MONTGOMERY COLLEGE ▪ OFFICE OF PROCUREMENT
MULTI-STEP REQUEST FOR BID (RFB) TITLE: ACHIEVING COLLEGE EXCELLENCE AND SUCCESS (ACES) PROGRAM EVALUATION
MULTI-STEP RFB NUMBER: 920-014
RFB CLOSING DATE: MARCH 24, 2020 @ 3:00 PM

MONTGOMERY COLLEGE

ADDENDUM #2
March 9, 2020

ADDENDUM IS BEING ISSUED FOR THE PURPOSE OF:

To provide the attached questions & answers, ACES Logic Model, and 2018 ACES strategic plan.

All other specifications, terms and conditions remain unchanged.

Patrick Johnson, MBA
Director of Procurement

Please **sign** below to acknowledge receipt of this Addendum and return with the proposal. Failure to return this Acknowledgement of Addendum may deem a proposal nonresponsive.

NOTE: ACKNOWLEDGEMENT OF RECEIPT OF BID ADDENDA WILL NOT BE ACCEPTED BY FACSIMILE OR E-MAIL.

_____	_____
Company Name	Authorized Signature
_____	_____
Date	Printed/Typed Signature

MONTGOMERY COLLEGE ▪ OFFICE OF PROCUREMENT
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ADDENDUM #2

QUESTION	ANSWER
Can you please clarify the expected period of performance?	6 months
Page 9 references a logic model in attachment A; however, it was not included. Can this be provided?	See attached
Can you give an idea of the level of effort expected?	1.5 FTE positions
Given such a short turnaround time, is it possible to extend the submission date for one week?	Yes
What is the anticipated budgeted amount or range available to support this evaluation?	Not available
What is the desired timeline for the scope of work? Is there a desired deadline for the Final Evaluation Report and Data Sustainability Plan?	May 1, 2020, to November 1, 2020 January 1, 2021 is the deadline for the Final Evaluation Report and Data Sustainability Plan
In Section 5, which provides directions for the proposal submission format, it is unclear where the sample work plan and proposed schedule should be included. Could you provide guidance on the desired format and sequence for the proposed work plan?	Submit with Technical Proposal, following the Qualifications & Experience Narrative
Similarly, there are a few required Technical Proposal items listed in section 5.1.1 that are not listed in the Proposal Submittal Format (section 5.2), including the Requirements Checklist (Attachment A), Completed Contractor Information form (Attachment C), Acknowledgement of Receipt of Addenda, and Mid-Atlantic Purchasing Team Rider Clause. Where in the sequence of items outlined in section 5.2 would you prefer that these items be included?	Order of proposal submittal shall be as follows: • Transmittal Letter • Requirements Checklist (Attachment A) • Qualifications & Experience Narrative • Sample work plan & proposed schedule • Completed Reference form (Attachment B) • Completed Contractor Information Form • Subcontractor Listing (if applicable) • Completed Contractor Information form (Attachment C) • Acknowledgement of Receipt of Addenda (if applicable) • Mid-Atlantic Purchasing Team Rider Clause (Optional)
What additional details are you willing to provide, if any, beyond what is stated in bid documents concerning how you will identify the winning bid?	No additional details, as the contract award will be made to the qualified bidder with the lowest submitted pricing.

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On page 13, Section 5.1.2 refers to section 4.2, which does not appear in the RFB. Is this an error, and this is meant to refer to section 4.2, or is there an additional section omitted from the RFB?	Change section 5.1.2 to read: *The proposal shall be organized using the following outline; responses to each requirement will be in order and clearly marked with the section number to which they respond. All responses must comply with the sequence and items outlined in section **5.2**. Failure to comply may result in rejection of offeror proposal. The proposal should be specific and complete in every detail, prepared in a simple and straightforward manner, and provide sufficient detail to allow College evaluators a comprehensive and clear understanding of the Offeror's capabilities. Offerors are expected to examine the entire Request for Proposal, including all specifications and general conditions & instructions contained herein*
Has the ACES program been working with an external evaluator?	No
What is the proposed start and end dates for the scope of work?	The proposed start date is May 1, 2020, with an end date of January 1, 2021 for the final report.
Could you provide the ACES Strategic Plan (2018) referenced in the RFB?	See attached
How many students apply who are not able to participate/enroll in the program? Is acceptance in the program based on criteria or a lottery?	Approximately 500 students across 14 schools applied, but were not enrolled. Acceptance is based on established criteria.
Are you looking for a retrospective or prospective evaluation, or both?	A retrospective evaluation.
Do you want a sample work plan and schedule included in the technical response?	Yes
Was this bid posted to the nationwide free bid notification website at www.mygovwatch.com?	No
Other than your own website, where was this bid posted?	The Maryland State procurement website: https://emma.maryland.gov/page.aspx/en/rfp/request_browse_public
Who is scheduled to be on the review committee?	Not available

************************END OF QUESTIONS AND ANSWERS************************

DRAFT 3/20/20

Logic Model: Achieving Collegiate Excellence and Success (ACES)

Collaborative program among Montgomery County Public Schools (MCPS), Montgomery College (MC) and the Universities at Shady Grove (USG)

GOAL: Increase baccalaureate degree attainment and professional or graduate school placement for students historically underrepresented in the higher education system by providing a pathway from high school to college completion.

ACES PATHWAY: MCPS to MC to USG

RATIONALE/NEEDS

Rationale—To:

- Eliminate barriers to college for students historically underrepresented in higher education
- Fuel economic development in Montgomery County
- Enhance lives and enrich communities in Montgomery County

Identified Needs/ Challenges

- Low college readiness/ underprepared/more likely to be placed in remedial courses
- Low college enrollment, retention, and graduation with bachelor's degree
- Limited supports for career readiness
- Underrepresented in STEM fields

INPUTS

Structures Instituted and Resources

Structures

- MOU between MCPS, MC, and USG
- ACES Strategic Plan
- Advisory Council
- ACES leadership and operational structure: 6 committees with representation from MCPS, MC, USG
- Strategic Communication Plan
- Network of support/ services—Pathway to a bachelor's degree
- ACES Alumni network

Staff

- 14 FTE ACES coaches in MCPS high schools
- 5 FTE ACES program staff at MC
- 5 FTE ACES coaches at 3 MC locations
- 1 FTE ACES coach at USG
- 3 FTE career readiness staff members at USG

Other Resources

- Business Engagement
- Community Partnerships
- ACES scholarships
- Operations (e.g., student meals, transportation to programs, supplies)
- Grants, foundations
- Local and state funding
- Workshops/Modules

OUTPUTS/RESULTS

Activities/Interventions: What we do/Who is involved

Activities at MCPS

- Outreach prior to Grade 10
- Recruitment and application in Grade 10 to begin in Grade 11
- Enroll 60 11th graders and retain 60 12th graders for a total of 120 students per high school per year
- College guidance, career readiness preparation, financial literacy guidance (e.g., workshops)
- Targeted supports differentiated by student need (e.g. academic, financial)
- Individual meetings with coaches
- Family outreach and engagement
- Transition support from MCPS to MC

Activities at MC

- Targeted academic supports, college guidance, and career readiness programming (e.g., workshops)
- Individual meetings with coaches
- Family outreach and engagement
- Transition support from MC to USG

Activities at USG

- Variety of academic supports, college guidance, and career readiness programs (e.g., workshops)
- Individual meetings with coaches
- Facilitation of professional internships or experiential opportunity
- Transition support from USG to career (e.g. workforce, graduate school, military, entrepreneurship, Peace Corps)

Coordination of services

- Development/Fundraising
- Periodic data reports and evaluations
- Implement Communication Plan
- Implement Strategic Plan

Who is Involved

- Approx. 1,680 students in MCPS per year; about 1,000 at MC over several cohorts; 90 at USG to date
- Families, coaches, administrators, MCPS counselors, employers, College/Career Information Coordinators (CCIC)

Immediate Results/Program-level Documented Evidence of Service Delivery

MCPS High schools

- Number of students applying/enrolled in ACES per school year
- Number and types of ACES programming for students/families
- Number of participants in various ACES program opportunities
- Number of individual meetings with coaches
- Participants' reports of benefits from ACES programming
- Self-reports of career readiness competencies
- Number of students retained in ACES program
- Number of students in honors, AP, IB, dual enrollment courses
- Number of students applying to college/completing financial aid applications
- Number of students awarded college scholarships/year

Montgomery College (MC)

- Number of ACES students enrolled per semester/year
- Number of eligible students who receive financial aid/ and scholarships/year
- Number and types of ACES programming for students/families
- Number of participants in various ACES program opportunities
- Number of individual meetings with coaches
- Participants' reports of benefits from ACES programming
- Self-reports of career readiness competencies
- Number of students enrolled in credit bearing courses
- Year-to-year credit progression and retention rates
- Number of students earning credit for prior learning
- Number of students completing a career experiential opportunity/year
- Number of students completing a career plan
- Number of students completing associate's degree
- Number of students applying and admitted to a 4-year institution

Universities at Shady Grove (USG)

- Number of ACES students transferred from MC
- Number of ACES students enrolled per semester/year
- Number of eligible students who receive financial aid and scholarships/year
- Number and types of ACES programming
- Number of participants in various ACES program opportunities
- Number of individual meetings with coaches
- Participants' reports of benefits from ACES programming
- Self-reports of USG career readiness competencies
- Year-to-year credit progression and retention rates
- Number of students completing a career experiential opportunity/year
- Number of students completing a bachelor's degree
- Number of students employed/in graduate school/military/other

EXPECTED OUTCOMES

Short-term Outcomes

ACES students at MCPS

- Complete college-track courses
- Achieve Maryland college and career readiness standards
- Increase college and financial aid knowledge/financial literacy
- Enroll in postsecondary education at MC or other colleges
- Obtain financial aid as needed to reduce financial barriers
- Demonstrate career readiness competencies

ACES students at MC

- Maintain satisfactory academic performance (good academic standing)
- Take fewer developmental courses relative to non-ACES peers
- Have higher year-to-year retention rates relative to non-ACES peers
- Maintain eligibility for ACES scholarships/financial aid
- Increase understanding of career opportunities and financial literacy
- Complete their associate's degree within 6 semesters
- Demonstrate career readiness competencies
- Earn industry certificates
- Transfer to a 4-year program

ACES students at USG

- Maintain satisfactory academic performance (good academic standing)
- Maintain eligibility for ACES scholarships/financial aid.
- Have higher year-to-year retention rates relative to non-ACES peers
- Earn a bachelor's degree within 6 semesters of transfer
- Demonstrate USG career readiness competencies
- Progress from USG to successful careers/graduate school/military/ other

Long-term Impact

ACES participants

- Increase parity/equity in high school graduation, college enrollment, and completion with traditionally represented college-going students
- Graduate with a BA/ BS degree while demonstrating career competencies
- Achieve professional placement within a year of graduation
- Matriculate with minimal college debt burden
- Increase life-long earning potential

ACES Achieving Collegiate Excellence & Success

1034.20 • EGPS • 3/20

ACES

Five-Year Strategic Plan

Spring 2018

TABLE OF CONTENTS

PURPOSE

The purpose of this document is to provide a clear and actionable strategic direction for the Achieving Collegiate Excellence and Success (ACES) program over the next five years. The Strategic Plan guides Montgomery County Public Schools (MCPS), Montgomery College (MC), and the Universities at Shady Grove (USG) in their work to implement a shared set of objectives that improve, enhance, and provide a roadmap for expansion of the ACES program.

BACKGROUND

ACES is a program that began as a collaboration between Montgomery County Public Schools (MCPS), Montgomery College (MC), and the Universities at Shady Grove (USG). The program provides a web of support services that facilitate the successful transition, retention, graduation, and transfer of participating ACES students from high school, through MC, and on to a program offered at the USG campus or at a University System of Maryland (USM). This trajectory is called the ACES Pathway.

It is important to note that students enrolled in the ACES program may elect to participate during high school, and then either elect to attend MC (or another institution of higher education) for four years, or to attend MC for two years and then select a college other than one represented at USG to complete their degree. An ACES high school student also may go directly to a four-year institution, a career preparation program, or another two-year college.

In support of both state and national initiatives on degree completion, ACES increase access to higher education for identified MCPS students who have the desire and potential to achieve a baccalaureate degree and whose likelihood of academic excellence and success would be significantly enhanced by receiving the targeted support and structural guidance provided by the ACES Program. The target populations for the ACES program are those students who are at-risk based on criteria from the U.S. Department of Education. These include students who are economically disadvantaged, disabled, the first generation of their family to attend college, members of an underrepresented group in higher education, or who are identified by MCPS as at-risk for not attaining a college degree.

Three partner institutions are involved in providing an integrated set of services throughout the ACES Pathway. All ACES students enter the first phase of the program in high school. Those who choose to continue on the ACES Pathway begin phase two at MC, and enter phase three when they matriculate to USG and work to complete their baccalaureate degree. The presence of an ACES coach at

each of the respective institutions is a central and essential element to completing the Pathway. Coaches foster strong relationships and provide ongoing support for students. These efforts focus on ensuring that ACES students will meet the goal of graduating with a baccalaureate degree, in collaboration with counselors, faculty members, administrators, and peers across the institutions.

Program Elements of the ACES Pathway

Phase 1—Montgomery College at MCPS Grades 11 & 12: Academic coaching, career and college counseling, college tours, preparation for college placement testing, social skills workshops, life skills workshops, individual assistance with college applications and financial aid, information sessions for parents/guardians, summer bridge programs at MC and USG, and transition services to college.

Phase 2—Montgomery College: Academic coaching, summer bridge/first-year experience seminar, transfer advice, tutoring, leadership development, financial aid and scholarship counseling, early access to courses offered at USG, visits to USG and other colleges.

Phase 3—USG: Guaranteed admission to degree programs offered through USG for ACES students matriculating from MC by nine USM institutions, with completion of an Associate's degree, academic advising, orientations and transfer success workshops, academic success support, leadership development, financial aid and scholarship counseling, interdisciplinary team activities, career development, mentoring, internship and job placement.

In the first four years of the program, evidence suggests that students who participate in the program are more likely to be successful in high school than their non-ACES counterparts who face similar barriers. Best practices produced by this partnership will result in systemic enhancements and interventions for population of students who are underrepresented in higher education, beginning at the high school level and continuing through to college completion.

CURRENT STATE OF ACES

The ACES program currently operates within 13 of the 25 comprehensive high schools in MCPS. MC employs 18 ACES coaches: 13 in the high schools, and 5 on the College's three campuses. USG also employs an ACES Success Coordinator. Together, this group currently supports over 2,000 students across all three institutions.

ENROLLMENT IN ACES AS OF MAY 2017

MONTGOMERY COUNTY PUBLIC SCHOOLS		
GRADE LEVEL	GRADE 12	559
	GRADE 11	713
	GRADES 9–10	47
HIGH SCHOOL	MONTGOMERY BLAIR	122
	CLARKSBURG	120
	ALBERT EINSTEIN	118
	GAITHERSBURG	115
	JAMES HUBERT BLAKE	66
	JOHN F. KENNEDY	109
	NORTHWOOD	113
	PAINT BRANCH	69
	ROCKVILLE	117
	SENECA VALLEY	121
	SPRINGBROOK	66
	WATKINS MILL	81
	WHEATON	102
	TOTAL	**1,319**

ENROLLMENT IN ACES AS OF SEPTEMBER 2017

MONTGOMERY COLLEGE STUDENTS		
MC	ACES 2014	153
	ACES 2015	138
	ACES 2016	220
	ACES 2017	277
	TOTAL	**788**

ENROLLMENT IN ACES AS OF SEPTEMBER 2017

UNIVERSITIES AT SHADY GROVE		
INSTITUTION	SALISBURY	3
	TOWSON	1
	UMBC	12
	UMD COLLEGE PARK	17
	UMD EASTERN SHORE	1
	UMUC	4
	UB	1
	UMD BALTIMORE	1
	TOTAL	**40**

SUMMARY OF ACES STAFFING COSTS

		MCPS	MC	USG	ALL INSTITUTIONS
ACES GRAND TOTAL COST		$261,453	$2,906,454	$153,250	$3,321,157
STAFFING COSTS	**QTY**		**COST**		
		MCPS	MC	USG	TOTAL
MC OVERALL ADMINISTRATIVE STAFF COSTS	5	$0	$506,400		
USG OVERALL ADMINISTRATIVE STAFF COSTS	5			$65,250	$544,650
ACES IN THE HIGH SCHOOL					
MCPS Professional Part-time		$38,330			
MC High School Coaches (includes benefits)	14		$1,316,806		
STAFFING COSTS	**QTY**		**COST**		
Student Assistants			$24,500		
Faculty/Tutoring and Workshops			$98,000		
TOTAL ACES HIGH SCHOOL		$38,330	$1,439,306	$0	$1,477,636
ACES ON CAMPUS					
ACES Coaches	5		$421,623	$65,000	
Student Assistants			$44,700		
Tutoring and Workshops			$43,060		
TOTAL ACES ON CAMPUS		$0	$509,383	$0	$574,383
TOTAL STAFFING/SUPPORT COST		$38,330	$2,455,089	$103,250	$2,595,669

Additionally, each institution is faced with a portion of the costs to effectively operate the ACES program. A snapshot of operational costs by institution is shown below:

SUMMARY OF ACES NON-PERSONNEL COSTS

OPERATING COSTS	COSTS			ALL INSTITUTIONS
	MCPS	MC	USG	TOTAL
MC OVERALL OPERATING COSTS		$18,125		$18,125
ACES IN THE HIGH SCHOOL				
Printing			$6,000	
Promotional Materials			$9,000	
Meals/Snacks		$175,000	$16,000	
Office Supplies	$26,087	$47,450	$6,000	
Summer Program Transportation	$10,636	$52,500	$13,000	
Summer Program Transportation	$30,000			
College Visits Transportation		$25,500		
Contracted Services	$156,400	$17,500		
TOTAL ACES HIGH SCHOOL	**$223,123**	**$314,950**	**$50,000**	**$588,073**
OPERATING COSTS		**COSTS**		**ALL INSTITUTIONS**
ACES ON CAMPUS				
Office Supplies		$10,000	$1,000	
Printing			$2,500	
Promotional Materials			$4,000	
USG ACES Database (Titanium)			$1,500	
ACES MC Orientation		$36,890		
ACES MC Orientation		$9,000		
ACES USG Welcome Event			$2,500	
Meals/Snacks		$38,400	$6,500	
Transportation		$24,000		
Workshops			$2,500	
TOTAL ACES ON CAMPUS	**$0**	**$118,290**	**$20,500**	**$138,790**
TOTAL OPERATING COST	**$223,123**	**$451,365**	**$70,500**	**$744,988**

OUR MISSION & VISION

OUR MISSION

The mission of the ACES program is to increase baccalaureate degree attainment and professional success for students who have been historically underrepresented in the higher education system. ACES is a collaboration among Montgomery County Public Schools, Montgomery College, and the Universities at Shady Grove designed to provide a structured and supportive pathway to college completion.

OUR VISION

ACES is a groundbreaking approach to education and economic development that transforms students, schools and communities. By eliminating barriers for students who have been historically underrepresented in higher education ACES builds equitable opportunities for all students to thrive in college and career.

ACES inspires at-promise students—often the first in their family to pursue higher education—to achieve their academic and professional dreams. ACES helps to make those dreams possible by providing the academic support, college guidance, and career readiness for its students to succeed.

Through ACES:

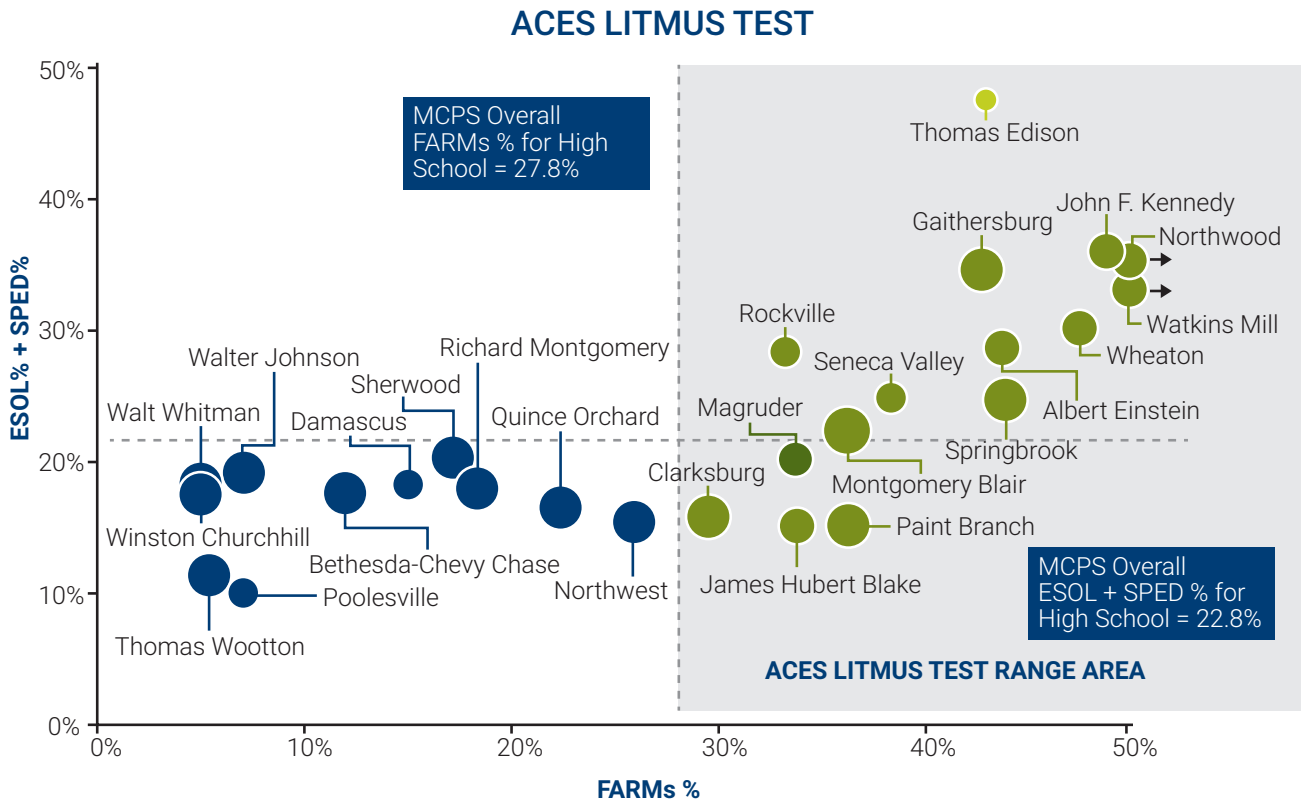
- **We eliminate the barriers to college** by engaging at-promise students at a critical moment during their high school career.
- **We give students a pathway to prosperity** with the skills and knowledge required to thrive in college and into the workplace.
- **We fuel economic development** in our County by contributing a more educated, skilled, and diverse workforce.
- **We enhance lives and enrich communities** by taking an individualized approach to support the success of each student at every stage of their academic and professional career.

PROGRAMMATIC EXPANSION PRINCIPLES

In terms of increasing the number of ACES schools—and, ultimately, the number of students served—ACES leadership proposes the following growth and expansion initiatives for the next five years:

I. Institute a moratorium on growth to additional high schools beginning with the 2018–2019 school year to enhance breath of services.

ACES leadership is interested in expanding the impact of the ACES program by enhancing the depth of supports in the high schools, reaching students at a younger age, and increasing the level and breadth of services available to ACES students to further encourage successful completion of a baccalaureate degree. The ACES program will continue



to operate in the 13 MCPS high schools. In the 2017–2018 school year, ACES will expand to Colonel Zadok Magruder High School (Magruder HS). The student population at Magruder HS is similar to the population of the current ACES schools. The Free and Reduced-Price Meals System (FARMS) data ranks Magruder HS above three existing ACES high schools, in terms of percentage of eligible students. As a result, there was agreement to expand to Magruder HS, then to impose the three-year moratorium to focus efforts on offering a higher level of service.

- Over the next three years, ACES will operate within 14 MCPS high schools. After this period of implementation of the strategic plan, ACES leadership will revisit expansion opportunities.

II. Utilize a set of criteria that qualifies high schools to be put into consideration for adding (or sunsetting) the ACES program

ACES leadership has identified the need for a more strategic process to determine when and why high schools should be added (or removed) from the list of ACES program schools. Additionally, ACES leadership developed criteria that will be used to evaluate the status of high schools every two years. These criteria will provide ACES leadership with a guide by which comprehensive high schools should be considered as candidates for the ACES program and through which high schools may no longer meet the criteria for ACES program. FARMS trend data can be incorporated into the decision-making process over a two-year period.

The criteria set will look at multiple indicators to assess the success rates of students with the ACES profile in their path to entering college.

III. Continue with current grade-level enrollment guidelines

ACES currently enrolls 60 students per year in Grades 11 and 12 at each ACES high school. The recommendation is to continue with this number of students in each cohort group, for a total of 120 students per school. Magruder will be the 14th school in 2017-2018 school year.

ACES programs currently operating within each MCPS high school will continue to be limited to a cohort of 60 students at each grade level. ACES will reassess its protocol for what to do when seats become open to ensure all seats are filled at all times across the grade levels.

IV. Measuring Effectiveness of ACES Initiatives

Developing effectiveness measures and measurement techniques has been identified as a strategic objective. This is covered in more detail in **Section V**.

The initiatives set forth in this document are meant to improve upon the overall success of students in the ACES program. The current student profiles of ACES students at each institution are as follows:

ACES 2016–2017 AT MCPS - CHARACTERISTICS

	TOTAL N=1208		GRADE 11* N=664		GRADE 12 N=544	
CHARACTERISTICS	**N**	**%**	**N**	**%**	**N**	**%**
GENDER						
Female	759	62.8	428	64.5	331	60.8
Male	449	37.2	236	35.5	213	39.2
RACE/ETHNICITY						
Asian	69	5.7	38	5.7	31	5.7
Black or African American	473	39.2	261	39.3	212	39.0
Hispanic/Latino	609	50.4	336	50.6	273	50.2
White	34	2.8	14	2.1	20	3.7
Multiple	21	1.7	13	2.0	8	1.5
Pacific Islander and American Indian		<=10		<=10		<=10
SERVICES						
Current ESOL	85	7.0	64	9.6	21.0	3.9
Current FARMS	679	56.2	385	58.0	294.0	54.0
Current Special Education	89	7.4	53	8.0	36.0	6.6
APPLICATION INDICATOR						
First Generation	965	79.9	535	80.6	430	79.0

SOURCE: *MCPS Student Data File: First Generation Source - Self-reported from ACES Program Data File Note: Demographics and services as of December 2016 Enrollment. First Generation self-reported on ACES application*
NOTE: *ESOL = English for Speakers of Other Languages; FARMS = Free and Reduced-Price Meals System*
**Includes 46 students who are currently in Grade 10 and one student in Grade 9 based on credits earned.*

The primary focus of the ACES program is on helping students minimize and overcome barriers to academic success. ACES leadership has therefore decided to focus the next five years on initiatives that will increase student success, progression, graduation, and college and career readiness. The following pages of this document outline the stated strategic objectives.

Our vision is to utilize the strategic objectives and success of the ACES program as a pilot for enhancing the standard operating procedures and overall level of service offered by the three coordinating institutions in ways that promote student success across a broader population of students in Montgomery County.

ACES 2016–2017 AT MCPS - BY GRADE LEVEL AND SCHOOL

		TOTAL N=1208	
		N	%
GRADE LEVEL	GRADE 12	544	45.0
	GRADE 11	617	51.1
	GRADE 10	47	3.9
SCHOOL	BLAIR	122	10.1
	CLARKSBURG	121	10.0
	EINSTEIN	118	9.8
	GAITHERSBURG	116	9.6
	KENNEDY	115	9.5
	NORTHWOOD	113	9.4
	ROCKVILLE	118	9.8
	SENECA VALLEY	121	10.0
	SPRINGBROOK	66	5.5
	WATKINS MILL	83	6.9
	WHEATON	112	9.3
	NON-ACES	3	0.2

SOURCE: *MCPS Student Data File*
NOTE: *Classes may include students who are in their 3rd year of ACES due to lagging graduation*
NOTE: *Grade level and school based on December 2016 Official Enrollment File*

AVERAGE STUDENT PROFILES OF MCPS ACES STUDENTS

MONTGOMERY COUNTY PUBLIC SCHOOLS
• Average GPA: 2.74 • Percent Meeting ACT/SAT Milestone*: 18.3

**ACT of 24+ or SAT of 1650+; Additional demographic information available by reviewing school profiles for MCPS*

UNIVERSITIES AT SHADY GROVE	MONTGOMERY COLLEGE
• Average GPA: 3.30 • Average Number of Credits: 13.58 • Average Age: 20	• Average GPA: 2.64 • Average Number of Credits: 12 Credits Enrolled/ 6 Credit Earned Per Semester • Average Age: 19 Years Old

OUR STRATEGIC OBJECTIVES

The ACES leadership team has identified three strategic objectives that will guide improvements to and expansion of the aces program over the next five years:

A. Expand the ACES Program

B. Enhance the ACES Program Through a Robust Career Readiness Component

C. Implement Operational Enhancements in Data Metrics, Communications and Fundraising

The following pages define each strategic objective in more detail and identify key action items, required resources, opportunities for coordination with existing initiatives, an estimated timeline for implementation, funding requirements, and defined ways to measure effectiveness.

A. Expand the ACES Program

PROBLEM STATEMENT

The mission of the ACES program is to increase access to higher education for MCPS students who have barriers to earning a baccalaureate degree and whose likelihood of academic excellence and success would be significantly enhanced by receiving targeted support and structural guidance.

There are multiple ways to consider expansion of the ACES Program. The ACES team considered the following options: adding more schools, increasing the number of students within existing ACES schools by expanding the 11 and 12th grade cohorts, or increasing the number of ACES students by starting the program earlier than the 11th grade. Below is a summary of costs and areas to consider with the three options:

OPTION	DETAILS	COST*
ADD MORE SCHOOLS	Opportunity to reach other school communities.	$194,000 per additional school (120 students at full capacity).
ADD MORE 11TH &12TH GRADERS IN EXISTING SCHOOLS	Opportunity to serve more students in schools where the program has already been established.	$100,000 per additional coach (including administrative oversight cost) at full implementation of additional 120 students.
START PROGRAM IN 9TH & 10TH GRADE	Opportunity to offer support and early intervention to improve academic profile of students and strengthen transition to college and career readiness.	$100,000 per additional coach (including administrative oversight cost) at full implementation of additional 120 students.

**Every 6 additional schools (or 720 students) add 3 additional coaches = $255,000 (2 at MC and 1 at USG).*
Every 5 (or 600 students) additional schools, add 1 admin support to program = $50,000.

Recommendation Option: Expand to an additional school; explore options to start the ACES program earlier.

The ACES leadership has determined to expand to an additional school in the 2018-19 school year. Based on multiple factors; including the number of students that could benefit from participation in the ACES program to access higher education; the ACES program will expand to Col. Zadock Magruder High School. The leadership also asked the for an in-depth rationale and proposed plan to start the program in the 9th grade for students. Below is a brief history of previous work in this area, current state and the specific scope to develop such a plan.

History of Early Start to ACES

The ACES leadership has determined that college and career readiness should begin in Grade 9 when students enter the ACES program. In order to accomplish this goal, there is a need for additional formal resources and programming so that students are on the path to enter credit-bearing courses at MC upon graduation from high school.

Currently, a high percentage of ACES students are enrolled in at least one developmental course upon entering MC. The chart below shows the percentages of ACES students requiring developmental courses over the past three cohort years.

NUMBER OF ACES STUDENTS REQUIRING DEVELOPMENTAL COURSES BY COHORT

	ACES '14		ACES '15		ACES '16	
DEVELOPMENTAL ENGLISH	182	60%	111	54%	155	64%
DEVELOPMENTAL ENGLISH	173	57%	95	46%	131	54%
DEVELOPMENTAL MATH	254	84%	171	83%	204	85%
TOTAL # ACES FRESHMEN ENROLLED FALL SEMESTER IMMEDIATELY FOLLOWING HIGH SCHOOL GRADUATION	**304**		**206**		**241**	

When the ACES Program was initially developed, a decision was made to include a Grades 9 and 10 component led by MCPS. The MCPS Division of School Counseling, Residency and International Students collaborated with school-based counselors and college and career information coordinators from the ACES high schools to prepare a curriculum for a summer program for "ACES-like" students. A basic set of goals focused on the use of Naviance materials throughout the school year was incorporated into the summer program. A process was put in place to identify the ACES-like students and their families in order to register them for the summer program. Schools received an allocation of implementation funds to use for activities—such as local college field trips with this group of students—and to pay 10-month staff members to conduct the program, focusing on college awareness. Some schools combined funds to incorporate motivational speakers into the sessions.

The variation across schools and experiences with the program posed challenges with fully implementing the model as initially proposed. Some students and families may not have been aware that participation in Grades 9 and 10 ACES activities did not automatically mean that the student was an "official" ACES student once they reached Grade 11, and it did not mean automatic acceptance into the ACES program. As a result of this initial confusion—and in order to differentiate the program from the official application process for the Grades 11 and 12 ACES program—the decision was made to refer to this set of activities as a college-readiness program rather than a Grades 9 and 10 ACES program. Finally, activities held in June posed conflicts for students attending summer school classes.

MCPS has recently enhanced its focus on college and career readiness, incorporating many of the existing features of the

Grades 9 and 10 college-readiness program into supports and services available for all students. This is particularly evident in the decision to make Naviance available at the middle school level and to add specific modules to the high school package. There is a requirement for all Grade 8 students to complete selected modules before transitioning to high school and for high school students to complete the High School Graduation College and Career Planner.

The shifts in focus on college and career readiness at the district and state level, the high number of ACES students needing developmental courses, and our experiences with inconsistent implementation of the current Grades 9 and 10 plan have demonstrated that innovative ideas to enhance support for early high school students will be key to this strategic plan and to the ultimate success of the ACES program. In this section, a detailed proposal identifies an ACES cohort of students as they transition from 8th grade to high school and examines the academic supports for English and mathematics available to those students in the first two years of high school, with the goal of decreasing the number of ACES students who will require remedial courses once they reach college.

According to the 2012 report, Complete College America, descriptive studies suggest that students who participate in developmental courses have lower rates of persistence that students placed in college courses. Less than 50 percent of students in "remediation" complete the entire sequence, particularly men, older students, African-American students, and part-time students (Bailey, Jeong, & Choo, 2009). Only 10 percent of students who enroll in the lowest levels of mathematics remediation courses ever complete a college-level course (Bailey, Jeong, & Choo, 2009). In 2006, the Alliance for Excellent Education estimated that the cost of remediation nationwide was $1.4 billion in the form of direct costs to students and the institutions that they attend.

BEST PRACTICES LEARNED OR OBSERVED

A review of early high school outreach efforts to improve college readiness identified several particularly promising best practices. These are embedded in the ACES strategic plan.

- In Washington state, programming for ACES-like students begins in middle school when students begin working on their "High School & Beyond Plan." Advisors are matched with groups of 20 students; meetings range from the full 20 students to one-on-one coaching sessions with the advisor. The Washington curriculum includes soft skills such as time management and taking initiative, as well as units on "college knowledge" and financing.
- Programming through Northern Virginia Community College (NOVA) begins in middle school and includes material on career interests, assessments, academic planning, and goal setting. In high school, the program transitions into focusing on college and career readiness.
- Several regions incorporate a technology-based college and career readiness program that addresses key components of a college-going approach to early high school, including career readiness, interest inventories, course selection, and career preparation aligned with postsecondary goals.

The College Board National Office for School Counselor Advocacy suggests "Eight Components of College and Career Readiness Counseling" that will improve the college readiness of students. The eight components include:

1. Build a college-going culture based on early college awareness by nurturing in students the confidence to aspire to college and the resilience to overcome challenges along the way.
2. Advance students' planning, preparation, participation and performance in a rigorous academic program that connects to their college and career aspirations and goals.
3. Ensure exposure to a wide range of extracurricular and enrichment opportunities that build leadership, nurture talents and interests, and increase engagement with school.
4. Provide early and ongoing exposure to experiences and information necessary to make informed decisions when selecting a college or career that connects to academic preparation and future aspirations.
5. Promote preparation, participation and performance in college and career assessments by all students.
6. Provide students and families with comprehensive information about college costs, options for paying for college, scholarship processes, and financial aid eligibility requirements, so they are able to plan for and afford a college education.
7. Ensure that students and families have an early and ongoing understanding of the college and career application and admission processes so they can find the postsecondary options that are the best fit with their aspirations and interests.
8. Connect students to school and community resources to help the students overcome barriers and ensure the successful transition from high school to college.

The best practices noted above were generally incorporated into the existing Grades 9 and 10 model, but they lacked the intensive focus required to fully implement a comprehensive program, particularly for students who are the first in their families to attend college. They were also implemented as interventions and not a full program (as is the case in the ACES 11 and 12th grade years). Without a strong champion within the school working to establish a college-going mentality in the first two years of high school and building relationships with that cohort of younger students and their families, the program is naturally weighted towards supporting older high school students. Students and families need to fully understand the options available to them and the steps necessary to achieve true college and career readiness. This includes enabling students to enroll in credit-bearing courses as they enter college and eliminating the need for remedial courses—a key goal of the ACES partnership.

Excellence starts early: focusing on college preparedness during the early high school years ensures that students can be successful in college-level courses upon matriculation. The operations workgroup for ACES has been tasked to develop a plan that:

- Involve all ACES schools
- Align the process for selection of students a model that starts ACES in the 9th grade
- Building early college awareness.
- Advancing students' performance in a rigorous academic program.
- Provide a wide range of extracurricular and enrichment opportunities that build leadership and nurture talents and interests within the school.
- Provide early and ongoing exposure to experiences and information necessary to make informed connects to academic preparation and career opportunities.
- Involve students and families in workshops related to college such as costs, options for paying for college, and the financial aid and scholarships.
- Connecting students to school and community resources and learning opportunities in order to help students overcome barriers and ensure their successful transition from high school to college.
- Have a set of clear metrics for success.

TIMELINE FOR IMPLEMENTATION

Implementation will begin in the 2017-2018 academic year with the hiring of an ACES coach at Magruder HS. A draft of a plan for options to expand to the 9th grade year will come forward to ACES leadership in the summer of 2018.

FUNDING REQUIREMENTS

OPTION	DETAILS	COST*
ADD MORE SCHOOLS	Opportunity to reach other school communities.	$194,000 per additional school (120 students at full capacity).
START PROGRAM IN 9TH & 10TH GRADE	Opportunity to offer support and early intervention to improve academic profile of students and strengthen transition to college and career readiness.	$100,000 per additional coach (including administrative oversight cost) at full implementation of additional 120 students.

**Every 6 additional schools (or 720 students) add 3 additional coaches = $255,000 (2 at MC and 1 at USG). Every 5 (or 600 students) additional schools, add 1 admin support to program = $50,000.*

B. Enhance the ACES Program Through a Robust Career Readiness Component

PROBLEM STATEMENT

While the central mission of the ACES program is focused on baccalaureate degree completion, ACES leadership has determined that it is also necessary for participants to be career-ready upon graduation. There is a need for additional formal resources and programming around career readiness and career planning at each pathway level, MCPS → MC → USG, so that ACES students are well-equipped to enter the workforce upon graduation.

According to a 2015 national study, "four in five employers report that recent public high school grads have at least some gaps in preparation for typical jobs and advancement in their company." In that same study, a majority of college instructors reported that fewer than half of their students were adequately prepared in critical thinking, problem solving, and written communication—all critical skills identified by the National Association of Colleges and Employers (NACE). Additionally, a 2013 Gallup report found that less than 28% of high school students and 50% of college students were developing real-world problem-solving skills.

Data gathered by the National Center for Education Statistics (NCES) in 2012 shows significant absence of career exploration and preparation in public high schools. In line with the demographics of ACES students, only 24.1% of Black and African-American students, 18% of Hispanic and Latino students, and 23.4% of Asian students participated in an internship or apprenticeship related to their career goals. Only 25.9% of low-income students participated in services that provided job-search skills or interview training. Despite these national trends, ACES does not have a formal component for addressing student need for access to career exploration and readiness.

When looking at this data, it is important to understand that students reported that their career thinking was primarily influenced by parents and family members. Parents or family members of ACES students may have limited access to college and career planning resources, so it is

therefore critical that ACES students be able to work with a career coach or counselor who can provide accurate and consistent career guidance.

Furthermore, the National Student Clearinghouse reports that only 6% of low-income, minority students in the class of 2008 earned an associate, bachelor's or advanced degree in a STEM field within six years. However, data from the U.S. Bureau of Labor Statistics projects that careers in STEM will increase by 1,000,000 jobs between 2012 and 2022. A career readiness component of ACES will encourage students to explore STEM careers and be ready with 21st-century workforce readiness skills upon completion of a degree.

BEST PRACTICES LEARNED OR OBSERVED

In a national 2015 study, students who reported they felt extremely or very well prepared for college and their professions had attended high schools that excelled at providing career readiness resources and career exploration opportunities.

According to the College Board National Office for School Counselor Advocacy, there are eight components of college and career readiness counseling that must be applied at the high school level: College Aspirations; Academic Planning for College and Career Readiness; Enrichment and Extracurricular Engagement; College and Career Exploration and Selection Processes; College and Career Assessments; College Affordability Planning; College and Career Admission Processes; and Transition from High School to College Enrollment. Currently, ACES is successful in addressing college-related pieces of these components. By incorporating a career-readiness component to the ACES program, students should be both college and career ready with academic and career support as indicated in the components above.

In 2014, the NACE Career Readiness Committee conducted a study to identify competency areas that serve as groundwork for career-readiness. Over six hundred representatives from various business and professional organizations that recruit in universities indicated the extent to which various competencies were essential for new college hires' success. This resulted in the identification of eight competencies associated with career readiness: Critical Thinking/Problem Solving; Oral/Written Communications; Teamwork/Collaboration; Digital Technology; Leadership; Professionalism/Work Ethic; Career Management; and Global/Intercultural Fluency.

Employers surveyed by NACE also recommended that students gain hands-on, real-world experiences during their education and master career-readiness skills in order to have a competitive advantage in the workforce.

Career readiness components are embedded in the curriculum at Miami Dade College. Students can identify their strengths and values, set short- and long-term goals, identify the professional and educational requirements for them to reach their goals, and participate in speed mock-interviews; all of these components would be included in career readiness activities for ACES students. Miami Dade College's director of workforce readiness and internship initiatives also recommends that career development programs be served in "bite-sized sessions" spread throughout each semester.

At Towson University, the career center has successfully promoted awareness of developing and communicating career readiness competencies. Towson University has specifically focused on career advisory programs that allow for one-on-one meetings, career readiness workshops, and development of career plans.

The Capella University Career Center focuses on career readiness amongst nontraditional students, or first-generation college students who may have limited professional networks. The Career Center boosts career readiness among these students by applying an educational approach to career counseling and ensuring that members of all involved institutions are invested in the success of their students. Similarly, it is critical for ACES programming to ensure that each partner institution collaboratively invests in students' career success.

A review of literature on increasing minority participation in STEM fields has identified key elements for developing effective programs. These elements focus on pipeline and career pathways that include summer programs, research opportunities, professional development activities, academic support, and mentoring.

College-based career readiness programs generally match a student with a mentor who guides them throughout their

career development process. These programs generally start no later than the second year of college, and they can last anywhere from 1-4 years. College mentorship programs are often supplemented by a one-to-two credit career development course or an orientation program before the beginning of classes. These programs typically have supplemental workshops and coaching that cover topics like career exploration, resume writing, and interview practice. Company visits or job shadowing are also important aspects to these career development programs. Mentoring has significant impacts on college success: minority college students with mentors show high GPAs and are twice as likely to persist when compared to non-mentored minority students, and undergraduate students report that mentoring helped them to develop professional skills and behaviors.

Montgomery Public County Schools (MCPS) are currently utilizing Career and Technology Education (CTE) programs to prepare students with technical and workplace skills. MCPS currently offers 34 CTE programs, many of which focus on careers in the STEM field. Damascus High School provides the Academy of Information Technology, which offers students courses in computer maintenance, programming, and web design. Wheaton High School offers Project Lead the Way: Biosciences and Engineering, which provides students with courses in the biomedical and engineering fields. These CTE programs provide students with opportunities to gain real-world experience and learn the skills necessary to succeed in their desired field.

Lastly, ACES is currently piloting a career readiness program of 100 ACES students. The HESS Construction Company-funded Career Experience Opportunities (CEO) program has shown significant early outcomes and observations. Data has shown that CEO students are more likely to select a major early when compared to their non-CEO ACES peers; 90% of CEO students selected a major while only 83% of all MC ACES students have selected a major. Students in the CEO program are also highly engaged: in summer and fall 2016, 89% of active students participated in at least one career readiness or experiential learning activity. In the Spring 2017 semester, over 50% of CEO students engaged directly with local employers through career experiential learning opportunities such as job shadowing and internships. More than half of these business interactions took place with STEM related employers.

OVERVIEW OF PROGRAMMATIC STRUCTURE

In order to accomplish the successful integration of a career readiness component of ACES, USG will oversee the development, staffing, and facilitation of a progressive program for all ACES students enrolled at either MCPS, MC, or in a program offered at USG. The program will be built upon concepts and activities that have proven successful through the Career Experience Opportunities (CEO) and Career Technology Education (CTE) programs, and on components of research-supported best practices. It will be specifically designed for success in three progressive segments and will grounded in the promotion and education related to the eight NACE career competencies:

- Critical Thinking/Problem Solving
- Oral/Written Communications
- Teamwork/Collaboration
- Digital Technology
- Leadership
- Professionalism/Work Ethic
- Career Management
- Global/Intercultural Fluency

Staffing and operational resources will be required for successful integration of the program. USG will hire and supervise staff members, including an Assistant Director and Career Readiness Coordinators. The Assistant Director will oversee the development of programming and processes and will serve as the business outreach representative for the program to ensure that Montgomery County businesses become aware of and engaged with the ACES program. Each level of the partnership will have Coordinators working with that specific student population.

They will ensure successful integration by utilizing existing resources. The Coordinators will work closely with the Director of ACES, other ACES staff members, and representatives at MCPS, MC, and USG to emphasize developing resources for students interested in pursuing STEM fields. The proposed Assistant Director of the career readiness component of ACES will become a member of the ACES Operational team, and other proposed staff members will collaborate on a regular basis with ACES, MCPS, MC, and USG staff members.

An onboarding phase of six months will be required for MCPS, MC, and USG to complete the following action items related to the development of the program:

- Adopt a singular, agreed-upon definition for "career readiness skills" across all three institutions based on National Association of Colleges and Employers (NACE) standards
- Develop a programmatic curriculum for each of the NACE professional competencies
- Create an agreed-upon career inventory plan/assessment to be used progressively across all three institutions
- Compile an inventory of MCPS programs that offer students the ability to earn workforce-ready skills and credentials such as CTE certifications
- Compile an inventory of MCPS, MC, and USG career services resources and programming offered to students
- Cross-train ACES staff on NACE career competencies and MCPS career tools, such as Naviance
- Develop an ACES class at MC that would include academic and career readiness components
- Develop an electronic repository for ACES students' career-readiness work and records
- Develop a system to track and report career data and statistics of ACES students that do not follow the MC to USG pathway

As part of the initial steps of expansion, a career advisory council will be organized with the goal of creating a county-wide plan for systemic change as it relates to career readiness of MCPS, MC, and USM at USG students. This council will be composed of program, academic, and industry representatives; it will finalize a Montgomery County-wide strategic plan for career readiness based on the assessment of outcomes from the ACES career-readiness expansion. After five years have passed from the initial expansion of career readiness to all ACES students, this strategic plan will be shared with the rest of the county with the goal of integrating successful career readiness programming to all students in Montgomery County.

Once these onboarding actions are completed, ACES will add career readiness components across the MCPS, MC, and USG segments. The following section details the goals and action items at each of these levels.

SEGMENT ONE (MCPS)

Segment One Summary

Segment one is comprised of career readiness programming across all ACES high schools. Two Career Readiness Program Coordinators will facilitate this programming; USG will provide additional supervision and administrative support. One Coordinator will focus on career readiness programming designed to help students build and practice NACE Career Competencies, while the other Coordinator will focus on building business partnerships and activities to engage students in career-based experiential learning. The coordinators will also work with existing ACES coaches to embed more career readiness programming into all MCPS-level ACES Summer Bridge activities. Activities in this segment will be focused on career interest inventory/assessment, career exploratory activities with business partners, career readiness workshops, and promotion of STEM academic pathways and dual-enrollment programs such as CTE programs. Curriculum and programming during this segment will touch upon all NACE career readiness competencies with special focus placed on learning and development outcomes related to oral and written communication and professionalism/work ethic.

Segment One Goals/Outcomes

Specific metrics tied to this goal include:

- 100% of MCPS ACES complete a Career Interest Profiler by the time they graduate from high school.
- 70% of MCPS ACES students complete at least two staff-led career readiness workshops or activities related to oral/written communication, professionalism/ work ethic, or other career readiness topics.
- 50% of MCPS ACES students will participate in a STEM-related career readiness activity.
- 70% of MCPS ACES students will complete a career experiential learning activity engaging with members of the business community. Examples could include career immersion trips, job shadowing at local industry sites, networking events, informational interviews, guest speaker representatives from the local business community, MCPS sponsored volunteering/internships, and professional written communication with a business professional, etc.
- Increase the percentage of MCPS ACES students that participate in programs to earn workforce ready skills and credentials (such as CTE Certifications) by 10–15%.
- Catalog and provide access and exposure to resources for ESOL students related to communication, STEM, and career readiness. This could include working to provide general resource information in multiple languages for students and families, as well as customized programming targeted for ESOL students. At least one annual service or intervention should be specifically aimed at ESOL students. Examples could include workshops aimed at celebrating workplace diversity, oral/written communication competency training that addresses common practices and idiosyncrasies of the American workplace, and guest speakers who both represent immigrant communities and are industry leaders.
- 70% of MCPS ACES students enrolled in workforce ready skills programs such as CTE Programs complete those programs and earn credentials/certifications.
- Track/collect student work on career readiness including Career Interest Profiler and other documents related to career readiness activities in segment one in a central electronic repository.
- Students will report an improvement in career readiness skills based on assessment data during segment one.

Segment One Key Action Items

- Provide ACES staff with printed materials that convey the value and benefits of work-ready skills programs such as CTE certification programs and how they can fit within a student's pathway to a 4-year degree.
- Engage more Montgomery County employers with career readiness activities impacting MCPS ACES students. Place a strong emphasis on increasing involvement of STEM employers.
- Reach out to ESOL support service providers and create a directory of available services.
- Create a calendar of career readiness activities with one activity per individual ACES high school per semester and at least one activity for each regional cluster of high schools per semester. Emphasize activities related to STEM, Oral/Written Communication, and Professionalism/Work Ethic.
- Develop data tools for tracking participation and outcomes related to STEM & career readiness.
- Develop and administer pre- and post- test/survey on career readiness skills/activities.
- Work with ACES high school and MC coaches to embed additional career readiness programming into all Summer Bridge activities.

SEGMENT TWO (MC)

Segment Two Summary

Segment two is comprised of career readiness programming across all three MC campuses; this programming is facilitated by one Career Readiness Program Coordinator with supervision and administrative support from USG. The MC Coordinator will focus on career readiness programming designed to help students build and practice NACE Career competencies, and building business partnerships and activities to engage students in career experiential learning. Programming will be focused on career planning, career and academic pathway research, career readiness workshops, and career exploratory/ experience activities. Curriculum and programming during this segment will touch upon all NACE career readiness competencies with special focus placed on learning and development outcomes related to critical thinking/problem solving, teamwork and collaboration, and leadership.

Segment Two Goals/Outcomes

Specific metrics tied to this goal include:

- 70% of MC ACES will complete a Career Cruising Interest Inventory by the time they graduate from MC.
- 70% of MC ACES students will complete at least two staff-led career readiness workshops or activities related to critical thinking/problem solving, teamwork and collaboration, leadership, or other career readiness topics.
- 40% of MC ACES students will participate in a STEM related career readiness activity.
- 70% of MCPS ACES students will complete a career experiential learning activity engaging with a member of the business community. Examples may include career immersion trips, job shadowing at local industry sites, networking events, informational interviews, guest speaker representatives from the local business community, mentoring, and internships, etc.
- 85% of MC ACES students will have a declared major by the end of their first semester at MC.
- 70% of MC ACES students will meet with a Career Readiness Program Coordinator to develop and discuss a career plan.
- Deliver at least one annual service or intervention focused on critical thinking/problem solving, teamwork and collaboration, leadership, or other career readiness topic that is customized for ESOL students.
- Track/collect student work on career readiness including Career Cruising Interest Inventory and documents related to career readiness activities in segment two in a central electronic repository.
- Students will report an improvement in career readiness skills based on survey and assessment data during segment two.
- 70% of ACES students will be able to identify at least three local employers in the industry they are targeting, as well as the credentials required for employment.

Segment Two Key Action Items

- Engage more Montgomery County employers with career readiness activities impacting MC ACES students. Place a strong emphasis on increasing involvement of STEM employers.
- Increase MC ACES students' access to tutoring and academic support in science and math through existing services at MC.
- Continue the development of tools for collecting participation and outcomes data.
- Create a calendar of career readiness activities with at least two activities on each MC Campus per semester. Emphasize scheduling activities related to STEM, Critical Thinking and Problem Solving, Teamwork/Collaboration, and Leadership.
- Develop career planning templates and tools for MC ACES students prior to the launch of segment two. Career planning tools should be designed for completion in one-time, individual consulting or group career planning sessions with Career Readiness Program Coordinators.
- Create regular career consultation schedules at each MC Campus.
- Increase the number of STEM scholarships & internship/ co-op scholarships available to MC ACES students.

- Develop a data collection method for career related information for students not attending MC.
- Work with MC on the development of a one-credit career readiness course for ACES students.
- Develop and administer pre- and post- test/survey on career readiness skills/activities.

SEGMENT THREE (USG)

Segment Three Summary

Segment three is comprised of career readiness programming at USG. It is facilitated by one Career Readiness Program Coordinator and receives additional supervision and administrative support from USG. The USG Coordinator will focus on career readiness programming designed to help students build and practice NACE Career competencies, and develop business partnerships and activities designed to engage students in career experiential learning. Programming will be focused on executing career plans, career readiness workshops, and securing internships/job placements. Curriculum and programming during this segment will touch upon all NACE career readiness competencies with special focus placed on learning and development outcomes related to digital technology, career management, and global/ intercultural fluency.

Segment Three - Goals/Outcomes

Specific metrics tied to this goal include:

- Reaching and maintaining a successful outcome rate for ACES students; at least 85% of students will matriculate to graduate school or be employed within nine months of graduation. 30% of placements will be in STEM careers.
- 50% USG ACES students will complete a team role or personality inventory such as the Myers-Briggs Type Indicator, True Colors, or Belbin by the time they graduate from USG
- 70% of USG ACES students will complete at least two workshops focused on improving the following NACE skills: Digital Technology, Career Management, Global/ Intercultural Fluency, or other career readiness topics during segment three.
- 80% of USG ACES students will meet with a Career Readiness Program Coordinator to discuss their resume, interview techniques, and job search/networking strategies.
- 80% of USG ACES students will complete an experiential learning activity from USG's business engagement toolkit. Examples include traditional internships, virtual internships, job shadowing, and team-based internships.
- 50% of USG ACES students will complete an e-portfolio to showcase industry-related work to potential employers.
- Deliver at least one annual career readiness intervention aimed at ESOL students to help them leverage global and intercultural fluency.
- Track/collect student work on career readiness including Career Interest Profiler and documents related to career readiness activities in segment three in a central electronic repository.
- Students will report an improvement in career readiness skills based on survey and assessment data during segment three.

Segment Three Key Action Items

- Develop data collection tools and methodology for capturing successful student outcomes within nine months of graduation.
- Establish common tools for student e-portfolios.
- Engage more Montgomery County employers with career readiness activities impacting USG ACES students. Place a strong emphasis on increasing involvement of STEM employers.
- Increase USG ACES students' access to tutoring and academic support in science and math.
- Create a calendar of career readiness activities with at least five activities at USG per semester. Emphasize scheduling activities related to STEM, Digital Technology, Career Management, and Global/Intercultural Fluency
- Create regular career consultation schedules at USG.
- Develop a data collection method for career related information for students not attending USG.
- Increase the number of STEM scholarships & internship scholarships available to USG ACES students.
- Develop and administer pre & post test/survey on career readiness skills/activities.

TIMELINE FOR IMPLEMENTATION

SPRING 2018

- Administrative Staff/Resources in Place at USG
- Onboarding Phase Begins
- Annual Estimated Funding Needs - $95K

FALL 2018

- Segment One Begins in All MCPS High Schools
- Annual Estimated Funding Needs - $289K

FALL 2020

- Segment Two Begins on all MC Campuses
- Annual Estimated Funding Needs - $397K

FALL 2022

- Segment Three Begins on USG Campus
- Program at Full Strength/Deployment
- Annual Estimated Funding Needs - $495K

SPRING 2023

- First Cohort of ACES Students Receiving Career Readiness Services Graduates from USG

RESOURCES REQUIRED & FUNDING

ANNUAL ADMINISTRATIVE RESOURCES
(Housed in USG Student & Academic Services) & Estimated Funding Requirements
(Starting Spring 2018)

RESOURCE REQUIRED	FUNDING REQUIRED
1 FTE & fringe for Career Readiness Assistant Director	$90,000
Operational Expenses (office/administrative supplies, communication/technology fees)	$5,000
TOTAL	**$95,000**

ANNUAL SEGMENT ONE
(MCPS) Resources Required & Estimated Funding Requirements
(Starting Fall 2018)

RESOURCE REQUIRED	FUNDING REQUIRED
FTE & fringe for two Career Readiness Coordinators serving 15 ACES high schools	$156,000
Instructional Expenses (Curriculum, workshop supplies, transportation/meals for career immersion activities, business engagement)	$30,000
Operational Expenses (marketing, professional development, office/administrative supplies, data management, communication/technology fees)	$8,000
TOTAL	**$194,000**

ANNUAL SEGMENT TWO
(MC) Resources Required & Estimated Funding Requirements
(Starting Fall 2020)

RESOURCE REQUIRED	FUNDING REQUIRED
FTE & fringe for one Career Readiness Coordinator serving 3 MC campuses	$78,000
Instructional Expenses (Curriculum, workshop supplies, transportation/mealsfor career immersion activities, career planning tools, business engagement, career readiness class)	$25,000
Operational Expenses (marketing, professional development, office/administrative supplies, data management, communication/technology fees)	$5,000
TOTAL	**$108,000**

ANNUAL SEGMENT THREE
(USG) Resources Required & Estimated Funding Requirements
(Starting Fall 2022)

RESOURCE REQUIRED	FUNDING REQUIRED
1 FTE & fringe for one Career Readiness Coordinator serving USM students at USG and MC ACES students in the pathways to USG.	$78,000
Instructional Expenses (Curriculum, workshop supplies, transportation/meals for career immersion activities, assessment tools, business engagement)	$15,000
Operational Expenses (marketing, office/administrative supplies, data management, communication/technology fees)	$5,000
TOTAL	**$98,000**

TOTAL ANNUAL RESOURCES & ESTIMATED FUNDING REQUIREMENTS AT FULL PROGRAM DEPLOYMENT

RESOURCE REQUIRED	FUNDING REQUIRED
Staffing Resources	$402,000
Instructional Resources	$70,000
Operational Resources	$23,000
TOTAL	**$495,000**
TOTAL COST PER ACES STUDENT (STARTING FALL 2022)	**$168.37**

An additional one-time resource is required for creating a marketing campaign for CTE and Work Ready Programs at MCPS. Estimated funding requirements for this one-time resource: $15,000.

Additional ongoing funding is needed for STEM-related tutoring and scholarships, and internship scholarships. Estimated funding requirements for this ongoing resource are contingent upon amount of students in STEM fields of study/unpaid internships.

Staffing, instructional, and operational resources will be managed by the Universities at Shady Grove, under the direction of an ACES Career Readiness Program Director.

Possible sources of funding include USM, State, and County, as well as funds contributed through grants, foundations, and philanthropists.

As evidenced, there is a clear need for career readiness programming for the ACES population. Not only will this initiative assist that population, it will lend itself to the creation of best practices impacting a broader population of students across the county. Broadening the positive effects of this program will increase the likelihood of systemic change throughout the Montgomery County school system, which in turn will have profound positive impact on the economic and educational future of the county.

ADDITIONAL EXPANSION CONSIDERATION

As documented in the Programmatic Expansion section of this document, ACES in currently in thirteen MCPS high schools and intends to expand to a fourteenth high school in 2017. While Career Readiness is at the forefront of consideration for programmatic enhancement, expansion of ACES to all MCPS high schools also remains a possibility. While there are programs throughout MCPS addressing the needs of underrepresented students, expanding ACES to all high schools would ensure that a significant number of these students are assisted with their academic development and college accessibility. The cost for ACES expansion to all twenty-six MCPS high schools is detailed below:

COST FOR ACES MCPS EXPANSION (MCPS, MC, AND USG COSTS)

NUMBER OF SCHOOLS	ACES OMNIBUS COST
2018 Academic Year (14 MCPS schools)	~$3,524,000
ACES in all 26 MCPS High Schools	~$7,120,000

COST FOR ACES CAREER READINESS EXPANSION

SEGMENT	TOTAL COST
Administrative	$95,000
Segment One	$194,000
Segment Two	$108,000
Segment Three	$98,000
TOTAL	**$495,000**

C. Implement Operational Enhancements in Data Metrics, Communications and Fundraising

PROBLEM STATEMENT

The ACES Program is an innovative partnership across three entities of educational systems in Montgomery County: MC, MCPS, and USG. While coordinating the rules, systems, and leadership across all three entities can be challenging due to the complexity of this partnership, significant organizational progress has been made in implementing the day-to-day operations of the program. Initial evaluations prioritized implementation, enrollment, and participation before progressing to comparative research reports. As students move through the pathway to college graduation, ACES will work to develop and refine a set of consistent "transition" metrics for each institution to provide a clear and comprehensive picture of the program.. Developing metrics that accurately measure student success through the program pathway may prove challenging; each educational institution uses different data collection, tracking, and reporting methods based on their student populations.

As the ACES program continues to expand, it is paramount that sustainable cohesive metrics for data collection, tracking, and reporting be implemented across all educational systems. If these metrics are not cohesive and do not influence student success at the next level, it will be difficult to promote the success and reputation of the program on the local and national level.

Ultimately, ACES must establish a common set of metrics with the ability to demonstrate the effectiveness of the program's services and its impact on student achievement. These metrics should be structured in a manner that allows them to report on both student success and logistical levels for the program to ensure longevity. Although recent detailed reports on effectiveness have been helpful, they serve as snapshots of a particular point in time. Establishing a common set of metrics will assist in documenting evidence of best practices learned or observed over time.

Other multi-institution initiatives, such as the Pathway to the Baccalaureate (PTB) program that involves NOVA, George Mason University, and eight K–12 systems have experienced similar challenges in terms of coordination and frequent reporting of effectiveness. For example, issues around the Family Educational Rights and Privacy Act led NOVA to jointly hire a statistician who would serve as an employee of multiple institutions. NOVA has also worked to employ comparison groups of students in their analysis to test the efficacy of their Pathway initiatives. Beyond these practices at NOVA, best practices in data and effectiveness measurement (for K–12 and postsecondary education) dictate a small set of important principles for measurement:

1. Use of a Comparison Group—All measurements require a comparison group and, ideally, use a comparison group that directly tests the efficacy of the initiative while controlling for as many exogenous variables as possible that might also influence results.
2. Identify Missing Data Elements Early—When developing a system of measurement, consider what variables can be measured immediately, as well as those that should be measured over time so that your overall measurement accounts for as much of the variability in your results as possible.
3. Identify a System for Merging Multiple Data Sources—Design an efficient system for periodically merging multiple data elements based on what data will be needed immediately and in the future.
4. Assign Responsibility and Accountability for Ongoing Measures—Shared responsibility for ongoing measurement can sometimes lead to issues of accountability. Assigning ultimate responsibility to a shared resource may help alleviate issues of coordination and accountability.

GOALS AND OUTCOMES

Within the next six months, ACES leadership will develop and implement a dashboard of key effectiveness metrics that demonstrate the impact ACES programming has on students across MCPS, MC, and USG. As a primary activity, ACES must develop its own objective and normative "logic model" for how it can (now) and will (later) measure the effectiveness of ACES initiatives.

This dashboard will include a set of cohesive measures in each of the following categories; these will be reported upon on a quarterly basis:

- ACES Program Operations: costs and efficiency
- ACES effectiveness in graduating high school students
  - Versus comparison groups
  - Considers a multitude of variables to help understand where ACES does and does not succeed with different types of students and initiatives
- ACES effectiveness in improving the college-going rate of ACES students
  - Rate of attending and college choice of ACES students (MC/2 yr vs. 4 yr)
  - Versus comparison groups
  - Considers a multitude of variables to help understand where ACES does and does not succeed with different types of students and initiatives
- ACES effectiveness in college success, credit progression, and completion rates
  - Persistence and graduation (rates?) at 2- and 4-year level
  - College Grade Point Averages and engagement measures
  - Student enrollment in developmental coursework at MC
  - Student completion of at least 20 credits in an academic year
  - At MC and USG vs. outside institutions, especially other UM institutions
  - Versus comparison groups
  - Considers a multitude of variables to help understand where ACES does and does not succeed with different types of students and initiatives

- ACES effectiveness in developing career-ready students
  - Career preparation
  - Gainful employment
  - Versus comparison groups
  - Considers a multitude of variables to help understand where ACES does and does not succeed with different types of students and initiatives
- ACES effectiveness with new Strategic Objectives in this strategic plan
  - Early High School Success and College Readiness Programming
  - Career Readiness Programming

KEY ACTION ITEMS

- Designate representatives from each of the three institutions to serve as primary data stewards, or identify an alternative source or third party for data collection and management.
- Develop a faster, more fluid system of approvals and agreements so that research and analysis can be conducted on an ongoing basis.
- Develop a communication timeline for "official" data availability and release that is shared across institutions.
- Create a "shared place" (data repository/system) where all of this data can be accessed across three institutions.
- Add additional researchers(?) to assist with assessment of employability data.
- Develop a system for formulating and approving requests for specific, ad-hoc reports that are outside of ongoing/ regular effectiveness measurements.
- Complete and finalize a memorandum of understanding between the three institutions around data sharing.
- Research use of a 3rd party to serve as a resource for ongoing needs around effectiveness reporting.

COORDINATION WITH CURRENT AND NEW RESOURCES

To develop effectiveness measures for the ACES program and ensure accountability for these metrics, the three participating institutions will have to create seamless data sharing and reporting across MCPS, MC, and USG. The details of these coordination and accountability metrics are detailed in the MOU that is in development and set to be implemented in fall of 2017.

TIMELINE FOR IMPLEMENTATION

The development of a system for tracking and measuring ACES effectiveness will require about six months of development time and additional time from several participants across MCPS, MC, and USG. We project that a new measurement program for ACES could be ready to roll out by January 2018.

FUNDING REQUIREMENTS

- New measurement programs will require one-time money to set-up the "system" for measurement (e.g., new data markers), with an estimated cost of $25,000 to $45,000 in one-time resources.
- Ongoing tracking and measurement could be managed by existing ACES resources in coordination with the data and institutional research resources at each institution, assuming current issues with data sharing are resolved.


ACES
Wish it. Dream it. Do it.
We can only see with open eyes.
We can only listen with open ears.
We can only think with open minds.
UVA

OVERVIEW OF ACES FINANCIAL PROJECTIONS AND NEW RESOURCE REQUIREMENTS

The following is a summary of new resource requirements that will be necessary to enact the leadership recommendations of strategic objectives described in this plan.

Program expansion: Expand ACES program to Colonel Zadok Magruder High School and research options to start program in 9th grade (proposal to leadership – summer 2018).

Program enhancement: Infuse Experiential Career Opportunities to all ACES high schools by providing career readiness services that begin in the junior year and continue through the program pathway ending at USG graduation. These services would be available for an additional cost of $168 per student.

Operational enhancements: Provide one-time investments to support a communications plan for program branding and to add a cross-institutional data system.

Funding Source: The acquisition of funds can be through a combination of institutional operational budgets, grants, and philanthropy.

COST FOR ACES MCPS EXPANSION (MCPS, MC, AND USG COSTS)

RECOMMENDATIONS	APPROXIMATE COST	
PROGRAM EXPANSION	AY17–forward	$140K—currently in MCPS budget
PROGRAM ENHANCEMENT	AY17–18 AY18–19 AY19–20 AY20–forward	$95K $289K $392K $495K
OPERATIONAL ENHANCEMENTS	Communications: Data System:	FY18—$30K - $10K per institution FY18—$45K - $15K per institution

NOTE: *ACES leadership may want to explore a cost-sharing plan for new strategic resources across the three institutions or possibly have them be part of a new outside 501(c)(3) in the future.*

TIMELINE FOR IMPLEMENTATION

The following is an approximate timeline for implementation based on the major initiatives and action items described in the report above.

COST FOR ACES MCPS EXPANSION (MCPS, MC, AND USG COSTS)

	FIRST 6 MONTHS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Add Magruder High School and explore options to start program in 9th grade						
Expand focus of ACES fundraising beyond scholarship opportunities						
Planning for Early High School and College Readiness Objectives						
Implementation of Early High School and College Readiness Objectives						
Planning and Development of Career Readiness Programming						
Implementation of Career Readiness Programming						
Development of Data-Sharing MOU						
Identification of Resources for Effectiveness Measurements						
Development of Efficacy “Logic Model”						
Implementation of Ongoing Effectiveness Measures						

Appendix and Notes

SOURCES

- FY 2017 ACES Omnibus Budget Document
- Academic Success of Montgomery College Students in the Achieving Collegiate Excellence and Success (ACES) Program: 2014–2015, MCPS Office of Shared Accountability, June 2016
- CES Winter 2017 Snapshot, ACES Data and Evaluation Committee
- Comparative Evaluation: Participants Versus Nonparticipants in the Achieving Collegiate Excellence and Success (ACES) Program at Montgomery County Public Schools in Year One and Year Two, MCPS Office of Shared Accountability, April 2016
- Formative Evaluation of ACES Program at Montgomery County Public Schools: Year Two: Student and Parent Experiences, MCPS Office of Shared Accountability, December 2015
- Outcome Evaluation of the Achieving Collegiate Excellence and Success (ACES) Program at Montgomery County Public Schools: Year Two, MCPS Office of Shared Accountability, January 2016
- www.ACESmontgomery.org
- USC Career Program https://careers.usc.edu/students/find-a-mentor/firstgenprogram/
- Dickinson State http://www.dickinsonstate.edu/Assets/uploads/files/accreditations/Dickinson%20State%20University%20Self-Study%20final%20%2003-15.pdf
- Washington–K12 http://www.k12.wa.us/SecondaryEducation/CareerCollegeReadiness/pubdocs/HandbookCareerGuidanceWashington.pdf
- Merrimack http://www.merrimack.edu/obrien-center/student/the-warrior-network.php
- DePaul
- https://offices.depaul.edu/student-affairs/support-services/academic/Pages/career-coaching.aspx
- Education Policy Institute - http://www.educationalpolicy.org/publications/pubpdf/TG_CASESTUDY.pdf

Appendix I: Measurements of ACES Effectiveness and ACES Student Profiles 2014–2016

END OF YEAR GPA AMONG ACES STUDENTS

	2016			2015			2014			2013		
	N	MEAN	SD	N	MEAN	SD	N	MEAN	SD	N	MEAN	SD
GPA												
11TH GRADERS	608	2.69	.65	564	2.74	.65	563	2.74	.66			
12TH GRADERS	569	2.80	.57	455	2.69	.61	455	2.68	.63	446	2.65	.67
NOTE: 2013 GPA is year prior to ACES												

PARTICIPATION AND PERFORMANCE ON SAT OR ACT AMONG ACES STUDENTS

ACES Students	TOTAL			GRADE 11			GRADE 12		
	N	n	%	N	n	%	N	n	%
2015–2016									
TOTAL SAT OR ACT	–	–	–	–	–	–	–	–	–
MET SAT OR ACT MILESTONE[b]	–	–	–	–	–	–	–	–	–
2015–2016									
TOTAL SAT OR ACT	1,019	716	70.3	564	360	63.8	455	356	78.2
MET SAT OR ACT MILESTONE[b]	716	131	18.3	360	66	18.3	356	65	18.3
2015–2016									
TOTAL SAT OR ACT	968	654	67.6	406	275	67.7	562	379	67.4
MET SAT OR ACT MILESTONE[b]	654	76	11.6	275	45	16.4	379	31	8.2
[b]Received a 1650+ on SAT or a 24+ on ACT									

MET AP/IB MILESTONE AMONG ACES STUDENTS

Met SAT or ACT milestone[a]	TOTAL			GRADE 11			GRADE 12		
	N	n	%	N	n	%	N	n	%
2015–2016	–	–	–	–	–	–	–	–	–
2014–2015	1,019	345	33.9	564	172	30.5	455	173	38.0
[a]Milestone is earning a 3 or higher on an AP exam or 4 or higher on an IB exam									

Appendix II: Career Readiness (at College) Case Samples

THE UNIVERSITY OF SOUTHERN CALIFORNIA FIRST-GENERATION MENTOR PROGRAM

The University of Southern California offers a mentorship program that pairs first-generation college students with alumni who were also first-generation students. The goal of this program is to pair students with a mentor and role model with whom they can discuss academic and career-related challenges as a first-generation college student.

Students are eligible to apply for the program after their first semester at USC. Students must commit to the program for at least one academic year. Program requirements are as follows:

- Participants must complete a preliminary orientation
- Mentors and mentees meet once per month for professional activities such as resume writing, drafting cover letters, and interview skills
- Mentors and mentees must attend all Career Center events (2–4 per semester)
- Mentees will serve as mentors to future program students after graduation

MERRIMACK COLLEGE WARRIOR NETWORK

Merrimack College in North Andover, Massachusetts provides a mentorship program to guide sophomore, junior, and senior first-generation college students through career development. The College pairs students up with alumni and local employers who align with each individual student's career goals. The program designates staff members to support the mentor and mentees throughout the program; it also maintains an online library of resources for mentors and mentees. The mentor provides career-specific advice and guidance to the mentee, as well as general career preparation such as networking and interviewing. Activities include job shadowing and participation in meetings.

DICKINSON STATE UNIVERSITY FOCUS 2

Dickinson State University in Dickinson, North Dakota implements an online program that guides students through academic and career choices throughout their time as an undergraduate. The program is initially incorporated into a first-year seminar and supplemented through mandatory first-year advising. It includes the following content:

- 5 self-assessments
- Career exploration
- Major exploration
- Academic action planning and decision-making
- Resume and interview skills

DEPAUL UNIVERSITY PROVIDING ACCESS THROUGH HOLISTIC SUPPORT (PATHS)

DePaul University in Chicago, Illinois offers a career development program to sophomore students. Each participant is paired with a career coach whom they will meet with regularly throughout the year to discuss career aspirations and guidance. Students have the option to take a two-credit hour career development course. The program organizes company visits and over 250 career exploration workshops throughout the year.

Montgomery County Public Schools

MONTGOMERY COLLEGE
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AT SHADY GROVE