Annual Report to Governor and General Assembly on
Pathways in Technology Early College High (P-TECH) schools

(Chapter 144, Acts of 2016)

December 1, 2016
Table of Contents

I. Background / Introduction 1

II. Stakeholder Work Group Membership 2

III. Charge to the Work Group 3

IV. Description of the Work Group Process 4

V. Findings of the Work Group 5

VI. Recommendations 10

VII. Attachments A-B 13
   A. Department of Legislative Services Fiscal and Policy Note SB376
   B. Sample P-TECH Scope and Sequence
I. Background/Introduction

Maryland leads the nation in terms of a high quality public education system, from early childhood preschool through higher education. Maryland is expanding pre-kindergarten programs, offering innovative K-12 initiatives, and providing world-class colleges and universities. Early college experiences, through Advanced Placement (AP), International Baccalaureate (IB), and Dual Enrollment (DE) are an important part of this system. The Pathways in Technology Early College High School (P-TECH) program strengthens the connection between education and career opportunities, while advancing degree completion goals in Maryland.

P-TECH schools are innovative public schools that create clear pathways from high school to college and career for young people from all academic backgrounds. In six years or less, students graduate with a high school diploma and a no-cost, two-year associate degree in a Science, Technology, Engineering and Math (STEM) career field. Each P-TECH school works with industry partners and a local community college to ensure an up-to-date curriculum that is academically rigorous and economically relevant. For more information on P-TECH Schools, please visit www.ptech.org.

Each P-TECH program requires a partnership among three entities; a local school system (LSS), a local institution of higher education, and a local employer in the technology field. Hallmarks of the program include one-on-one mentoring, workplace visits and skills instruction, paid summer internships and first-in-line consideration for job openings with a school's partnering company.

P-TECH was designed to address skills gaps in the labor force by preparing young people from all backgrounds for academic achievement and skilled, middle-skill employment. IBM created the P-TECH program design that would link education to economic development and illuminate a pathway from high school to college and career. According to the Department of Commerce, Maryland has 230,000 STEM jobs, which is the second largest share of a state’s employer base in the U.S. While the degree attainment rate (associate degree and higher) in Maryland improved from 43.9 percent in 2008 to 46.9 percent in 2014 (Lumina Foundation, 2014), Maryland still suffers from a shortage of highly qualified employees, with approximately 6,000 STEM openings a year and only 4,000 STEM graduates, one of the largest workforce deficits in the U.S. (STEM Workforce Data Book, 2011).

The Pathways in Technology Early College High School (P-TECH) Act of 2016 (Chapter 144 of the Annotated Code of Maryland, Education Article) established the P-TECH Stakeholders Work Group to examine the implementation of Maryland P-TECH pilot schools and to determine optimum funding for statewide implementation of Maryland P-TECH schools. Work Group membership under the leadership of Dr. Lynne Gilli, Chair, brings together members of the General Assembly, State agencies, higher education institutions, business, representatives, and other organizations interested in early college high schools.
II. Stakeholder Work Group Membership

<table>
<thead>
<tr>
<th>Member</th>
<th>Position / Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cynthia Bambara</td>
<td>President, Allegany College</td>
</tr>
<tr>
<td>Angela Carroll</td>
<td>Education Analyst, Maryland Higher Education Commission</td>
</tr>
<tr>
<td>Sean Conley</td>
<td>Chief Academic Officer, Baltimore City Public Schools</td>
</tr>
<tr>
<td>Brian Dulay</td>
<td>Executive Director, Maryland Business Roundtable for Education</td>
</tr>
<tr>
<td>Lateefah Durant</td>
<td>Officer of College &amp; Career Readiness, Prince George’s County Public Schools</td>
</tr>
<tr>
<td>Dr. Helga Einhorn</td>
<td>Assistant Superintendent for Instruction, Talbot County Public Schools</td>
</tr>
<tr>
<td>Dr. Lynne Gilli</td>
<td>Assistant State Superintendent, Maryland State Department of Education</td>
</tr>
<tr>
<td>Jeanne Hitchcock</td>
<td>Special Advisor, Johns Hopkins University</td>
</tr>
<tr>
<td>Dr. Kim Kalbaugh</td>
<td>Chief Academic Officer, Allegany County Board of Education</td>
</tr>
<tr>
<td>Sally Scott Marietta</td>
<td>Program Manager, IBM</td>
</tr>
<tr>
<td>Dr. Gordon May</td>
<td>President, Baltimore City Community College</td>
</tr>
<tr>
<td>Larry McKenzie</td>
<td>Chief Financial Officer, Allegany County Public Schools</td>
</tr>
<tr>
<td>Kristy Michel</td>
<td>Chief Operating Officer, Maryland State Department of Education</td>
</tr>
<tr>
<td>Patricia Mikos</td>
<td>Program Manager, Maryland State Department of Education</td>
</tr>
<tr>
<td>Keiffer Mitchell, Jr.</td>
<td>Special Advisor, Office of the Governor</td>
</tr>
<tr>
<td>Gregory Pilewski</td>
<td>Interim Superintendent, Queen Anne’s County Board of Education</td>
</tr>
<tr>
<td>Dr. Patricia Saelens</td>
<td>Assistant Superintendent for Instruction, Caroline County Public Schools</td>
</tr>
<tr>
<td>Dr. Barbara Viniar</td>
<td>President, Chesapeake College</td>
</tr>
<tr>
<td>Angela Visintainer</td>
<td>Director of Economic Development, Caroline Economic Development Corp.</td>
</tr>
</tbody>
</table>

Additional support and contributions to the Work Group included policy analysts from the Department of Legislative Services, Garret Halbach and Dana Tagalicod, as well as staff from MSDE and the Maryland Higher Education Commission (MHEC), including Dr. Emily Dow, Assistant Secretary, Academic Affairs. Representatives from the six (6) P-TECH Planning Grant teams also participated in the Work Group process and provided information regarding proposed implementation strategies and budget requirements. Dr. Tonya Ringgold, Vice President for Academic Affairs, Baltimore City Community College also shared early implementation information regarding the first two P-TECH schools in Baltimore City.
III. Charge to the Work Group

The Maryland State Department of Education (MSDE), in collaboration with stakeholders, including the Maryland Higher Education Commission (MHEC), the Maryland Association of Community Colleges, private sector representatives with experience in the P–TECH model, and representatives of proposed P–TECH schools shall determine the optimal funding strategy for P–TECH schools.

The Work Group shall report on the following:

1. The status of the planning grants and the implementation of P–TECH schools in the State, including whether any of the planning grants resulted in proposed P–TECH schools that are ready to be implemented in accordance with the requirements of § 7–1701 of the Education Article;

2. The number of credits a P–TECH student is expected to take from both the P–TECH school and the institution of higher education in each year of the program;

3. The number of students expected to graduate with both a high school diploma and an associate’s degree or Commission–approved certificate in each cohort of a P–TECH school;

4. Whether P–TECH students should be included in the Maryland public school enrollment count in years five and six of the program, or in any year or semester during which the majority of credits are being taken from the institution of higher education;

5. If a P–TECH student should be included under item four (4) of this subsection, a justification;

6. A framework for funding the dual enrollment costs of P–TECH students that includes:
   a. the requirements of the P–TECH model to pay for student transportation, fees, and books in addition to tuition; and
   b. a comparison and explanation for the difference, if any, from current law provisions relating to dual enrollment;

7. An examination of P–TECH schools in other states; and

8. Recommendations for legislation to be introduced during the 2017 Legislative Session including:
   a. a justification for, and a reasonable division of, P–TECH model costs among the State, school system, higher education and, in alignment with the P–TECH model, industry partners of the P–TECH schools, while maximizing opportunities to minimize State costs; and
   b. whether additional P–TECH schools are ready to be implemented based on the status of the planning grants and, if so, where they may be located.
IV. Description of the Work Process

The P-TECH Stakeholders Work Group was convened on September 15, October 4, and October 19, 2016. Meetings were conducted at MSDE as well as through teleconference. All materials and meeting minutes were also posted to the Maryland P-TECH website at:
http://www.marylandpublicschools.org/programs/Pages/ptech/index.aspx

The first meeting on September 15, 2016 provided an opportunity to share the history of the P-TECH model developed in New York in partnership with IBM. Sally Scott Marietta, Program Manager at IBM provided an overview of the model and an update on the growth of P-TECH schools across the country. In the 2016-2017 school year, there are more than 60 P-TECH schools in operation or in the planning phase. The Work Group also reviewed legislation and funding models for P-TECH schools in New York and Colorado. Additional information regarding implementation of the P-TECH model is provided through the national P-TECH website at: http://www.ptech.org/.

The Work Group also reviewed the Maryland P-TECH legislation and planning grant requirements. A panel of representatives from Maryland P-TECH schools, including Baltimore City and the Eastern Shore, shared their progress to date. Baltimore City Public Schools opened two (2) P-TECH schools in August, with 100 students enrolled in the first cohort, with 50 students in P-TECH@Carver and 50 students in P-TECH@Dunbar. Representatives from the P-TECH school on the Eastern Shore also shared their progress in terms of identifying college pathways offered at Chesapeake College and potential challenges in implementing a regional P-TECH, such as providing transportation and identifying employer partners to provide mentoring and internship opportunities for all students.

The second meeting of the Work Group on October 4, 2016 included a more detailed review of costs associated with P-TECH requirements, such as career exploration and mentoring, extended school year, and student support services. The P-TECH Act of 2016 includes a requirement that a Maryland P-TECH school must reserve at least 50% of its available space for students who meet the free and reduced-price meals (FARM) income criteria.

The Work Group reviewed the Department of Legislative Services Fiscal and Policy Note for SB 376 (Attachment A) and discussed the variations across school systems in determining estimates for these costs, such as transportation and facilities. Similarly, the cost of college tuition, fees and books will vary by college, depending on the current agreements for dual enrollment. The Work Group also discussed current funding options through dual enrollment provisions and formula funding for K-12 schools and community colleges. Kristy Michael, Chief Operating Officer at MSDE reviewed current funding sources for local school systems. Geoff Newman, Assistant Secretary of Finance and Administration at MHEC provided an overview of the John A. Cade Formula for Aid to Maryland Community Colleges.
The third meeting of the Work Group on October 19, 2016 included a review of recommendations and clarification on funding model options. In preparation for the meeting, members of the Work Group also examined other models of early college high schools, such as the Prince George’s Community College Academy of Health Sciences and the Bard High School Early College in Baltimore. The Work Group confirmed estimates for costs, considerations for implementation, and the rationale for each recommendation in the Maryland P-TECH model.

V. Findings of the Stakeholder Work Group

The P-TECH Stakeholders Work Group addressed each item as required by its charge. A summary of each is provided below and informed the recommendations included in this report.

1. The status of the planning grants and the implementation of P-TECH schools in the State

In January 2016, Governor Hogan announced the launch of P-TECH in Maryland, with planning grants for six (6) new P-TECH schools. Local school systems partnered with community colleges and local businesses to provide a clear pathway from high school to college and careers. P-TECH schools identified potential career pathways and associate degree options in STEM career fields.

Two (2) P-TECH schools opened in Baltimore City in the 2016-2017 school year. The remaining P-TECH schools will open in the 2017-2018 school year. The chart below shows the planning grant schools, business partners, degree pathways, and cohort size for each P-TECH school.

<table>
<thead>
<tr>
<th>LSS/CC</th>
<th>Industry Lead</th>
<th>Career Pathways (A.A.S. degree)</th>
<th>9th Grade Cohort</th>
</tr>
</thead>
</table>
| Baltimore City Public Schools – Baltimore City Community College | P-TECH@Dunbar in partnership with Johns Hopkins Hospital, Kaiser Permanente, and University of Maryland - Baltimore | Health Information Technology  
Respiratory Care  
Surgical Technology | Fall 2016  
50 students |
| Baltimore City Public Schools – Baltimore City Community College | P-TECH@Carver in partnership with IBM | Cyber Security  
Computer Information | Fall 2016  
50 students |
| Allegany County Public Schools – Allegany College | Allegany in partnership with Western MD Health Systems | Cyber Security  
Computer Science | 2017-2018 SY  
20 students |
| Queen Anne’s, Talbot, and Caroline County Schools (Upper Eastern Shore) – Chesapeake College | P-TECH@Chesapeake College in partnership with University of MD Cooperative Extension Service | Business Management  
Applied Technologies - Engineering Technology | 2017-2018 SY  
20 students |
| Prince George’s County Publics Schools – Prince George’s Community College | 2 P-TECH Schools (tbd) | Health Information Management  
Hospitality Services Management | 2017-2018 SY  
50 Students  
(25 each school) |
2. Expected number of credits a P-TECH student completes in high school and college

Each P-TECH school includes multiple pathways for students to earn a college degree and work experience in their chosen career field. While students are provided support for up to six years to complete the degree, many students will complete the degree requirements in four or five years. Each P-TECH school must develop for each pathway a P-TECH Scope and Sequence for a four-year, five-year, and six-year plan. A sample P-TECH Scope and Sequence is included in Attachment B. Unlike other early college programs, P-TECH schools must be open admission, without selective criteria or barriers to enrollment for any student interested in the identified career pathways.

Based on the experiences of the first P-TECH school in Brooklyn, NY, it is estimated that 12%-15% of students will complete the degree requirements in four years, 13%-25% will complete in 5 years, and 60%-75% will need up to six years of support to complete the Associate degree. For budgeting projections, it is estimated that 25% of the P-TECH students will complete in five years or less and 75% will remain enrolled for a full six years. The chart below shows the variation in the number of college high school and college courses a P-TECH student takes depending on their progress. As part of the P-TECH model, all students must take college courses starting no later than 10th grade.

<table>
<thead>
<tr>
<th>Pathway Scope &amp; Sequence</th>
<th>Number of High School and College Courses by Grade (HS/College)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>9th</td>
</tr>
<tr>
<td>4-Year (12%)</td>
<td>5/1</td>
</tr>
<tr>
<td>5-Year (13%)</td>
<td>5/0</td>
</tr>
<tr>
<td>6-Year (75%)</td>
<td>5/0</td>
</tr>
</tbody>
</table>

Regardless of the rate of progress, all P-TECH students generally complete 60 credits, or 20 college courses. Funding considerations for P-TECH students include the number of terms of enrollment, fees, and tuition rates for full-time versus part-time students. Funding for community colleges is calculated using a Full Time Enrollment (FTE) credit load of 30 credits annually (i.e., total FTE enrollment is equal to the total number of credits hours offered annually divided by 30). In the P-TECH model, students generally do not reach a full-time college course load while in high school.

3. Expected number of students to graduate and earn a degree

The first P-TECH school in Brooklyn, NY has not yet completed a full 6-year cycle. However, 78% (76 out of 97) of students from the August 2011 cohort have graduated with an AAS degree or are still enrolled in college. For the Maryland P-TECH schools, it is expected that at least 85% of P-TECH students will graduate with both a high school diploma and an associate’s degree or Commission-approved certificate designated for their career pathway (within six years). The cohort graduation rate for other Maryland early college high schools (with selective admissions) is 91%. The following table shows the estimated number of graduates and degrees for the full implementation cycle for the pilot schools in Maryland.
### 4. P-TECH students in the Maryland public school enrollment for Year 5 and Year 6

P-TECH students are included in the Maryland public school enrollment count as long as they are attending and receiving services from the Local School System. In Year 5 and Year 6 of the P-TECH pathway, all students will be taking the majority of their courses through the college. However, high school courses may include coordination of internships or work-based learning opportunities and remediation for struggling students.

In Maryland, each LSS has an existing agreement with local institutions of Higher education regrading dual enrollment. As an example, the table to the right shows the current calculations for tuition and fees at Chesapeake College.

In this example, the college has reduced tuition to 75% for dual enrollment high school students. The remaining tuition and fees for one (1) three-credit course is $400.

Under the current dual enrollment provisions, local school systems operating a P-TECH school would be required to cover the tuition and fees for all 20 courses.

This is estimated to range in cost per student from $400 to $3,200 per year. The total per student investment is $8,000 over the course of the degree requirements.
5. **Justification for P-TECH students in public school enrollment for Year 5 and Year 6**

P-TECH schools provide services and supports to students in addition to the opportunity for dual enrollment or early college credit. Every P-TECH student must be provided support services as long as s/he persists in the degree program (up to year six), including:

- Assigning a P-TECH School Administrator and other staff as needed, to ensure program implementation and college and career readiness of all students;
- Coordinating with college partners to support students completing the degree; and
- Providing industry mentoring and internships, especially in years four to six.

The P-TECH Act of 2016 authorizes state per pupil funding for the first two P-TECH schools in Baltimore City and planning grants for the six (6) pilot sites. The Act eliminates the P-TECH specific dual enrollment provisions, with the expectation that the P-TECH Stakeholder Work Group provide recommendations regarding the optimal funding strategy for P-TECH. The Act specifies costs for operating a P-TECH school to include:

I. Additional staffing to implement the P-TECH curriculum;
II. Instructional support services, such as professional development, curriculum materials and time for planning and coordination;
III. Extended day programs; and
IV. Student support services, such as counseling, tutoring, and career exploration.

Beginning in Fiscal Year 2017, the state shall distribute P-TECH school grants to county Boards of Education, proportionately based on enrollment in each P-TECH school. The P-TECH school grants shall be used for P-TECH school costs (previously listed). In Fiscal Year 2017, the amount provided for each P-TECH student is $520. The state contribution is 50% for each P-TECH student, with the remaining $260 provided at the local level.

6. **Framework for funding dual enrollment in Maryland community colleges**

Current dual enrollment funding is a combination of reduced tuition costs by the community college, local school system funding, and payment by student/parent for reimbursement of tuition and additional fees. P-TECH schools must include a community college partner and identify specific Associate degree programs as the P-TECH “pathway.” As such, P-TECH students complete a clearly defined sequence of college courses leading to the degree. This includes a 60-credit degree program, generally including 20 college courses.

A public institution of higher education may not charge tuition to a dually enrolled student, under the College and Career Readiness and College Completion Act of 2013. However, the Act is silent on fees and other costs, such as registration and books. Additional fees may be covered by the LSS or the student in the current provisions. Local Boards of Education pay the lesser of tuition costs for dually enrolled public secondary school students as follows:
• Category 1: First four courses – Community colleges charge 75% of tuition or five (5)% of the per pupil foundation amount.

• Category 2: Five or more courses – Community colleges charge 90% of tuition or five (5)% of per pupil foundation amount.

• Category 3: For Agreements established prior to July 1, 2013: If lesser than categories one or two, the agreement is the basis for tuition.

• Local boards may recoup costs from students as follows: First four (4) courses – Boards may charge students a fee not to exceed 90% of the amount paid for tuition.

• Five (5) or more courses – Boards may charge students a fee not to exceed 100% of the amount paid for tuition.

• Boards must waive tuition fees for students who are eligible for Free and Reduced Price Meals (FARM).

The charts below show the current distribution of cost for dual enrollment tuition. Additional costs, including fees, books and related course materials are not included.

7. Additional early college enrollment programs and other state P-TECH models

The Maryland Higher Education Commission administers an Early College Access Grant for dually enrolled students, as well as a grant program for part-time undergraduate students, including dually enrolled students. Under both programs, grant recipients must demonstrate financial need according to Commission-established criteria. The Commission allocates Early College Access Grant funds to an institution based on the number of dually enrolled students receiving credit for courses completed at the institution. The institution then distributes the grant awards to eligible students.

Funds under the part-time undergraduate grant program are allocated by the Commission to each institution based on the number of undergraduate part-time students who demonstrate financial
need. The institution then distributes the grant awards to eligible students. Institutions may use up to 10% of the part-time grant allocation to provide grants to students who are dually enrolled.

The Stakeholder Work Group examined budgets and funding for several other Early College High Schools (ECHS), including the New York and Colorado P-TECH schools, Prince George’s Community College Academy of Health Sciences, Bard High School Early College (HSEC), and the current Maryland P-TECH pilot schools. Total costs and per pupil funding formulas vary by state and school system. In addition, the number of students per school, or cohort size has a significant impact on cost. In general, additional per student costs range from $6,135 to $3,906 per year for a P-TECH student, above the ADA allotment (per pupil funding amount).

<table>
<thead>
<tr>
<th>School Location</th>
<th>Total Number of Students</th>
<th>Total Costs per Year</th>
<th>Per Pupil Cost per Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colorado P-TECH</td>
<td>Varies</td>
<td>Varies</td>
<td>N/A</td>
</tr>
<tr>
<td>Academy of Health Sciences at PGCC</td>
<td>Prince George’s Community College</td>
<td>400</td>
<td>$4,800,000</td>
</tr>
<tr>
<td>Baltimore Bard HSEC</td>
<td>School-with-in-school</td>
<td>500 (2018-19)</td>
<td>$977,000</td>
</tr>
</tbody>
</table>

* costs are for early college activities only, in addition to general formula high school funding

In New York City P-TECH Schools, college tuition is reduced or waived for P-TECH students. A more detailed breakout of the New York P-TECH School costs is available through the New York City Public Schools website at: [http://schools.nyc.gov/AboutUs/funding/schoolbudgets](http://schools.nyc.gov/AboutUs/funding/schoolbudgets). In Colorado, the per pupil allocation for P-TECH is the same regardless of school size or location. All models expect schools to maximize funding streams. No early college models include the use of Pell Grants for high school students. Students participating in the P-TECH program are not Pell-eligible.

7. **Recommendations for legislation**

Recommendations for legislation to be introduced in the 2017 legislative session are discussed in the next section, including a) a justification for, and a reasonable division of, P-TECH model costs among the State, school system, higher education, and industry partners and b) whether additional P-TECH schools are ready to be implemented based on the status of the planning grants.

VI. **Work Group Recommendations and Justification**

College costs can be a barrier to higher education attainment, and the P-TECH model removes that obstacle, providing students with a seamless pathway to college and career. An additional condition for Maryland P-TECH schools includes the requirement that at least 50% of students served are eligible for Free or Reduced-Priced Meals (FARM). There is a current funding gap between current tuition costs, fees, and related expenses and the LSS ability to cover these for all students.
Current State funding includes P-TECH Planning Grants ($600,000 in FY2016). P-TECH schools require significant planning prior to launch among all the partners involved. P-TECH schools are required to establish a Memorandum of Understanding (MOU) between the school system, community college, and business partners. Each partner must contribute to the operation of the P-TECH school. The chart below includes the support provided by each partner.

<table>
<thead>
<tr>
<th>LSS Costs</th>
<th>Community College</th>
<th>Business Partners</th>
</tr>
</thead>
<tbody>
<tr>
<td>Additional services for P-TECH students are provided in Years 1-6, including facilities and school-year transportation</td>
<td>Additional services include coordination of pathways and supporting students through degree completion</td>
<td>Provides alignment to career pathways and degree programs and supports student career development</td>
</tr>
<tr>
<td>• LSS share of P-TECH Grants is 50% of per student amount of $520 or $260</td>
<td>• College Liaison must be identified for each P-TECH school to coordinate student progression</td>
<td>• Business Liaison must be identified for each P-TECH school to facilitate mentors and on-going contact with students</td>
</tr>
<tr>
<td>• Additional facilities costs for the newly established schools, and expanded transportation for the magnet program</td>
<td>• Coordination of student registration, testing, and access to college resources as needed (in partnership with LSS)</td>
<td>• Identify and coordinate internship opportunities related to career pathways</td>
</tr>
<tr>
<td>• Tuition and fees for all college courses (no cost to student)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The P-TECH Stakeholder Work Group proposes two options for consideration for the optimal funding of the Maryland P-TECH schools. Each option is based on the P-TECH model principles of a no-cost degree for students supported by a public-private partnership. The Local School System, Community College, and Industry partners all contribute to the success of each student as they prepare and successfully transition to a STEM career.

**Option A:** Full Funding for All Years of High School and College Enrollment

**Option B:** Graduated Formula for Years 5 and 6 of P-TECH Schools (based on FTE)

State funding sources are described below. For each option, additional conditions are included with the recommendations for funding.

<table>
<thead>
<tr>
<th>K-12 Formula</th>
<th>John A. Cade</th>
<th>P-TECH Grant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provides State per pupil funding for general education requirements while enrolled in Local School System</td>
<td>Provides State funds linked to full-time equivalent enrollment in the Community College</td>
<td>Provides State funds for additional P-TECH services, such as extended year, student support services, tuition, fees, and transportation</td>
</tr>
<tr>
<td>A</td>
<td>• Full student funding in Years 1-6, regardless of the number of college credits earned (up to 20 courses).</td>
<td>• FTE funding in Years 1-6, based on the number of college credits</td>
</tr>
</tbody>
</table>

| B | • Reduced student funding in Years 5-6 based on high school credits earned (.5 or .25 FTE) | • FTE funding in Years 1-6, based on the number of college credits | • Per student funding in each year of the program to include amount for supplemental services ($1,500) plus half of expected tuition and fees ($1,580) |

There is a two-year lag in calculation of FTE, so P-TECH enrollment will not include actual expenses until full implementation (year six). Additional considerations include a cap on the number of college courses per year for P-TECH students, a cap on the number of students in P-TECH schools (to limit overall costs), and incentives for having students complete the degree requirements in four or five years.

The goal of the Maryland College and Career Readiness – College Completion Act is to align and strengthen Maryland’s P-20 system of education and workforce development. Increasing degree attainment and aligning to high-skill/high wage STEM careers serves our students, families and our economy. The P-TECH model addresses the skills gap and college completion rates directly.

The P-TECH Stakeholder Work Group recommends fully funding the P-TECH program by authorizing State per pupil funding for P-TECH schools through local school systems, community colleges, and the P-TECH State Grant, including foundation funding for students who may need support in year five and year six.

Additional considerations for funding P-TECH schools include:

- Requiring P-TECH schools to reserve at least 50% of its available space for students who meet the FARM income criteria;
- Requiring LSS to use existing dual enrollment provisions to cover the cost of the first four college courses. This exceeds the current dual enrollment provisions to include all tuition and fees, regardless of student FARM status; and
- Award State P-TECH Grants in the amount of $1,500 per P-TECH student to support LSS in providing additional services for P-TECH students through all years of enrollment.

Several LSS have expressed interest in creating a P-TECH school. In the first round of funding for planning grants, two additional applications were received. Since that time, three other school systems have expressed an interest in the next round of planning grants, if available. All six pilot sites are expected to be open by September 2017.
Attachments

A. Department of Legislative Services Fiscal and Policy Note SB 376

B. Sample P-TECH Scope and Sequence