

Tidewater Community College

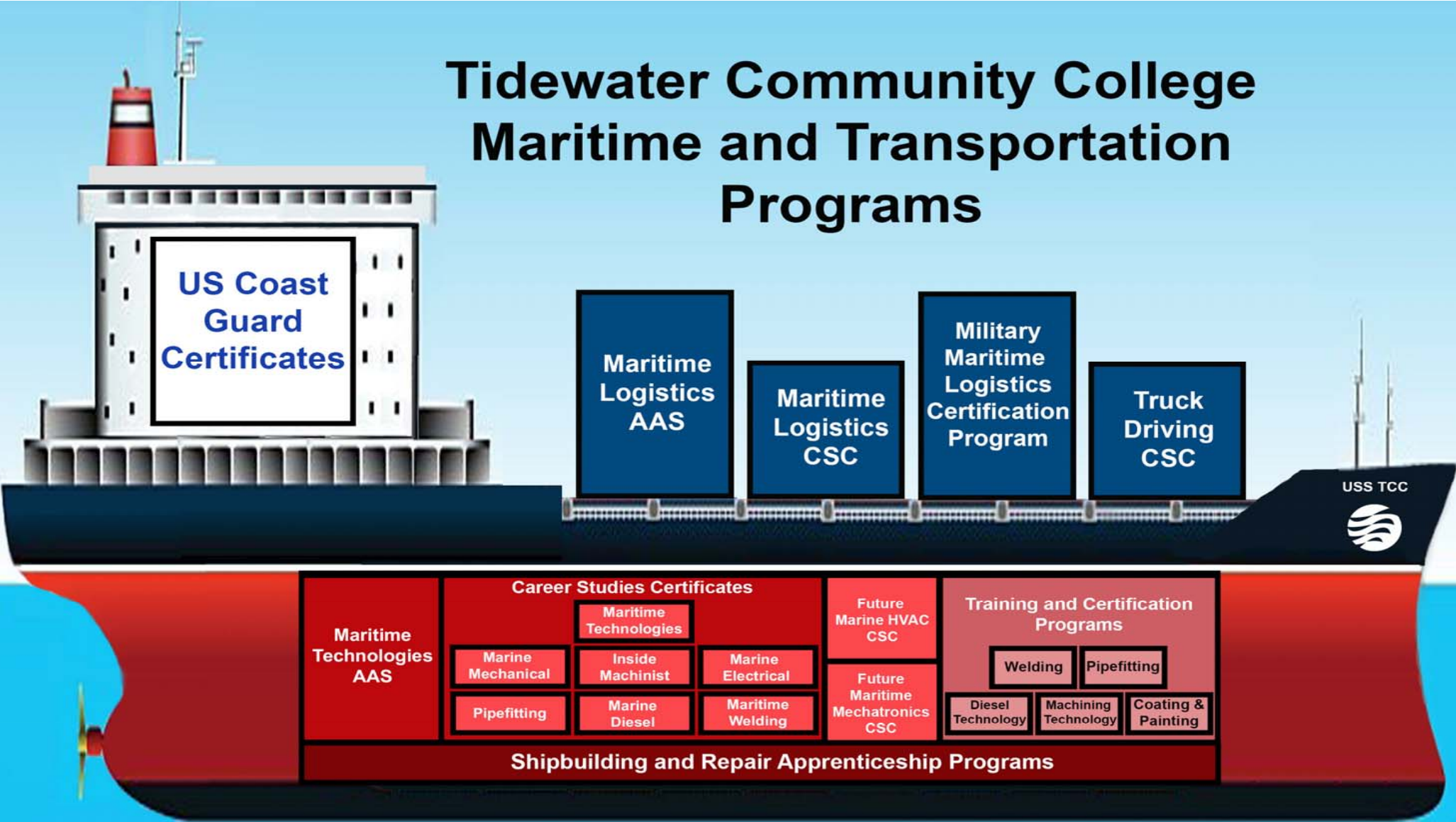
WORKING COLLABORATIVELY TO DEVELOP AND SUSTAIN
THE SHIPBUILDING & SHIP REPAIR WORKFORCE IN
HAMPTON ROADS

The Importance of Maritime Education

- **90%** of all U.S. goods are transported by ship
- The maritime industry accounts for **26%** of the U.S. economy
- In Virginia **530,800** jobs and **10.1%** of the gross state revenue are directly dependent on the maritime industry
- **60%** of maritime workers are beyond retirement age



Tidewater Community College Maritime and Transportation Programs



VSRA Pre-Hire Model

- Skilled Trades Certification and Training (Marine Coating, Marine Electrical, Marine Outside Machinist, Marine Pipefitter, Marine Welding, Maritime Sheet Metal*)
- Collaborative community college effort between TCC (*Lead*), TNCC, and PDCCC
- Curriculum developed in partnership with industry
- Training simulates the workday
- Successful students transition to industry employment
- Training under evaluation for academic advanced standing



High School Shipbuilding Pre-Apprenticeship Program

- Regional partners include CPS, NPS, PPS, VBCPS, VSRA, Colonna's, Newport News Shipbuilding, Oceaneering, and Tecnico
- Targets high school students in their junior and senior year
- Creates a reliable pipeline for K-12 outreach, awareness, and recruitment
- Incorporates industry relevant credentials and dual enrollment courses
- Promotes direct engagement with employers throughout the program

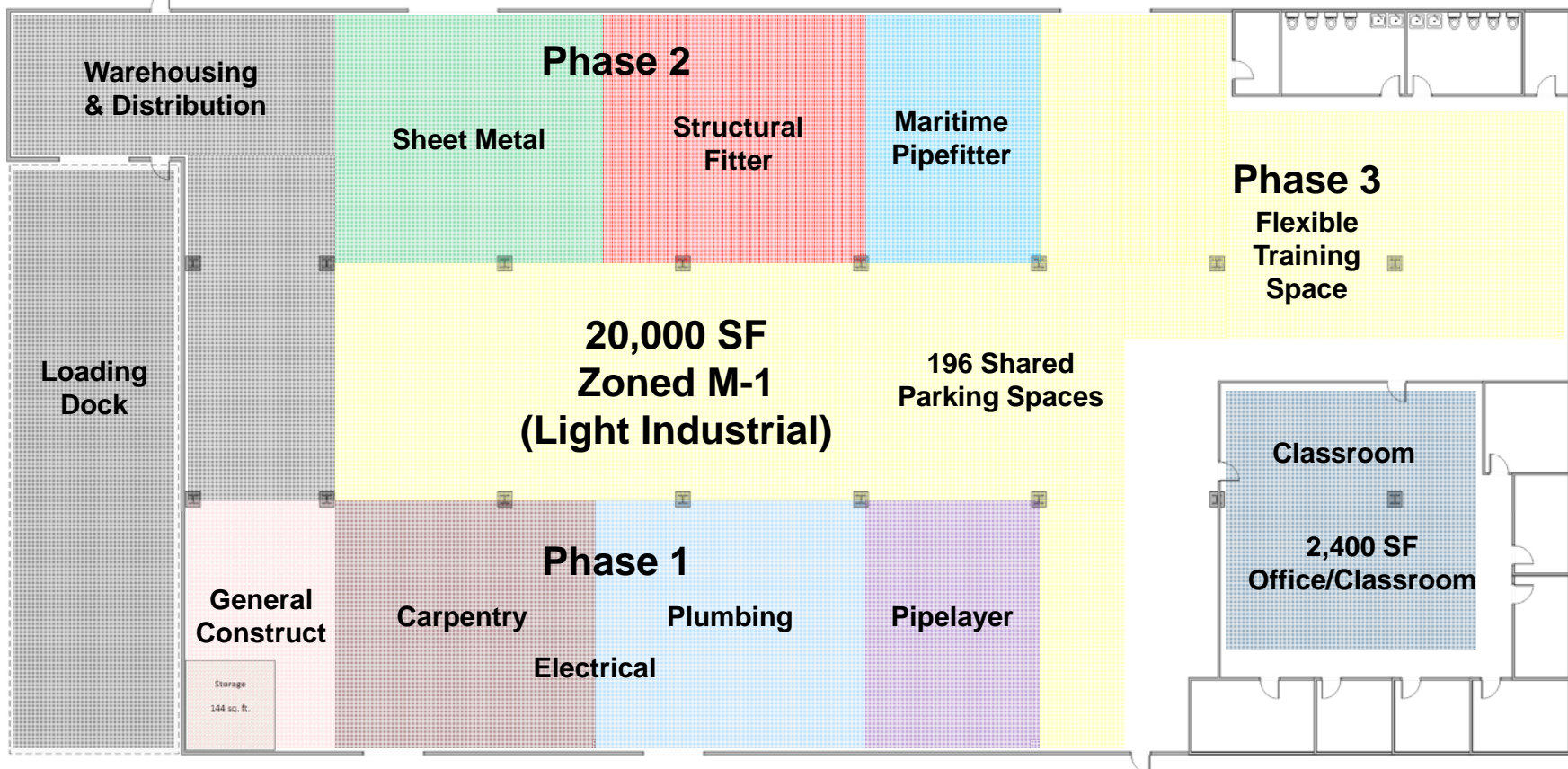


Apprenticeship Related Instruction (ARI)

- TCC currently provides some, or all, of the ARI for 11 shipbuilding/ship repair employers
- Program models include both fulltime and part-time academics
- Employer provides structured on-the-job training
- Current ARI includes workforce and academic credit courses leading to stackable academic credentials
- Curricula developed to support shipbuilding/ship repair industry



New Skilled Trades Center



Who Are We?



The SMART Center received **\$3M** for 2015-19 NSF Award to continue and scale work in maritime & transportation pathways, partnerships, and innovative national model

The SMART Center Goals



1. Career Awareness and Pathways

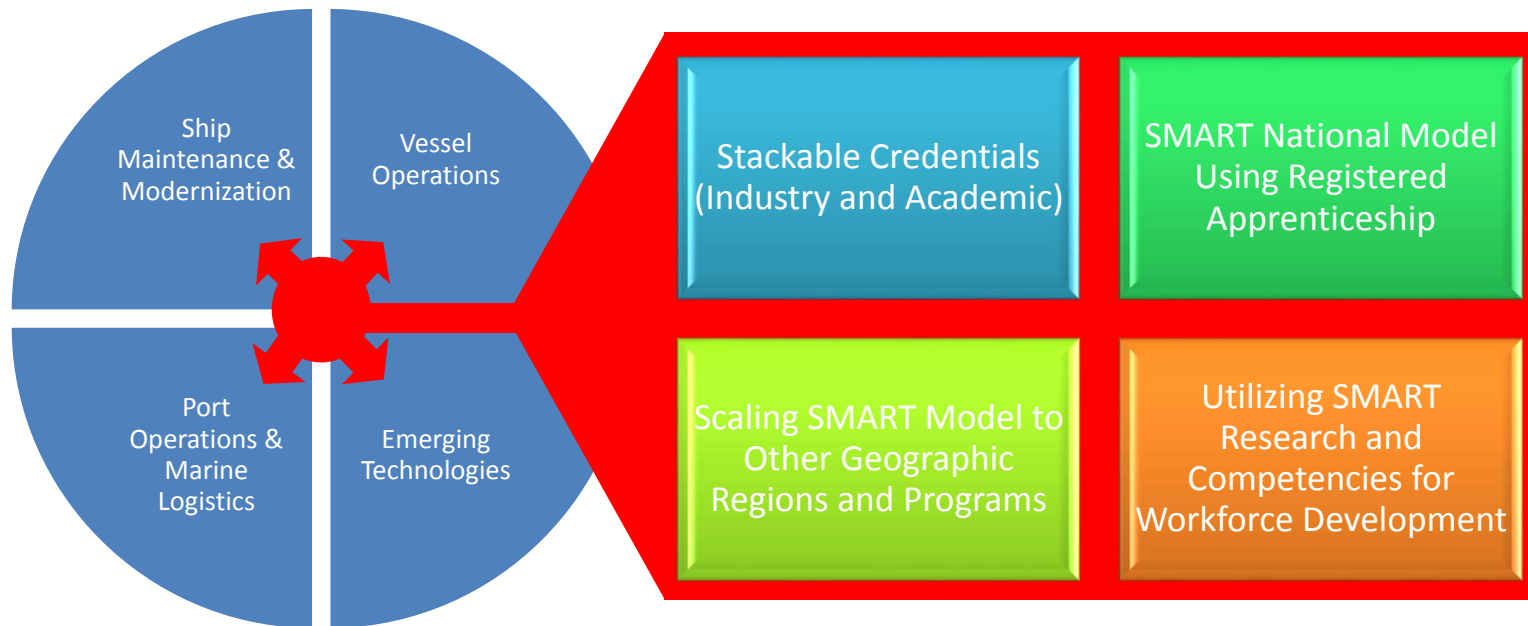
2. Industry Standards/ Ports & Logistics Focus

3. Professional Development

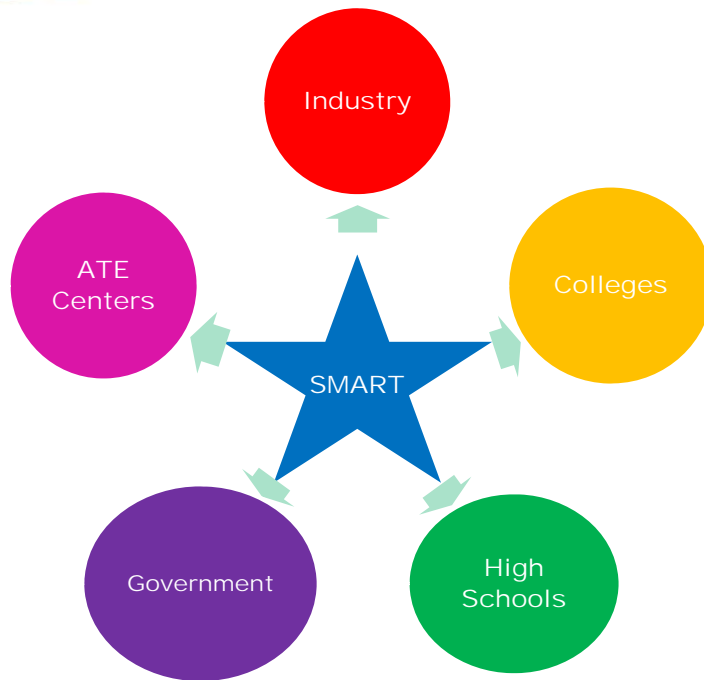
4. Model Education & Industry Partnerships



Work in All 4 Sectors in Maritime & Transportation Industry



Regional and National Partnerships



What we have been doing lately

- Maritime Academy for Hampton Public Schools
- First Maritime Summer Camp rising 6-9th graders
- October – teaming with the Girl Scouts to produce “Women on Wheels”
- Domestic Maritime Centers of Excellence
- Military Crosswalks
- Hosting the 2019 national Maritime Education conference in Norfolk

SMART Website



TCC | From Here Go Anywh... Southeast Maritime anc x +

← → ↻ | maritime-technology.org

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Norfolk Naval Shipyard Apprenticeship Program

Norfolk Naval Shipyard (NNSY) Apprentice Program. Earn while you learn an in-demand maritime trade. Norfolk Naval Shipyard's (NNSY) Apprentice Program, in partnership with Tidewater Community College and Tidewater Community College Apprenticeship Institute, is...

[Read more about this](#)

SMART Center June/July 2018 Newsletter
The June 2018 edition of the SMART Center's Bi-Monthly Newsletter is now available. Newsletter author and SMAR...

National Maritime Day 2018
Every year the United States celebrates National Maritime Day recognizing one of America's most important indu...

SMART Summer Maritime Camp REGISTRATION OPEN
The Southeastern Maritime and Transportation Center, will be hosting a SMART Summer Maritime Camp August 6-10t...

Why Smart? The Southeast Maritime and Transportation (SMART) Center is the only National Science

Social Media 7/11/2018 Great article about Bill Crow from Virginia Ship Repair

Upcoming Events July 2018

www.maritime-technology.org





SMART - a National Science Foundation Advanced Technological Education (NSF ATE) Center

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Video Gallery

The maritime and transportation industry offers a wide variety of exciting and rewarding STEM-based career opportunities in four main sectors:

- Shipbuilding and ship repair
- Ports and logisitics
- Seagoing/Vessel Operations
- Marinas and Recreational Boating

Learn more about the great career possibilities available in the maritime and transportation industry.

For more videos, please visit our [YouTube channel](#).



How Ports Operate



Maritime Careers Overview



Careers In The Shipyard



Careers On Board Vessels



Careers On The Pier



Maritime Careers (silent video version)



Make the SMART Choice: The Next Captains



Make the SMART Choice: Faces of Success



Make the SMART Choice: Opportunities on the Water



Make the SMART Choice: Opportunities Abound in Maritime



David Tang



Cheryl Smith



Cheryl Smith



Cheryl Smith

Upcoming Events

July 2018						
Su	Mo	Tu	We	Th	Fr	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

Make the SMART Choice



Make the SMART Choice: Matching Up with the Men

Social Media

7/11/2018 Great article about Bill Crow from Virginia Ship Repair Association and Tidewater Community College Dr. Edna



Maritime and Transportation Resource Handbook and Career Guide

Ship Maintenance & Modernization Vessel Operations Port Operations & Marine Logistics Emerging Technologies



SMART

SOUTHEAST MARITIME AND TRANSPORTATION CENTER





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Career Guide & Educator Resource Handbook

anyflip

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Maritime and Transportation Resource Handbook and Career Guide
 250 Mathematics & Mathematics, 1000+ Questions, 400+ Questions & Model Questions, Designing Technology

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Maritime / Transportation Industry Sectors & Jobs

Industry / Job Role	Sea-Born	Port / Logistics	Associated / Offshore Cost
Shipping - Ship Repair	Ship Repair	Port Operations	Offshore Support
Maritime Education	Maritime Education	Port Education	Offshore Education
Maritime Research	Maritime Research	Port Research	Offshore Research
Maritime Training	Maritime Training	Port Training	Offshore Training
Maritime Safety	Maritime Safety	Port Safety	Offshore Safety
Maritime Security	Maritime Security	Port Security	Offshore Security
Maritime Operations	Maritime Operations	Port Operations	Offshore Operations
Maritime Management	Maritime Management	Port Management	Offshore Management
Maritime Engineering	Maritime Engineering	Port Engineering	Offshore Engineering
Maritime Technology	Maritime Technology	Port Technology	Offshore Technology
Maritime Innovation	Maritime Innovation	Port Innovation	Offshore Innovation
Maritime Sustainability	Maritime Sustainability	Port Sustainability	Offshore Sustainability
Maritime Compliance	Maritime Compliance	Port Compliance	Offshore Compliance
Maritime Quality	Maritime Quality	Port Quality	Offshore Quality
Maritime Environmental	Maritime Environmental	Port Environmental	Offshore Environmental
Maritime Health & Safety	Maritime Health & Safety	Port Health & Safety	Offshore Health & Safety
Maritime Risk Management	Maritime Risk Management	Port Risk Management	Offshore Risk Management
Maritime Business Development	Maritime Business Development	Port Business Development	Offshore Business Development
Maritime Marketing	Maritime Marketing	Port Marketing	Offshore Marketing
Maritime Sales	Maritime Sales	Port Sales	Offshore Sales
Maritime Customer Service	Maritime Customer Service	Port Customer Service	Offshore Customer Service
Maritime Human Resources	Maritime Human Resources	Port Human Resources	Offshore Human Resources
Maritime Finance	Maritime Finance	Port Finance	Offshore Finance
Maritime Law	Maritime Law	Port Law	Offshore Law
Maritime Insurance	Maritime Insurance	Port Insurance	Offshore Insurance
Maritime Claims	Maritime Claims	Port Claims	Offshore Claims
Maritime Arbitration	Maritime Arbitration	Port Arbitration	Offshore Arbitration
Maritime Dispute Resolution	Maritime Dispute Resolution	Port Dispute Resolution	Offshore Dispute Resolution
Maritime Mediation	Maritime Mediation	Port Mediation	Offshore Mediation
Maritime Conciliation	Maritime Conciliation	Port Conciliation	Offshore Conciliation
Maritime Negotiation	Maritime Negotiation	Port Negotiation	Offshore Negotiation
Maritime Litigation	Maritime Litigation	Port Litigation	Offshore Litigation
Maritime Arbitration	Maritime Arbitration	Port Arbitration	Offshore Arbitration
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Make the SMART Choice



[Make the SMART Choice: Maritime Apprenticeships Lead to Broad Opportunities On and Off the Water](#)

Social Media

7/11/2018
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7/11/2018

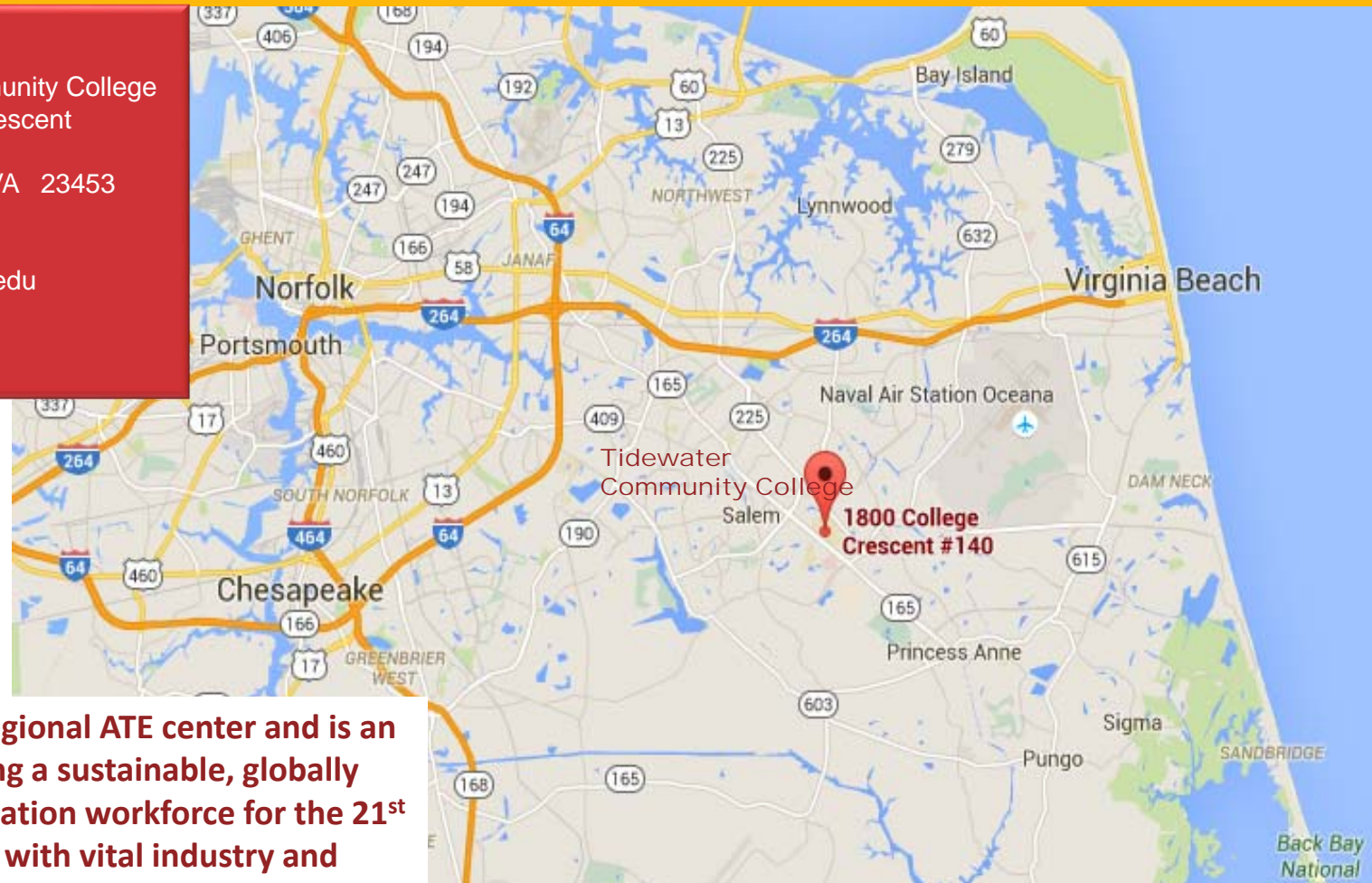


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SMART Co-PI and Director



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The SMART Center serves as a regional ATE center and is an economic model for developing a sustainable, globally prepared maritime and transportation workforce for the 21st century through partnership with vital industry and