



December 1, 2016

The Honorable Larry Hogan, Governor
The Honorable Thomas V. Mike Miller, Jr., President of the Senate
The Honorable Michael E. Busch, Speaker of the House of Delegates

Dear Governor Hogan, President Miller, Speaker Busch, and the Citizens of Maryland:

I am pleased to update you on the activities of the Maryland Youth Apprenticeship Advisory Committee. As you may recall, this group of business, labor, and government stakeholders was charged, pursuant to Chapter 646 of the Acts of 2014, with the review and expansion of youth apprenticeship opportunities throughout Maryland.

Please note, this report was written with input from staff at the Maryland State Department of Education (MSDE) and satisfies both the Maryland Department of Labor's and MSDE's mandated state agency's "Report on the Status of the "Apprenticeship Maryland" Pilot Program."

In December 2015, the Committee released a blueprint for Maryland's youth apprenticeship system. Since that report, Apprenticeship Maryland, the State's first youth apprenticeship pilot program specifically dedicated to growing opportunities in Science, Technology, Engineering and Mathematics (STEM) occupations, was launched. Already, that pilot has garnered a great deal of national attention. Maryland's youth apprenticeship efforts have been showcased in a national publication and have received national attention at various workforce and apprenticeship conferences. Maryland has also been awarded \$2.2 million in federal funds, allowing the State to accelerate and expand the State's apprenticeship programming for both youth and adults.

In 2016, the Committee's work was directed under the leadership of Mr. Grant Shmelzer, Executive Director of the Independent Electrical Contractors - Chesapeake. Mr. Shmelzer's extensive knowledge of apprenticeships, his investments in apprenticeship opportunities for youth, and his boundless energy have been invaluable. Throughout this report, you will be presented with updates on the Committee's work as well as an update regarding the Apprenticeship Maryland pilot, the chairman's focus on providing opportunities for disconnected youth, and a review of the Committee's 2015 recommendations.

Please know that the Department and I are committed to the great work that has already begun, and look forward to reporting to you on the continued successes of this work-and-learn model for Maryland's youth.

Best Regards,

Kelly M. Schulz Secretary

Department of Labor, Licensing and Regulation

elly M. Schulz



Advisory Committee Roster

Secretary of the Department of Labor, Licensing and Regulation or the Secretary's Designee: *The Honorable Kelly M. Schulz*

State Superintendent of Schools or the State Superintendent's Designee:

Lynne Gilli

Secretary of Commerce or the Secretary's Designee:

Bret Schreiber

Secretary of Juvenile Services or the Secretary's Designee:

Jay Cleary

The Commissioner of Labor and Industry:

Tom Meighen

Two representatives of The Maryland Apprenticeship and Training Council (MATC):

Grant B. Shmelzer,

Exec. Dir., Independent Electrical Contractors – Chesapeake, Chairman

Edwin A. Cluster Jr.

One representative of an employee organization:

Brian S. Cavey,

Joint Apprenticeship and Training Program Director of the International Association of Heat and Frost Insulators & Allied Workers, Local 24

One employer whose business has a non-joint apprenticeship program:

Larry Robert Minnick Jr., CEO/President of Minnick's, Inc.

One representative from a community college:

Nicanor "Nick" Diaz, Frederick Community College, Trustee

One individual who holds a doctoral degree and specializes in labor economics with expertise in national and international apprenticeship systems:

Vacant

One representative of a nonprofit organization involved with employee training and workforce development:

Jason C. Roberts,

Director Of Education, Associated Builders and Contractors

One representative from the Maryland Chamber of Commerce:

Vacant

Table of Contents

Transmittal Letter	2
Advisory Committee Roster	3
Executive Summary	1
Introduction	1
Maryland's Vision to Expand Apprenticeships	3
Opportunities for Opportunity Youth	6
Youth Apprenticeships: A Year in Review	7
Local Apprenticeship Advisory Boards Formed	7
Recruitment of Eligible Employers	8
National Apprenticeship Week	9
Targets for Youth over the Next Three Years	9
Apprenticeship Maryland Pilot Program	10
Lessons Learned	14
The Path Ahead	17
The 2015 Recommendations	17
2016 Recommendations	19

Executive Summary

The following report represents the dedicated work of the Youth Apprenticeship Advisory Committee in 2016. The Committee focused on the launch of the Apprenticeship Maryland youth apprenticeship pilot program, which launch during the 2016-2017 school year.

In addition to its work on the recommendations detailed in the 2015 annual report, the Committee recommends the following additional items:

2016 RECOMMENDATION 1: Find ways to support Career and Technical Education (CTE) programs as a way to provide on-the-job training for students.

2016 RECOMMENDATION 2: Support the development of a data system to track and evaluate the youth apprenticeship program.

2016 RECOMMENDATION 3: Support ways to ensure that related instruction for youth apprentices lead to college credit either through a community college or via equivalent credit through the American Council on Education.

2016 RECOMMENDATION 4: Support efforts from the Maryland Department of Labor, and Maryland State Department of Education to garner the financial support of private sector and philanthropic organizations to assist in the funding of the pilot program.

Introduction

"Apprenticeships in Maryland are seriously underutilized" was the bold and unequivocal finding of the Maryland Economic Development and Business Climate Commission, a bipartisan group charged with providing recommendations regarding how Maryland can improve its business climate. In 2014, fewer than 7,600 apprentices were trained through the State's apprenticeship programs, accounting for less than 0.4% of the State's workforce.

The Commission, also known as the Augustine Commission, concluded in its 2014 report that a pilot program must be created for youth who wish to obtain on-the-job learning experiences. "While college-oriented high school curricula are extremely important," the Commission asserted, "many youth and adults may be far better served through voluntary engagement in apprenticeship training."iii

Concurrently, more than 85,000 16-24 year olds in Maryland are not connected to work or school. Employers report a persistent "skill mismatch" problem when filling available positions. For example, information technology and healthcare are Maryland's fastest-growing fields, but many employers are hiring workers from outside the state for these jobs because they are unable to find qualified employees. In

In 2014, the Youth Apprenticeship Advisory Committee was formed with the passage of House Bill 1207. As a part of its responsibilities, the Committee must annually identify the value of apprenticeships, highlight best practices from other states and nations, and provide recommendations for future work and legislation.

Additionally, in 2015, the State Commission on Economic Development and Business Climate completed its inquiry into why Maryland's apprenticeship program has not reached its full potential.vii One key finding was that most available and well-known apprenticeship opportunities

are in the construction field.viii While many Maryland public high schools offer Career and Technology Education (CTE) programs preparing students for jobs in fast-growing sectors, these are often classroom-based learning experiences and may not be suitable to youth seeking work-based learning or students who are disconnected from high school. ix

During its inaugural 2015 report, the Committee identified eight recommendations to guide its work in 2016. Those recommendations were as follows:

RECOMMENDATION 1: The Department of Labor, Licensing and Regulation, in consultation with the Department of Commerce, should identify and convene key industry partners to establish an employer engagement campaign for youth apprenticeship.



Committee member Brian Cavey giving a presentation to vocational students as a part of Maryland's 2016 National Apprenticeship Week Celebration

RECOMMENDATION 2: The Committee should identify and evaluate current and needed resources for the State to establish the role of business intermediaries for youth apprenticeship.

RECOMMENDATION 3: The Committee should establish targets for implementing youth apprenticeships after reviewing and assessing available data. The Committee should also establish performance matrixes to gauge the success of youth apprenticeship programming.

RECOMMENDATION 4: The Committee should review and establish best practices for mentorship.

RECOMMENDATION 5: The Committee should identify policies and suggest changes to regulations that prohibit employers from establishing a youth apprenticeship program.

RECOMMENDATION 6: The Committee should identify and suggest solutions to additional barriers that would inhibit youth from participating in a youth apprenticeship program. These barriers include, but are not limited to, transportation needs.

RECOMMENDATION 7: In consultation with the Maryland State Department of Education and other stakeholders, the Committee should review Maryland's existing models and recommend ways to integrate soft skills training into the training plans for the Youth Apprenticeship program.

RECOMMENDATION 8: The Committee should convene a one-day conference with leading experts to discuss the necessary components of high quality training plans, to ensure strong mentorships and the integration of academic, technical, and the essential skills.

An update regarding the Committee's progress on these recommendations is discussed in the pages that follow.

Recognizing the importance of a robust work-based learning pathway, the Maryland legislature created *Apprenticeship Maryland*, the State's first youth apprenticeship pilot program.^x This program links high school students in Frederick and Washington counties with identified employers in high-skill, high-growth Science, Technology, Engineering, Mathematics (STEM) and advanced manufacturing industries. This pilot program provides opportunities for high school

juniors and seniors to gain awareness and experience related to in-demand industries such as healthcare, biotechnology, information technology, construction and design, banking and finance, and advanced manufacturing.

This pilot program is a partnership between the Maryland Departments of Labor, Education, and Commerce. As outlined in the legislation, Apprenticeship Maryland is a 2-year pilot program requiring students to complete 450 hours of on-the-job learning and at least one-year of classroom instruction related to the eligible career path. For comparison, state and federal Registered Apprenticeship programs require 2,000 hours of on-the-job learning and 144 hours of classroom instruction per year.

Students completing the program will receive both high school diplomas and state certification, while employers will have the opportunity to build their talent pipeline. Although the pilot has enjoyed great interest from local employers, schools, and students, funding for the program thus far has been meager. To date, a \$10,000 foundation grant obtained by the Maryland State Department of Education and \$15,000 in funding provided by a foundation of a local utility company have been obtained, and made available to the school districts and businesses in Washington and Frederick Counties.

Maryland's Vision to Expand Apprenticeships

As noted earlier, the Maryland Department of Labor was awarded \$2.2 million in 2016 from the

United States Department of Labor for the acceleration and expansion of apprenticeship opportunities in the State. Both the ApprenticeshipUSA Acceleration Grant and the ApprenticeshipUSA Expansion Grant will be used to invest in the State's Registered Apprenticeship programming. The funds provided under this new federal grant are vitally important to the State's efforts in addressing the pressing workforce needs of Maryland's businesses.

The State's goal is to align apprenticeships with Maryland's workforce system, ensuring that traditional apprenticeship opportunities expand alongside the creation of new opportunities grounded in labor market demand. The funds will be used to provide additional staffing and outreach to businesses



Secretary Kelly M. Schulz pictured with Justin Elliott and his family. Justin is one of the first youth apprentices placed in Maryland as a part of the Apprenticeship Maryland Pilot Program.

additional staffing and outreach to businesses interested in creating apprenticeship opportunities to meet their talent pipeline needs.

Governor Hogan's strategic vision for the workforce system, as outlined in the State's Combined State Workforce Plan, is to "providing businesses with the skilled workforce they need to compete in the global, regional, and local economies is central to ensure Maryland is 'open for business.'" A bedrock strategy within that vision is the expansion of Registered Apprenticeship opportunities. Specifically the plan notes, "[by] aligning apprenticeships with the Workforce Innovation and Opportunity Act (WIOA) system, Maryland will ensure traditional apprenticeship opportunities expand alongside the creation of new opportunities that are grounded in labor market demand."

In a July 2016 report, The National Skills Coalition applauded Maryland's vision to invest in Registered Apprenticeships and other innovative training connected to jobs.

Through various initiatives, including recent legislative action integrating the State's Apprenticeship Office into its workforce system and the full-fledged support of Registered Apprenticeships outlined in the State's workforce plan, Maryland is poised to make a meaningful impact on its workforce system by expanding apprenticeship opportunities.

For instance, during the 2016 Legislative Session of the Maryland General Assembly, the Department sponsored Senate Bill 92, a measure that transferred the State's apprenticeship programming to the Division of Workforce Development and Adult Learning. This legislative enactment, approved unanimously by the Assembly and signed into law by Governor Hogan, provides key resources for the growth and expansion of apprenticeships.

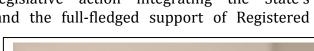
Maryland will use the grant funds and leveraged resources to catalyze efforts to grow and diversify Apprenticeships to provide а sustainable employment pipeline in both the skilled trades and non-traditional industry sectors such as those in the Science, Technology, Engineering, and Mathematics (STEM) field. To accomplish this, the State is focusing on three critical elements:

(1) Expanding Capacity by Increasing Staffing and Infrastructure

• To grow apprenticeship opportunities, key infrastructure investments are needed in Maryland's Apprenticeship Office. Currently. Maryland's apprenticeship unit consists of three

individuals: a Program Manager, an Apprenticeship Training Representative (ATR), and a Navigator.

- This staff serves the needs of the approximately 9,400 active apprentices and 3,500 participating employers in Maryland. The team works with over 230 approved registered occupations and maintains 417 programs Statewide.
- Recognizing the limitation of current staff and noting that growth requires a deeper and continued investment in human capital, DLLR intends to expand this unit's personnel through the addition of five Navigators and one Apprenticeship Training Representative.





Vocational student using the virtual paint sprayer at Maryland's 2016 National Apprenticeship Week kicked off event

(2) Outreach/Education

- Maryland has already created unique learning opportunities. DLLR held an all-day training, "Accelerating Apprenticeships in Maryland," on June 28, 2016. This professional development opportunity was conducted by national expert, Dr. Gerald Ghazi, and was made possible through ongoing USDOL technical assistance to Maryland.
- The State also hosted a portion of the inaugural Transatlantic Apprenticeship Exchange Forum held in Washington, D.C. and Baltimore with representatives from the United Kingdom's apprenticeship program.
- Industry engagement and participation is also key to the successful expansion of RA in Maryland. Outreach to chambers of commerce and industry associations, such as the Tech Council of Maryland (TCM) and State and local Workforce Development Boards will occur enabling the development of multi-employer programs and program templates. Lastly, relationships with over 500 industry sector partnerships through EARN Maryland will be nurtured.

(3) Advancing Innovative Practices

- To build upon these proven, existing partnerships with industry and workforce intermediaries, local workforce development areas, training providers, and institutions of postsecondary education, DLLR aims to establish an "Apprenticeship Innovation Fund" to invest in programs that support and enhance RA expansion strategies, particularly for vulnerable populations, youth, and dislocated workers.
- DLLR intends to dedicate \$621,000 to award competitive grants to applicants so they
 may implement new and promising ideas or adapt proven strategies at the systems or
 service delivery level so as to expand the reach of Registered Apprenticeship
 programs in Maryland. This competitive grant structure has proven effective through
 Maryland's implementation of its Maryland Business Works incumbent worker
 training fund.

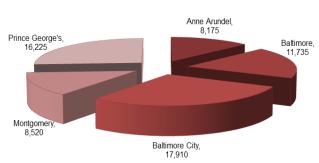
Additionally, the State applied for and received an additional award instituting a pilot program aimed at mitigating the hiring challenges found within the healthcare industry by drawing on an untapped resource, internationally trained skilled immigrants:

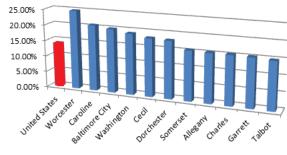
- This proposal from the Maryland Department of Labor, Licensing and Regulation seeks to mitigate this workforce challenge by drawing on an untapped resource, internationally-trained skilled immigrants.
- Skilled immigrants have acquired extensive education and/or work experience abroad. In spite of their potential to address employers' workforce shortages, many work in low-skilled jobs unrelated to their training due to language and communication barriers, lack of professional networks, lack of career options knowledge, and licensing barriers.
- This pilot engages key organizations with extensive experience in healthcare, workforce development, and serving skilled immigrants. The Baltimore Alliance for Careers in Healthcare (BACH) is a nonprofit dedicated to eliminating the critical shortage of qualified healthcare workers in the Baltimore area by working with local agencies, healthcare institutions, and other entities to create opportunities for residents to pursue careers in health professions.

Opportunities for Opportunity Youth

Chairman Shmelzer focused the Committee's attentions this year on finding opportunities for disconnected or opportunity youth. According to a recent report issued by the Century Foundation, "Disconnected youth cost taxpayers \$26.8 billion in 2013 alone, due to incarceration costs, Medicaid, public assistance payments, and Supplemental Security Income payments."xi

Disconnected youth (also called "Opportunity Youth") are teenagers and young adults between the ages of 16 and 24 who are neither working, nor in school. Nationwide more than 5.8 million young people (approximately 1 in 7) are disconnected. In Maryland, the number is approximately 94,000, or *1 in 10*, with the highest percentages located in Baltimore City, Baltimore, Caroline, Dorchester, Washington, and Worcester Counties.





Five MD jurisdictions with largest number of disconnected youth

Maryland jurisdictions with rates of youth disconnection higher than the national average

SOURCE: Governor's Office of Children, http://goc.maryland.gov/disconnected-youth/

Keeping with the vision of a workforce system dedicated to placing "people before performance measures," Maryland's State Workforce Plan provides evidence-based strategies to support a service delivery system to all of Maryland's youth. *A minimum of 75 percent of WIOA Title I Youth Program* funds is required to be spent on disconnected youth, which is an increase from the minimum of 30 percent under the former Workforce Investment Act.

Additionally, the Governor's Children's Cabinet's 2015 Strategic Direction and Implementation Plan clearly notes:

Years of research has demonstrated that reconnecting youth is beyond the scope of a single program. Young people need multiple pathways that combine work experience, education, training, and other supports. These pathways may include dropout recovery programs, early college/dual track programs, nontraditional certificate or associate degree programs, leading edge internships or *apprenticeships*, training directly linked with job placement, two generation approaches involving healthy child development with parental career development, life skills training, and supported independent living opportunities." xii

Several features of WIOA funding will favor development or expansion of industry-based workforce development programs specifically serving opportunity youth. Local Workforce Development Areas

now must spend at least 20 percent of WIOA Title I Youth Program funds on work experiences that incorporate academic and occupational education. In particular, WIOA:

- Encourages integrated education and training, as well as the implementation of Career Pathways approaches to workforce development that are commonly used in tandem with industry-based workforce development;
- Promotes on-the-job experience for youth;
- Allows youth up to age 24 to receive youth services (previously, services were only available to youth ages 16 to 21);
- Allows more youth to receive services (youth no longer have to prove that they come from a low income household to receive services; instead, youth living in a low-income neighborhood are eligible to receive services); and,
- Expands education and training options by allowing youth to immediately start on a formal career-training program, rather than to first have to participate in programs for which they already have skills.

As the pilot program continues, the Committee is dedicated to developing opportunities for disconnected youth.

Youth Apprenticeships: A Year in Review

With the recent start of the 2016-2017 school year, staff from the Maryland Department of Labor, the Maryland State Department of Education, and local school systems of Washington and Frederick Counties built systems, policies, and strategies to engage businesses, students, and their parents. Some of the key accomplishments made in building a successful pilot program are discussed below.

Adoption of Youth Apprenticeship Regulations

In March, 2016, the Maryland Secretary of Labor adopted the Code of Maryland Regulations 09.01.12. These regulations, promulgated pursuant to Maryland Annotated Code, Business Regulations Article, Section 2-105 and Labor and Employment Article, Section 11-603(k), outline the consideration and approval of an Eligible Employer, the requirements of an Eligible Employer, and other requirements regarding the youth apprentice.

Local Apprenticeship Advisory Boards Formed

Both school systems established Apprenticeship Maryland Local Advisory Committees. Similar to the State Advisory Committee, the local groups include representatives from:

- The area's Local Workforce Development Board;
- The county or city economic development office;
- Employers/Sponsors;
- Secondary and postsecondary education;
- Professional school counselors:
- Government agencies;
- Local chamber of commerce; and,
- Local school system and school liaisons; and other stakeholders.

These committees, modeled after local consortiums that run existing state youth apprenticeship programs in Wisconsin, are responsible for implementing the local program and recruiting eligible businesses and students. DLLR and MSDE continue to provide technical assistance to the chosen school systems.

Recruitment of Eligible Employers

In July, Governor Larry Hogan announced that twelve Maryland businesses are approved as Eligible Employers designated to provide apprenticeship opportunities to the youth in Frederick and Washington Counties. The businesses submitted applications to the Maryland Apprenticeship and Training Council to participate in the Apprenticeship Maryland Pilot Program and are poised to accept apprentices for the duration of the pilot program.

Since Governor Hogan's announcement, four additional Eligible Employers have been approved by the Maryland Apprenticeship and Training Council. The following is a listing of all Eligible Employers as of the date of this report's publication.

Current Eligible Employers		
American Computer Development, Inc.	Custom Concepts Construction Inc.	
B Todd Stocks Insurance Agency, LLC	DVF Corporation	
Brunswick Woodworking Company, Inc.	Frederick Regional Health Systems	
Insul-Tech, Inc.	Pain and Spine Specialists of Maryland	
Phoenix Mecano, Inc.	O'Boyle Enterprises, Inc.	
RAMPF Molds Industries, Inc.	Woodsboro Bank	
Beachley Furniture	Stacey Nicole Design	
Holly Hills Country Club	Beacon Grace, LLC	

The program requires that Eligible Employers hire Apprenticeship Maryland participants to enter into high-skill, high-growth STEM related industries such as healthcare, biotechnology, information technology, construction and design, banking and finance, and advanced manufacturing. Frederick and Washington Counties were selected to administer this pilot program which provides high school juniors and seniors with academic and occupational skills leading to both a high school diploma and a State Skill Certificate.

Issuance of Program Guide

In August, the Maryland Department of Labor, in consultation with the Maryland State Department of Education, issued the Apprenticeship Maryland Program Guide. The guide, available in English and Spanish, outlines the responsibilities of employers and mentors, school districts, students, and parents. The guide also discusses key components of the program including information on:

- Child Labor Laws;
- Wages;
- Worker's Compensation;
- Eligible Employer Reporting Requirements;
- Unemployment Compensation; and,
- Early graduation and extensions

National Apprenticeship Week

In 2015, President Barack Obama proclaimed the week of November 2, 2015, as the first Annual National Apprenticeship Week to provide awareness to the many contributions apprenticeships make to the United States' economy. Governor Larry Hogan also issued a proclamation recognizing National Apprenticeship Week, and the Maryland Department of Labor sponsored a number of events throughout the week.

During November 14 through 18, 2016, Maryland built on the success of its National Apprenticeship Week events by sponsoring or taking a part in six events focused on various aspects of apprenticeships. The weeklong celebration included an event focused apprenticeship on youth The event celebrated the opportunities. employers participating in the Apprenticeship Maryland pilot program and Maryland's first youth apprentices. Maryland Public Television covered the event.



The 2016 Governor's Proclamation for National Apprenticeship Week

Targets for Youth over the Next Three Years

Maryland statute requires that the Committee establish the quantity of youth apprenticeship opportunities for youth that the State should reach over the next three years. The Committee remains committed to responding to the requests within the school districts, and to the success of the *Apprenticeship Maryland* pilot program. That program requires that each participating school system may select up to sixty students to participate in the pilot.

As such, the Committee provides the following intended outcomes for the pilot program. The chart includes goals for the conclusion of each year of the pilot as well as a third year as required by the act authorizing this Committee's work.

Measures	Year One (08/16 - 08/17)	Year Two (08/17 - 08/18)	Year Three (08/18 - 08/19)
Number of Students Contacted ¹	100	150	200
Number Entered into Youth Apprenticeships	30	60	90

¹ This number should represent the number of students who receive information about the Apprenticeship Maryland pilot program through outreach conducted by Maryland Department of Labor, Maryland State Department of Education, or by the local school systems participating in the pilot.

Number of Students Obtaining Certifications	20	50	80
Number Completing Apprenticeships	0	20	70
Number of Businesses/ Employers Contacted ²	50	100	150

The Committee is also committed to finding greater opportunities for youth in other Maryland jurisdictions.

Apprenticeship Maryland Pilot Program

Chapter 140 of the Acts of 2015 requires that the Maryland Department of Labor, in coordination with the Maryland State Department of Education, report jointly to the Governor and the General Assembly on the effectiveness of the pilot program. Specifically, the statute requires detailed information on:

- The number of students participating in the program from each participating school system:
- The wage information regarding payments disbursed to students participating in the program;
- Feedback from students participating in the program on ways to improve the program;
- The types of workforce skills and training that the students participating in the program were able to acquire;
- The number of students who completed the program;
- The number of students that employers retained; and,
- Recommendations to expand or discontinue the program.

As the pilot program officially started with the beginning of the 2016 – 2017 school year, a limited number of students have been placed. As such, limited information is available at the time of this report.

- Currently, eight (8) students have been placed with eligible employers. Additional students are being interviewed to fill positions with Eligible Employers in both counties.
- According to wage information, and in accordance with statute, the students who were
 placed with eligible employers were making at least the applicable minimum wage.
 According to the information gathered, student apprentices, on average, were paid \$9.00 per
 hour.
- The following represents the feedback that was received by some of the students placed as of the date of this report:

	Student	Feedback
Colin Lynch		"My apprenticeship at working for the Brunswick
		Woodworking/Cabinet Making is a good experience for me to help

² This number should represent the number of businesses who receive information about the Apprenticeship Maryland pilot program through outreach conducted by Maryland Department of Labor, Maryland State Department of Education, or by the local school systems participating in the pilot.

	extend my career in the future. I have a good amount of experience that I learned in Career and Technology Center (CTC) and I can use some of those skills in my apprenticeship. I like how everyday I learn something new! I get along with the worker/employees very well! Every morning I wake up, and I am excited about what I will be learning when I get there!"
Steven Swift	"In my apprenticeship I am able to help register patient's information. This position has shown me a different side of working with patients that I would have never experienced without this apprenticeship. People do not normally think of the work that happens behind the scenes when someone enters a hospital. There is another world of information that comes with just one patient. Because of this, I have gained a lot of respect for the people that are able to keep the patient registration system running so smoothly. I am thankful for this opportunity and am excited to learn more in the months to come."
Justin Elliott	"So far the apprenticeship program has been working smoothly. I am occupied most of the time with projects or small tasks. The jobs I perform are a great learning opportunity, especially for someone my age. I thoroughly enjoy the work I do here. My only problem with it is I do not always have something to do, but that rarely happens. I enjoy my coworkers and interacting with them as a team. In conclusion, this is a great opportunity and being the first year of the program, it is going very well."
Suzanne Harkins	"In my opinion, the program is working great, it is going wonderfully. I would not be so much ahead if it was not for this program. For improvements, I would go with bettering the process of actually getting in the program, it was kind of a long-going process of hearing nothing and not knowing anything. But overall, it's wonderful. I'm learning and getting experience that's good for me. The people I am working with are so nice, and they teach me very well. I am very pleased with the program and my experiences so far. Plus, I was recognized on the front of the Frederick new post so very, very thankful for the opportunity I was given."

• The following includes workforce skills and training that the students will be able to acquire as a participant in the pilot program:

Occupation	Workforce Training Skills	
Cabinetmaker	Learn safe operation of power tools	
Engineer	Learn drafting and auto-cad	
Manufacturing Engineer	Learn to read blueprints and drawings to assess design for	
VANTU ADDENTICECUID Advisory Committee Appual Boront 2014		1.1

	manufacturing to customer specifications. Create, improve, and validate manufacturing processes.
CNC Machine Operator	Utilize drawings and other instructions to select, align and secure fixtures, tools and materials to modify parts using CNC Machines.
Print (Silkscreen/Pad Print) Operator	Using customer supplied artwork and documents, formulate inks and paints and print parts using silk screen and pad print technology
Construction Management/Estimator	Be able to read blueprints, learn estimating system and visual take offs in order to bid jobs. Learn how a construction office works in accounting, project management, etc.
Bio-medical Equipment Assistant	The Biomedical Engineering Assistant receives, processes, dispatches, and files work orders as requested; provides excellent customer service, is detail-oriented, and possesses accurate data entry skills.
	Under supervision, inspects and performs preventive maintenance on certain types of biomedical, clinical laboratory, research, and other related technical equipment; performs scheduled inspections and tests to assure conformance of code requirements; inspects newly acquired equipment; performs electrical safety inspections on biomedical equipment in accordance with JCAH.
	Maintains and updates the following: inventory of hospital's biomedical equipment and biomedical engineering parts inventory, performs monthly database audits and corrections, assists in producing inventory reports from database, and maintains biomedical engineering storage areas.
	Enters all incoming equipment in computer files, makes work orders for new equipment, and closes out work orders in computer.
Pre-access Financial Counselor	Responsible for verifying patient demographic and financial information for all insurances and self-pay accounts. Responsible for verifying insurance authorizations for in-patient and out-patient services and for assisting patients and / or guarantors in making suitable financial arrangements.
	Proficiency in the use of computer software, ability to operate a copier, fax machine, 10 key calculator and printer.
	Excellent verbal and written communication skills in order to effectively interact with patients, customers, employee's and Senior Leaders.
	Must demonstrate the ability to follow verbal and written

instructions.

Attention to detail, with the ability to analyze and determine the type of data needed to complete various types of patient registration functions.

Must demonstrate ability to manage time, deadlines, multiple request and priorities, maintain productivity and exercise good judgment with minimal supervision.

Must have the ability to apply policies and procedures regarding data security and confidentiality to prevent inappropriate release of patient information.

Patient Access Registrar

Responsible for obtaining accurate, pertinent demographic and insurance information prior to services, thus reducing financial risks of third party denials and delayed collection processes for services both at on and off site facilities.

Proficiency in the use of computer software, ability to operate a copier, fax machine, 10 key calculator and printer.

Excellent verbal and written communication skills in order to effectively interact with patients, customers, employees and Senior Leaders. Must demonstrate the ability to follow verbal and written instructions.

Attention to detail, with the ability to analyze and determine the type of data needed to complete various types of patient registration functions.

Must demonstrate ability to manage time, deadlines, multiple request and priorities, maintain productivity and exercise good judgment with minimal supervision.

Must have the ability to apply policies and procedures regarding data security and confidentiality to prevent inappropriate release of patient information.

- As of the date of this report and because the program started in August 2016, no students have completed the program;
- As of the date of this report and because the program started in August 2016, no students have been retained:
- While a recommendation to expand or discontinue the program is premature given the August 2016 start date, the Departments and the Committee have been able to collect various lessons learned.

Lessons Learned

During its September meeting, the Committee met with representatives of the local school systems, community colleges, and workforce development agencies at Frederick Community College. The goal of the meeting was to have an open discussion about the lessons the two school districts have learned in implementing the pilot program. The following is a listing of issues discussed at the meeting:

(1) Streamlining communication and application processes between local school districts, students and employers.

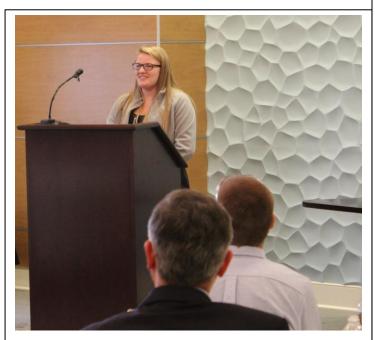
The school districts in Washington and Frederick Counties reported that students are applying for certain career pathways, not specific jobs. As such, the school systems are experiencing some difficulty in matching qualified students with eligible employers.

For example, Woodsboro Bank received five applications and decided to interview two candidates.

However, when the students were contacted by bank employees to schedule an interview, one student was reportedly unaware that his/her resume was sent to the bank.

Similarly, Washington County Public Schools reported that their youth apprenticeship kickoff event was well attended, with approximately 100 students expressing interest. Following the kickoff, only ten students applied to participate in the pilot program. Those students were invited to attend a youth apprenticeship training. At the training, school officials did not have information about available jobs to give to the students, only information on potential career pathways.

Local school officials and professional school counselors also report that they are often not notified when a student applies for a position. Therefore, the Committee discussed creating a seamless online job board that will allow the students and employers direct access, cutting time and school staff resources.



Suzanne Harkins tells a group at Frederick Memorial Hospital what her apprenticeship has meant to her.

(2) School districts lack necessary resources to meet growing demand of youth apprenticeships.

Both school systems report that local school staff are currently serving as intermediaries between students and employers. School officials are receiving student resumes, sorting resumes with available employers based on career pathways, matching employers to students, contacting employers and students about available opportunities, and arranging interviews. Both local education systems note that school staff and professional school counselors are adding management of the program to already busy schedules. For instance, Frederick school officials report a 400:1 ratio of students to school counselors, when the guidelines suggest a ratio of 250:1.

As a possible solution, apprenticeship navigators supplied by the Maryland Department of Labor will help to alleviate staffing shortages. As this program is currently not funded by state funds, additional federal and potentially philanthropic funds should be sought and leveraged to address these concerns.

(3) Branding Youth Apprenticeships to students, parents and school officials

Targeting and reaching students who are looking for a career before, or in lieu of, going straight to college after high school graduation has proven difficult. For instance, Frederick County reported that students interested in the pilot program were asked to attend a site visit and "fell in love with the program." Many of those students are currently participants in the pilot program. Schools officials report that the students more favorably viewed apprenticeship opportunities post-site tour.

This example is in line with many of the reports that have been presented nationally on marketing apprenticeships to youth. In its August 2016 report, the Young Invincibles notes a late winter 2015 and early spring of 2016 survey of 200 young adults from Chicago on their attitudes toward apprenticeship and job training.xiii The report outlined three key misconceptions. The youth surveyed believed:

- Apprenticeships don't exist in their communities;
- Youth Apprenticeships are essentially unpaid internships;
- Participating in an apprenticeship precludes getting college credentials.xiv

Additionally, Frederick Memorial Hospital, for example, is accepting youth apprentices but reports lack of understanding how to best provide the students a valuable experience. Hospital staff coordinating the youth apprenticeship experience are not familiar with the needs and learning potential of high school students and are fearful of not providing a rewarding experience causing the students to not want to return, which could lead to a negative opinion of the program.

Not limited to the hospital, this concern must be addressed as the pilot program continues. The state agencies must work together to ensure that competencies are aligned with the students' educational needs. Agreements entered into by the youth apprentice and his or her parent(s) should also include this list of competencies. This leads to a greater amount of transparency about the program and allows the apprentice and his or her parent(s) to recognize the value of the apprenticeship experience.

The Committee also encourages school systems and employers to avail facilities for site visits, thus demonstrating opportunities to the students and professional counselors. Similarly, as the program progresses, the Committee, with the assistance of the Departments, should develop successful case studies from experiences of currently enrolled youth apprentices.

Additionally, the State is currently leveraging funds it obtained through the ApprenticeshipUSA Accelerator grant to develop outreach materials, including the development of videos dedicated to demonstrating the benefits of apprenticeship programs for youth apprenticeships. These outreach efforts should be co-branded by both the Maryland Department of Labor and the Maryland State Department of Education to assure parents of the educational value of the program.

Outreach and education will be a cornerstone of the Maryland Apprenticeship pilot. Not only will industry engagement be critical to the success of the youth apprenticeship pilot, but the scale of this engagement is broader than with previous endeavors.

Target Audiences	Unique Message Focus	
K-12 Public Education Staff K-12 Parents or Caregivers K-12 Students	Promoting youth apprenticeship as a means of career advancement for students seeking career choices/options to traditional college or university training. This messaging may also occur at school-sponsored job fairs.	
Training Schools and other Training Providers	Empowering these providers to work with DLLR to build direct connections between their skills training programs and youth	
Labor Unions and Labor-Affiliated Training Programs	apprenticeship opportunities with participating businesses.	
Intermediaries and EARN Maryland grantees		
Associated Builders and Contractors and the Independent Electrical Contractors		
Community Colleges	Promoting more robust connections between credit programs and existing non-credit programs offering Registered Apprenticeship-related training. Also, helping such institutions build stronger connections with RA sponsors, so as to grow future capacity.	
	Making the link between apprenticeship and college credits will be an important point for many parents, and can serve as a recruiting strategy for students.	
Chambers of Commerce	Promoting apprenticeship and youth employment as a means of	
Business-driven Workforce Intermediaries	linking businesses with workers who can receive direct training required to be successful with these businesses. Also noting the benefits apprenticeship provides businesses both on a cost basis,	
Businesses within Focus Industries	as well as tailoring training to meet unique business needs.	
Maryland Apprenticeship and Training Council	Promoting DLLR's vision for the increased use of apprenticeship in Maryland, while working with members to outline their essential role as this process unfolds.	
Philanthropic Organizations and Foundations	Promoting the ability of youth apprenticeships to more closely align business needs, trainee competencies, and existing training programs with each other. Sharing how these results lead to a stronger and more vibrant state and regional economy.	

(4) Contrasting Youth Apprenticeships with other existing and better known programs

Students and parents may be confused as to the differences between youth apprenticeships and current work-study programs. Thus, the Committee will develop branding and marketing

opportunities that will assist in the education of parent, students, and school staff alike to differentiate between the various programs available to students seeking career-ready experience.

(5) Explore opportunities with CTE course work and State graduation requirements

It was reported that CTE programs are scheduled in a variety of ways, discouraging late entry into the program. Similarly, it was noted that College and Career Readiness requirements hinder class choice to meet State graduation mandates. The Maryland State Department of Education will examine these issues and will provide the Committee and local school systems with additional information as the pilot program continues.

(6) School officials and employers fear violating existing laws and regulations

Employers and school counselors are not familiar with youth labor laws. Employers are concerned about exposing themselves to legal liabilities from insurance companies which is a barrier to further implementation and growth of the program. School officials are also concerned about student privacy laws when collecting data and other information for the program.

The Maryland Department of Labor is dedicated, in coordination with the Committee, to research youth labor laws and add information to all marketing materials as well as train school officials and employers on regulations and policies. The Committee will work with the Maryland Occupational Safety and Health Office to develop safety protocols and procedures. The Committee will also seek guidance on student privacy laws.

(7) Youth Apprenticeship program is perceived to be lacking clear participation goals and timelines

During the pilot program, school officials are developing timelines for the program as they go because no standard timeline for participants to follow has been developed. The school systems also state that they are having difficulty measuring success without clear, measurable goals.

The Maryland General Assembly, through the 2015 legislation establishing the pilot program, provided a number of clearly articulated goals. The Committee recognizes that the collection of data may continue to be an issue moving forward. The Departments note that a data system to collect the information may be necessary to ensure that all information required under the law is collected.

Standard schedules are being developed as the youth apprenticeship program transitions from the first to second year which should alleviate this issue. The Maryland Department of Labor recognizes that, while employer participation drives student demand, increased efforts need to be made to identify potential businesses by working with state and local partners.

The Path Ahead

The 2015 Recommendations

In its 2015 report, the Committee identified eight recommendations for its continued work. The following is an update on the Committee's progress toward those recommendations.

RECOMMENDATION 1: The Maryland Department of Labor, in consultation with the Maryland Department of Commerce, should identify and convene key industry partners to establish an employer engagement campaign for youth apprenticeship.

Great strides have been made in implementing this recommendation. As noted above, local advisory committees were formed and funds have been obtained through a non-profit partnership with First Energy Corporation, providing financial assistance to employers interested in participating in the pilot program.

RECOMMENDATION 2: The Committee should identify and evaluate current and needed resources for the State to establish the role of business intermediaries for youth apprenticeship.

As noted above, the legislative action transferring the State's apprenticeship programs to the Division of Workforce Development and Adult Learning will provide greater access to much needed resources. Already, the State has conducted a one-day training seminar featuring Gerry Ghazi, of HITECH, a Vermont company specializing in using apprenticeship opportunities as workforce solutions. At the conference, Ghazi provided a full-day training for the state and local agency business services representatives from the Maryland Department of Labor, the Maryland Department of Commerce, the Maryland Department of Human Resources, the Maryland State Department of Education's Division of Rehabilitation Services, Community College representatives, EARN Maryland Program grantees, and business services representatives from Maryland's Local Workforce Development Areas and existing Registered Apprenticeship sponsors.

The recently awarded ApprenticeshipUSA Expansion grant will allow for additional funding for intermediaries. Other exciting opportunities exist in the State. For instance, a collaboration of apprenticeship experts from the United Kingdom, the Children's Guild and others have established the TranzEd Apprenticeship Services in 2016. The Committee looks forward to exploring ways how business intermediaries can be used to coordinate efforts in the growth of apprenticeship opportunities in Maryland.

RECOMMENDATION 3: The Committee should establish targets for implementing youth apprenticeships after reviewing and assessing available data. The Committee should also establish performance matrixes to gauge the success of youth apprenticeship programming.

The Committee has developed a matrix (provided on pages 9 and 10) as a way to meet this recommendation.

RECOMMENDATION 4: The Committee should review and establish best practices for mentorship.

The Committee is continually reviewing mentorship best practices. For example, Committee staff has noted the work of a number of states regarding the establishment of mentors for youth apprenticeships. To illustrate, the State of Kentucky has developed a mentorship guide as a part of its Work-Based Learning Manual. The Committee will continue to examine best practices for mentorship as its work continues into 2017.

RECOMMENDATION 5: The Committee should identify policies and suggest changes to regulations that prohibit employers from establishing a youth apprenticeship program.

This recommendation was discussed above in the "Lessons Learned" section of the report. The Committee looks forward to working with our partners in Washington and Frederick Counties as the pilot program progresses.

RECOMMENDATION 6: The Committee should identify and suggest solutions to additional barriers that would inhibit youth from participating in a youth apprenticeship program. These barriers include, but are not limited to, transportation needs.

This recommendation was discussed above in the "Lessons Learned" section of the report. The Committee looks forward to working with our partners in Washington and Frederick Counties as the pilot program progresses.

RECOMMENDATION 7: In consultation with the Maryland State Department of Education and other stakeholders, the Committee should review Maryland's existing models and recommend ways to integrate soft skills training into the training plans for the Youth Apprenticeship program.

Soft skills training remains an important component of any youth apprenticeship model. The Washington County local school system reports that it utilizes the United States Department of Labor's *Mastering Soft Skills for Workplace Success*. The curriculum includes six key skill areas: Communication, Enthusiasm and Attitude, Teamwork, Networking, Problem Solving and Critical Thinking, and Professionalism. The Committee will continue to review curricula and other resources for the integration of soft skills training.

RECOMMENDATION 8: The Committee should convene a one-day conference with leading experts to discuss the necessary components of high quality training plans to ensure strong mentorships and the integration of academic, technical, and the essential skills.

Youth apprenticeship opportunities were discussed at the CTE conference on Nov 3, 2016. Representatives from the two local school systems participating in the pilot program, the Maryland Department of Labor, and TranzEd Apprenticeship Services presented. The presentations helped inform counselors about youth apprenticeship opportunities. Additionally, the Division of Workforce Development and Adult Learning is dedicated to using grant funds obtained to accelerate apprenticeship opportunities in order to convene the conference in 2017.

2016 Recommendations

In addition to its continued work on the aforementioned recommendations, the Committee agreed to a number of additional items that will assist it in its work during 2017.

2016 RECOMMENDATION 1: Find ways to support Career and Technical Education (CTE) programs as a way to provide on-the-job training for students. While participation in CTE programs should not be a pre-requisite for youth apprentices, exposing students to career opportunities should remain a high priority. The Committee will continue to examine opportunities to promote on-the-job training for students.

2016 RECOMMENDATION 2: Support the development of a data system to track and evaluate the youth apprenticeship program.

2016 RECOMMENDATION 3: Support ways to ensure that related instruction for youth apprentices lead to college credit either through a community college or via equivalent credit through the American Council on Education. The Committee finds that stackable, industry-recognized credentials benefit the apprentice, and the business employing the apprentice. It also promotes the youth apprenticeship program. While the Committee notes that some of Maryland's community colleges currently participate in the USDOL has created the Registered Apprenticeship

College Consortium, the Committee would like to continue to explore opportunities to expand credit opportunities for related instruction.

2016 RECOMMENDATION 4: Support efforts from the Maryland Department of Labor, and Maryland State Department of Education to garner the financial support of private sector and philanthropic organizations to assist in the funding of the pilot program. As other states are beginning to implement youth apprenticeship programs, some initiatives, like the one in Colorado, are drawing the attention of large corporations. The Committee will continue to assist the Departments in the pursuit of grant funds for the continuation of this program.

 $\underline{\text{http://msa.maryland.gov/megafile/msa/speccol/sc5300/sc5339/000113/020000/020859/unrestricted/20150235e.pdf.}$

ⁱ Finding #8. Report of the Maryland Economic Development and Business Climate Commission. 2014 Interim Report (a/k/a "The Augustine Commission"). February 2015. Available online at

[&]quot;Ibid.

ⁱⁱⁱ Ibid.

iv Governor's Office for Children. "Disconnected Youth Jurisdictional Data." Handout available at http://goc.maryland.gov/presentations/. Last updated October 2015.

Youth Apprenticeship Advisory Committee. "Youth Apprenticeships: The Creation of Maryland's Youth Employment Pipeline." Annual Report. 2015. Available at https://www.dllr.state.md.us/aboutdllr/youthapprrep.pdf.

vi Maryland Department of Labor, Licensing, and Regulation. "Maryland Fastest Growing Occupations – 2004-2014." Available at http://www.dllr.state.md.us/lmi/iandoproj/fastestgraph.pdf.

vii Report of the Maryland Economic Development and Business Climate Commission. 2014 Interim Report (a/k/a "The Augustine Commission"). February 2015.

viii *Ibid*, p.31.

ix Youth Apprenticeship Advisory Committee, 2015 Report, p. 4.

^x MD Annotated Code Labor & Employment § 11-603. Apprenticeship Maryland; pilot program.

xi The Case for Expanding Youth Apprenticeships" *The Century Foundation* https://tcf.org/content/commentary/the-case-for-expanding-youth-apprenticeships/

xii Children's Cabinet 2015 Strategic Direction and Implementation Plan http://goc.maryland.gov/wp-content/uploads/sites/8/2013/11/CC Strategic Plan FINAL.pdf

xiii Young Invincibles, From Medieval to Millennial: Building and Marketing Modern, Youth-Oriented Apprenticeship Programs, August 2016. Available at: http://younginvincibles.org/wp-content/uploads/2016/08/YIApprenticeshipReport_Final.pdf