

DEC 07 2015

MARYLAND HIGHER EDUCATION COMMISSION  
ACADEMIC PROGRAM PROPOSAL

PROPOSAL FOR:

- NEW INSTRUCTIONAL PROGRAM
- SUBSTANTIAL EXPANSION/MAJOR MODIFICATION
- COOPERATIVE DEGREE PROGRAM
- WITHIN EXISTING RESOURCES OR  REQUIRING NEW RESOURCES

(For each proposed program, attach a separate cover page. For example, two cover pages would accompany a proposal for a degree program and a certificate program.)

Community College of Baltimore County  
Institution Submitting Proposal

February 1, 2016  
Projected Implementation Date

A.A.S. Degree  
Award to be Offered

Transportation, Distribution, and Maritime Logistics Degree  
Title of Proposed Program

XXXXXX  
Suggested HEGIS Code

520209  
Suggested CIP Code

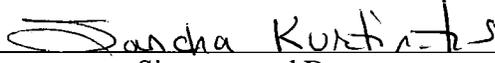
Business Studies  
Department of Proposed Program

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Signature and Date

President/Chief Executive Approval

11/18/15  
Date

Date Endorsed/Approved by Governing Board

**ACADEMIC PROGRAM PROPOSAL**

**MATERIALS AND GUIDELINES**

## **A. Centrality to institution mission statement and planning priorities:**

The Community College of Baltimore County (CCBC) mission states that CCBC provides accessible, affordable, and high quality education that prepares students for transfer and career success, strengthens the regional workforce, and enriches our community. The primary goal of the Transportation, Distribution, and Maritime Logistics (TDML) Program is to provide a pathway for students from high school and from the community to pursue or continue their careers in the TDML industry. Students would have the option to earn a certificate or degree to enter the job market as entry- or mid-level employees or continue their education toward a Bachelor's Degree.

The Transportation, Distribution, and Maritime Logistics (TDML) program will prepare students for employment in current and emerging workforce needs in TDML. It would also prepare students who are currently working in the industry for job advancement by allowing students to update or enhance the knowledge and skills of existing industry employees.

TDML is a growing industry sector that encompasses many different occupations and career pathways. Baltimore is fortunate to have a major seaport within its borders. The Port of Baltimore is located on the Northwest branch of the Patapsco River, a tributary of the Chesapeake Bay. Baltimore gains great advantage over other East Coast ports with a geographic location that is closest to the U.S. Midwest. The Transportation, Distribution, and Maritime Logistics Program is designed to provide students with a broad understanding of the handling and logistics of seaborne cargo. Some of the many activities involved include customer service, transportation, purchasing, warehousing, materials handling, strategic planning, inventory control, and forecasting.

If approved, this program would directly support CCBC's strategic direction of Teaching and Learning Excellence and one of its tenets to encourage students to value lifelong learning, personal development, active citizenship, and educational and professional advancement. The proposed program aligns with the College's Comprehensive Academic Plan by supporting development of academic programs that would attract better prepared students. In addition, this program will be identified in the strategic plan for CCBC's School of Criminal Justice and Law.

This program also affirms two key institutional priorities related to enrollment stabilization based on CCBC's mission and demographics. The College is prioritizing and investing resources in areas/initiatives with expansion and/or stabilizing potential. Given the projected demand for job opportunities for the transportation, distribution, and maritime industry described later in this document, this program has excellent potential for expansion in order to satisfy the documented workforce development need.

In addition, the College is promoting completion of credit degree and workplace certification/transfer (ideally after completing a community college credential). This program provides students with the opportunity to earn a credit degree at CCBC. By earning these credentials, students have better selection for job opportunities.

**B. Adequacy of curriculum design and delivery to related learning outcomes consistent with Regulation .10 of this chapter:**

- 1. Provide a list of courses with title, semester credit hours and course descriptions, along with a description of program requirements**

**Transportation, Distribution, and Maritime Logistics: Associate of Applied Science**

**Transportation, Distribution, and Maritime Logistics: AAS Degree**

<b>General Education Requirements:</b>	<b>Credits</b>
CMNS 101 - Fundamentals of Communication	3
CRJU 101 - Introduction to Criminal Justice (Diversity Course)	3
ECON 201 - Introduction to Macro-Economic Principles	3
ENGL 101 - College Composition I	3
GEOG 101 - Introduction to Physical Geography	3

**General Education Elective:**

*(Choose courses in each category from the list of approved General Education Courses.)*

Mathematics	3
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**Total General Education 18**

**Program Requirements:**

ACCT 101 - Principles of Accounting I	3
ENGL 102 - College Composition II	3
ENVS 101 - Introduction to Environmental Science	3
GEOA 101 - Introduction to Geographic Information Systems	3
MNGT 101 - Introduction to Business and Industry	3
MNGT 105 - Principles of Management	3
MNGT 265 - Business Ethics	3
TDML 101 - Introduction to Transportation, Distribution, and Maritime Logistics	3
TDML 148 - Global Commercial Transportation	3
TDML 150 – Introduction to Supply Chain Management	3
TDML 155 – Maritime Transportation and Distribution Technology	3
TDML 201 - Domestic Freight Operations	3
TDML 202 – Principles of Maritime Logistics	3

<b>Program Elective:</b> (Choose one course, three credits)	3
ECON 202 - Introduction to Micro-Economic Principles (3)	
MNGT 159 - Managing Customer Relations and Service (3)	
MNGT 239 - Business Communications (3)	
TDML 273 – Transportation, Distribution, and Maritime Logistics Internship (3)	

<b>Total Program Requirements</b>	<b><u>42</u></b>
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<b>Total Credits Required for Degree*</b>	<b>60</b>
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**General Education Requirements:**

**CMNS 101: Fundamentals of Communication (3 Credits)**

fundamentals of Communication introduces the study of human communication. Students develop an understanding of the theoretical principles of verbal and non-verbal interaction by analyzing and applying these principles in a variety of communication contexts. Areas of study include intrapersonal, interpersonal, cross-cultural, small group, and public speaking.

**CRJU 101: Introduction to Criminal Justice (3 Credits)**

discusses the history, philosophy and social development of police, courts, and corrections in a democratic society; covers identification and operations of local, state and federal agencies, emphasizing criminal justice career orientation. Course offered fall, spring, and may be offered during additional sessions.

**ECON 201: Introduction to Macro-Economic Principles (3 Credits)**

studies the national economy including income, savings, investment, government economic activity, and policy making; explores money and banking, economic growth, international economics, and related current issues and problems. Course offered fall, spring, and may be offered during additional sessions.

**ENGL 101: College Composition I (3 Credits)**

College Composition I provides instruction in a writing process that will enable students to develop a topic, organize their ideas, write a draft, revise, edit, and proofread; to access, evaluate, incorporate, and document outside material as a means to develop a topic; and to continue to improve use of grammar, and language. Placement is based on assessment and/or successful completion of (ENGL 052 or LVE 2) and (RDNG 052 or LVR 2) or ESOL 052.

**GEOG 101: Introduction to Physical Geography (3 Credits)**

examines the physical elements of geography, including the Earth in its orbit, the nature and distribution of landforms, the elements of weather and climate, soils, vegetation, the Earth's shape, plate tectonics, landscape building and erosion. Course offered fall, spring, and may be offered during additional sessions.

**Program Requirements:**

**ACCT 101: Principles of Accounting I (3 Credits)**

provides in-depth study of the accounting cycle for sole proprietorships, including record-keeping,

preparation of financial statements, and the theory of accounts; uses computer technology and problem-solving techniques to supplement classroom work. 3 lecture hours per week. Note: CLEP exam is accepted. Course offered fall, spring, and may be offered during additional sessions.

**ENGL 102: College Composition II (3 Credits)**

increases the writing and thinking skills developed in ENGL 101 and applies critical thinking and writing skills to a variety of academic assignments, including analyzing multiple and varied complex texts, furthering complex arguments and ideas, conducting research and sophisticated source use. NOTE: Course offered fall, spring, and may be offered during additional sessions.

**ENVS 101: Introduction to Environmental Science (3 Credits)**

explores the inter-relationships between humans and the Earth's ecosystems. Fundamentals of ecology, water resources, populations, energy, climate, and nutrient cycling will be covered, as well as the impact of human use and management of the earth's land, water, and air resources. For students needing a lab, ENVS 102 serves as the accompanying lab. NOTE: Course offered fall, spring, and may be offered during additional sessions.

**GEOA 101: Introduction to Geographic Information Systems (3 Credits)**

introduces students to the concepts, science, and theory of Geographic Information Systems (GIS) and geospatial analysis. Students work with the leading software and technology in the field of geospatial analysis and get hands-on experience using the latest version of ArcGIS. Students master sufficient introductory concepts and skills to develop, complete, and present a GIS project. 2 lecture hours (this course is delivered in a combination lecture and lab format) and 3 lab hours. Course offered fall, spring, and may be offered during additional sessions.

**MNGT 101: Introduction to Business and Industry (3 Credits)**

examines the functions in business and develops a framework for the further study of business; serves as an interdisciplinary course drawing from such areas as marketing, product strategy, finance, and business ethics. Course offered fall, spring, and may be offered during additional sessions.

**MNGT 105: Principles of Management (3 Credits)**

examines the basic managerial processes and activities; relates findings in the behavioral sciences to the various levels of management and aids the student in understanding theory and practice of management. Course offered fall, spring, and may be offered during additional sessions.

**MNGT 265: Business Ethics (3 Credits)**

introduces the ethics of business operation in a changing pluralistic environment with changing social values and demands; covers corporate accountability, employee rights, multinationals, and the role of ethics in a free economic system. Course offered fall, spring, and may be offered during additional sessions.

**TDML 101: Introduction to Transportation, Distribution, and Maritime Logistics (3 Credits)**

provides an overview and history of the basic functions involved in the transportation, distribution, and logistics of maritime commerce in addition to the various career opportunities.

**TDML 148: Global Commercial Transportation (3 Credits)**

examines the modes of world-wide commercial transportation and compares their operating costs, initial investment, timeliness and relationship to the commercial goods being transported. Particular attention will be paid to the various physical and political implications on trade routes and the benefits and limitations that they impose.

**TDML 150: Introduction to Supply Chain Management (3 Credits)**

explores purchasing, operations, logistics, and integration of these business functions with a focus on the maritime industry. Supply Chain Management and the related concepts of logistics are cornerstones of business strategies to create market share and shareholder value.

**TDML 155 – Maritime Transportation and Distribution Technology (3 Credits)**

examines the use of computer concepts and applications for the transportation and distribution of goods in the maritime industry. Students will be given a broad understanding of the industry through the use of computer technology.

**TDML 201 - Domestic Freight Operations (3 Credits)**

provides a detailed knowledge of freight movement, safety, third party intermediaries, financing, insurance, contingency planning, and customs regulations.

**TDML 202: Maritime Logistics (3 Credits)**

explores the multiple external pressures and internal constraints that plague daily maritime logistics companies' operations. Topics include planning, utilizing resources efficiently, managing transportation costs, and ensuring superior delivery performance.

**Program Electives:**

**ECON 202 - Introduction to Micro-Economic Principles (3 Credits)**

explores how businesses, households, and sometimes public agencies utilize scarce resources in competitive and noncompetitive environments. Course offered fall, spring, and may be offered during additional sessions.

**MNGT 159: Managing Customer Relations and Service (3 Credits)**

prepares students to interact effectively with customers and to manage those who provide customer service; studies understanding customer behavior, implementing business policy, and maintaining good will. Course offered fall, spring, and may be offered during additional sessions.

**MNGT 239: Business Communications (3 Credits)**

covers three aspects of effective business communications: the written, the oral, and the visual. Students analyze business situations which require an array of responses; they identify the purpose and audience of each response; and then they design, draft, revise, and deliver this response to its audience. NOTE: Course offered fall, spring, and may be offered during additional sessions.

**TDML 273: Transportation, Distribution, and Maritime Logistics Internship (3 Credits)**

provides students an opportunity to apply classroom learning to the work environment. The internship assists students in identifying potential employment opportunities with practical field experience. This Internship is an elective in the TDML program and certificate. The course requires 120 work hours on site. Students work with their site supervisor and the faculty supervisor, who monitors student's progress to develop learning objectives.

**Description of Program Requirements**

**Transportation, Distribution, and Maritime Logistics Program**

The Transportation, Distribution, and Maritime Logistics (TDML) program is an Associate in Applied Science Degree. There are 60 total number of credits required for the TDML.

program. This program is designed to prepare students for employment or advancement in the TDML field. Graduates will have the essential skills to be successful entry-level or mid-level employees at seaports and many related industry locations. With added experience, they will be excellent candidates for higher-level technical and supervisory positions within the industry.

A program will be awarded to those students who achieve a 2.0 GPA or higher and complete at least 25% of the credits required while enrolled at CCBC.

## **2. Describe the educational objectives and intended student learning outcomes.**

### **Program Outcomes**

Upon successful completion of the Transportation, Distribution, and Maritime Logistics Program, students will be able to:

1. analyze the process and functions of the various components of transportation, distribution, and maritime logistics concepts designed to promote strategic thinking;
2. compare and contrast the forms of Global Commercial Transportation and identify how the major strengths, weaknesses, opportunities, and threats of each mode of global transportation influences the global economy;
3. analyze the relationship between ethics, diplomacy, team work, and legal issues and how these changing paradigms impact the human resource management of a culturally diverse workforce;
4. develop a supply chain management plan for the distribution and transportation of goods that arrive at the Port of Baltimore;
5. create, design and critique technological solutions to common transportation, distribution and logistical issues that confront Maritime Industry management;
6. compare and contrast the forms of Domestic Freight Operations and identify how the key components of product, price, place, and promotion influence their success; and
7. evaluate the process and functions of Maritime Logistics and principle factors used to achieve tactical and strategic advantages in the global marketplace.

### **Student Learning Outcomes**

Students who successfully complete the Transportation, Distribution, and Maritime Logistics (TDML) Program will be able to:

1. differentiate the various modes of transportation;
2. identify the operating costs of each mode of transportation;
3. identify factors which impact TDML;
4. analyze the impact of global ethics in the workplace;
5. apply knowledge of the complete cycle of transportation and logistics,
6. compare and contrast trends in intermodal transportation models currently being utilized in the Port of Baltimore;

7. explain the interrelatedness of maritime transportation, warehousing and material handling;
8. explain the impact of global location decisions on a maritime supply chain;
9. describe maritime global electronic commerce;
10. discuss the financial consideration and impact to freight movement;
11. explain impact of public-private partnerships on port logistics;
12. employ problem-solving skills related to TDML issues;
13. explain excellent communication and customer service skills required;
14. apply required skills in leadership, teamwork, cultural awareness and organization in the industry; and
15. identify career pathways in the industry.

**3. Discuss how general education requirements will be met, if applicable.**

As stated in the CCBC strategic plan, the College will “Encourage students to value lifelong learning, personal development, active citizenship and educational and professional advancement.” The general education requirements will help students develop as well rounded individuals by exposing them to the specified courses at the beginning of this program. The general education requirements meet or exceed the state minimum and CCBC minimum for Associate in Applied Science degrees.

**4. Identify any specialized accreditation or graduate certification requirements for this program and its students.**

There are no specialized accreditations or graduate certification requirements for this program/certificate and its students.

**5. If contracting with another institution or non-collegiate organization, provide a copy of the written contract.**

CCBC will not be contracting with other institutions or organizations. We will be seeking articulation agreements with Baltimore County Public Schools and Morgan State University for students to transfer to Morgan’s Transportation System Bachelor’s program.

**C. Critical and compelling regional or statewide need as identified in the Maryland State Plan.**

**Societal Needs**

This program provides an affordable means for students to continue their education in the transportation, distribution, and maritime logistics industry and provides a pathway through to completion. This initiative expands access for minority and educationally disadvantaged students to pursue this opportunity from the standpoint of cost since CCBC’s tuition and fees are much lower as compared to four-year institutions.

## **Alignment with the Maryland State Plan**

In accordance with the Maryland State Plan for Postsecondary Education, college completion was identified as one of the significant issues in the Plan and a primary focal point of postsecondary education in Maryland. Goal 2 of the Plan promotes and supports access and completion. This program will provide an affordable means for students to garner the academic background needed to prepare for and earn the TDML degree thereby supporting access and facilitating completion.

This program will also promote Goal 5 of the plan by supporting a knowledge-based economy through education and training. As indicated in the Plan, there is a perceived mismatch between the skills that job applicants possess and the ones that employers require, and a need for more people in the workplace with recognized credentials. This program will provide a pipeline of graduates with relevant workforce experience.

This program will enable new workers to compete in the ever evolving workforce, and incumbent workers to move up the career ladder.

## **D. Market Supply and Demand in the Region and State**

### **Market Demand, Availability of Job Openings, Supply of Graduates, and Educational and Training Needs**

The Maritime and Transportation industry is a critical component of our nation's economy and global security. This industry is large and growing. There are more than 3,700 marine terminals in the U.S. which move more than \$2 trillion worth of domestic and international goods through an intermodal transportation system.

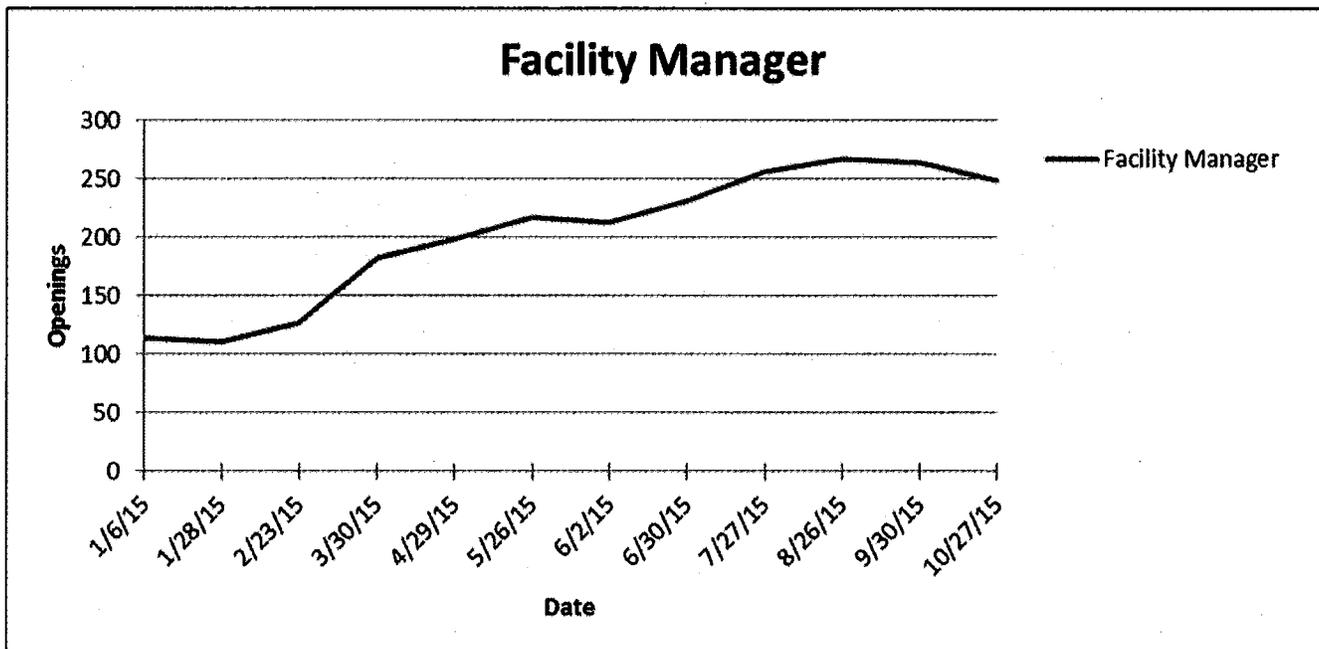
According to the Southeast Maritime and Transportation Center (SMART), Maritime transportation occupations are the fastest growing category in the industry. Right now the industry is dominated by an aging workforce nearing retirement, and there is a large need for new employees. In addition, there is a lack of technically-skilled workers entering this industry and a lack of people to fill leadership positions. Entering workers can learn a variety of skills and then determine which area they want to pursue for a long-term career. (<http://www.maritime-technology.org/industry-outlook/>)

Local data collected by Burning Glass Technologies, the leading provider of high-impact job market analytics, identifies a three-month report of several related job openings in the Transportation, Distribution, and Maritime Logistics Industry listed below.

<u>Name</u>	<u>O*NET Code</u>	<u>Baltimore City Postings</u>	<u>Baltimore County Postings</u>	<u>Balto-Towson LMA Postings</u>	<u>Maryland</u>
Facility Manager	11-9141.00	111	45	248	431
Cargo and Freight Agents	43-5011.00	20	3	37	41
Dispatchers	43-5032.00	30	4	42	74
Freight Forwarders	43-5011.01	1	0	1	1
Laborers and Freight, Stock and Material Movers	53-7062.00	316	93	775	1,283

*\*Data Source: Labor Insight/Burning Glass - for the three (3) month time period between: July 30, 2015 – October 27, 2015 (Data not available after October 25, 2015)*

LMA = Labor Market Area



According to the U.S. Bureau of Labor Statistics, employment of water transportation occupations is projected to grow 13 percent from 2012 to 2022.

(<http://www.bls.gov/ooh/transportation-and-material-moving/water-transportation-occupations.htm>) As the economy continues to recover, the demand for waterway freight shipping will grow, increasing the need for these workers. Employment of hand laborers and material movers is projected to grow 10 percent from 2012 to 2022.

(<http://www.bls.gov/ooh/transportation-and-material-moving/hand-laborers-and-material-movers.htm>) Job prospects should be favorable because of the need to replace workers who leave these occupations. Employment of logisticians is projected to grow 22 percent from 2012 to 2022, much faster than the average for all occupations.

(<http://www.bls.gov/ooh/business-and-financial/logisticians.htm>)

According to the study collected by the Opportunity Collaborative Career Pathways in the Baltimore region, the transportation and logistics sector directly employ 32,800 workers. Hiring in the industry will be driven in part by employee turnover and retirement of experienced workers, but the sector is also expected to add at least 1,800 net new jobs by 2020 creating opportunities for entry-level jobs. The Baltimore region is home to major employment centers in the transportation, distribution, and maritime logistics sector such as the Port of Baltimore. Additionally, emerging opportunities of the FedEx distribution center (Sparrow's Point location) will only strengthen this sector's position in our labor market.  
<http://touch.baltimoresun.com/#section/-1/article/p2p-82296749/>

The Port of Baltimore is the second-largest port on the US eastern seaboard by gross tonnage and is directly responsible for employment in 14,630 jobs generated by cargo and vessel activities at the Port, including jobs at railroads, trucking companies, terminal operators, cargo handling, manufacturing, towing, pilots, ocean carriers, and agents. In addition, companies that choose to import or export their cargo through the Port of Baltimore are responsible for 68,300 additional jobs in Maryland that are directly related to activities at the Port. These companies include manufacturing firms, distributors, coal mines, automobile dealers, and others that use the Port of Baltimore to support their logistics.  
<http://www.opportunitycollaborative.org/assets/Career-Pathways-in-the-Baltimore-Region-Transportation-and-Logistics-FINAL-REPORT1.pdf?ae56d8>

Jobs are expected to accelerate with the expansion of the Panama Canal and the ability of larger ships to enter the port. The new Panama Canal will be opening in April of 2016. This will allow ships to pass between the Atlantic and Pacific Oceans that are now restricted by the original dimensions of the Panama Canal. These new ships will be 1.5 times larger than the ships that now pass through the Canal and will be capable of carrying five to ten thousand twenty-foot equivalency unit (TEU) containers, nearly double current capacity.  
<http://micanaldepanama.com/expansion/>

The port requirements for these post-Panamax ships include approach and port depths of 48 to 50 feet. The Port of Baltimore has completed the required dredging projects to accommodate ships of this draft. Currently, the only East Coast ports capable of hosting these post-Panamax ships are New York, Baltimore and Hampton Roads, Virginia. All other east-coast ports are years away from dredging to the required fifty-foot depth needed for ships of post-Panamax size. Many of the ports are also restricted by bridge clearances for the larger vessels. Maryland's Chesapeake Bay Bridge and Francis Scott Key Bridge already have the 180+ foot clearances necessary for the larger ships.

Baltimore has already installed four cranes capable of servicing the longer and wider post-Panamax ships. In 2012, the Port of Baltimore and Ports America Chesapeake completed a \$1.3 billion project that now allows Baltimore to handle super-post-Panamax ships, the world's largest cargo vessels, giving the facility a leg up on almost every port from Maine to Florida. (Baltimore Development Corporation) The Port of Baltimore also has a distinct advantage of being the most westward Atlantic Port cutting westward shipping costs significantly.

The Baltimore Development Corporation links 150,000 jobs to the Port of Baltimore. These jobs are currently held by an aging workforce according to the Southeast Maritime and Transportation (SMART) Center. The confluence of larger ships and more cargo into the Port of Baltimore with an aging workforce creates the necessity for training a highly skilled replacement workforce for the port. The Community College of Baltimore County is well positioned to provide this education and training through a Transportation, Distribution and Maritime Logistics A.A.S. Program.

**E. Reasonableness of program duplication:**

A few other Colleges offer courses, certificates, and degrees in transportation, distribution, and logistics but none offer an emphasis in maritime logistics.

**Anne Arundel Community College** offers a Logistics and Supply Chain option in their Business Management program. They also offer certificates in Transportation, Logistics, and Cargo Security and Supply Chain Management. They have partnered with North County Signature High School.

**Cecil College** has a Mid-Atlantic Transportation & Logistics Institute and offers AAS degrees in Materials Management, Supply Chain Management, and Transportation Management. They also offer certificates in Commercial Transportation, Materials Management, and Transportation Management.

**Hagerstown Community College** offers an Associate degree and certificate in Commercial Transportation Administration.

**Harford Community College** offers two courses with a focus on Supply Chain and Distribution/Warehouse.

**Morgan State University** offers a Bachelor's degree in Transportation Systems. **University of Maryland, College Park** offers a Bachelor's degree in Supply Chain Management.

Graduate level degrees are offered at **Morgan State University, Towson University and University of Maryland, College Park** in Supply Chain Management.

**Justification for the Proposed Program**

CCBC is poised to provide a quality educational program at a very cost-effective price for students interested in Transportation, Distribution, and Maritime Logistics. This initiative will address a documented workforce development need, based on the aging workforce and the expansion of the Panama Canal.

As previously mentioned, according to the Southeast Maritime and Transportation Center (SMART), Maritime transportation occupations are the fastest growing category in the industry. Right now the industry is dominated by an aging workforce nearing retirement, and there is a large need for new employees. In addition, there is a lack of people to fill leadership positions.

Also identified above, the Baltimore region is home to major employment centers in the transportation, distribution, and maritime logistics sector such as the Port of Baltimore. Additionally, emerging opportunities of the FedEx distribution center (Sparrow's Point location) will strengthen this sector's position in our labor market.

<http://touch.baltimoresun.com/#section/-1/article/p2p-82296749/> Amazon, a warehouse surrounding the Port of Baltimore, also offers 1,000 full-time jobs in the Baltimore area and will pre-pay the cost of tuition for employees to go back to school.

<http://patch.com/maryland/northbaltimore/amazon-to-build-mammoth-warehouse-in-baltimore-bring-1000-jobs>

Jobs are expected to accelerate with the expansion of the Panama Canal and the ability of larger ships to enter the port. The new Panama Canal will be opening in April of 2016. The confluence of larger ships and more cargo into the Port of Baltimore with an aging workforce creates the necessity for training a highly skilled replacement workforce for the port. The Community College of Baltimore County is well positioned to provide this education and training through a Transportation, Distribution and Maritime Logistics A.A.S. Program.

During spring of 2016, the Global Commercial Transportation cross-listed course – MNGT 148 will be offered to a group of 23 students from Dundalk High School. Awareness of the Transportation, Distribution, and Maritime Logistics (TDML) program will continue to be promoted in Baltimore County Public Schools in an effort to form articulation agreements. Outreaches to the community and marketing materials will also be developed with CCBC Continuing Education to advertise and promote seamless pathways from non-credit Supply Chain Management courses to TDML credit-degree program completion.

With extensive networking with community employers in the areas of transportation, distribution, and maritime logistics, partnerships and internships will also be developed creating employment opportunities for graduates.

#### **F. Relevance to Historically Black Institutions (HBIs)**

Students who wish to complete a Bachelor's degree can transfer to Morgan State University's Transportation Systems program. The TDML program at CCBC provides students the foundational competencies to successfully transfer into a Bachelor's degree. CCBC's program effectively supports the maintenance of high demand programs at Historically Black Institutions. CCBC values the unique resources of neighboring institutions and is committed to continue building complementary partnerships with HBI institutions.

#### **G. Principles of Good Practice in Distance Education**

##### Curriculum and Instruction

The College uses Blackboard as its Learning Management System (LMS). Within this environment there are numerous tools that provide for appropriate real-time or synchronous communications, as well as delayed interaction or asynchronous communications, between faculty and students. Faculty members who will be teaching online are trained to take best

advantage of these technologies in their courses. Faculty members include any assignments for development of new distance education courses in their Annual Professional Summaries as part of the faculty evaluation process.

All levels of academic and instructional technology planning are integrated in the development of new distance education courses and programs. Distance education planning is also coordinated with CCBC's Enrollment and Student Services and Administrative Services divisions to ensure that students have access to academic and physical resources needed to promote student success. Several of the courses in the proposed Transportation, Distribution, and Maritime Logistics program/certificate have already been offered and have benefited from this integrated planning process.

The Transportation, Distribution, and Maritime Logistics program was developed by CCBC's Management faculty, the dean in the School of Business, Criminal Justice, and Law, and the department chair. The TDML program was vetted and approved by the College's internal curriculum governance process to ensure that the curriculum is coherent, cohesive, and comparable in academic rigor to programs offered in traditional academic formats. As part of this process, the learning outcomes were examined to ensure they were appropriate given the rigor and breadth of the program. The careful research that is performed in the development of newly approved programs facilitates their internal adoption within CCBC's established planning and resource allocation processes. The program will be overseen by the department chair for Business Studies, which includes the disciplines of Management, Marketing, Human Resources, and Entrepreneurship. The department chair and three Management faculty have completed the CCBC mandated training required to develop and teach online courses.

### Role and Mission

As part of CCBC's mission, the College is committed to preparing students for career success and strengthening the regional workforce. The Transportation, Distribution, and Maritime program will help to fulfill both of these goals. In addition, as part of CCBC's strategic direction of Teaching and Learning Excellence, the College is committed to using the most technologically appropriate and effective teaching methods and formats available. The effectiveness of current technologies to support the objectives of all academic programs is reviewed on an ongoing basis.

In Spring 2007, the College commissioned an assessment of information technology services and resources. To complement these efforts, in fall 2007 the Vice President of Instruction (VPI) charged the Distance Education Task Force (DETF), that includes a large complement of faculty, with reviewing distance learning at CCBC and recommending a framework for future development and improvement. The DETF report was submitted to the VPI and Chief Information Officer (CIO) in June 2008.

In July 2008, CCBC's Information Technology Services (ITS) was reorganized to create a robust, effective technical help desk and information technology support model for the College. To build on these accomplishments, ITS has its own formal planning document that is aligned and prepared in accordance with the CCBC Strategic Plan. One of the action items

in the ITS Plan is to evaluate, adopt, and maintain the most current technologies available in support of online and distance learning. Achievement of this action item is measured on an ongoing basis through CCBC's institutional assessment processes. It is noteworthy that the College was commended for its culture of institutional assessment in its Middle States decennial reaccreditation in 2012.

### Faculty Support

To promote high-quality instruction, once new distance education courses and programs have been approved, a faculty member must complete CCBC's Online Course Development Institute before developing and teaching a distance education course. Through this professional development, faculty members learn about the pedagogical and technological aspects of teaching online and work with an instructional designer to develop the course shell and materials. The instructional design team reviews the course for compliance with Quality Matters standards before the course is offered in the schedule of classes. Through this review, the faculty member and instructional design team ensure that the design of the course will enable a student to achieve the learning outcomes and that these outcomes are assessed appropriately. Faculty who are teaching online for the first time but not developing the course for online delivery (i.e., teaching an already existing distance education course), complete the professional development opportunity, Teaching Online Course, to become skilled in teaching within this environment. This course is offered online and includes 40 hours of activities.

To ensure that the principles of best practice for teaching in a distance education format are established and implemented, the Distance Learning Advisory Board (DLAB) was created in 2009 and is comprised of institutional leaders, including a large complement of faculty who teach online. This group was charged by the VPI to develop policies designed to improve distance education outcomes for consideration by the College's governance structure. As new policies are approved, they are monitored and assessed as part of the established institutional assessment processes. In addition, the Distance Learning Advisory Panel (DLAP), led by the director of instructional design and comprised of faculty members, continues to provide recommendations to (DLAB).

The College provides a robust array of support services for faculty teaching in a distance education format. Within ITS, the Instructional Technology Department is led by the Senior Director of Instructional Technology and includes an Online Learning/Instructional Design Group and a Learning Management Systems and Instructional Training Group to provide support to faculty in the design of courses and courseware. The Online Learning/Instructional Design Group is led by a Director and includes three Instructional Designers (two at the senior level). The Learning Management Systems and Instructional Training Group is led by a Director and includes two LMS Administrators, two Technology Trainers, and an Administrator for Digital and Emerging Technologies. Additional support is provided to faculty via a 24/7 Technical Help Desk and an externally hosted LMS, which includes the highest level of technical support available.

To ensure appropriate learning resources are available to students, CCBC offers online tutoring, which is provided by trained tutors. The format for the service is through an

asynchronous discussion board using Blackboard. Students self-register for each subject in which they seek tutoring; these subjects then appear on their Blackboard class list and include allied health, biology (all levels), chemistry (all levels), math (all levels), physics, and psychology. Online tutoring for other subjects, such as accounting, economics, and philosophy, may be available upon request. To increase awareness of online tutoring the Student Success Centers (SSC) provide an announcement on Blackboard and provide a brochure during the classroom announcements in the first week of school.

As indicated in the Library section of this proposal, students have access to a repository of resources, videos, publications, and career opportunities available for Transportation, Distribution, and Maritime Logistics through the SMART Institute (Southeast Maritime and Transportation Center) website: <http://www.maritime-technology.org/>.

The College also subscribes to several online databases that would be helpful to students in this program such as *Business Source Premier*, *Proquest ABI/INFORM Complete*, *ProQuest Newsstand* and *Lexis Nexis Academic*. Students can access these online databases anytime from any computer or mobile device on or off-campus.

Beyond the resources provided through CCBC, the College provides Inter-Library Loan service, <http://library.ccbcmd.edu/screens/borrowingfromotherlibs.html>. In addition, to make library services more accessible to students, the CCBC library participates in a 24/7 online reference service through the *AskUsNow* Maryland statewide program.

### Students and Student Services

The CCBC College Catalog is updated on an annual basis and will contain clear, complete, and timely information on the proposed curriculum, course and degree requirements, nature of faculty/student interaction, and assumptions about technology competence and skills. Within Blackboard, students can access useful information after they have registered for an online course such as Blackboard tutorials and technical requirements, availability of academic support services and 24/7 Help Desk support, and financial aid resources. Costs and payment policies are consistent for classes in online and traditional formats; this information is contained in the College catalog at the following URL: <http://catalog.ccbcmd.edu/content.php?catoid=26&navoid=1538>.

Distance education students and other learners find support online for advising, registration, financial aid, and library services. Five designated full-time advisors dedicate 2-10 hours of advising time to respond to online student inquiries. General information is provided within 24 to 36 hours. All CCBC students may access online advising while maintaining confidentiality. Online advising services average 200 students per month. Application and registration processes now occur mostly online.

The financial aid application process, including the counseling component, can be completed online. Financial Aid TV is also available on the CCBC website at the following URL: <http://ccbc.financialaidtv.com/> Distance education students are eligible for all facets of financial aid offered through CCBC.

CCBC has an extensive array of print and electronic communications to inform the public and other College audiences of the strength of CCBC's mission, the quality of its academic programs, and the diversity of training offerings and support services available. Revisions are made regularly to reflect program, policy, and/or procedural changes and to modify or rebrand the marketing message. As part of providing these communication tools and outreach initiatives for students and the community, several positive outcomes have been achieved. Staff training and the implementation of communication technology have augmented CCBC's efforts to comply with Higher Education Opportunity Act regulations related to misrepresentation. Additionally, a consistent message is provided when working directly with prospective and enrolled students. This same focus on quality would be applied to all advertising, recruiting, and admissions materials prepared for this proposed degree program.

### Commitment to Support

CCBC faculty are evaluated annually in three areas—Professional Assignment, College and Community Service, and Scholarship/Professional Growth. It is stipulated that 60-70% of the evaluation must be based on Professional Assignment, and 10-20% must cover Professional Development. Within the category of Professional Assignment, the written faculty evaluation policy recognizes the importance of instructional improvement; and efforts made to convert, develop, or implement classes in online or blended formats are named in the category of instructional improvement. Potential areas of Scholarship/Professional Growth include furthering one's technical education by learning new software and/or technology. In addition, public performances, presentations, and exhibitions that recognize one's area(s) of expertise that involves research and scholarly preparation are also recognized as acceptable means of documenting scholarship and professional growth.

According to CCBC policy, when a program of study is discontinued, students will be afforded time to complete the program requirements. Department Chairs will work with students to develop plans to help students complete their course work. If particular courses are no longer offered, substitutions will be made. The length of time for services and benefits to be extended is determined by the number of credits the student needs to complete the program, with the maximum of up to two years after the discontinuance of the program. Requests for further extension must be submitted in writing to the Vice President of Instruction. This policy would apply to this proposed program of study.

### Evaluation and Assessment

This program will be incorporated in CCBC's program review process that supports CCBC's strategic direction of Student Success and fulfillment of the related institutional goal to measure and assess student outcomes routinely, evaluate multiple measures of student achievement and success, and act upon the results to improve student outcomes.

CCBC's Office of Planning, Research and Evaluation (PRE) maintains information on student retention in academic programs. This data is provided as part of the program review process for analysis and program improvement. To further promote quality in instruction and assess the performance of the faculty member in the online environment, the Distance Learning Advisory Board developed and implemented a student course evaluation instrument

for distance education courses. Faculty satisfaction with Distance Education Services and with Instructional Technology is measured through the annual CCBC Employee Survey. Since many of the courses in the Transportation, Distribution, and Maritime Logistics Program are included in other CCBC credit offerings, the program is cost effective by taking advantage of existing College resources.

As part of CCBC's commitment to an evidenced-based approach to the best online teaching practices, the College provides budgetary resources to support Quality Matters (QM), a faculty-centered peer review process designed to certify the quality of online course design. Approximately 200 faculty have completed the Applying the QM Rubric workshop and nearly 20 are QM certified peer course reviewers. By faculty applying the QM rubric to existing distance education sections, CCBC can discern that essential course components, including learning objectives, assessments and measurements, resources and materials, learner engagement, and course technology have sufficient academic rigor and serve to enable students to meet the learning expectations and outcomes for the course. Increasing numbers of online courses are being evaluated for Quality Matters' certification. Continuous improvement is promoted through ongoing monitoring of student performance in distance education offerings by CCBC's Planning, Research, and Evaluation staff. The results of this monitoring are shared with appropriate constituencies so that any needed adjustments in curriculum can be made.

Student performance in online courses is also benchmarked against student performance in the same courses offered in a face-to-face format to evaluate differences. Comparisons of student retention/persistence are also made. The Office of Planning, Research, and Evaluation provided success rates for fall 2012 web courses of 65%, compared to 77% in non-web courses and found that these rates had increased slightly in recent years. Additionally, the withdrawal rate for web courses in fall 2012 was 4% higher (10%) than for non-web courses (6%). The percentage of students withdrawing from web based courses and traditional courses has declined slightly in the past several years. Data shows that many students who register late for distance education courses do so because classroom sections are full, and students who register late have lower success rates across all modes of instruction.

Assessment and documentation of student achievement will occur as part of CCBC's program review process. Academic programs, whether they are offered online or in traditional formats, are reviewed on a five-year cycle. Program coordinators must document how student learning outcomes were developed and validate how the outcomes relate to the College's mission.

#### **H. Adequacy of Faculty Resources**

The full-time and adjunct faculty scheduled to teach Transportation, Distribution, and Maritime Logistics in the proposed program hold a Bachelor's, a Master's, and some an Ed.D or Ph.D degrees.

## **Full-time Faculty**

### **Beckford-Barclay, Gayona**

Assistant Professor/Coordinator, Business Studies

B.S., Morgan State University

Management (1992)

M.B.A., University of Baltimore

Business Administration (1998)

Ed.D., Morgan State University Higher

Education (2003)

Past Assistant Director for International Education and Multicultural Learning

Intro. to Business, Prin. of Management, Supervision, Human Resources Management

### **Clements, David**

Instructor, Business Studies

A.S., J. Sargeant Reynolds Community College

Business Administration (1996)

B.S., Old Dominion University

Psychology (1991)

M.B.A., Jones International University

Entrepreneurship (2005)

Certificate – Non-profit Management

University of Illinois

Navy Reservist

Intro. to Business, Prin. of Management, Business Communications, Supervision, Introduction to Transportation, Distribution, and Maritime Logistics, Global Commercial Transportation

### **Leu, Huey-Shan**

Assistant Professor, Business Studies

B.B.A., National Taiwan University

Finance (1986)

M.B.A., Syracuse University

Business Administration (1993)

Ph.D., National Chung Cheng University

Business Administration (2007)

Intro. to Business, Prin. of Management, Introduction to Macroeconomic Principles, Strategic Management

### **Osborne, William**

Assistant Professor, Business

B.A., University of Maryland, Baltimore County

Psychology (1975)

M.A., Bowie State University

Counseling Psychology (1981)

Past President – The People Business

Past Director – Human Resources and Training for Strategic Publications

Past Director – Training and Development for the Gannett Company, Inc.

Intro. to Business, Prin. of Management, Marketing, Supervision, Strategic Management, Intro. to Supply Chain Management, Principles of Maritime Logistics

**Sullivan, Dennis**

Assistant Professor/Coordinator, Business Studies  
Director, Center for Business Innovations  
B.A., University of Maryland, College Park  
English Language and Literature (1988)  
M.B.A., Johns Hopkins University  
Business Administration (2003)

Intro. to Business, Prin. of Management, Prin. of Marketing, Prin. of Supervision, Salesmanship, Seminar in Supervisory Problems, Advertising, Managing Customer Relations and Service, Human Resource Management, Entrepreneurship, Seminar in Entrepreneurship

**Adjunct Faculty**

Adjunct faculty with the requisite qualifications will also be used to teach courses in this proposed program of study in accordance with CCBC policy. Additionally, industry leaders will contribute as visiting practitioners to give students a real world perspective on career pathways. Some industry leaders include representatives from the Baltimore Port Authority (BPA), Baltimore Marine Terminals, Pilots Office, Maryland Port Administration, Port America Chesapeake, Maritime Administration (MARAD), US Coast Guard, Merchant Terminal Corporation (MTC) Warehouse, Steinweg Group, Maritime Environmental Resource Center (MERC), Masonville Cove Environmental Education Center, and McAllister Towing.

**I. Library**

The CCBC resources are sufficient for the proposed program. Currently, there are 254,290 resources available at the CCBC library in the Transportation, Distribution, and Maritime Logistics, which include streaming video recordings, periodicals, and academic journals. In addition, the textbooks for the courses will be on reserve in the campus libraries. Students have access to a repository of resources, videos, publications, and career opportunities available for Transportation, Distribution, and Maritime Logistics through the SMART Institute (Southeast Maritime and Transportation Center) website: <http://www.maritime-technology.org/>.

The College also subscribes to several online databases that would be helpful to students in this program such as *Business Source Premier*, *Proquest ABI/INFORM Complete*, *ProQuest Newsstand* and *Lexis Nexis Academic*. Students can access these resources anytime from any computer or mobile device on or off-campus.

Beyond the resources provided through CCBC, the College provides Inter-Library Loan service, <http://library.ccbcmd.edu/screens/borrowingfromotherlibs.html>. In addition, to make library services more accessible to students, the CCBC library participates in a 24/7 online reference service through the *AskUsNow* Maryland statewide program.

**J. Adequacy of physical facilities, infrastructure, and instructional equipment**

Existing classrooms and computer labs will be used to hold classes. This will limit any need for additional classrooms and related equipment. No new physical facilities will be needed to support this program/certificate. Several courses in the program already exist either on ground or online. This will limit any need for additional classrooms and related equipment. Please see the evidence in this document for how CCBC complies with the Principles of Good Practice for Distance Education.

New program proposals at CCBC are reviewed and approved according to the process developed through college governance, which includes approval by the Curriculum and Instruction Committee and the full College Senate. In addition, this new program proposal was carefully reviewed by the President and her Senior Staff prior to submission to the CCBC Board of Trustees for their endorsement. The President has affirmed that the program can be implemented within existing institutional resources. A plan for ongoing equipment and facility upgrades and other routine needs has been developed and is in accord with CCBC's strategic plan.

**K. Adequacy of financial resources with documentation**

Narrative: The following breakdown of costs is based on in-county tuition rates and having one student complete 24 credits total per year during the fall, spring and summer semesters.

Tuition	\$2,712.00
General Services Fee	360.00 (\$12 per credit hour)
Registration Fee	165.00 (\$55/semester x 3)
Capital Fee	30.00 (\$10/semester x 3)
Technology Fee	300.00 (\$10 per credit hour)
Activity Fee	90.00 (\$3 per credit hour)
Total	\$3,657.00
Program	
or	\$ 75.00
Certificate fee	\$ 50.00

All students are eligible for regular CCBC financial aid.

<b>TABLE 1: RESOURCES</b>					
<b>Resources Categories</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>
1. Reallocated Funds					
2. Tuition/Fee Revenue (c+g below)	31,845	56,910	81,975	107,040	150,390
a. # F.T. Students	5	10	15	20	30
b. Annual Tuition/ Fee Rate	3,657	3,657	3,657	3,657	3,657
c. Annual Full Time Revenue (a x b)	18,285	36,570	54,855	73,140	109,710
d. # Part Time Students	10	15	20	25	30
e. Credit Hour Rate	113.00	113.00	113.00	113.00	113.00
f. Annual Credit Hours	12	12	12	12	12
g. Total Part Time Revenue (d x e x f)	13,560	20,340	27,120	33,900	40,680
3. Grants, Contracts, & Other External Sources					
4. Other Sources					
<b>TOTAL (Add 1-4)</b>	<b>31,845</b>	<b>56,910</b>	<b>81,975</b>	<b>107,040</b>	<b>150,390</b>

*\*Full time tuition reflects students carrying 24 credits a year.  
The most conservative estimate.*

Table 2: Projected forecasting for adjunct salaries

<b>TABLE 2: EXPENDITURES</b>					
Expenditure Categories	Year 1	Year 2	Year 3	Year 4	Year 5
1. Faculty (b+c below)				15,030	15,030
a. # FTE	.6	.75	1	1	1
b. Total Salary	7,515	10,020	12,525	15,030	15,030
c. Total Benefits	0	0	0	0	0
2. Admin. Staff (b+c below)	0	0	0	0	0
a. # FTE					
b. Total Salary					
c. Total Benefits					
3. Support Staff (b+c below)	0	0	0	0	0
a. # FTE					
b. Total Salary					
c. Total Benefits					
4. Equipment	0				
5. Library	0				
6. New or Renovated Space	0				
7. Other Expenses	0				
8. TOTAL (Add 1 – 7)	0	0	0	15,030	15,030

**L. Adequacy of provisions for evaluation of program**

Assessment and documentation of student achievement will occur as part of CCBC's program review process. Academic programs, whether they are offered online or in traditional settings, are reviewed on a five-year cycle. Program coordinators must document how student learning outcomes were developed and validate how the outcomes relate to the College's mission. It is noteworthy that CCBC's student learning assessment program received a Commendation and an Exemplary Practice award as part of the College's most recent Middle States decennial review.

Full-time faculty prepare an Annual Professional Summary every year to document their achievements in the categories of Professional Assignment, College and Community Service,

and Professional Development. Supervisors use this information to complete annual evaluation of faculty performance. Students also have the opportunity to complete course evaluations on a regular basis.

An advisory board consisting of CCBC and outside faculty, administration, and local leaders in the industry will be evaluating the success of the program to ensure student success. The Learning Outcomes Assessments Advisory Board, The Curriculum and Instruction Committee, and the Program Review Committee will review and revise as the program grows.

#### **M. Consistency with State's Minority Student Achievement Goals**

To promote minority student success, one of the hallmarks of CCBC's strategic plan is the value of inclusiveness. That is, we honor the diversity of people, cultures, ideas, and viewpoints. To help faculty to better appreciate and to maximize the potential of a diverse student population in their classrooms, CCBC has a Culturally Responsive Teaching and Training Program (CRT). The CRT Program is a multi-faceted initiative engaging faculty, staff, administrators and students in the recursive process of self-reflection, dialogue, change, and growth regarding cultural understanding and cooperation. This program has helped the College to close achievement gaps and thereby improve student success. It is noteworthy that CCBC received the Leah Meyer Austin Award at the Achieving the Dream Conference in 2015, and the CRT Program was an important component to enable CCBC to improve student achievement and to meet equity goals.

Since its inception in 2004, the CRT Program has led 500+ faculty and staff and thousands of students to actively address individual and collective self-awareness, attitudes and beliefs, knowledge of others, and the skills needed to implement new understandings through best practices of cultural competence.

The *2014 US Department of Labor* link below identifies the distribution of minority employees in the TDML industry. <http://www.bls.gov/cps/cpsaat18.htm>. For fiscal year 2014 CCBC's student demographic figures indicate that 53% of credit students are minorities, and 58% are female. We anticipate that the student population for the Transportation, Distribution, and Maritime Logistics Program at CCBC will provide employment opportunity, thereby promoting minority student access.

#### **N. Relationship to Low Productivity Programs Identified by the Commission:**

N/A

