Alaska FSM Sector Education and Training Gap Analysis

Prepared for:

Alaska Joint Fisheries Seafood Maritime Workforce Forum

Prepared by:

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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

Training-Gap Analysis Tasks

- 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



FSM Firms and Workers

- 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

FSM Firms and Workers

- 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



| FSM Sub-sector | # Workers |
|----------------------------------|-----------|
| Commercial fishing | 31,000 |
| Seafood processing/marketing | 22,500 |
| Water transportation | 4,000 |
| Sport-fish guiding | 3,000 |
| Ship-building/repair/maintenance | 700 |
| Salmon hatcheries/aquaculture | 500 |
| Marine engineering/surveying | 200 |
| ADF&G, USCG, NMFS | 5,600 |

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

Training Priorities

- 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

Recommendations



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

The Gaps...

- 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

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