Sea Grant

Key Considerations from Primer

The program must play an essential role to report on this measure. An essential role is one that would be described by stakeholders and partners as essential for the project's ultimate success.

When a program has a non-essential role, describe the the project's impacts or accomplishments in narrative form for the annual report but do not include these the performance measures and metrics.

- ▶ Not everything needs a number

- ▶ Count what you can count

- ▶ Sometimes a story is best

- ▶ If it's too complicated, report it as an Impact or Accomplishment

- ▶ Do not seek out nor shy away from large numbers. Larger benefits are ok but should be reviewed with added rigor

- ▶ Do not use multipliers

- ▶ Include citations in reporting to enhance clarity, defensibility, and transparency.

Job and Business Support and Creation [1]

Through workshops, trainings, education, outreach, research, and other extension work, Sea Grant programs help support and create both jobs and businesses in a wide variety of industries. This methodology guide will help you calculate the impacts that your program activities have on the local economy and help you craft statements to effectively communicate them. It is appropriate to use this guide when you support or create jobs or businesses. The economic benefits reporting guidance previously used the terminology "sustain," but we recommend using the term "supported." This change should make the story more defensible, as programs have not consistently met the criteria for sustaining a job in past reporting efforts. This guide uses the same methodology to calculate the value of jobs and businesses—basing the value on the wages associated with the jobs or the jobs within a business.

Examples

Here are some slightly modified examples of impacts on jobs and businesses reported to Sea Grant's Planning, Implementation, and Evaluation Resources (PIER)[2] database. The types of jobs might include, but are not limited to, fishermen and other seafood harvesting jobs, aquaculturists, seafood distributors, environmental engineers, farmers, construction workers, educators, environmental scientists, and a variety of ocean- and coastal-related jobs requiring certifications. For each example, we provide our thoughts about what the Sea Grant program did well and what could be improved.

1 Sea Grant implemented Hazard Analysis and Critical Control Point (HACCP) trainings for multiple seafood distribution centers that service a variety of grocery stores. Sea Grant estimates that the HACCP trainings created 11 jobs, helped to support 550 seafood jobs, and supported companies that handle and process seafood sold to hundreds of thousands of consumers. Estimated median wages from U.S. Bureau of Labor Statistics (BLS) employment statistics webpage (occupational code: Food Quality Control Inspectors) is $36,780 per person.

✅ Sea Grant documented what was impacted well. The calculation pulls from an appropriate industry, and the citation helps with transparency.

❌ It would be more compelling to explain how the trainings created or supported jobs (e.g., were the 550 "supported" jobs training attendees? How were 11 jobs created?). It is also important for defensibility to note how Sea Grant estimated those 11 jobs. It would have been useful for the story to express the value of the jobs created (11 * $36,780 per person) and the value of the jobs supported (550 * $36,780).

2 A Sea Grant business retention and expansion program, focused primarily on the agricultural community, created 150 jobs and supported 1,034 jobs. 150 * average wage of $27,580 = $4,137,000. Jobs supported = 1,034 * average wage of $27,580 = $28,517,720. Total = $32,654,720. Sea Grant used salary data from the BLS that are specific to the job classifications.

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1. This methodology guide was developed to help Sea Grant and other coastal engagement programs calculate and characterize the economic benefits and impacts of their program activities. This methodology guide is a tool and does not constitute official guidance from the National Sea Grant Office for reporting for reporting economic benefits and impacts.

2. Sea Grant programs use PIER to submit their impacts, accomplishments, performance measures, and metrics to the National Sea Grant Office.

☑ Sea Grant showed the calculations clearly and separately calculated job creation and jobs supported.

☒ Without a stronger explanation on how the program created or supported jobs, these numbers lack defensibility. Similarly, the average wage citation should identify the industry used, which will also improve defensibility.

③ A Sea Grant oyster remote setting training has continued to successfully grow and significantly expand oyster aquaculture and restoration production. This program began in 2011 with 12 growers participating and, by 2016, has grown to 45 growers. Setting systems were placed in eight locations around the state with a total of 38 remote setting tanks. These collaborative efforts helped the region's oyster aquaculture industry to expand in 2016, gaining 12 new businesses and 35 new jobs.

☑ This is very strong and has a clear link for how Sea Grant created the jobs. A slightly more detailed story (e.g., "This training helped new growers learn the needed skills to jump into the industry") would have made it even stronger.

☒ It would have been helpful to demonstrate how Sea Grant calculated its economic impact—whether this was based on the business revenue, job wages, or another method.

Present Your Story as a Value Chain

Value chains illustrate the sequence of events or activities that result in an economic impact or benefit. Consider developing a value chain diagram to help you tell a compelling and defensible story about how your Sea Grant program, product, or service generated a measurable result.

Name the program, product, or service → State what it affected → State what it did to get this impact → Present the measurable change → Translate that into a societal benefit or impact

Let's modify one of the earlier examples to illustrate how to create a compelling value chain. *A Sea Grant business retention and expansion program [the program/product/service] focused primarily on jobs in the agricultural community [what was affected]. By providing 150 participants with a new set of skills that helped them get employed and enhancing the existing skills of many more already in the field [what was done to get impact], this program created 150 jobs and supported 1,034 jobs [measurable changed]. This program created $4,137,000 worth of jobs (150 people * average wage of $27,580 = $4,137,000) and supported $28,517,720 worth of jobs (1,034 people * average wage of $27,580 = $28,517,720) [societal economic impact]. Salary data are from the Bureau of Labor Statistics and are specific to the [ENTER JOB NAME] [cite data for defensibility].*

A Sea Grant business retention and expansion program → Jobs in the agricultural community → Provided new skills and enhanced existing skills → 150 jobs created and 1,034 jobs supported → Creating $4.2 million of jobs and supporting $36 million of jobs

Recommended Methodology and Best Practices

We recommend calculating the value of both **jobs** and **businesses** based on the wages associated with the jobs (in the case of businesses, the jobs that the business supports). The method below outlines how to perform this calculation, which quantifies the value of businesses or jobs that Sea Grant either "creates" or "supports."

Please note: **Do not use multipliers**. Economic input-output models (e.g., REMI, IMPLAN, RIMS II) use multipliers to calculate the indirect impact—or ripple effect—of increased jobs or revenue. For example, when creating 10 new jobs, those people spend money, which in turn helps create more jobs in other industries. In this example, only count the 10 direct jobs. Multipliers allow you to aggregate indirect and direct economic impacts, but the focus of this guide is to help you report direct impacts in compliance with Office of Management and Budget reporting standards.

Recommended Methodology: Use average wages for specific jobs to calculate the value of the jobs or jobs within a business.

Description: This methodology helps you determine whether your program "created" or "supported" a job and then calculates the value of those jobs using a federal dataset.

Key Steps and Best Practices:

1. Determine the number of jobs and/or businesses that have truly been "created" compared to "supported." You can directly report both categories to PIER for jobs and businesses.
   - Examples of job creation: trainings that provide someone with a new skill to get a new job or job within a business.
   - Examples of job support: trainings or workshops to sharpen skills or re-certify existing employees or businesses.
   - Include all jobs within a business unless you only support part of a business (e.g., 20 of its 500 employees). In this case, you would just count the jobs associated with the part of the business you support.
2. Go to the BLS State Occupational Employment and Wage Estimates webpage.
3. Click the state in which you have created or supported jobs.
   - If you created jobs in multiple states, and it would be overly burdensome to make separate calculations by state, use the BLS National Occupational Employment and Wage Estimates webpage.
4. Find the appropriate occupation in the table and the associated annual mean wage.
   - Perform a reality check on this number and click on the table link to ensure it describes the job.
   - Example: Fisherman are typically best categorized under code 45-3011.
   - As shown in the example table below, occupation 45-2093 includes aquaculture, and the mean annual wage is $28,960 (pulled from Ohio in the figure below).
   - If you are accounting for part-time jobs, calculate the annual wage by multiplying the mean hourly wage by the approximate number of annual hours.

Occupation code	Occupation title (click on the occupation title to view its profile)	Level	Employment	Employment RSE	Employment per 1,000 jobs	Location quotient	Median hourly wage	Mean hourly wage	Annual mean wage	Mean wage RSE
	Workers, All Other									
45-0000	**Farming, Fishing, and Forestry Occupations**	major	4,450	7.6%	0.828	0.25	$13.51	$15.40	$32,040	2.6%
45-1011	First-Line Supervisors of Farming, Fishing, and Forestry Workers	detail	210	10.8%	0.040	0.27	$20.63	$23.15	$48,150	3.4%
45-2011	Agricultural Inspectors	detail	340	12.3%	0.063	0.65	$23.97	$23.92	$49,750	1.7%
45-2021	Animal Breeders	detail	110	8.4%	0.020	1.58	$29.83	$31.10	$64,690	6.5%
45-2041	Graders and Sorters, Agricultural Products	detail	170	44.7%	0.031	0.11	$11.26	$12.02	$25,000	3.6%
45-2091	Agricultural Equipment Operators	detail	240	31.7%	0.044	0.24	$17.21	$17.53	$36,460	2.8%
45-2092	Farmworkers and Laborers, Crop, Nursery, and Greenhouse	detail	2,110	13.1%	0.393	0.20	$11.85	$12.95	$26,940	3.7%
45-2093	Farmworkers, Farm, Ranch, and Aquacultural Animals	detail	800	14.2%	0.150	0.60	$11.75	$13.92	$28,960	3.0%

5. Calculate the loaded hourly wage
    - See the [BLS Employer Costs for Employee Compensation News Release](#). The link provided should always display the most current, up-to-date information. Scroll down to the bottom of the page and select "Table 1. By Ownership."
    - Based on the occupation selected in Step 4, determine whether jobs were primarily civilian, private industry, or state and local government. Do this for each occupation code selected. Once you make this determination, select the corresponding "Cost($)" and take the value for "Total benefits" (see figure below). Add the total benefits figure to the median hourly wage identified in Step 4. This is now your **loaded hourly wage** (for the corresponding occupation). You might have multiple loaded hourly wages depending on how many occupation codes you select.

Economic News Release
ECT PRINT:

Table 1. By ownership

Table 1. Employer Costs for Employee Compensation by ownership
[Mar. 2020]

Compensation component	Civilian workers[1]		Private industry workers		State and local government workers	
	Cost ($)	Percent of compensation	Cost ($)	Percent of compensation	Cost ($)	Percent of compensation
Total compensation[2]	37.73	100.0	35.34	100.0	52.45	100.0
Wages and salaries	25.91	68.7	24.82	70.2	32.62	62.2
Total benefits	11.82	31.3	10.53	29.8	19.82	37.8
Paid leave	2.76	7.3	2.58	7.3	3.89	7.4
Vacation	1.34	3.6	1.32	3.7	1.46	2.8
Holiday	0.82	2.2	0.77	2.2	1.11	2.1

> Loaded hourly wage is the total compensation employers pay their employees.
> The loaded hourly wage includes the employee's hourly wage, plus benefit expenses incurred by the employer, like sick leave, vacation time, and other benefits.

6. Multiply the number of jobs (or number of jobs within a business) created by the annual mean wage to get the value of the jobs created and do the same for jobs "supported."
    - If you have multiple job types, calculate each job type (e.g., 500 fishermen * $25,000/year and 50 supervisors * $50,000/year) before summing the values of jobs created or supported.

7. Use the value chain tool to write up a clearly linked story about how your program supported or created jobs and show the overall value of these jobs in the write-up.
    - Separate (do not sum) the total value of jobs "created" versus those "supported."
    - For jobs "created," make sure you are clear about how you truly created as opposed to supported them. This is very important for defensibility

Factors to Consider in Communicating Benefits

You should consider the following differences when reporting your economic impact or benefit to Sea Grant's PIER database versus communicating its value in other outreach pieces (e.g., fact sheets, websites, impact statements, accomplishment statements).

	Performance Measure Reporting in PIER	Impact Statements and Other Outreach
Recurring Impacts	You should only include the value of the created or supported jobs or businesses during the year they were created or supported when reporting to PIER or communicating in any outreach piece. • For multi-year projects, you should only report the value of the "created" jobs once in the year they were created (e.g., if you created 10 jobs in year 1, you should not report the value of those jobs as "created" in year 2 and beyond). You may report the value of those jobs as "supported" in future years if you have essential involvement in supporting them (e.g., if you created 100 jobs in year 1 and continued to support the same 100 jobs in year 2, you should report the value created in year 1, and the value supported in year 2). • You should not report the value of the jobs created or supported in years after your support ends, as we are conservatively assuming the business is responsible for sustaining itself at that point.	
Attribution	Avoid double counting when **multiple Sea Grant Programs are involved**. Multiply the final $value by the fraction of your level of effort (LOE) divided by total **Sea Grant LOE** (e.g., you provided 400 hours, Sea Grant program 2 provided 600 hours, and another organization provided 500 hours). Multiply the final $value by 40% (i.e., your 400 hours / **1,000 total Sea Grant hours** [600 + 400]). The other Sea Grant program will multiply by 60%. Together, the two Sea Grant programs are now claiming they were essential contributors to the full $value (without double counting). Note, the Sea Grant programs are claiming they were an essential contributor to the full value, but not the only contributors to this full value.	There is generally no need to attribute the value of your contribution; simply state you played an essential role in a project that provided $X in jobs supported or created and ensure your role is transparent and well-described to tell an effective story. **If** you need to attribute your LOE for outreach, use your percent LOE as a rough estimate (e.g., Sea Grant contributed 300 hours out of a total 1,000 hours, so it contributed 30 percent).
Very Large Impacts	Do not shy away from large numbers: As long as you make a strong case for either "creating" or "supporting" jobs or businesses, especially in the case of job creation, you should not be concerned about large $values associated with these jobs.	

Tools for Implementation

As noted in the methodology, BLS provides the following databases on mean annual income that can be accessed online:

- State Occupational Employment and Wage Estimates
- National Occupational Employment and Wage Estimates
- BLS Employer Costs for Employee Compensation News Release