Alaska FSM Sector Education and Training Gap Analysis

Prepared for:
Alaska Joint Fisheries Seafood Maritime Workforce Forum

Prepared by:
McDowell Group, Inc.
Anchorage · Juneau

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Purpose of the Training-Gap Analysis

- Define the FSM Sector in more detail
- Identify unmet needs, including career paths
- Identify relevant education/training/certification sources
- Identify opportunities for the University of Alaska to support FSM development that benefits Alaska communities
Training-Gap Analysis Tasks

- Analyze discussion results from the first FSM Forum
  - Fisheries
  - Seafood
  - Maritime
- Interview representatives of the FSM sector about training interests
  - 25 interviews
Field an online Workforce Needs Survey

- Distributed to FSM attendees, other businesses and associations
- 52 responses

Obtain and analyze ADOLWD employment data

Discuss findings with UA Allied Fisheries Working Group
Alaska Fisheries Seafood Maritime Sector Overview
Approx. 30 different NAICS (Industry) codes

More than 800 different SOCs (Standard Occupational Codes)

Many firms, and even individual positions, span FSM and non-FSM activities
More than 500 primarily FSM firms, not counting sole proprietorships.

68,000 workers, not counting scientists, educators and others whose FSM connection not reflected in DOLWD statistics.

About half the workers are Alaska residents.
<table>
<thead>
<tr>
<th>FSM Sub-sector</th>
<th># Workers</th>
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</thead>
<tbody>
<tr>
<td>Commercial fishing</td>
<td>31,000</td>
</tr>
<tr>
<td>Seafood processing/marketing</td>
<td>22,500</td>
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<tr>
<td>Water transportation</td>
<td>4,000</td>
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<tr>
<td>Sport-fish guiding</td>
<td>3,000</td>
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<tr>
<td>Ship-building/repair/maintenance</td>
<td>700</td>
</tr>
<tr>
<td>Salmon hatcheries/aquaculture</td>
<td>500</td>
</tr>
<tr>
<td>Marine engineering/surveying</td>
<td>200</td>
</tr>
<tr>
<td>ADF&amp;G, USCG, NMFS</td>
<td>5,600</td>
</tr>
</tbody>
</table>
Importance of FSM to Communities

- 200+ coastal communities
  - 34,000 miles of coastline
- CDQ Groups – 65 communities
  - Direct employment of 1,600 workers (2008)
- 8 seafood processors and 3 marine transportation companies among Alaska’s 100 largest firms.
Research Findings
Broad Goals for FSM Workforce Development

- **Fishing:** Counteract aging of fleet and support services providers
- **Processing:** Attract and hold motivated workers with potential to advance
- **Maritime:** Meet safety training requirements and technical deckhand, engineer, and construction/repair skills
Training and Education Needs

1. Vessel support, construction and repair
2. Processing and mariculture technology
3. Business management w/ FSM content
4. Resource sustainability management
5. Mariner licensing and certification
6. Safety and risk management
Other Training Interests

- Implications of climate change
- AA in maritime transportation
- Vessel and fishing systems for new entrants
- Commercial diving
- Coastal engineering disciplines
- Culinary, for seagoing environment
- Customer service and interpretive naturalists
- Commercial truck driving
Specific Training Needs

- Survey results include estimates of specific trainings currently used:
  - Type of business
  - Position
  - Organization
  - Location
  - Credential, if applicable
  - Approx # trainees per year
- Also notes training that is in short supply
Training Design and Delivery

- No overall plan for coordinating different FSM training efforts
- FSM training needs span a great many technical areas
- Hands-on components are key
  - Apprenticeships and internships have been especially useful
Survey respondents say the most important types of training over the next 10 years will cover:

- Safety standards
- Installation, repair and maintenance technicians, especially refrigeration
- Skilled machinery/technology operators
- Regulatory knowledge, quantitative skills, communications skills
- Cross-training
Training Design Considerations

- Adapt schedules to business seasons and geographic location of workers
- Work with existing training organizations, CDQ groups, and innovative companies
- Career ladders mostly unknown except for USCG, AMHS, ADF&G and other agencies
Design Process

- Be strategic about training design
  - Build long-term relationships with industry to ensure training remains on target
  - Differentiate training goals from employment goals
  - Take a long-term/career-oriented view to benefit Alaskans
Marketing Programs

- Package and promote training to industries and potential students
  - Clear links between training and employment
  - Work one-on-one with large employers like ADF&G, USCG, and AMHS to develop offerings
  - Look for ways to deliver training outside the classroom, including videos, fieldwork, and online
Some new training, but also new ways to:

- Deliver it, including needed credentials
- Coordinate and promote it
- Link training with OTJ experiences
- Stay in touch with industry needs
- Build career paths