UNIVERSITY OF MARYLAND EASTERN SHORE

"CLOSING THE ACHIEVEMENT GAP"

FOLLOW-UP REPORT – February 2014

I. DEFINITION OF THE ACHIEVEMENT GAP

The University of Maryland Eastern Shore (UMES), the State's Historically Black 1890 Land-Grant institution, emphasizes baccalaureate and graduate programs in the liberal arts, health professions, sciences, and teacher education. In keeping with its land-grant mandate, the University's purpose and uniqueness are grounded in distinctive learning, discovery, and engagement opportunities in agriculture, marine and environmental sciences, technology, engineering and aviation sciences, health professions, and hospitality management. Degrees are offered at the bachelors, masters and doctoral levels.

As a result of its land-grant mission and student population we serve, UMES continues to implement best practices, strategies, and programs that are designed to enhance student success, critical thinking, student retention and graduation rates. As a result of new university leadership and ongoing assessment, UMES has altered initiatives and its approach to closing the achievement gap.

UMES continues to review and measure the impact its programs and efforts have had on retention and graduation rates. UMES will continue evaluating findings using the following four major comparison groups:

- **Group I**. The six-year graduation achievement gap for African-American males was established by comparing the six-year graduation for all students in the USM graduating from institution of entry as compared to UMES African-American male students graduating UMES.

- **Group II.** UMES established the first-to-second year achievement gap data by comparing white students in the USM who returned to the institution of entry with UMES African-American students returning to UMES.

- **Group III.** The six-year graduation achievement gap was established by comparing the six-year graduation rate for all students in the USM system graduating from institution of entry compared to UMES African-American students graduating from UMES.

- **Group IV**. The six-year graduation achievement gap was established by comparing the six-year graduation rate for all students in the USM system graduating from institution of entry compared to UMES Low-income students graduating from UMES.

II. TREND DATA – TABLE I *Six-year Graduation Rates: African-American Students vs. All USM Students*

Institution's Name	Six-year Graduation and Retention Rates at Institutions of First-Entry												
UMES	**Fall Cohort First-Time Full Time**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**
		918	**951**	**926**	**983**	**1,128**	**875**	**1,038**	**876**	**944**	**748**	**882**	**604**
	FY Graduation Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
UMES Total Cohort	**6-Year Graduation Rate**	**38**	**32**	**32**	**31**	**32**	**32**						
	2nd Year Retention	**70**	**67**	**64**	**65**	**65**	**66**	**70**	**65**	**68**	**69**	**68**	
	3rd Year Retention	**51**	**48**	**49**	**46**	**47**	**48**	**52**	**51**	**54**	**55**		
	4th Year Retention	**43**	**39**	**42**	**41**	**43**	**44**	**47**	**45**	**47**			
	5th Year Retention	**21**	**21**	**21**	**23**	**26**	**28**	**24**	**27**				
UMES African American	**6-Year Graduation Rate**	**39**	**32**	**30**	**31**	**32**	**32**						
	The Gap	**23**	**30**	**32**	**28**	**28**	**30**						
	2nd Year Retention	**71**	**68**	**64**	**66**	**66**	**66**	**71**	**66**	**69**	**69**	**67**	
	3rd Year Retention	**53**	**50**	**49**	**47**	**46**	**48**	**53**	**52**	**55**	**56**		
	4th Year Retention	**45**	**42**	**40**	**42**	**43**	**44**	**47**	**46**	**49**			
	5th Year Retention	**21**	**22**	**21**	**23**	**26**	**28**	**24**	**27**				
UMES African American Male	**6-Year Graduation Rate**	36	28	27	22	30	23						
	The Gap	**26**	**34**	**35**	**37**	**30**	**39**						
	2nd Year Retention	**73**	**68**	**59**	**62**	**69**	**62**	**69**	**65**	**67**	**66**	**64**	
	3rd Year Retention	**56**	**46**	**49**	**46**	**53**	**44**	**51**	**54**	**56**	**52**		
	4th Year Retention	**46**	**39**	**40**	**39**	**47**	**41**	**42**	**48**	**50**			
	5th Year Retention	**31**	**24**	**28**	**25**	**32**	**34**	**26**	**33**				
UMES Low- income (Pell)	**6-Year Graduation Rate**	37	30	32	28	31	29						
	The Gap	**25**	**32**	**30**	**31**	**29**	**33**						
	2nd Year Retention	**66**	**67**	**66**	**64**	**67**	**69**	**72**	**65**	**66**	**69**	**66**	
	3rd Year Retention	**48**	**46**	**53**	**46**	**46**	**49**	**54**	**49**	**54**	**54**		
	4th Year Retention	**39**	**39**	**43**	**40**	**42**	**45**	**48**	**42**	**45**			
	5th Year Retention	**22**	**23**	**24**	**21**	**26**	**30**	**24**	**26**				

TREND DATA

This section provides charts illustrating how the UMES student populations are growing closer to meeting the goals to close the gap.

Table 1: This table includes six-year graduation and 2nd, 3rd, 4th, and 5th year retention rates for the following groups: UMES Total Cohort, UMES African-American, and UMES Low-income (Pell) first time full-time cohorts from 2002-2013.

There are a couple data points on this chart to be highlighted. For the fall 2011 overall cohort, there has been an increase from 54% to 55% for the 2nd to 3rd year retention rate. This 55% represents the highest 2nd to 3rd year retention rate in 11 years. The African American student had an increase from 55% to 56%. It is to be noted that this is the highest 2nd to 3rd year retention rate for this cohort of students over the past 10 years.

III. NEW INITIATIVES FOR 2012-2014

The University has developed several new strategies designed to close the achievement gap. The strategies are outcomes based and allowed for the measurements of improvement and ongoing assessment. These strategies/best practices are as follows:

- Strengthening the academic profile of incoming fall cohorts;
- Implementing an online degree audit system to decrease time-to-degree completion;
- Implementing a university mentoring program;
- Focusing on the redesigning of introductory level courses;
- Expanding recruit-back efforts to be more intrusive and proactive;
- Strengthening academic support for students in developmental mathematics; and
- Implementing the "Bachelors in 4" initiative, focusing on registering students in a minimum of 15 credit hours per semester.

Notable Success of Strategies

1. *Admissions and Recruitment*

   College access and readiness are factors that we have been addressing for 126 years. We are always cognizant of our mission as well as the accountability demands placed on higher education both at the state and national levels. In an effort to balance these demands and keep "true" to our land-grant mission, in 2012 we began working with our K–12 partners in our recruitment market-share and providing them with data illustrating how students from their respective high schools are performing at UMES. In addition, we have been adjusting our enrollment criteria upward and challenging our constituents to enhance their academic preparation. Data resulting from this evidence-based strategy revealed, the average two component (Reading and Math) SAT score for incoming freshmen has increased from 828 (fall 2008) to 881 (fall 2013). This is an increase of 53 points over a five year period. UMES' mean scores which were always below those of its ten peers are now above their average.

2. *Online Degree Audit Program*

The strategy of introducing an online degree audit system to decrease time-to-degree completion did not yield the desired outcome upon initial implementation. Therefore, several action steps were put into place to enhance the use of online degree audit and increase degree completion. The first action step was to repeat training for all faculty, deans and department chairs on the proper usage of the online degree audit system. The mandated training sessions were provided by the Registrar and Associate Registrar and included case studies provided by faculty and department chairpersons. Additionally, each department chairperson was provided a spreadsheet of all the students in their major who had earned ninety credits or more.

Each department chairperson was required to use the online degree audit information to answer the following questions: 1) What term will this student be eligible for graduation?; 2) How many credits does each student need to graduate?; 3) What courses are required for this student to complete the degree program?; and 4) What strategies need to be employed in order to assist this student in degree completion? The University has employed this strategy since fall 2010 resulting in a major increase in the number of degrees awarded (758) in the 2011-2012 academic year, surpassing 2010-2011 awards by 20% and 2009-2010 by 40%.

However, this trend did not follow for the 2012-2013 academic year. Therefore, several action steps were put into place to evaluate the cause for this decrease in the number of graduates. Institutional Research provided data on the seniors who should have been eligible to graduate and each department has established action steps to recruit-back these students and provide outreach to assist these students in completing their degrees. Where applicable these students were referred to the Hawk A Step Away Project. This project is designed to recruit-back degree eligible near-completers and degree potential near-completers to earn their undergraduate degree. The students targeted for this project must have completed 90 or more semester credit hours, have a GPA of 2.0 or higher and have not attended UMES within the last 12 months.

3. *"Connections" A University Mentoring Program*

Studies have shown that student success and retention is inextricably linked to personal satisfaction and out-of-classroom experiences. Therefore, students who feel comfortable, well supported, engaged, and connected are those who return from year-to-year and graduate with a degree. In spring 2012, we piloted a university-wide mentoring program. The program connected incoming freshmen with upperclassmen. The students participated in social, civic engagement and life skills programs over the course of one academic year.

During the piloted phase, we identified 45 mentee and mentors to participate in the program. The mentees were freshman students many of which self-identified as either first-generation, low-income, or an African American male. It is important to note that our retention efforts are focusing on these particular student populations.

At the conclusion of the piloted phase, 42 (93%) mentees (freshmen) enrolled for fall 2013, compared to 76% for the overall first-year student population who did not participate. With regards to mentors 38 (84%) of mentors (juniors and seniors) enrolled for fall 2013, the remaining 7 mentors graduated in May 2013. The mean grade point average for mentees participating in the program was 2.8.

The fall 2013 cohort consists of 101 mentors with a mean GPA of 3.076 and 101 mentees. All mentors and mentees are enrolled for spring 2014.

4. *Academic Course Redesign*

Best practices for improving retention and graduation rates include the redesign of delivery of courses. This is particularly important for introductory level courses where a number of challenges converge. Challenges that are frequently prevalent in introductory courses include inconsistent knowledge of incoming students; varying levels of student retention of material; lecture-based formats that do not consistently engage students; and, as a result of a large number of sections to be taught, a lack of coordination among professors teaching the various sections of the course leading to course drift and/or inconsistent learning outcomes. University of Maryland Eastern Shore (UMES) has embraced this best practice of academic transformation by becoming active participants in the USM course redesign project. As a result of participation and funding of numerous course redesign efforts, the leaders of the National Center for Academic Transformation (NCAT) have identified a number of components that are present in many of the successful course redesign efforts. Key quality improvement strategies include[1]:

- **Online Tutorials** – Interactive tutorials provide students with the opportunity to practice material and supplemental information when they need it.

- **Continuous Assessment and Feedback** – Automated response that provide instant assessment to homework assignments and quizzes support student learning. Generally, the same tools provide guidance on how to improve strategies and approaches to solving the problem at the same time.

- **Increased Interaction Among Students** – the courses are redesigned such that more frequent interaction among students is not only possible, but encouraged.

- **On-Demand Support** – Expanding the number and types of avenues that students can use in order to master course material is vital. This may also include the use of Undergraduate Learning Assistants (ULAs) rather than traditional faculty or graduate teaching assistants.

- **Mastery Learning** – The redesigned courses often provide a flexible format to support individualized student progress toward mastering learning objectives. Successful courses are generally not self-paced, but instead provide adequate structure to allow steady progress toward completion.

A benefit that accrues from course redesign is that assessment measures are often improved. This is almost a given since more effective monitoring is often put in place to determine whether more effective learning has taken place as a result of the changes. In addition, many campuses report that simply going through the course redesign process helps to ensure that learning objectives across multiple sections are complete, consistent, and being met by each section.

UMES has been a participant in the national trend to increase the effectiveness and efficiency of its learning environment through course redesign. Through a partnership between the University System of Maryland and NCAT, the University of Maryland Eastern Shore participated in the Maryland Course Redesign Initiative (MCRI). Through this program, the USM provided $20,000 and the institution provided a $20,000 match to use the NCAT methodology to redesign its Principles of Chemistry (CHEM

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[1] Twigg, Carol A., "Course Redesign Improves Learning and Reduces Cost," The National Center for Public Policy and Higher Education – Policy Alert, June 2005.

111) course. The results of this initiative allowed UMES to reduce the number of sections of the Chemistry course and the related cost of offering the course in the traditional format ($268 per student) to $80 per student once the course redesign was fully implemented. At the same time, the number of students receiving a C or better increased from 54.5% to 69.4%.[2]. UMES has already redesigned seven courses, six of which are in the STEM disciplines. UMES wishes to continue its efforts in course redesign by including four high enrollment gatekeeper courses for redesign with two of which are in the STEM disciplines.

UMES proposes to redesign the following courses:
- BIOL 112- Principles of Biology II
- CHEM 211-Fundamentals of Organic Chemistry
- SOCI 101-Introduction to Sociology
- SPAN101-Fundamentals of Spanish I

5. *Recruit-Back Program*
   Like many colleges and universities throughout the nation, we have seen a trend of more freshman students not completing their first year; however, our most significant loss continues to be at the sophomore level. There are multiple internal and external factors that contribute to this decline. Therefore, in fall 2011, in an effort to address our decline we expanded our recruit-back efforts to be more intrusive and proactive. We appointed a professional staff member to serve as a class-advisor to each academic class (freshmen, sophomore, junior, and senior). The advisor's role is to guide the cohort, serve as a primary point person and work with the class leadership as well as various departments around campus to address academic, social, and personal factors that may impede student success and persistence. In addition, the cohorts were brought together twice a semester for town-hall programs. As a result of this effort, we were able to raise our second-to-third year retention rate for the fall 2011 cohort to 55%. This is our highest second-to-third year rate since 2002.

6. *Student Support Services for Developmental Mathematics*

   All entering students must take a placement test for mathematics. The results of the Math placement test revealed that from 2010 to 2013, an average of 94% of the entering freshmen were placed in developmental mathematics. The results of these placements yielded only a 50% pass rate for these students, thus impacting retention and college completion. As a result of these findings, a comprehensive university academic enhancement program was developed for incoming students to improve progression/success rates for students enrolled in developmental mathematics from 50% to 60%.

   This plan required that students enrolled in Science, Technology, Engineering, Agriculture and Mathematic (S.T.E.A.M) programs will be allowed to enroll in developmental mathematics during their first semester at the University. This decision was made to enhance the progression of the students who require several mathematic courses as prerequisites before they can take courses within their STEAM majors. Students in non-STEAM majors are advised to wait until their second semester to enroll in developmental mathematics. During their initial semester, the non-STEAM students were provided individualized mathematics tutoring with systematic diagnostic evaluations throughout the semester. These students were allowed to enroll in developmental mathematics during the spring 2013 semester.

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[2] Hearne, J., et al., "Redesign of Principles of Chemistry I", The National Center for Academic Transformation website, 2009.

The University redesigned its developmental mathematics course as part of its redesign efforts. Preliminary data for all fall 2012 revealed that students with Accuplacer Elementary Algebra score of 60 or higher had a pass rate of 74% percent; while students with Accuplacer Elementary Algebra score of 59 or level had a pass rate of 38%. The overall pass rate for this population witnessed an increase from 50% to 57% that is slightly below our target of 60%.

In fall 2012, Supplemental Instruction (SI) was introduced as another strategy to increase student success in mathematics. SI is considered a top 10 best practice for improving student cognitive comprehension and success; thus, we launched the SI initiative with the purpose of increasing students' understanding of course content and to increase the pass-rate for developmental mathematics. Mathematic professors were asked to hold their office hours in the Center for Access and Academic Success (CAAS), at which time they conduct supplemental instruction sessions. The sessions were open to all students enrolled in developmental mathematics. In spring 2012, prior to the implementation of SI, the pass rates for developmental Mathematics were: Math 101 (49%); Math 102 (51%); and Math 109 (25%). At the end of spring 2013, after two semesters of SI there were significant increases in the success and pass rate of students; Math 101 (52%); Math 102 (66%); and Math 109 (49%). These findings are encouraging and we will continue to build upon these successful efforts.

7. *Bachelors in 4*
   In fall 2013, UMES introduced the "Bachelor's in 4" program. The purpose of the program is to cultivate a campus culture that empowers our students to graduate in four-years. The program is based on the successful premise that you take no fewer than 5 courses per semester (15semester credit hours); thereby decreasing your time-to-degree completion and increasing the likelihood that you graduate in four years. We are already seeing the reality of this effort; more students than ever were enrolled in at least 15 credit hours, including nearly 100 percent of our new freshmen. This is a significant increase when compared to fall 2012. After one semester of implementation of the Bachelors in 4 program, data has shown a positive increase in the average number of credit hours attempted between Fall 2012 cohort- 14.9 credits and Fall 2013 cohort- 15.7 credits, as well as a slight increase in average hours semester credit hours earned: Fall 2012 cohort- 12.3 credits and Fall 2013 cohort- 12.7 credits. We predict that we will continue to see our average credit hours earned continue to move in a positive direction.

In summary, as the State continues progress toward meeting its 55% completion goal, more under-served, low-income and first-generation students will have to enter higher education and graduate, as these are the fastest growing populations in the State. In addition, state-wide data reveals that most students from these groups will usually enter higher education through either a community college or predominately black institution (PBI). UMES has proven to be strong in providing access to under-served, low-income, and first generation students. Moreover, while many of these students will encounter factors that threaten to impede their college careers, at UMES, we continue to build inroads in helping them succeed. The increases in our second-to-third year retention rate, four-year and six-year graduation rates, student success rates in developmental mathematics, course design, and increasing our mean SAT/GPA scores, are all evidence and strong indicators that our strategies and efforts have us on the right track and moving ever closer to achieving our institutional goals as well as helping the State meet its.

UNIVERSITY OF MARYLAND EASTERN SHORE
TRENDS IN GRADUATION RATE
First-time, Full-time Undergraduate, Fall Semester Cohorts 1997-2007
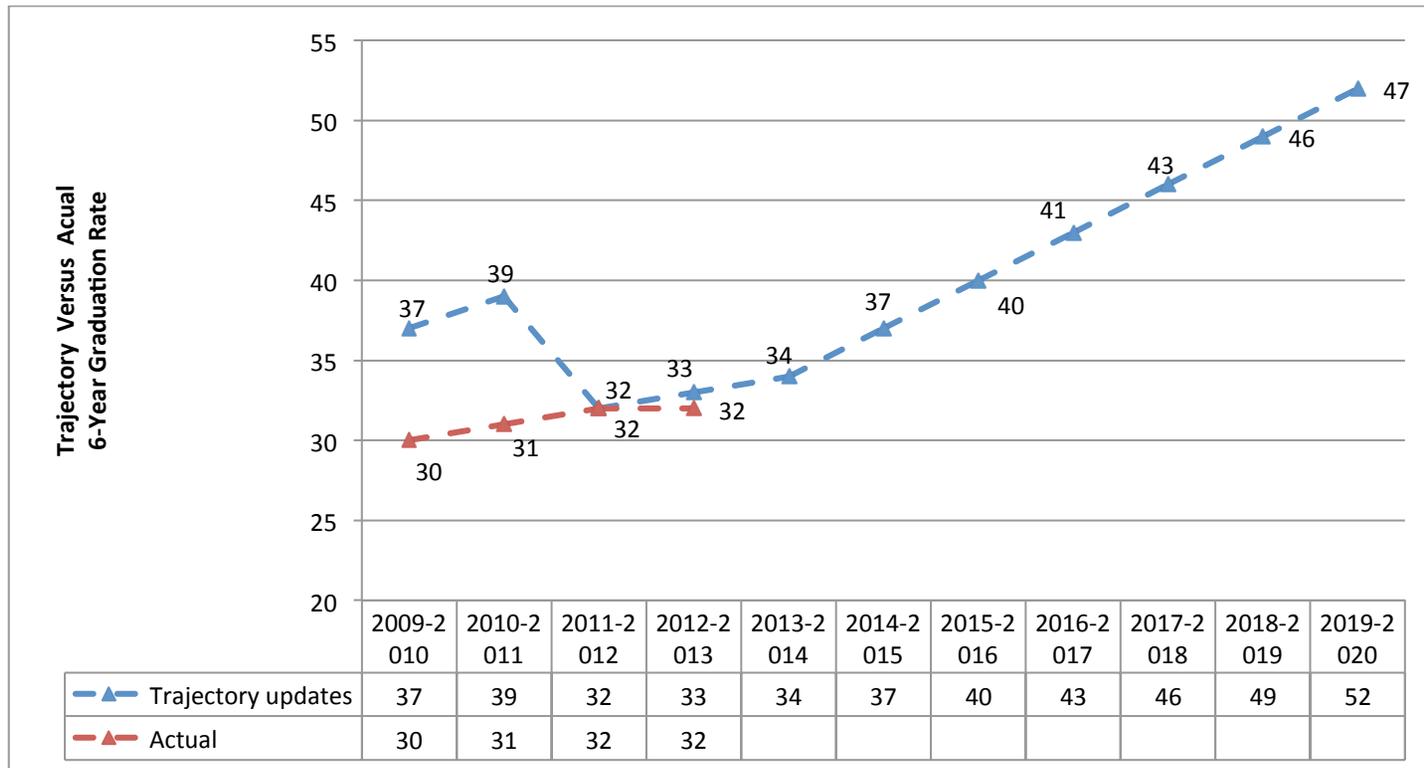### 6-Year Graduation Rate Table 2

Cohort Year	All Students		All African American		All USM Students	Gap	Half the Gap
	Cohort Size	Rate	Cohort size	Rate			
1997	647	44%	544	45%	61%	20%	10%
1998	622	42%	523	43%	62%	21%	11%
1999	533	42%	465	43%	61%	23%	12%
2000	780	34%	670	34%	60%	32%	16%
2001	1,194	37%	883	37%	61%	28%	14%
2002	918	38%	734	39%	62%	26%	13%
2003	951	32%	794	32%	62%	34%	17%
2004	926	32%	753	30%	62%	35%	18%
2005	983	31%	867	31%	59%	37%	19%
2006	1128	32%	1005	32%	60%	30%	15%
2007	875	32%	779	32%	62%	30%	15%

Sources: 1) IPEDS Graduation Rate Surveys

2) USM Retention & Graduation Rates Report, March, 2013

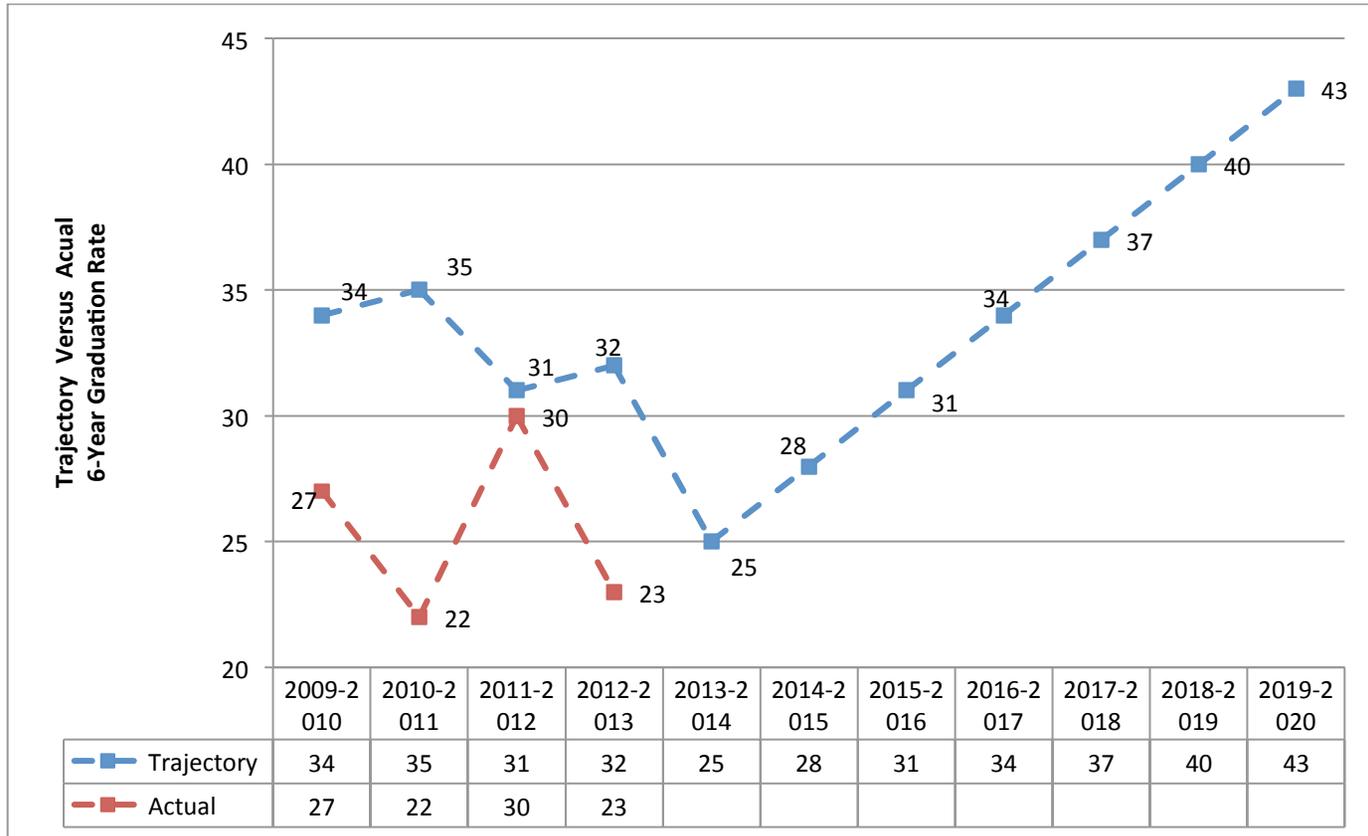# UMES African American Six-year Graduation Rate Trajectory for Closing the Achievement Gap by 2020

Table 3

	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
Trajectory updates	37	39	32	33	34	37	40	43	46	49	52
Actual	30	31	32	32							

Table 3: The UMES African-American Six-year Graduation rate and Trajectory until 2020. It is the goal of UMES by 2020 to have a six-year graduation rate of 47%. The fall 2007 cohort had a graduation rate of 32%, which remains constant with the fall 2006 cohort; however, the rate is 1% point lower than the trajectory rate.

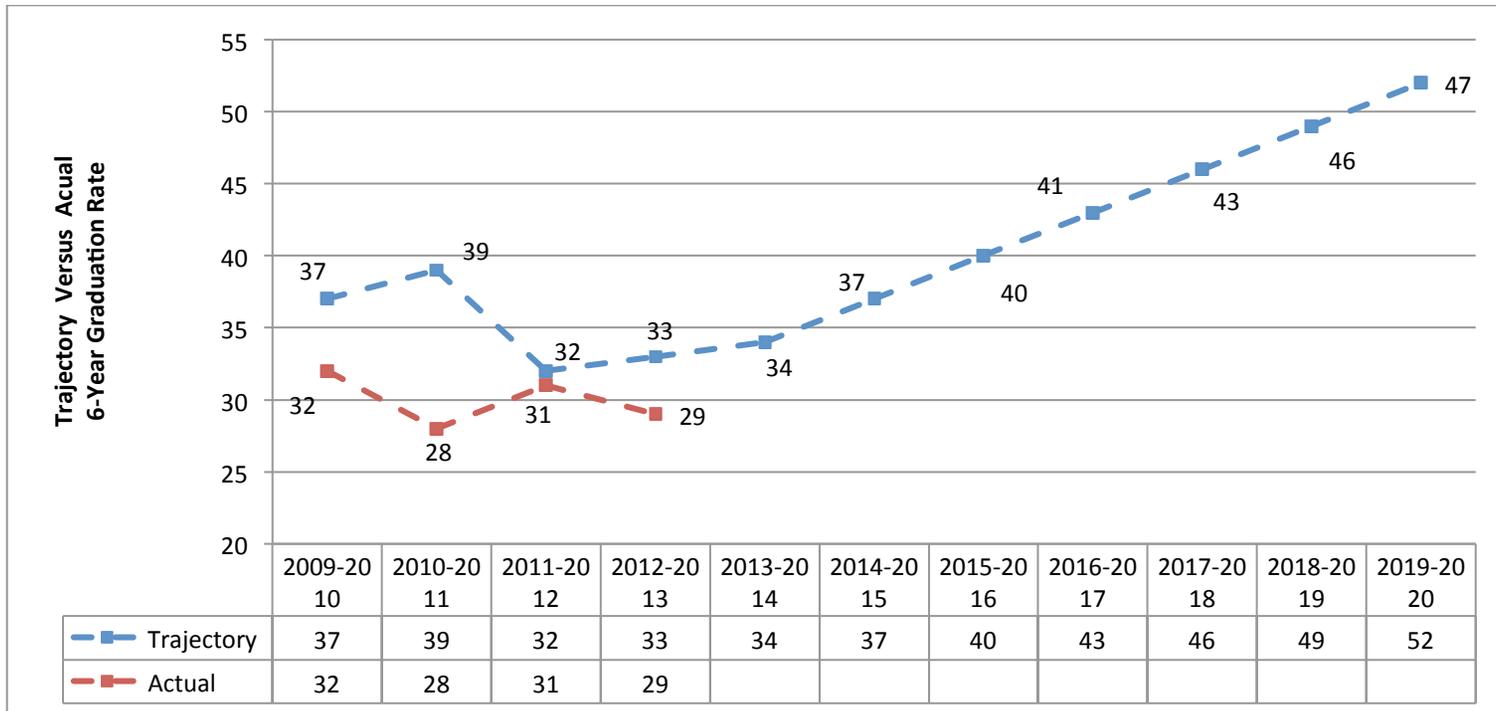**UMES African American Males Six-year Graduation Rate Trajectory for Closing the Achievement Gap by 2020**

Table 4

	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
Trajectory	34	35	31	32	25	28	31	34	37	40	43
Actual	27	22	30	23							

Table 4: The UMES African-American Males Six-year Graduation rate and Trajectory until 2020. It is the goal of UMES by 2020 to have a six-year graduation rate of 43% for African-American Males. The fall 2007 cohort had a graduation rate of 23%, which was a drop from 30% from the fall 2006 cohort. The trajectory rate for this cohort was 32%.

Male student success and retention is an important focus for UMES. In fall 2013, they institution hired a Program Coordinator for Male Student Success and Retention. Through the initiatives of this program the institution anticipates an increase in 1st to 2nd year retention, four year and six year graduation rates.

UMES Low-income (Pell) Six-Year Graduation Rate Trajectory for Closing the Achievement Gap by 2020
Table 6

	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
Trajectory	37	39	32	33	34	37	40	43	46	49	52
Actual	32	28	31	29							

Table 6: The UMES Low-income Six-year Graduation rate and Trajectory until 2020. It is the goal of UMES by 2020 to have a six-year graduation rate of 47% for low-income students. The fall 2007 cohort had a graduation rate of 29%, which was a drop from 31% from the fall 2006 cohort. The trajectory rate for this cohort was 33%.

IV. BULLETED SUMMARY FY 15 INITIATIVES

Statement of Immediate Goals

In order to obtain the overarching goals of cutting the achievement gap in half by 2015, the following goals will be implemented:

- Establish milestones for the identified six-year graduation rate goal.

- Resign New Student Orientation and expand to a two day program placing greater emphasis on academic preparation and transition.

- Continue to recruit students from the top ten percent of the three local school districts in the STEAM areas.

- Introduce a Summer Bridge Transition program for academically under-prepared first-time, full-time fall admits needing additional support.

- Provide training for faculty/staff who provide advising, as well as other support services. Also provide training for other support personnel who interact with students during the enrollment process.

- Enhance systematic academic support services for first-time, full-time students.

- Enhance the centralized process for identifying, monitoring tracking, and providing academic/counseling support for students on probation.

- Continue to develop a process for collecting student satisfaction data (administer the student satisfaction survey).

- Develop learning communities for incoming first-time, full-time students.

- Enhance the systematic approach for developing course scheduling and course availability by spring 2014.

- Establish processes for increasing faculty/student engagement.

- Conduct faculty development activities to ensure that instruction is of the highest quality and utilizes appropriate pedagogy.

- Develop and implement career-related educational interventions for first-time, full-time students.

- Develop and implement personal counseling related educational interventions for first-time students.