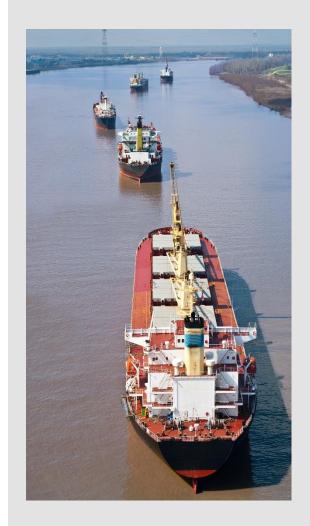






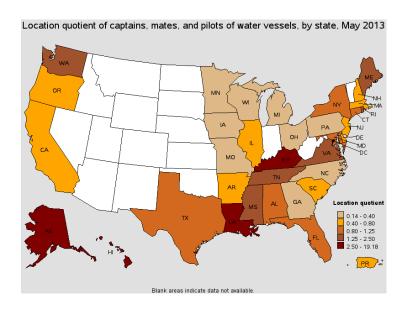
Presentation to the Senate Select Committee on Vocational and Technical Education April 9, 2015



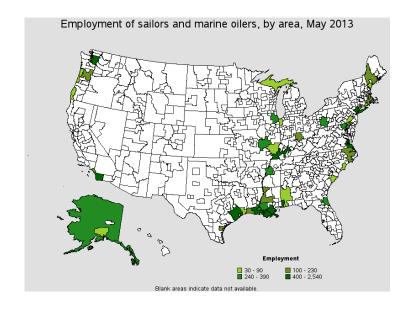
# The maritime industry is an invisible giant in Louisiana.

- One in five jobs in Louisiana is connected to the maritime industry, resulting in more than \$3.5 billion in employment income every year.
- The maritime industry has an \$11 billion total annual economic impact in Louisiana the only state to post more than \$10 billion in total gross economic output directly related to the maritime industry.
- "Water-way" dependent jobs generate nearly \$2 billion in tax revenue.

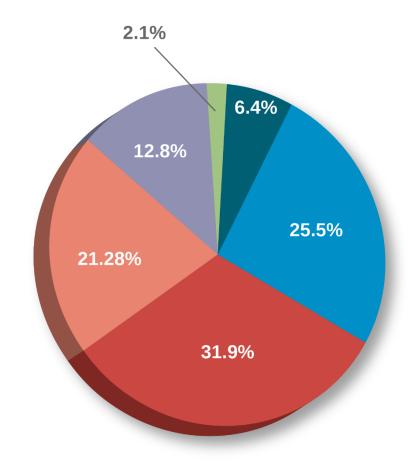
Louisiana leads the nation in maritime jobs. #1 employer of captains, mates, pilots – One in four American captains are in La.

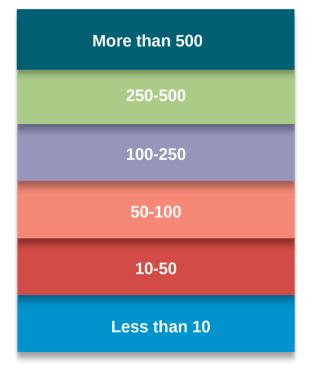


#1 Houma #2 New Orleans #3 Lafayette #1 employer of sailors, marine oilers – One in five American sailors are in La.



#1 Houma #2 New Orleans #3 Lafayette Just 50 companies indicate they will need as many as 3,000 additional employees for La. maritime operations in the next five years.





Data confirms anecdotes of workforce shortages for Louisiana maritime jobs.

Job Title	10-Yr % Change 2012 to 2022	2013 Annual Wage
Sailors and Marine Oilers	20%	\$41,170
Captains, Mates, and Pilots of Water Vessels	18%	\$82,610
Crane and Tower Operators	18%	\$50,270
Tank Car, Truck, and Ship Loaders	14%	\$42,770
Ship Engineers	9%	\$84,530

Several factors will compound the maritime workforce challenge.



#### Aging workforce



Emergence of "Blue Tech"



Growth in offshore production

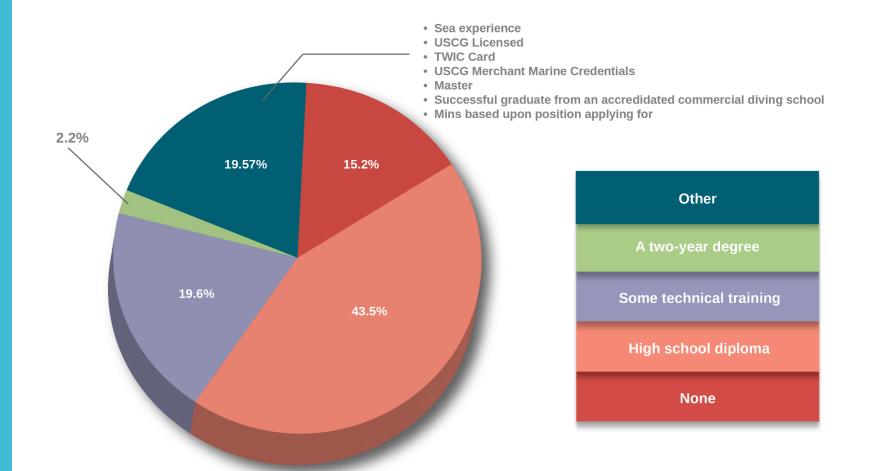


Panama Canal expansion



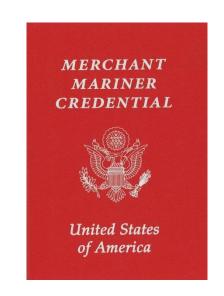
Historic industrial growth

Educational requirements for maritime positions are minimal.



Employers largely assume the responsibility for worker training on the job.

- Basic safety and skills training, a
   Merchant Mariner Credential from the US
   Coast Guard, and sea experience make up
   the baseline requirements for all mariners.
- 82% of companies surveyed by LABI report that on-the-job training or retraining is a standard procedure for all new recruits.
- Nearly one-third of companies surveyed by LABI report that they contract with La. community and technical colleges for customized maritime training.



Louisiana provides maritime training primarily through three LCTCS institutions.

#### **Delgado Community College**

New Orleans

5,416 marine course completers in 2014

#### South Central La. Technical College

Morgan City

2,864 marine course completers in 2014

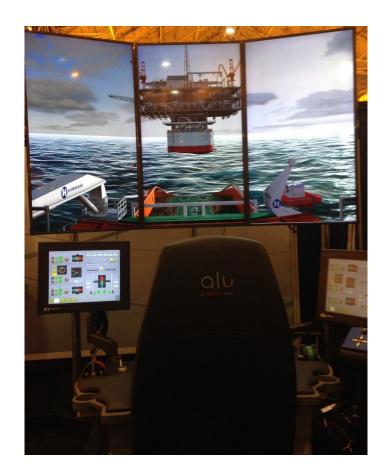
### Fletcher Technical Community College

Houma

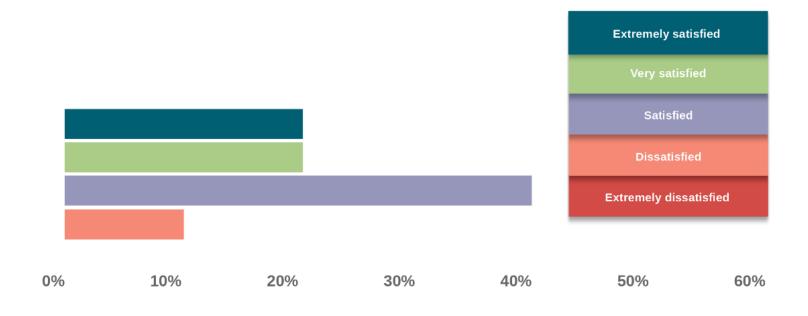
846 marine course completers in 2014

# LCTCS maritime training is almost entirely employerdriven.

- Institutions report they rely on companies to fund an estimated 90% of all maritime training courses.
- Nearly all courses are taken individually and tailored for licensing and credentialing and not necessarily represent a path to a degree.
- Very little college credit is issued for maritime coursework.



Employers contracting with LCTCS for training are generally satisfied with the quality.



• Colleges are meeting the workforce need for certain employers. The **strong relationships with industry** and history of partnership cannot be over-emphasized.

91% of companies surveyed believe the State should do more to provide industry with qualified maritime workers.



We use the local college when we can, but they are often booked.

In 5 to 6years, the right worker will earn a six-figure salary – all with training funded by industry.

We need more basic safety and STCW training due to heightened standards.

We use 25% of our training budget on housing and transportation when we can't use local colleges, which means less people will receive training.

[The state needs to] educate young people not interested in the university that there is a viable alternative in the maritime industry...

Honest and open dialogue between the education side and the business side should happen prior to implementing or modifying training within the schools.

# Louisiana must scale up and diversify efforts to grow the workforce and fulfill demand.

- A substantial number of companies appear unaware of the training or do not choose to utilize it.
- There is no overarching effort to link the schools, no standard curriculum, and no statewide credential.
- There is little market reach outside the state for Louisiana's maritime training despite the available jobs.
- There are few entry points for students to begin a maritime career in two-year schools.

- 1. Serve the needs of more employers with the current approach, but scale it up.
- informed option for students, broadening beyond the traditional approach to Louisiana maritime training.

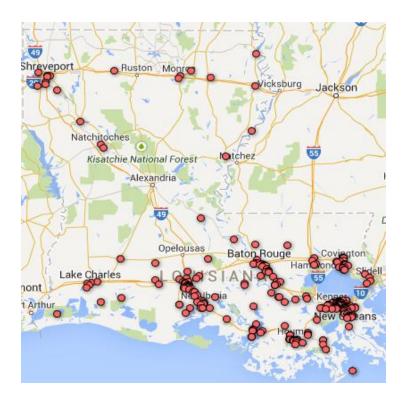
Promote the "Blue Economy" to maximize federal and state support for the maritime industry in economic and workforce development, while also raining awareness of careers to the public.



Convene an industrydriven maritime task force within the Louisiana Workforce **Investment Council** (WIC) to develop a business plan that substantially increases maritime training opportunities in Louisiana.

- Efforts conducted in silos or sporadically will inevitably fall short.
- Replicate the nationally recognized Louisiana Craft Trade Task Force to produce a detailed analysis of needs, a mapping of programs, and targeted training expansions.
- The following recommendations should be explored through this public-private process and the development of a business plan.

Articulate a goal and vision for a world-class maritime training institute.



- Complete the Center of Excellence application
- Collaborate across institutions
- Develop clear, seamless career tracks
- Standardize an industrydriven curriculum
- Look beyond the three institutions with programs today
- Add space at the appropriate time to expand

Be more aggressive in marketing maritime programs to industry, meeting more workforce demand and generating revenue for colleges at the same time.

### Establish and publicize clear career pathways for maritime jobs.

- Ensure credentials are standardized and stackable across colleges.
- 2. Outline the pathways down to the course level.
- 3. Put it all online for the public and encourage K12 schools, technical schools, the Workforce Investment Boards, and others to utilize it as an option for those seeking work.

# Example of Maritime Course Requirements Linked to Career Tracks

San Jacinto College in Pasadena, Texas

San Jacinto College Maritime Program 3234 East Pasadena Freeway, Pasadena Texas 77503 281-974-2200 sanjacinto.maritime@sicd.edu Ocean Going Ships & Tugs Maritime Career Pathways Months Away From Home Depending on how long one is willing to be away from home Weeks or Months at Home Step 1: Obtain a TWIC Transportation Worker Identification Card Cooks & Stewards Ordinary Seaman Step 2: Obtain U.S. Coast Guard Approved Training Up to \$170 / day (Deckhand) At a maritime training school, academy or college. 40 Hour Up to \$170 / day Step 3: Obtain a Merchant Mariner Document Basic Safety Training 40 Hour U.S. Coast Guard Professional Mariner Identification Basic Safety Training Able Bodied Seaman Inland Service **Near Coastal Service** Up to \$ 270 / day Tug & Barge Oil Field Support 360 Days Exp Ship Channel Crew & Supply Boats 40 Hour A/B Class 14 to 28 Days Away From Home 28 Days Away From Home 32 Hour Lifeboat 7 to 14 Days at Home 14 or 28 at Home Third Mate Unlimited Tonnage Deckhand Ordinary Seaman Up to 500.00 / Day Up to \$130 / day (Deckhand) 1080 Days Exp. No Classes Required Up to\$170 / day MANY COLLEGE Recommended classes: No Classes Required LEVEL CLASSES Basic Safety Training Recommended classes: Deck Familiarization Basic Safety Training Engineering Familiarization Deck Familiarization Second Mate Engineering Familiarization Unlimited Tonnage Up to 650.00 / Day Apprentice Mate Tankerman 360 Days in Charge of Up to \$270 / day Up tp \$270 / day Able Bodied Seaman Navigation Watch 360 Days Exp 40 Hour Class Up to \$ 270 / day as 3rd Mate 104 Hour Class Tanker Operations 360 Days Exp. Navigation, Safety (math & physics) 40 Hour A/B Class Pollution Prevention Maritime Law, etc. 32 Hour Lifeboat Class Chief Mate Maritime Law 40 Hour Unlimited Tonnage 16 hour Basic Safety Training Firefighting and Up to 800.00 / Day Mate - Pilot 8 hour 360 Days in Charge of Up to \$450 / day First Aid / CPR Navigation Watch 540 Days Exp Master Class as 2nd Mate Math & Physics. More Classes 100 - 1600 Ton MANY COLLEGE Up to \$ 800.00 / Day LEVEL CLASSES 360 to 1080 Days Exp. MANY COLLEGE LEVEL CLASSES Master of Towing Master (Captain) Up to \$550.00 / day Unlimited Tonnage 1080 Days Exp Up to 1200,00 / Day

360 Days as Chief Mate

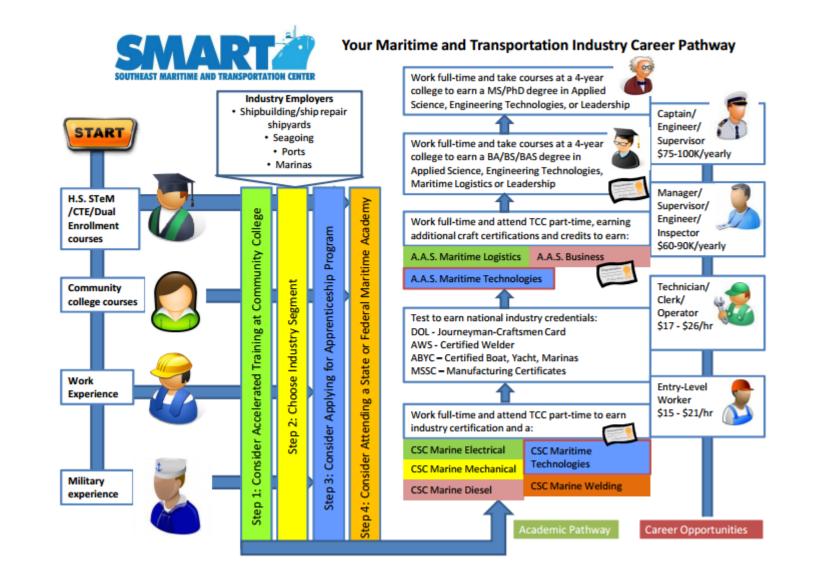
Top of the Food Chain

MANY MORE

CLASSES

# Example of a Maritime Career Pathway

SMART Center, a workforce training program for the maritime industry funded by NSF

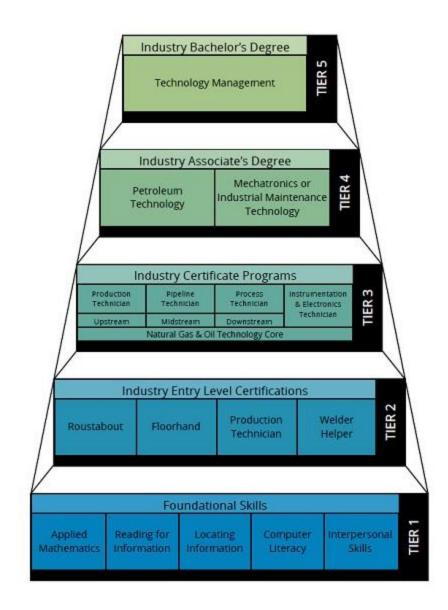


As a complement to industry-funded training, offer more courses for credit as a means for students to climb the career ladder and achieve portable credentials.

- Industry-funded training cannot be the sole path to develop the maritime workforce.
- The lack of accreditation standards confers flexibility in hiring, course content, and schedules – critical to industry.
- However, it also creates a barrier for students seeking to use TOPS Tech or Pell grants to access training and for career advancement in later years.

# Example of a Stackable Credential Model

ShaleNET, a publicprivate training partnership that spans four states to urgently fill natural gas workforce needs



Extend outreach into **K12 schools** – the untapped market for maritime.

#### **New JumpStart Partners** (among others) **PRIVATE PUBLIC** Bollinger Assumption Fletcher Candies Lafourche Danos **Edison Chouest** LWC Nicholls State Gulf Island South Central Oceaneering St. Mary Oceanwide Terrebonne SCIA

Explore the use of **federal workforce funds** to promote maritime training.







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