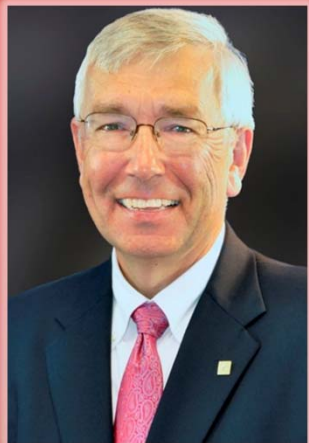




Scaling Registered Apprenticeship-Based Pathways for Sustained Impact

NCPN Conference - October 6-7, 2016





Brad Mason

Co-PI, The SMART Center

AMSEC, LLC
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Kipp Snow

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Transportation, Logistics and Cargo
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Guy St John

Apprentice Program Manager
Oceaneering



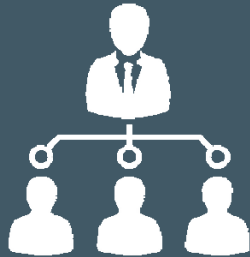
Alan Walker

Apprenticeship
Subject Matter Expert

What is registered apprenticeship?



Employer
Involvement



Structured
On-the-Job
Learning



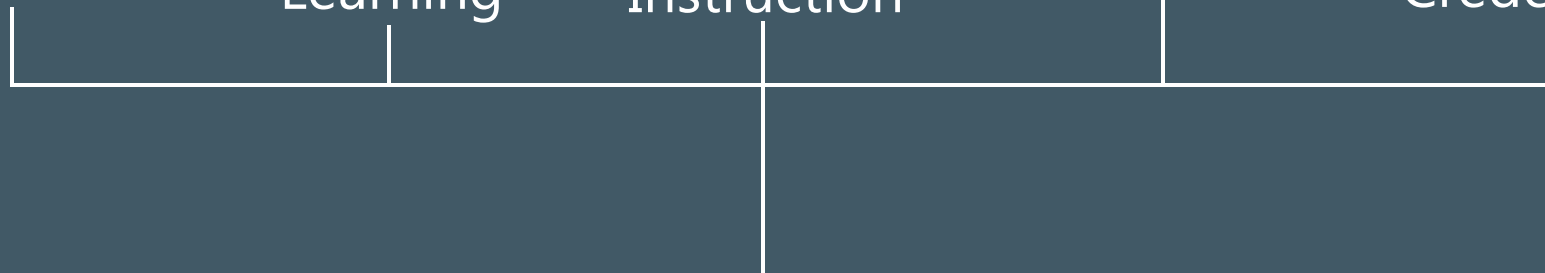
Related
Training and
Instruction



Rewards for
Skill Gains



National
Occupational
Credential



Five Core Components of Registered Apprenticeship

Apprentices

National Growth Chart



Registered Apprenticeship Facts and Figures

Did You Know?

150,000

Employers and Labor Management Organizations Participate in Registered Apprenticeship.

400,000

Registered Apprenticeships Nationwide in More than 1,000 Occupations.

\$50,000

Average Starting Salary of Apprentices Per Year While Earning a Credential Equivalent to a 2 or 4 Year College Degree

\$300,000

Amount Workers Who Complete Registered Apprenticeship Programs Earn More Over a Lifetime Than Peers

\$1.47 per \$1.00

For Every \$1 Spent on Registered Apprenticeship, Employers Get an Average of \$1.47 Back in Increased Productivity



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The SMART Center has released a new installment in its "Make the SMART Choice" video series showing how today's maritime industry employers are offering workers a great pathway into stable, great-paying careers. The video tells the story of how Auxiliary Syste...

Read more about this



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Machine/Shop Foreman



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Ship Pilot

1) Consult maps, charts, weather reports, and navigation equipment to determine and direct ship movements.2) D... read more

Second Mate

The second mate is responsible for maintaining the bridge navigational and communications equipment as well as

Upcoming Events

August 2016						
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						

New "Make the SMART Center"

Apprenticeship

Offering workers a great pathway into the story of how Auxiliary Systems...

Read more about this

- Careers
- Career Pathways
- Videos
- Apprenticeship
- Dual Enrollment
- Aptitude Quiz



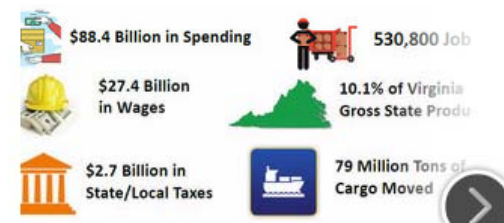
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Make the SMART Choice: Maritime Apprenticeships Lead to B...



Colter Chambers

Maritime Apprentice



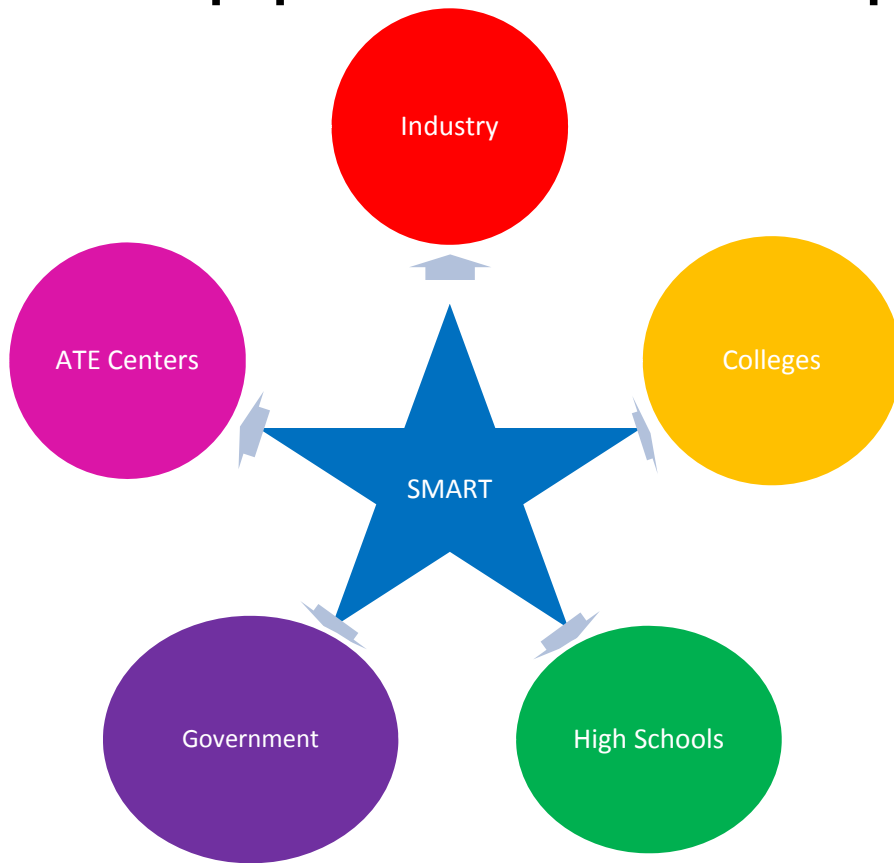
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Make the SMART Choice: Maritime Apprenticeships Lead to Broad Opportunities On and Off the Water



Regional and National Apprenticeship Partnerships





Join RACC...



MARiTech Consortium



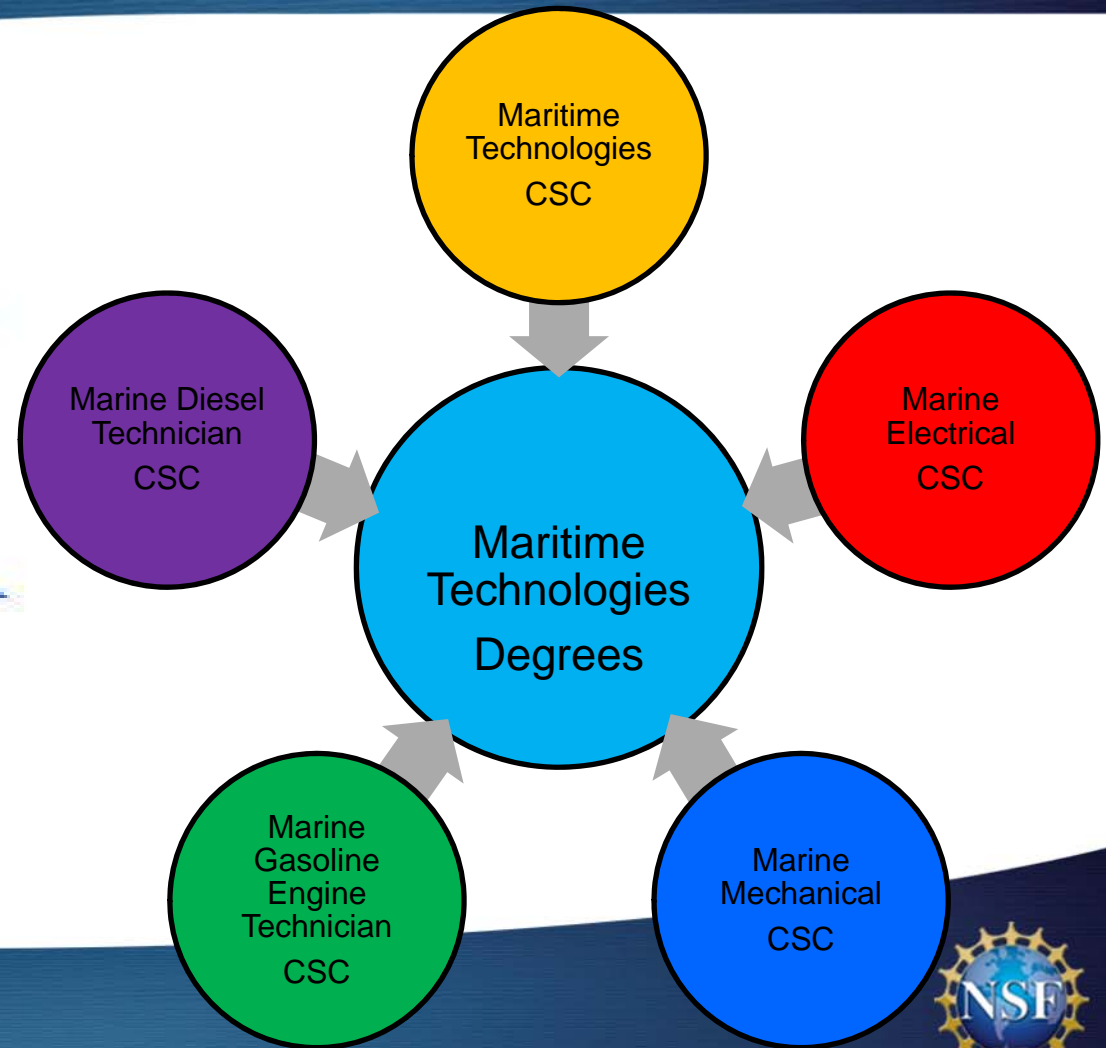
- Leading creation of dual enrollment programs
- Leading creation of new programs in Maritime Technologies
- Leading creation hybrid courses
- Leading curriculum updates to serve industry



Meeting Student & Industry Needs



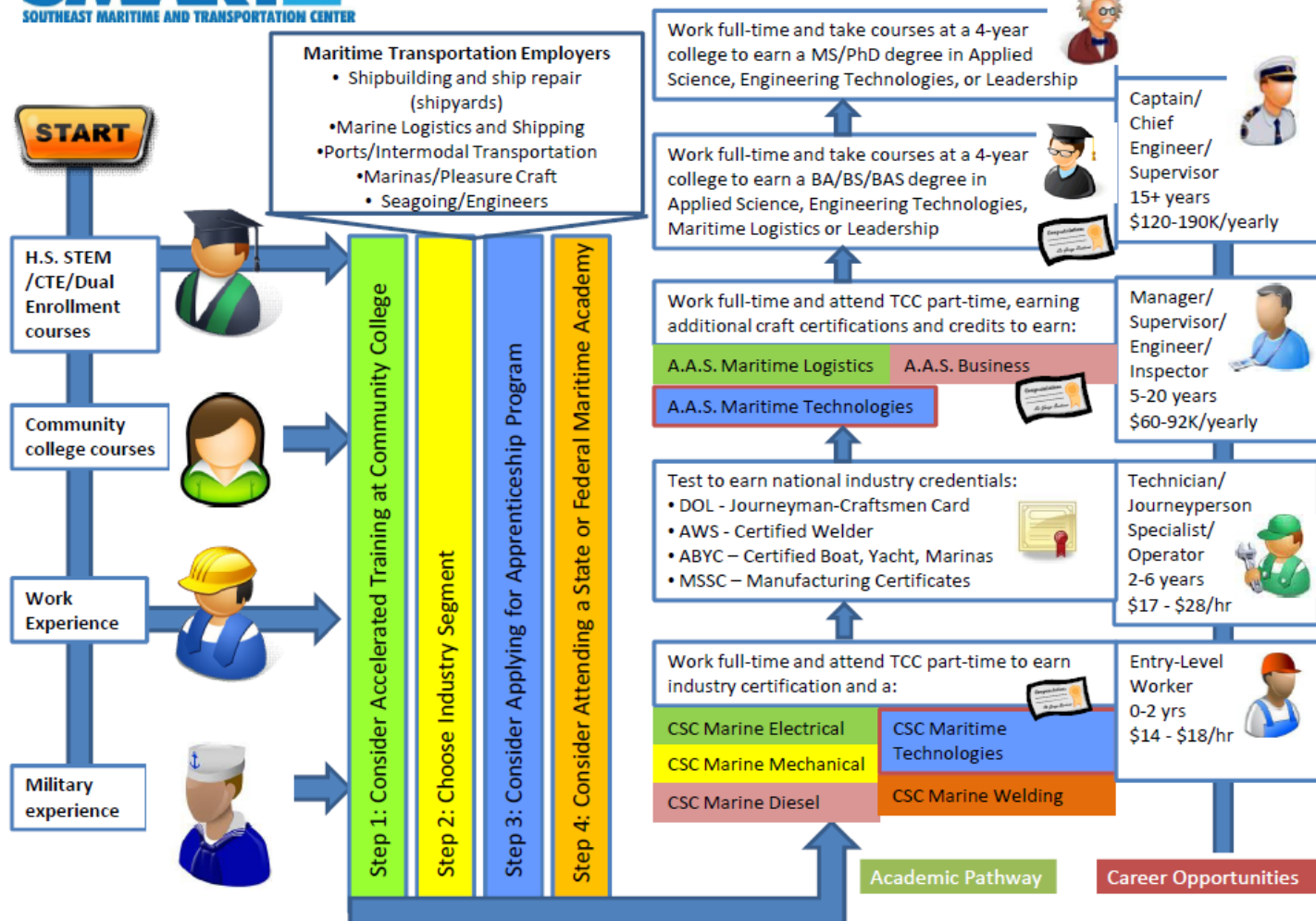
Maritime Technologies Career Pathway since Inception of SMART Center:



SMART Maritime Career Pathways With Registered Apprenticeship



Your Maritime and Transportation Industry Career Pathway



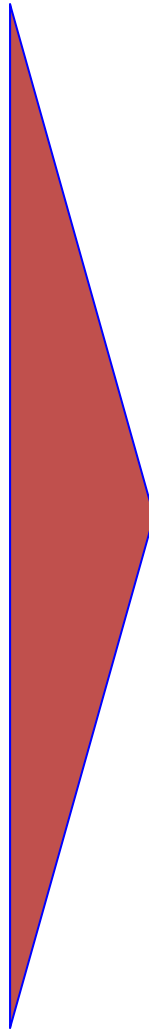
Link to jobs through deep employer engagement

Result in credentials that support career pathways

Make training accessible to diverse students and workers

Build a bridge to real work

Set clear goals and measure outcomes

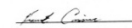


Quality Stackable Credentials

The United States Department of Labor

Office of Apprenticeship
Certificate of Completion of Apprenticeship

This is to certify that
Robert Gamboa
has completed an apprenticeship for the occupation
Inside Wireman
under the sponsorship of
Phoenix Electrical JATC
in accordance with the basic standards of apprenticeship
established by the Secretary of Labor

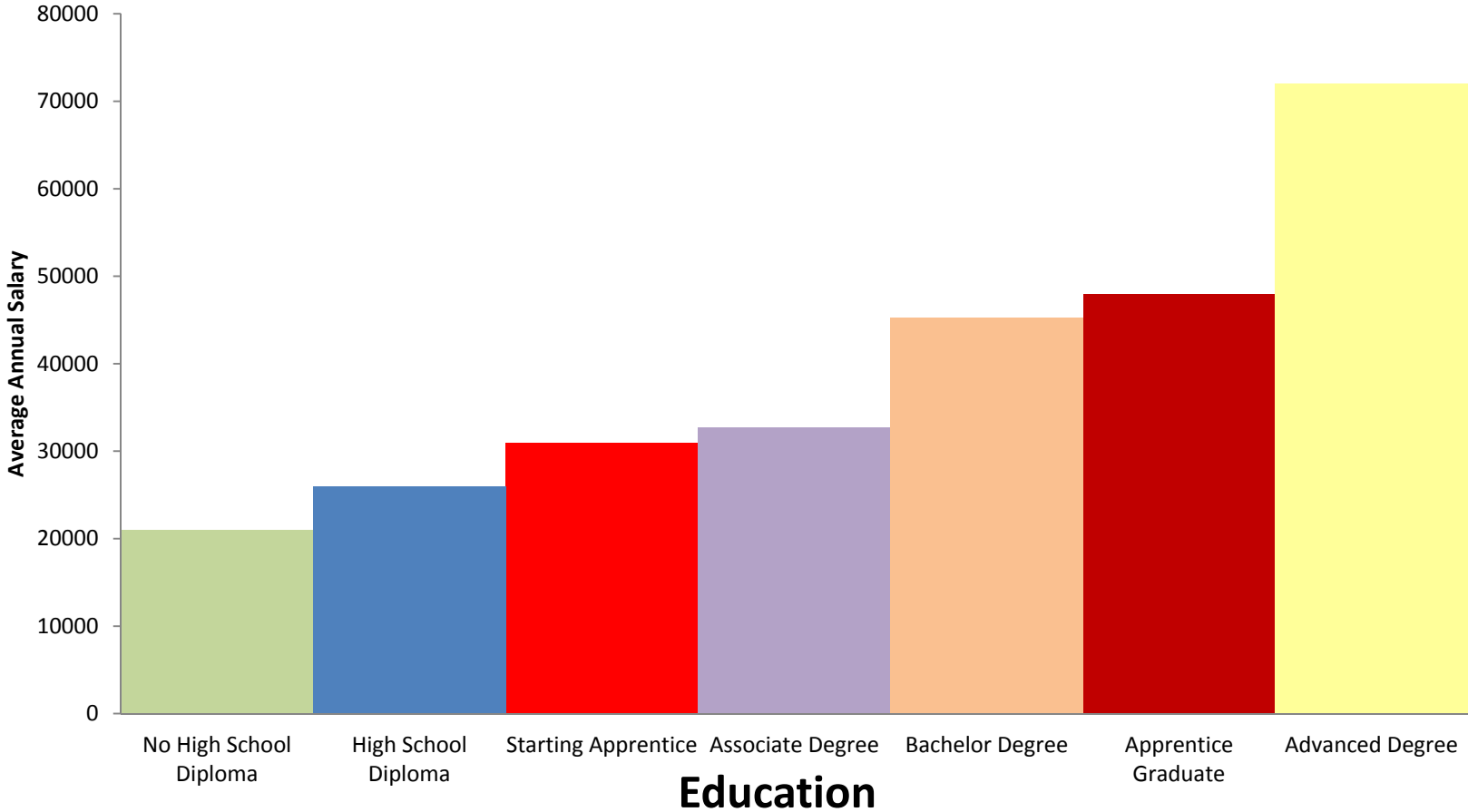

September 30, 2010
Date Completed




Director, Office of Apprenticeship

Apprentices “**earn and learn**”,
resulting in higher pay from the beginning and early graduation.

Education vs. Salary ... Registered Apprenticeship



Most new apprentice graduates earn more than students graduating with a Bachelor’s degree.

Potential Earnings Comparison between College Career Path and Apprenticeship



Enter College from High School

Year	Earnings	Cumulative
1	-20,000	-20,000
2	-20,000	-40,000
3	-20,000	-60,000
4	-20,000	-80,000
5	60,000	-20,000
6	62,000	42,000
7	64,000	106,000
8	68,000	174,000
9	71,000	245,000
10	76,000	321,000

Enter workforce from High School

Earnings	Cumulative	Delta
29,500	29,500	49,500
30,400	59,900	99,900
32,500	92,400	152,400
34,800	127,200	207,200
37,300	164,500	184,500
40,000	204,500	162,500
43,000	247,500	141,500
51,000	298,500	124,500
55,000	353,500	108,500
57,750	411,250	90,250



Benefits of Stackable Credentials & Dual Enrollment Head Start

Education in Maritime and Transportation Pays

Education/Experience	Maritime Jobs	Pay Range	Transportation Jobs
<i>Master's Degree / Bachelor's Degree with Experience</i>	<ul style="list-style-type: none"> • Industrial Engineer • Nuclear Engineer • Project Supervisor • Electrical Engineer • Mechanical Engineer 	\$75K - \$100K Yearly	<ul style="list-style-type: none"> • Industrial Engineer • Supply Chain Manager • Electrical Engineer • Civil Engineer • Captain
<i>Bachelor's Degree</i>	<ul style="list-style-type: none"> • Production Manager • Health & Safety Inspector • Logistics Manager 	\$60K - \$90K Yearly	<ul style="list-style-type: none"> • Transportation Manager • Distribution Center Supervisor • Ports Logistician • Ocean Engineer
<i>Registered Apprenticeship / Journeyman</i>	<ul style="list-style-type: none"> • Marine Welder • Inside/Outside Machinist • Shipfitter • Rigger 	\$41K - \$68K Yearly	<ul style="list-style-type: none"> • Freight Forwarder • Marine Designer • Longshoreman • HVAC Technician • Welder
<i>Associate's Degree / Certifications or College Coursework & 1-2 Years Experience</i>	<ul style="list-style-type: none"> • <i>Electrical Technician</i> • Mecatronics Tech • CAD/Designer • Marine Maintenance • Instrumentation 	\$17 - \$26 Hourly	<ul style="list-style-type: none"> • Production/Planning Clerk • Crane and Tower Operator
<i>Intensive Training Programs</i>	<ul style="list-style-type: none"> • Certified Welder • Maritime Electrician • Mechanics 	\$15 - \$25 Hourly	<ul style="list-style-type: none"> • Rail-Track Laying and Equipment Operator • Heavy Vehicle Service Tech
<i>High School Diploma or GED</i>	<ul style="list-style-type: none"> • Welder • Helper • Fire Watch 	\$8 - \$15 Hourly	<ul style="list-style-type: none"> • Freight, Stock and Material Mover • Shipping, Receiving and Traffic Clerk



ApprenticeshipUSA



REGISTERED APPRENTICESHIP- COLLEGE CONSORTIUM

RACC

A network of Colleges and Registered Apprenticeship Programs
working together to provide college-to-career opportunities

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PATHWAYS TO SUCCESS

EDUCATORS

> Provide Apprentices an accelerated

REGISTERED APPRENTICESHIP SPONSORS

> A "grow your own" career path

REPRESENTING ORGANIZATIONS

> Be on the cutting edge of

https://www.doleta.gov/oa/racc.cfm

Discussion & Questions



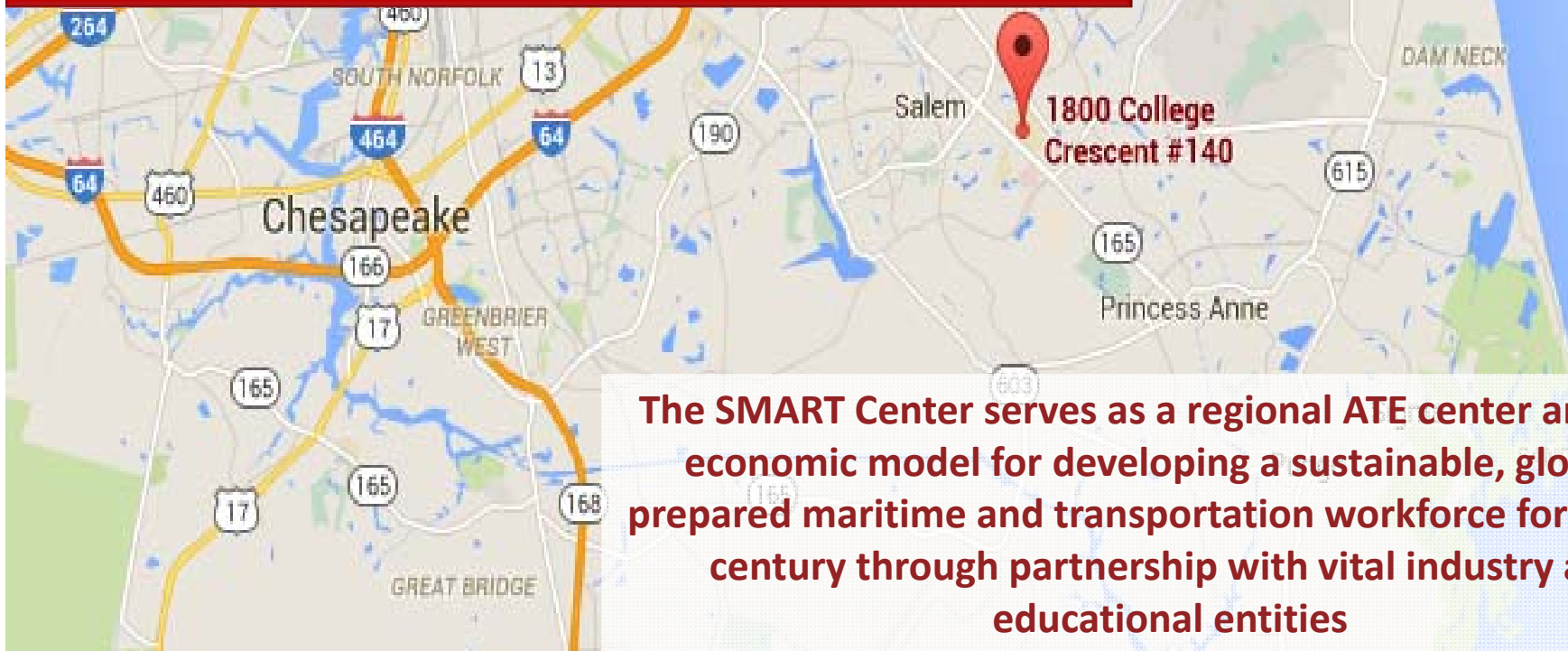
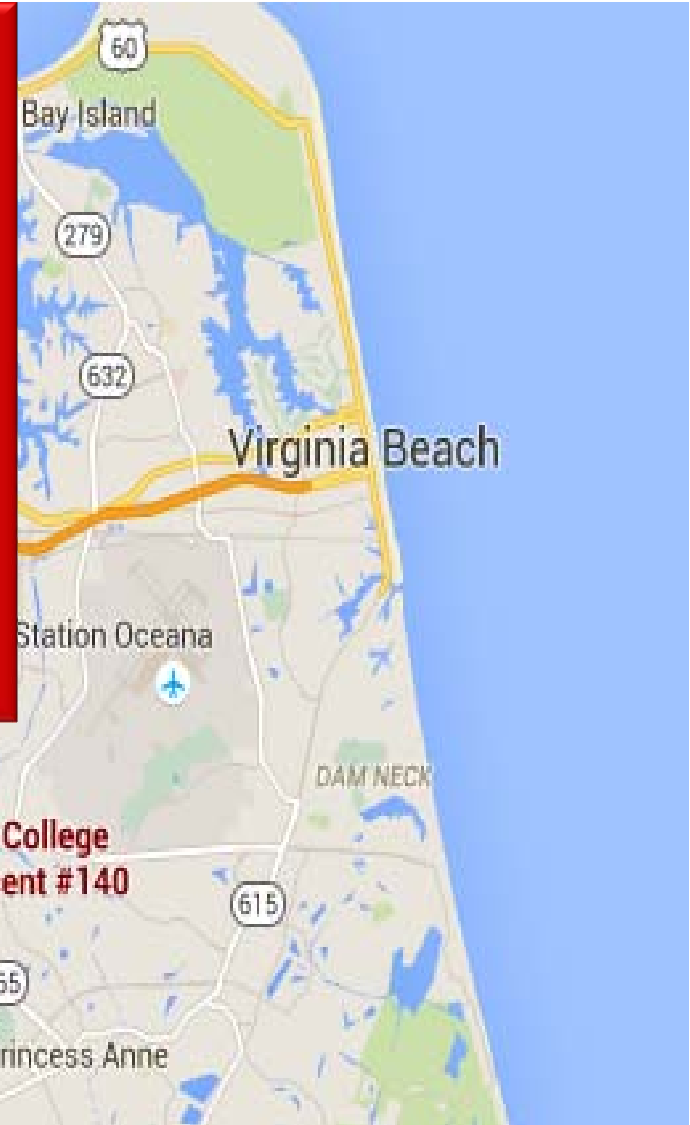
Barbara Murray

The SMART Center

Executive Director and Principal Investigator

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www.maritime-technology.org



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 educational entities

Back Bay
National