

How Much?! Making a Living with a Maritime Career

An Interactive Career Exploration Module for High School
(Grades 9-12)



Additional modules can be found at:
www.maritime-technology.org



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Learning Outcomes

- Students will gain an understanding of career options in the maritime industry.
- Students will be able to identify and compare career pathways including community colleges, 4 year colleges, and entry level work.
- Students will begin to explore the idea of their desired future careers.
- Students will make a connection between salary ranges and careers in the maritime and transportation industry.
- Students will identify salaries needed to maintain their desired lifestyle.
- Students will be able to identify differences between starting and median salaries.

Learning Expectations

Delivery: Students will begin by completing a pre-assessment to determine baseline level of knowledge. Students will then complete an online assessment titled "Imagine" to determine the salary needed to maintain their desired lifestyle. An overview of maritime and transportation careers and training needed will then be presented for increasing income ranges. Lastly, a post-assessment will be completed.

Time: 90 minutes. The Imagine assessment should take 30 minutes and the presentation should take 30 minutes. The pre and post quiz should take 15 minutes each.

Grade Level: 9-12th grade

Subject Area: Career Pathways, specifically those in the maritime and transportation industries. Possible subjects would include Financial Management, Independent Living, and Oceanography.

Materials Needed: Internet access for students (such as laptop cart or computer lab reservation), How Much?! Presentation, Pre and Post Assessments.

Set Up: Secure internet access for all students. Print pre- and post assessments. Instructor may desire to have students create accounts at www.vawizard.org before beginning the activity.

Objectives

- Students will be able to identify multiple career options in the maritime and transportation industry including the areas of ship maintenance and modernization, vessel operations, and port operations and marine logistics.
- Students will be able to identify the starting points of maritime and transportation career pathways to include community colleges, 4 year colleges, and entry level work.

Objectives (continued)

- Students will identify specific income ranges needed to meet their desired lifestyle.
- Students will be able to recite 3 careers that fall within their desired income level.
- Students will list careers of interest and disinterest.
- Students will be able to identify In-Demand careers in the maritime and transportation industry.

Activities

1. *Pre-Assessment*: Students will complete the pre-assessment to determine baseline knowledge of careers available in the maritime and transportation industry by income.
2. *IMAGINE Activity*: Students will complete an online assessment to determine salary needed to provide for desired lifestyle.
3. *How Much?!*: PowerPoint presentation will be given with a sampling of careers from each income level. Will include starting/median salary, in-demand career, and a video of a career for each level.
4. *Post-Assessment*: Students will complete a post-assessment to determine increase from baseline knowledge.

Learning Standards Met (from Commonwealth of Virginia Standards of Learning)

Economic and Personal Finance Standards of Learning (SOLs)

EPF. 4 The student will demonstrate knowledge that many factors affect income by:

- a) Examining the market value of a worker's skills and knowledge.
- c) Explaining the relationship between a person's own human capital and the resulting income potential.

EPF.15 The student will demonstrate knowledge of income earning and reporting by:

- a) Examining how personal choices about education, training, skill development, and careers impact earnings.
- b) Differentiating among sources of income.

Family Life Standards of Learning (SOLs)

9.14 The student will begin to identify educational and career goals.

10.8 The student will examine factors to be considered in life-goal planning.

12.12 The student will prepare a plan for the fulfillment of lifelong goals.

Standards for School Counseling Programs in Virginia Public Schools

HA2. Understand the variety of post-secondary options available to them and the requirements of those options including the relationship of academic status and scholastic record.

HA3. Demonstrate the knowledge and skills necessary to ensure a successful transition from high school to post-secondary options.

Learning Standards Met (continued) – Standards for School Counseling Programs

HC2. Understand how changing economic and societal needs influence employment trends and future training

HC10. Demonstrate knowledge of the current job market trends.

Workplace Readiness Skills for CTE Courses

14. Demonstrate job-acquisition and advancement skills

IMAGINE Instructions

1. Go to www.vawizard.org. If you would like students to access results later, click “Register”.



Complete instructions to create a new account. Then have students log in with this account.

Create a new account

Username

First Name Middle Name

LastName

Password

Confirm Password

Password must have at least 8 characters and not more than 10 characters; must contain at least 1 UPPERCASE letter; must contain at least 1 lower case letter; must contain at least one number; must contain at least one special character.

Email Address

Zip Code

Birthday in mm-dd-yyyy format

I am a veteran

Select an Option

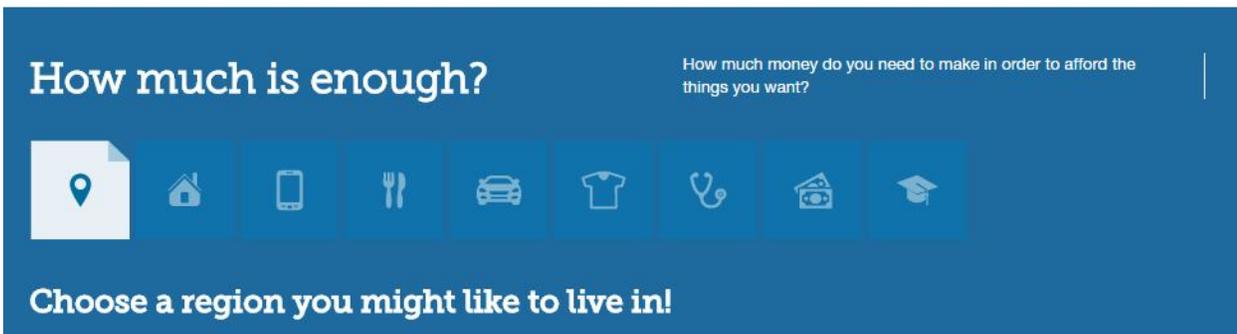
Contact me with information about colleges and programs that may interest me

CREATE MY ACCOUNT

The register button updates to the student’s account name once they have successfully logged in.



To begin the activity click “Imagine”. If you would not like students to access results later do not create an account and begin by clicking the “Imagine” button.



2. Begin by selecting the Virginia region the student resides in. It will appear darker. Then click next at the bottom of the screen. You will notice that the total needed will continue to progress as you continue through each of the 9 screens.

Select a region from the map below



3. Choose one option for desired housing. You will notice prices vary depending on which option is selected and which region was selected. Then click next at the bottom of the screen.

Choose your Housing (Select one)



EFFICIENCY APARTMENT



1 BEDROOM APARTMENT



2 BEDROOM APARTMENT



HOUSE

YOUR EXPENSE

Monthly Cost in Norfolk region for



HOUSING

\$1,100

TOTAL EXPENSE

\$1,100

4. Choose desired utilities. Electricity and Water & Gas are required. Then students may optionally choose from either Basic Cable Internet or Expanded Cable & Internet. Again, prices will adjust according to selections. Then click next.

Choose your Utilities (Select one or more)



ELECTRICITY



WATER & GAS



BASIC CABLE & INTERNET



EXPANDED CABLE & INTERNET

YOUR EXPENSE

Monthly Cost in Norfolk region for



UTILITIES

\$200

TOTAL EXPENSE

\$1,300

5. Choose food habits. Only one option may be selected. Then click next.

Choose your Food Habit (Select one additional option)



YOUR EXPENSE

Monthly Cost in Norfolk region for



FOOD

\$200

TOTAL EXPENSE

\$1,580

6. Choose transportation. Only one option may be selected. Then click next.

Choose your preferred Transportation (Select one)



YOUR EXPENSE

Monthly Cost in Norfolk region for



TRANSPORTATION

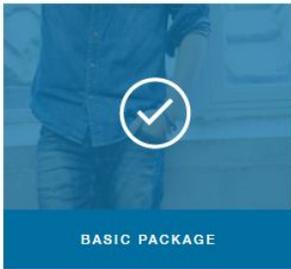
\$250

TOTAL EXPENSE

\$1,930

7. Choose clothing. More than one option may be selected. Then click next.

Choose your Clothing Budget (Select all that apply)



YOUR EXPENSE

Monthly Cost in Norfolk region for



CLOTHING

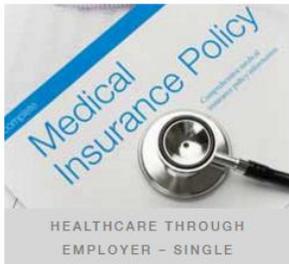
\$175

TOTAL EXPENSE

\$1,925

8. Choose healthcare. Only one option may be selected. Then click next.

Choose your Plan (Select one)



YOUR EXPENSE

Monthly Cost in Norfolk region for



HEALTHCARE

\$380

TOTAL EXPENSE

\$2,305

9. Choose fun expenses. More than one option may be selected. Then click next.

Choose your Extra Fun (Select all that apply)

 <input checked="" type="checkbox"/> FOR BASICS	 <input checked="" type="checkbox"/> ADD A PET	 <input checked="" type="checkbox"/> CELL PHONE WITH EVERYTHING	<p>YOUR EXPENSE</p> <p>Monthly Cost in Norfolk region for</p>  PERSONAL EXPENSES \$275
 <input type="checkbox"/> SAVE FOR VACATION			<p>TOTAL EXPENSE \$2,580</p>

10. Choose desired level of education. Only one option may be selected.

Choose your Degree (Please select one)

 <input type="checkbox"/> HIGH SCHOOL DIPLOMA/GED	 <input type="checkbox"/> CREDENTIALS	 <input checked="" type="checkbox"/> ASSOCIATE'S DEGREE	<p>YOUR EXPENSE</p> <p>Monthly Cost in Norfolk region for</p>  STUDENT LOAN \$0
 <input type="checkbox"/> BACHELOR'S DEGREE	 <input type="checkbox"/> MASTER'S DEGREE		<p>TOTAL EXPENSE \$2,580</p>

Depending on level of education selected, student will be prompted to select desired schooling and funding. Then click finish.

Choose your Institution (Please select one)

<input checked="" type="checkbox"/> COMMUNITY COLLEGE	<input type="checkbox"/> 4 YEAR PUBLIC COLLEGE/UNIVERSITY	<input type="checkbox"/> 4 YEAR PRIVATE UNIVERSITY
<input type="checkbox"/> PROPRIETARY UNIVERSITY		

Choose how to pay (Please select one)

<input type="checkbox"/> GRANTS & WORK MY WAY THROUGH OR PARENTS WILL HELP	<input checked="" type="checkbox"/> GRANTS & LOANS
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11. Student will then receive a total of all selected expenses. Taxes and savings are accounted for in the final monthly expense needed. Annual salary is totaled. Students may go back and switch selections at any time. Then click “Find Careers That Match This Salary.” If students did not create an account, it is suggested the student print these results using the “Print” icon in the upper right corner.

<p>Location Norfolk region</p> <hr/> <p>Housing \$1,100 House</p> <hr/> <p>Utilities \$200 Electricity; Water & Gas</p> <hr/> <p>Food \$200 Eat at Home</p> <hr/> <p>Transportation \$250 Used Car</p>	<p>Clothes \$175 Clothing Basic Package; Shoes Accessories</p> <hr/> <p>Healthcare \$380 Employer Family</p> <hr/> <p>Personal \$275 Personal Basics; Personal Cellphone; Personal Pet</p> <hr/> <p>Student Loan Debt \$325 Associate Degree</p> <hr/> <p>Annual Savings \$696 2% of expenses</p>	<p>Your Monthly Expenses</p> <p>\$2,905</p> <p>2% Savings based on expenses</p> <p>\$58</p> <hr/> <p>Final Monthly Expenses</p> <p>\$2,963</p>
<p>Annual Expenses \$35,556</p>	<p>Annual Salary needed</p>	<p>\$47,408</p> <p>FIND CAREERS THAT MATCH THIS SALARY</p>
<p>Taxes (25% Of Annual Salary) \$11,852</p>	<p>\$47,408</p>	

12. Students can then browse careers matching their desired salary. They may also adjust the result by salary, or search for a specific career name. Only careers at or above desired salary will show up in this search feature. Click the career name to read the career profile in a new tab.

Career options that match your desired salary

ANNUAL SALARY NEEDED:

SEARCH USING CAREER NAME:

Show only STEM Careers

Career	Annual Salary
Commercial Divers	\$47,460.00
Archivists	\$47,600.00
Opticians, Dispensing	\$47,640.00
Paralegals and Legal Assistants	\$47,660.00
Community and Social Service Specialists, All Other	\$47,680.00
Healthcare Social Workers	\$47,760.00

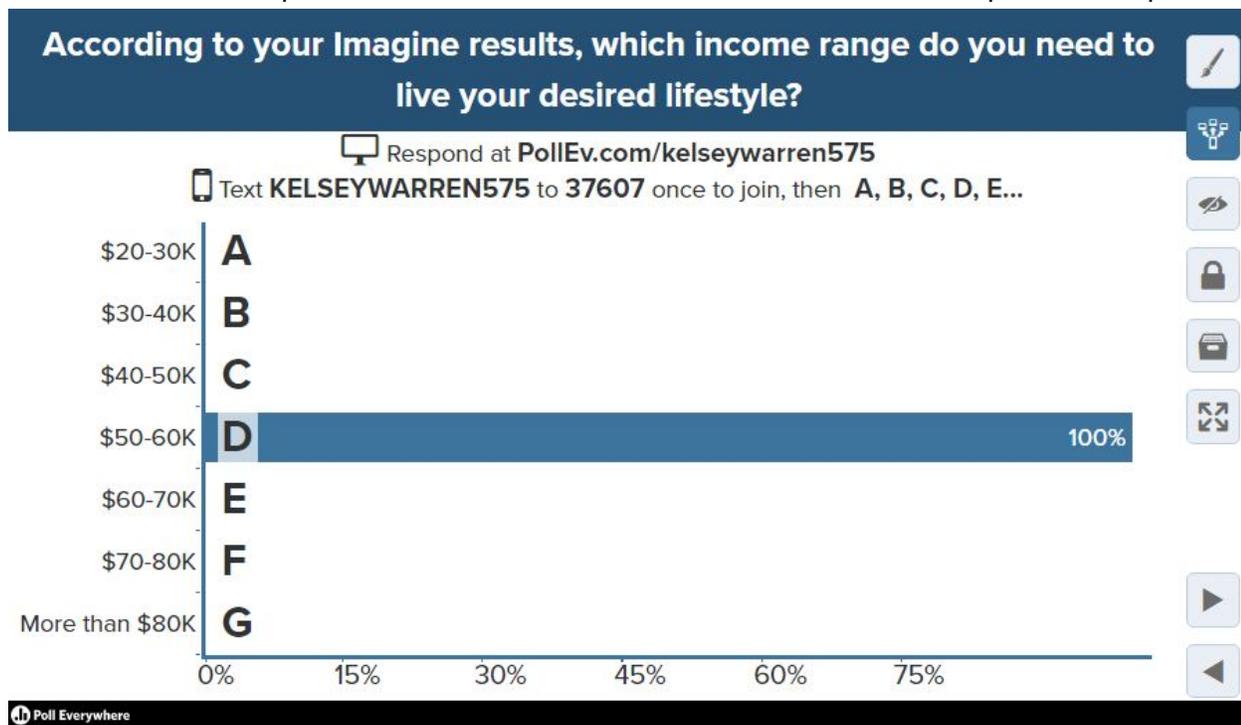
Poll Everywhere Instructions

1. Go to www.polleverywhere.com and click "Sign Up" then "You're Presenting". Educators may update to a free account that allows us to 40 responders.
2. Click the red button that says "Create" to make desired polls.



The polls created for this presentation are:

-According to your Imagine results, which income range do you need to live your desired lifestyle? With options \$20-30K, \$30-40K, \$40-50K, \$50-60K, \$60-70K, \$70-80K, and \$80K+ given to correspond with the PowerPoint presentation. Students text or enter the website to respond to the poll.



-What career did you see in this range that you would probably hate? Students can type answers in an open response format. More popular answers will be a larger text.

What career did you see in this range that you would probably hate?

Respond at PollEv.com/kelseywarren575
Text **KELSEYWARREN575** to **37607** once to join, then text your message



healthcare
worker archivist
social **driver**
commercial

Poll Everywhere

-What career did you see that you may enjoy? Students can add more than one response. More popular answers will be a larger text.

What career did you see that you may enjoy?

Respond at PollEv.com/kelseywarren575
Text **KELSEYWARREN575** to **37607** once to join, then text your message



healthcare
worker
optician
social paralegal

Poll Everywhere

Remember to click the "Activate" button that looks like the phone sending a signal to screens. This allows the poll to go live for students to respond. There is not moderation available while using a free account.

Pre-Assessment (5 points each)

1. How much money do you think you would need to make per year to “barely get by”?

\$_____ per year

2. How much money do you think you would need to make per year to feel “rich”?

\$_____ per year

3. How much money do you think you would need to make per year to live a “normal” or “comfortable” lifestyle?

\$_____ per year

4. How confident are in that this income would result in a comfortable lifestyle for you?

Not at all 1 2 3 4 5 6 7 8 9 10 Very

5. Name 3 careers that would provide a median salary that matches your desired amount for a comfortable lifestyle.

- 1.
- 2.
- 3.

6. Name 2 careers in the maritime and transportation industry that would provide a median salary that matches your desired amount for a comfortable lifestyle.

- 1.
- 2.

7. Pick one of these careers and list the amount of education needed to obtain a job.

Career _____ Education _____

8. 4. How confident are in that this is the correct level of education for this career?

Not at all 1 2 3 4 5 6 7 8 9 10 Very

9. Name 3 life expenses that are easy to adjust to save money.

- 1.
- 2.
- 3.

10. Name 3 life expenses that are not adjustable to save money.

- 1.
- 2.
- 3.

11. What is the difference between a starting and median salary?

12. What are two key training elements of an apprenticeship?

1.

2.

Post Assessment (5 points each)

1. How much money do you think you would need to make per year to “barely get by”?
\$_____ per year
2. How much money do you think you would need to make per year to feel “rich”?
\$_____ per year
3. How much money do you think you would need to make per year to live a “normal” or “comfortable” lifestyle?
\$_____ per year
4. How confident are in that this income would result in a comfortable lifestyle for you?
Not at all 1 2 3 4 5 6 7 8 9 10 Very
5. Name 3 careers that would provide a median salary that matches your desired amount for a comfortable lifestyle.
 - 1.
 - 2.
 - 3.
6. Name 2 careers in the maritime and transportation industry that would provide a median salary that matches your desired amount for a comfortable lifestyle.
 - 1.
 - 2.
7. Pick one of these careers and list the amount of education needed to obtain a job.
Career _____ Education _____
8. How confident are in that this is the correct level of education for this career?
Not at all 1 2 3 4 5 6 7 8 9 10 Very
9. Name 3 life expenses that are easy to adjust to save money.
 - 1.
 - 2.
 - 3.
10. Name 3 life expenses that are not adjustable to save money.
 - 1.
 - 2.
 - 3.

11. What is the difference between a starting and median salary?

12. What are two key training elements of an apprenticeship?

1.

2.

Teacher Answer Key

All answers listed in the key are found during the Image activity or PowerPoint presentation. Other answers may be accepted at the teacher's discretion.

- 1. How much money do you think you would need to make per year to “barely get by”?**
- 2. How much money do you think you would need to make per year to feel “rich”?**
- 3. How much money do you think you would need to make per year to live a “normal” or “comfortable” lifestyle?**

Answers vary depending on student preference. Instructors should use this question to determine if the student has a realistic idea about income. For example, a student would be expected to choose between 25K and 50K for a “normal” lifestyle and not 5K or 100K.

- 4. How confident are in that this income would result in a comfortable lifestyle for you?**

Answers vary. Instructor should seek the student to report an upward trend in knowledge between pre and post assessment.

- 5. Name 3 careers that would provide a median salary that matches your desired amount for a comfortable lifestyle.**

Answers vary per student. Instructor should use this question to determine if the student has a realistic idea of careers and related incomes.

- 6. Name 2 careers in the maritime and transportation industry that would provide a median salary that matches your desired amount for a comfortable lifestyle.**

20-30K: Automotive and Watercraft Service, Attendant, Forklift Operator, Shipping, Receiving, and Traffic Clerk

30-40K: Painter, Machinist, Sailor/Oiler, Motorboat Mechanic or Service Technician

40-50K: HVAC Mechanic/Installer, Crane and Tower Operator, Electrician, Industrial Engineering Technician

50-60K: First-Line Supervisors of Transportation and Material-Moving and Vehicle Operators, Transportation Inspector, Cost Estimator

70K+: Ship Engineer, Logistician, Captain/Mate/Pilots of Water Vessels, Transportation, Storage, Distribution Manager

- 7. Pick one of these careers and list the amount of education needed to obtain a job.**

HS Diploma or GED and/or TWIC Card: Automotive and Watercraft Service, Attendant, Forklift Operator, Shipping, Receiving, and Traffic Clerk, Crane and Tower Operator, Transportation Inspector

Certificate: Motorboat Mechanic/Service Technician, Crane and Tower Operator, Transportation Inspector

Maritime Academy: Sailor/Oiler,

Apprenticeship: Painter, Machinist, HVAC Technician, Electrician

Associate's Degree: Painter, Machinist, HVAC Technician, Electrician, Industrial Engineering, Transportation, Storage, and Distribution Managers Technician, Transportation Supervisor

Bachelor's Degree: Cost Estimator, Ship Engineer, Captain, Logistician, Transportation, Storage, and Distribution Managers

8. 4. How confident are in that this is the correct level of education for this career?

Answers vary. Instructor should seek the student to report an upward trend in knowledge between pre and post assessment.

9. Name 3 life expenses that are easy to adjust to save money.

Cable, Internet, Eating out, Clothing, Pets, Shoes and Accessories, Designer Clothing, Type of College

10. Name 3 life expenses that are not adjustable to save money.

Housing, Water, Electricity, Transportation, Food, Medical Insurance

11. What is the difference between a starting and median salary?

Starting is what you make initially when starting in a career and median is what you make after you've been in the industry over time after several raises.

12. What are two key training elements of an apprenticeship?

Work during the day to earn an income and on the job training. Attending school in the evening at the expense of the employer.

References

<http://www.maritime-technology.org/>

<http://www.maritime-technology.org/video-gallery/>

<http://www.mamatrains.com/>

<https://www.vawizard.org/wizard/browse-by-occupation-name>

<https://www.vawc.virginia.gov/vosnet/drills/occupation/occdriill.aspx?enc=wmYpcFfqu4rfhoTxK9afWn2nJ94nJ3gPVKIMrLhg8wg3oFoxsFv+VezrdWSVoKs8>

<https://www.vawizard.org/wizard/imagine>

<http://www.bls.gov/ooh/>

<http://www.tcc.edu/academics-programs>

<https://www.careerzone.ny.gov/views/careerzone/search/occupation/occupationSearchResult.jsf>

<https://www.polleverywhere.com/>

Maritime and Transportation Resource Handbook and Career Guide published by NSF SMART
(Southeast Maritime and Transportation) Center