie State University ^</b>	19	NA	5	6	10
<b>Notre Dame of Maryland University</b>	NA	9	7	NA	56
<b>Coppin State University ^</b>	NA	NA	NA	NA	17
<b>Frostburg State University ^</b>	12	NA	17	NA	25
<b>Goucher College</b>	NA	NA	10	NA	50
<b>Hood College</b>	NA	NA	13	NA	70
<b>Johns Hopkins University</b>	45	NA	17	NA	67
<b>Loyola College</b>	53	NA	8	NA	8
<b>McDaniel College</b>	52	13	17	NA	176
<b>Morgan State University</b>					
<b>New Leaders for New Schools</b>					
<b>Salisbury University ^</b>	NA	NA	13	NA	19
<b>Towson University ^</b>	NA	24	69	37	100
<b>University of Maryland College Park ^</b>	6	15	19	2	1
<b>University of Maryland Eastern Shore ^</b>	7	NA	NA	NA	2

## Non-Classroom Professionals by Extent of Staffing Need

**Non-Classroom Professionals by Extent of Staffing Need**, was projected based on the new hires, the information from the survey of local school needs and the actual vacancies each August.

Within the limitations of this study of projected shortages, and based on projected imbalances in supply and demand, MSDE uses the same three categories used in the teacher projections: *Critical Shortage*, *Balanced*, and *Surplus*. To summarize, this year the non-classroom professionals that are declared as critical shortage areas in Maryland are library media specialist, principal and speech/language pathologist.

<b>Certification Area</b>	<b>Critical Shortage</b>	<b>Balanced</b>	<b>Surplus</b>
Guidance Counselor		X	
Library/Media Specialist	X		
Principal		X	
Reading Specialist		X	
School Psychologist	X		
Speech/Language Pathologist	X		

In summary, this report identifies select non-classroom professional positions that are critical shortage areas. Many of these positions come from the teacher ranks and are considered career pathways for teachers. All of these positions are essential to having successful schools for Maryland's K-12 population.

## RECOMMENDATIONS TO THE MARYLAND STATE

### BOARD OF EDUCATION

The MSDE is recommending to the Maryland State Board of Education teaching and geographic areas of critical shortage, consistent with Education Article §18-708, the *Workforce Shortage Areas (rev. 2014)*, found in the Annotated Code of Maryland. A declared shortage recommendation on gender and diversity in teaching is made, and inclusion of certain non-classroom professional positions as critical shortage areas is presented. The recommendations are below.

**Recommendation 1:** The Maryland State Board of Education declares the following content areas as critical shortage areas:

- Career and technology areas (7-12):
  - Technology education, and
  - Family and Consumer Sciences;
- Computer science (7-12);
- Business Education
- English for speakers of other languages (ESOL) (PreK-12);
- Science areas (7-12):
  - Chemistry;
  - Earth/space science,
  - Physical science, and
  - Physics;
- Special education areas:
  - Generic: Infant/primary (birth-grade 3);
  - Generic: Elementary/middle school (grades 1-8);
  - Generic: Secondary/adult (grades 6 – adult);
  - Hearing impaired;
  - Visually impaired;
- World language areas (PreK-12):
  - Chinese, and
  - Spanish.
- The Arts
  - Art
  - Dance
  - Theatre

**Recommendation 2:** The Maryland State Board of Education declares the following twenty (20) Maryland jurisdictions as geographic areas of projected shortage of certified teachers:

1. Anne Arundel County
2. Baltimore City
3. Baltimore County
4. Calvert County
5. Caroline County
6. Carroll County
7. Cecil County
8. Charles County
9. Dorchester County
10. Frederick County
11. Garrett County
12. Harford County
13. Howard County
14. Kent County
15. Montgomery County
16. Prince George's County
17. Queen Anne's County
18. St. Mary's County
19. Somerset County
20. Talbot County
21. Washington County
22. Wicomico County
23. Worcester

**Recommendation 3:** The Maryland State Board of Education declares a shortage of teachers who are males and teachers who are members of minority groups.

**Recommendation 4:** The Maryland State Board of Education declares a shortage of the non-classroom professional positions of library/media specialist and speech/language pathologists.

# **APPENDICES**

**Maryland Teacher Staffing Report  
Rubric for Determining Critical Shortage Content Areas  
2011-2012**

Objective: To determine the State’s critical shortage areas by using the rubric to score each content area by multiple criteria. For those content areas that are *core academic subjects* (CAS), use all three criteria; for those content areas that *are not* CAS, use only the first two criteria.

Content Area: \_\_\_\_\_ Core Academic Subject (CAS)  YES  NO

	Statewide Critical Shortage	Statewide Balance	Statewide Oversupply	Not Applicable (NA)	Rating
Criteria	3 points	2 points	1 point		
<b>1. State projection formula</b>	85% or less <b>Finding:</b>	86 –100% <b>Finding:</b>	100% or higher <b>Finding:</b>		<b>Rating:</b>
<b>2. August LEA Recruitment Difficulties</b>	5 or more <b>Finding:</b>	1-4 <b>Finding:</b>	0 (none) <b>Finding:</b>		<b>Rating:</b>
<b>3 No. classes taught by NHQT Core Academic Areas only (CAS)</b>	89% or less <b>Finding:</b>	90% – 95%. <b>Finding:</b>	95-100%. <b>Finding:</b>		<b>Rating:</b>
				<b>TOTAL</b>	

For content areas that are *Core Academic Subjects* (rated on all three criteria) use the following scale:

- \_\_\_\_\_ 7- 9 points, it is a statewide critical shortage area.
- \_\_\_\_\_ 4-6 points, the content area is in statewide balance.
- \_\_\_\_\_ 0-3 points, the content is an area of oversupply.

For content areas that **ARE NOT Core Academic Subjects** (rated on only two of the criteria) use the following scale:

- \_\_\_\_\_ 5-6 points, it is a statewide critical shortage area.
- \_\_\_\_\_ 3-4 points, the content area is in state balance.
- \_\_\_\_\_ 0-2 points, the content is an area of oversupply

**DECISION:** \_\_\_\_\_

Additional comments or rationale for the decision:

## Appendix 2

### Local School System Vacancy Report September 2014

Revised 9/3/14

School System	Contact Person	Explanation: Original projection of need, actual hires, remaining vacancies and recruitment difficulties
Allegany School begins 8/25	Steve Wilson (301) 759-2033	projected teacher needs 2014-15: <b>25</b> actual teachers hired 2014-15: <b>28</b> teacher vacancies as of 8/18: <b>0</b> # of principals hired as of 8/18: <b>0</b> # of assistant principals hired as of 8/18: <b>0</b> recruitment difficulties: <b>none</b> any teacher layoffs due to budget cuts: <b>None</b>
Anne Arundel School begins 8/25	Florence Bozzella (410) 222-5066	projected teacher needs 2014-15: <b>601</b> actual teachers hired 2014-15: <b>646</b> teacher vacancies as of 8/18: <b>42</b> # of principals hired as of 8/18: <b>22</b> # of assistant principals hired as of 8/18: <b>26</b> recruitment difficulties: <b>Math, Vis Impair, Tech Ed, Lib. Media, Physics, Chem, Biol, World &amp; Classical Lang, FACS, ESOL, Teacher Deaf &amp; Hard of Hearing</b> any teacher layoffs due to budget cuts: <b>None</b>
Baltimore City School begins 8/25	Shauna Anthony (410) 396-8885	projected teacher needs 2014-2015: <b>341</b> actual teachers hired 2014-15: <b>474</b> teacher vacancies as of 8/18: <b>149.1 (FTE)</b> # of principals hired as of 8/18: <b>29</b> # of assistant principals hired as of 8/18: <b>38 (incl. 16 prior AP's who were appointed)</b> recruitment difficulties: <b>Math, Science, Sp. Ed., Vocational, Foreign Lang.</b> any teacher layoffs due to budget cuts: <b>None</b>
Baltimore Co School begins 8/27	Herman C. James (410) 887-2945	projected teacher needs 2014-15: <b>600</b> actual teachers hired 2014-15: <b>517</b> teacher vacancies as of 8/18: <b>9.3</b> # of principals hired as of 8/18: <b>17 (3 external, 14 internal)</b> # of assistant principals hired as of 8/18: <b>15 (all internal)</b> recruitment difficulties: <b>Span., Sp. Ed. (secondary), Math, Tech. Ed.</b> any teacher layoffs due to budget cuts: <b>None</b>
Calvert School begins 8/19	Dr. Victoria Karol (410) 535-7495	projected teacher needs 2014-15: <b>25</b> actual teachers hired 2014-15: <b>58</b> teacher vacancies as of 8/18: <b>2</b> # of principals hired as of 8/18: <b>3</b> # of assistant principals hired as of 8/18: <b>8</b> recruitment difficulties: <b>SLP</b> any teacher layoffs due to budget cuts: <b>1</b>

School System	Contact Person	Explanation: Original projection of need, actual hires, remaining vacancies and recruitment difficulties
Caroline School begins 8/26	Brian Spiering (410) 479-2894 x132	projected teacher needs 2014-15: <b>20</b> actual teachers hired 2014-15: <b>41</b> teacher vacancies as of 8/18: <b>0</b> # of principals hired as of 8/18: <b>1 new, 1 AP appointed</b> # of assistant principals hired as of 8/18: <b>1</b> recruitment difficulties: <b>School Psychologist, Math</b> any teacher layoffs due to budget cuts: <b>None</b>
Carroll School begins 8/25	Jimmie Saylor(410) 751-3078	projected teacher needs 2014-15: <b>100</b> actual teachers hired 2014-15: <b>133</b> teacher vacancies as of 8/18: <b>2.5</b> # of principals hired as of 8/18: <b>1 new, 5 appointed</b> # of assistant principals hired as of 8/18: <b>12 appointed</b> recruitment difficulties: <b>Physical Thpy, World Lang., SLP</b> any teacher layoffs due to budget cuts: <b>Part time art</b>
Cecil School begins 8/21	Aretha Young (410) 996-5432	projected teacher needs 2014-15: <b>85</b> actual teachers hired 2014-15: <b>89</b> # of principals hired as of 8/18: <b>1</b> # of assistant principals hired as of 8/18: <b>4</b> teacher vacancies as of 8/18: <b>1</b> recruitment difficulties: <b>Speech Pathologist, OT &amp; PT</b> any teacher layoffs due to budget cuts: <b>None</b>
Charles School begins 8/25	Pamela Murphy (301) 934-7230	projected teacher needs 2014-15: <b>170</b> actual teachers hired 2014-15: <b>178</b> teacher vacancies as of 8/18: <b>22</b> # of principals hired as of 8/18: <b>5</b> # of assistant principals hired as of 8/18: <b>9</b> recruitment difficulties: <b>Span, Library, Spec. Ed., English</b> any teacher layoffs due to budget cuts: <b>None</b>
Dorchester School begins 8/26	Dwayne Abt (410) 228-4747 ext 1014	projected teacher needs 2014-15: <b>40</b> actual teachers hired 2014-15: <b>46</b> teacher vacancies as of 8/18: <b>2</b> # of principals hired as of 8/18: <b>0</b> # of assistant principals hired as of 8/18: <b>2</b> recruitment difficulties: <b>Math, Spec. Ed., World Lang.</b> any teacher layoffs due to budget cuts: <b>None</b>
Frederick School begins 8/25	Paula Lawton (301) 644-5097	projected teacher needs 2014-15: <b>182</b> actual teachers hired 2014-15: <b>259</b> teacher vacancies as of 8/18: <b>2</b> # of principals hired as of 8/18: <b>9 internal promotions, 3 new</b> # of assistant principals hired as of 8/18: <b>11 internal promotions</b> recruitment difficulties: <b>For. Lang., Tech. Ed., SLP, ELL, Minority, Male (Elem)</b> any teacher layoffs due to budget cuts: <b>None</b>

School System	Contact Person	Explanation: Original projection of need, actual hires, remaining vacancies and recruitment difficulties
Garrett School begins 8/25	Tim Thornburg (301) 334-8903	<p>projected teacher needs 2014-15: <b>24</b>  actual teachers hired 2014-15: <b>17</b>  teacher vacancies as of 8/18: <b>1</b>  # of principals hired as of 8/18: <b>0</b>  # of assistant principals hired as of 8/18: <b>0</b>  recruitment difficulties: <b>Certified teachers in Computer Sci. and Sp. Ed (vision), School Counselors, School Psychol., Minorities</b>  any teacher layoffs due to budget cuts: <b>None</b></p>
Harford School begins 8/25	Shannon Hagan(410) 588-5226	<p>projected teacher needs 2014-15: <b>174</b>  actual teachers hired 2014-15: <b>246</b>  teacher vacancies as of 8/18: <b>20</b>  # of principals hired as of 8/18: <b>8 appointed within</b>  # of assistant principals hired as of 8/18: <b>11within, 1 external</b>  recruitment difficulties: <b>PEI, Math, Sp. Ed, Media, Tech. Ed, FACS, Chem, SLP, Foreign Lang.</b>  any teacher layoffs due to budget cuts: <b>None</b></p>
Howard School begins 8/25	Jennifer Sifuentes (410) 313-7338	<p>projected teacher needs 2014-15: <b>375</b>  actual teachers hired 2014-15: <b>366</b>  teacher vacancies as of 8/18: <b>10</b>  # of principals hired as of 8/18: <b>5</b>  # of assistant principals hired as of 8/18: <b>7</b>  recruitment difficulties: <b>Special Education, World Languages</b>  any teacher layoffs due to budget cuts: <b>None</b></p>
Kent School begins 8/25	Ed Silver (410) 778-7135	<p>projected teacher needs 2014-15: <b>22</b>  actual teachers hired 2014-15: <b>21</b>  teacher vacancies as of 8/18: <b>1</b>  # of principals hired as of 8/18: <b>1</b>  # of assistant principals hired as of 8/18: <b>0</b>  recruitment difficulties: <b>Spec. Ed. Working with E.D.</b>  any teacher layoffs due to budget cuts: <b>3 but brought back into vacancies</b></p>
Montgomery School begins 8/25	Jeff Martinez (301) 279-3278	<p>projected teacher needs 2014-15: <b>900-1000</b>  actual teachers hired 2014-15: <b>935</b>  teacher vacancies as of 8/18: <b>19 FT, 21 PT</b>  # of principals hired as of 8/18: <b>29</b>  # of assistant principals hired as of 8/18: <b>76</b>  recruitment difficulties: <b>Tech. Ed., Computer Sci., Spanish</b>  any teacher layoffs due to budget cuts: <b>None</b></p>
Prince George's School begins 8/26	Vanessa Bass (301) 952-6037	<p>projected teacher needs 2014-15: <b>950</b>  actual teachers hired 2014-15: <b>1086</b>  teacher vacancies as of 8/18: <b>185</b>  # of principals hired as of 8/18: <b>37</b>  # of assistant principals hired as of 8/18: <b>25</b>  recruitment difficulties: <b>Art, Music, Media, Sp. Ed, Chinese, Italian, Span., ESOL (elem)</b>  any teacher layoffs due to budget cuts: <b>None</b></p>

School System	Contact Person	Explanation: Original projection of need, actual hires, remaining vacancies and recruitment difficulties
Queen Anne's School begins 8/25	Dan Lessard (410) 758-2403	projected teacher needs 2014-15: <b>30</b> actual teachers hired 2014-15: <b>50</b> teacher vacancies as of 8/18: <b>3</b> # of principals hired as of 8/18: <b>0</b> # of assistant principals hired as of 8/18: <b>0</b> recruitment difficulties: <b>Welding, Span., MS Eng/LA, Spec. Ed</b> any teacher layoffs due to budget cuts: <b>None</b>
St. Mary's School begins 8/20	Dale Farrell (301) 475-5511 x170	projected teacher needs 2014-15: <b>75</b> actual teachers hired 2014-15: <b>74</b> teacher vacancies as of 8/18: <b>8</b> # of principals hired as of 8/18: <b>0</b> # of assistant principals hired as of 8/18: <b>0</b> recruitment difficulties: <b>Chem, Lib/Media, Sp. Ed, Math</b> any teacher layoffs due to budget cuts: <b>None</b>
Somerset School begins 8/25	Beth Whitelock (410) 621-6231	projected teacher needs 2014-15: <b>16</b> actual teachers hired 2014-15: <b>22</b> teacher vacancies as of 8/18: <b>0</b> # of principals hired as of 8/18: <b>0</b> # of assistant principals hired as of 8/18: <b>1</b> recruitment difficulties: <b>Music</b> any teacher layoffs due to budget cuts: <b>None</b>
Talbot School begins 8/26	Lynne Duncan (410) 822-7557	projected teacher needs 2014-15: <b>15</b> actual teachers hired 2014-15: <b>29</b> teacher vacancies as of 8/18: <b>0</b> # of principals hired as of 8/18: <b>0</b> # of assistant principals hired as of 8/18: <b>0</b> recruitment difficulties: <b>minorities</b> any teacher layoffs due to budget cuts: <b>None</b>
Washington School begins 8/20	Laura Fransisco (301) 766-2808	projected teacher needs 2014-15: <b>100</b> actual teachers hired 2014-15: <b>126</b> teacher vacancies as of 8/18: <b>5</b> # of principals hired as of 8/18: <b>1</b> # of assistant principals hired as of 8/18: <b>6</b> recruitment difficulties: <b>Foreign Languages</b> any teacher layoffs due to budget cuts: <b>None</b>
Wicomico School begins 8/25	Vince Pavic (410) 677-4531	projected teacher needs 2014-15: <b>100</b> actual teachers hired 2014-15: <b>98</b> teacher vacancies as of 8/18: <b>1</b> # of principals hired as of 8/18: <b>3</b> # of assistant principals hired as of 8/18: <b>4</b> recruitment difficulties: <b>Math, Foreign Lang., Minority</b> any teacher layoffs due to budget cuts: <b>None</b>

School System	Contact Person	Explanation: Original projection of need, actual hires, remaining vacancies and recruitment difficulties
Worcester School begins 9/2	Velda Henry (410) 632-2582 x 5077	<p>projected teacher needs 2014-15: <b>20</b>  actual teachers hired 2014-15: <b>47</b>  teacher vacancies as of 8/18: <b>0</b>  # of principals hired as of 8/18: <b>1 (promoted)</b>  # of assistant principals hired as of 8/18: <b>4</b>  recruitment difficulties: <b>Physics, Spch. Path., Math</b>  any teacher layoffs due to budget cuts: <b>None</b></p>