Purpose of Study
The Social Sciences Branch (SSB) of the NEFSC recently completed a survey of vessel owners about their annual fishing costs for calendar year 2011 and 2012. This cost information, along with the trip cost data collected by the Northeast Fisheries Observer Program, helps SSB improve its analyses. Improved analyses help fisheries managers to:

- Better understand the economic and social impacts of fisheries management regulations and incorporate this information in the decision making process.
- Recognize differential impacts of the regulations on different fishing industries, ports, fishing groups, and fishing communities.
- Evaluate management measures based on impacts on net benefits.

Study Methods
The survey for 2011 data was conducted from August to December of 2012, and the 2012 survey was conducted from April to September, of 2013. The survey was offered via mail and on the web. The number of vessels that received the survey was 1,457 in 2012 and 1,778 in 2013. Vessels for the survey were selected randomly from a population stratified by primary gear groups and vessel length.

Survey Structure
I. Vessel Information
II. Repair/Maintenance/ Upgrade/Improvement
III. Fishing Business Costs
IV. Operating Costs
V. Crew Payments System
VI. Other Costs

Participation Data

<table>
<thead>
<tr>
<th>Survey Year</th>
<th>Response rate</th>
<th>Mail Submissions</th>
<th>Online Submissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>372 (28.90%)</td>
<td>305 (82 %)</td>
<td>67 (18 %)</td>
</tr>
<tr>
<td>2012</td>
<td>367 (20.6 %)</td>
<td>312 (85 %)</td>
<td>55 (15 %)</td>
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</tbody>
</table>

Average Market Value of the Vessel
(Including gear, permits, and history): $434,336

Average Vessel: % of Vessels With:
Length (feet): 44 Sole Proprietorship: 65%; Corporation: 28%
Gross Tons: 44 Owner operated: 87%; Hired captain: 11%
Horse Power: 435 Loan on vessels: 39%
Year built: 1988 Insurance Coverage (Hull and P&I): 85%

Vessel Information
I. Data analysis is done for 720 responses with two years combined and after removing outliers. II. Only non-zero values are considered for calculating averages and cost distributions. III. All costs are in 2012 dollars. IV. Summaries with less than 3 vessels are not reported due to confidentiality issues.

### Data Analysis Notes

- Survey respondents were asked to report these costs by seven different categories: engine, deck equipment, hull, gear, wheel house/gear electronics, processing/refrigeration, and safety equipment.

- Of the 720 responses used for this analysis, 697 reported repair/maintenance costs and 437 reported upgrade/improvement costs.

- Upgrade and improvement costs are analyzed after accounting for depreciation.

- The average repair/maintenance cost is $24,608 and the average expense for upgrade/improvement is $2,648 for all responses.

### Graphical Display Notes

I. The continuous vessel lengths were categorized into three length groups for displaying cost distributions.

- Large: greater than 80 ft (N=44);
- Medium: between 40 and 80 ft (N=288);
- Small: less than 40 ft (N=388).

II. The red dotted line in each graph indicates the average cost.

#### Repair/Maintenance Costs by Length Category

- Large Vessels-Average: $117,807
- Medium Vessels-Average: $31,093
- Small Vessels-Average: $9,211

#### Upgrade/Improvement Costs by Length Category

- Large Vessels-Average: $5,837
- Medium Vessels-Average: $3,539
- Small Vessels-Average: $1,627
Fishing business costs include mooring fees, office expenses, permit fees, business travel costs, interest paid on loans, etc.
Of the 720 responses, 682 reported their business costs. The overall average business cost is $34,940.

There were 685 vessel owners who reported their operating costs, which include expenses on items such as fuel, food, bait, ice, fishing supplies, and communication.
The overall average operating cost is $67,790.

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