

Alaska Bulk Fuel Aggregation Study

Alaska Municipal League – Local Government Conference

December 2025



Introduction & Project Purpose: Alaska Bulk Fuel Aggregation Study



Big Question:

Can aggregating some or all aspects of bulk fuel facilities improve facility lifespan, limit or prevent spills, and save money that could be reinvested in capital improvement projects, thereby lessening the investment burden by state and federal agencies?



Project Partners

Joint Effort, *supported by:*

- Denali Commission
- Alaska Energy Authority



Rural AK Communities & Leaders

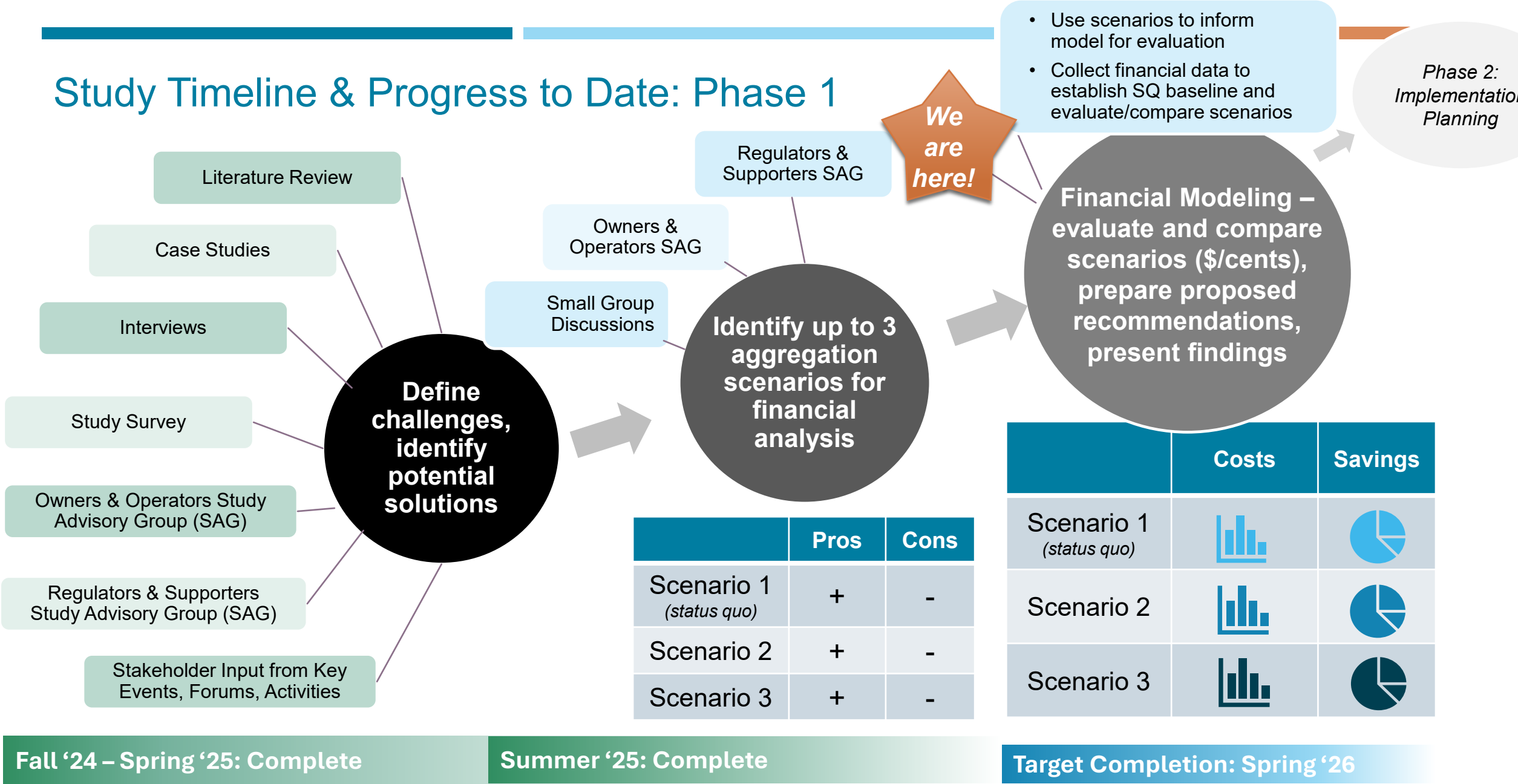
Study Advisory Groups

- Owners & Operators
- Regulators & Supporters

Contracting Team

- HDL Engineering
- Agnew::Beck Consulting
- Northern Economics

Study Timeline & Progress to Date: Phase 1

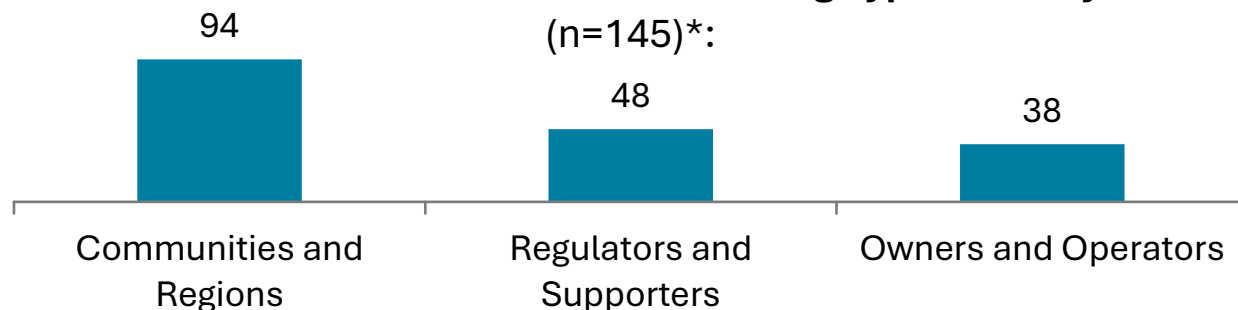


2025 Alaska Bulk Fuel Aggregation Study Survey

- **Purpose:** Gather input on needs, opportunities, and next steps for long-term sustainability of bulk tank farms throughout rural Alaska.
- **Period and Platform:** Open from March 24 to May 16, 2025, on SurveyMonkey.
- **Results:** 209 participants!
- **Today:** Comparisons by region and entity type.

I am Associated With the Following Type of Entity

(n=145)*:



Communities and Regions (C&R)

Alaska Native Corporations, Tribes, Municipalities, School Districts, Businesses, Users

Regulators and Supporters (R&S)

Contractors, Federal and State agencies, Funders, Oil Spill Response Organizations, Nonprofits, Regulators, Universities

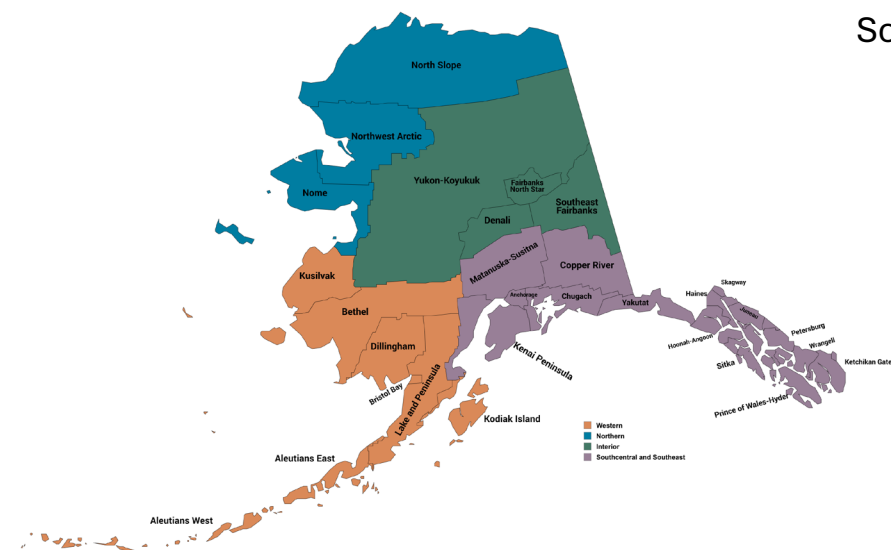
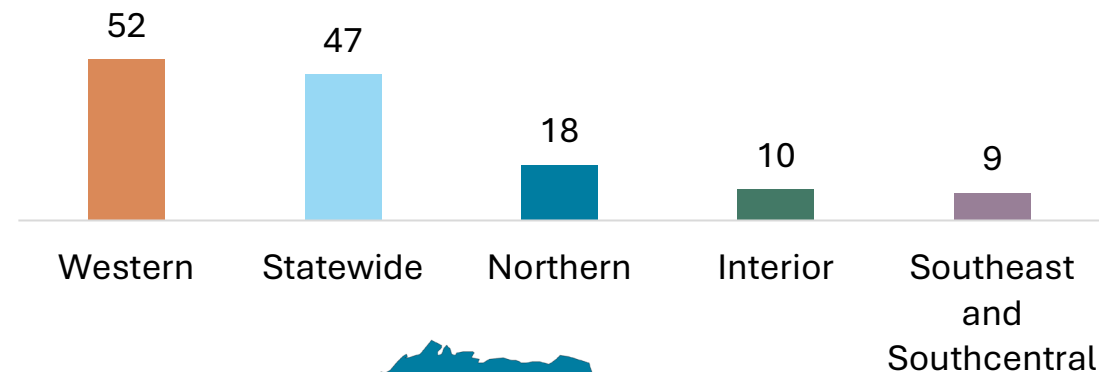
Owners and Operators (O&O)

Bulk Fuel Operators, Fuel Distributors, Utility Cooperatives, Investor-Owned Utilities

*Survey participants could select as many types of entities as applied to their individual circumstance. The project team then grouped into the categories shown.

“Community or Region You/Your Entity Serves”

(n = 134)**:

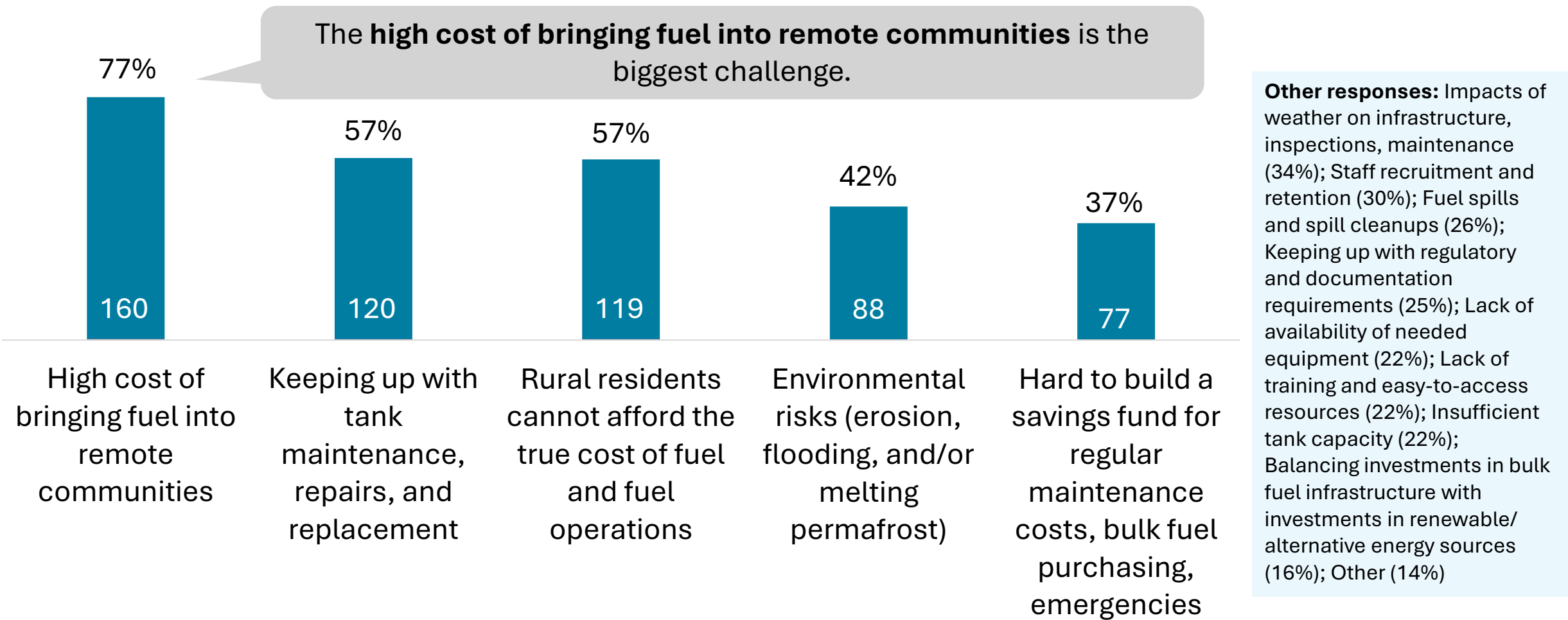


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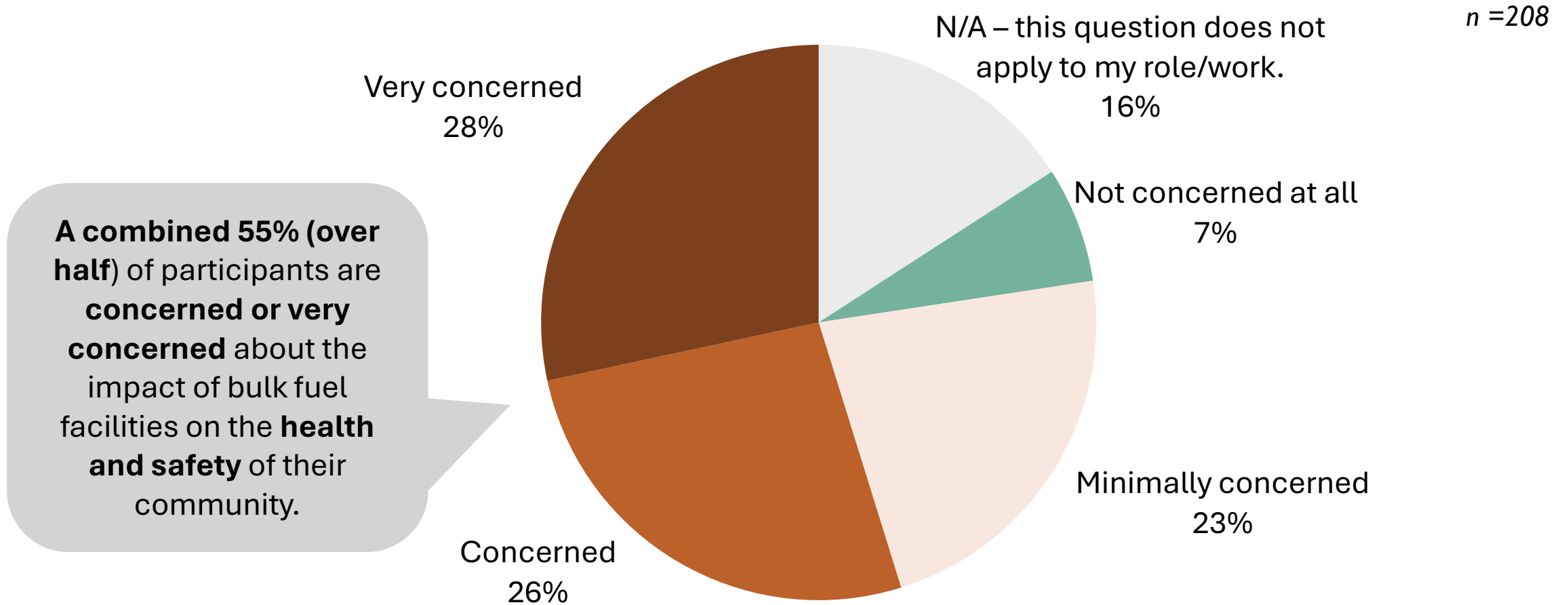
**This was an open-ended question. Survey participants responded with a range of communities and regions. The project team then grouped into the categories shown.

Q1. What are the **biggest challenges** to rural Alaska’s bulk fuel infrastructure and operations? Please select your top five.

n =209



Q2. For the region/communities you work with, overall, how **concerned** would you say community members are with the potential **impact of bulk fuel facilities** infrastructure on the **health and safety** of their community (people, lands, waters)?



Q4 & Q6. Listed below are different **aggregation options** that could help address bulk fuel challenges in Rural Alaska. Please share your **level of support** for each option. N=160

1 = *Least Support*

2

3

4

5 = *Most Support*

Aggregation Options

- A. **Expanded training** for owners, operators, and administrators/managers
- B. **Standardization** of parts and facility design
- C. Centralized **maintenance and training**
- D. Centralized **facility repair and replacement**
- E. Centralized **access to technical resources and technicians**
- F. Centralized **ways to share knowledge** such as mentor and peer networks
- G. Centralized **fuel purchasing and delivery**
- H. Building ongoing maintenance and training **costs into the price of fuel**
- I. Centralized **administration, operations, and bookkeeping**
- J. Centralized **tank farm ownership**

Average

4.22
4.13
4.06
4.06
4.00
3.86
3.76
3.75
3.58
3.39

All aggregation options show some level of support. There is most support for expanded training (4.22 out of 5) and the least for centralized tank farm ownership (3.39 out of 5).

50% of aggregation options were ranked at least a 4 out of 5 for support.

Case Studies: Key Takeaways

Alaska-Based Cooperatives are strong examples for modeling **consolidated ownership** and **bulk purchasing** – ANICA, AVEC, IPEC

Other case studies are potential strong examples for modeling other types of aggregation:

NSEDC's Bulk Fuel Purchasing Program as a model for **bulk purchasing**.

RUBA and **ARUC** as models for **cost-sharing programs**.

Nordic Co-operative and the **NWMC** as models for **funding sustainability**.

Acronyms:

ANICA: Alaska Native Industries Cooperative Association; **AVEC:** Alaska Village Electric Cooperative; **IPEC:** Inside Passage Electric Cooperative; **NSEDC:** Norton Sound Economic Development Corporation; **RUBA:** Rural Utility Business Advisor; **ARUC:** Alaska Rural Utility Collaborative; **NWMC:** Northwest Municipal Conference

Small Group Discussions: Purpose and Process

Purpose | Three Small Group Discussions were convened in early June 2025 to:

1. Learn results from study outreach and research and identify any gaps in the data or process.
2. Help us learn more about operations and maintenance of tank farm facilities today (e.g., what data is being collected and reported, how are challenges being addressed today).
3. Share perspectives on the aggregation options that emerged as front-runners from the survey results (e.g., which seem the most feasible, which may be combined to create a potential scenario or model, what challenges or opportunities might we anticipate).

Capacity Builders and Technical Assistance Providers

- Alaska Center for Energy and Power
- Alaska DCCED, DCRA*
- Alaska Energy Authority*
- Alaska Rural Utility Collaborative*
- Rural Alaska Fuels Service

Owners, Operators, and Community / Regional Organizations

- City of Elim
- Kodiak Area Native Association*
- Tuntutuliak Community Services Association*

Cooperatives

- Alaska Village Electric Cooperative*
- Inside Passage Electric Cooperative*
- Alaska Native Industries Cooperative Association*

Small Group Discussions Summary

Capacity Builders and Technical Assistance Providers

Emerging Aggregation Themes

Centralized ownership, centralized administration, and centralized fuel purchasing/delivery.

Key Takeaways

- Centralized ownership may have most significant impact, but other elements will be needed to maximize effectiveness.
- Interested to hear from owners and operators.
- Support for aggregation options may be informed by what is happening today.

Owners, Operators, and Community / Regional Organizations

Emerging Aggregation Themes

Centralized fuel purchasing/delivery, consolidated ownership, and centralized training.

Key Takeaways

- Centralized fuel purchasing has potential to free up funding for other priorities.
- Consolidated ownership could address compliance, operating costs, and fuel capacity issues.
- Centralized training could reduce costs and address access issues.

Cooperatives

Emerging Aggregation Themes

Centralized training, consolidated ownership, and centralized fuel purchasing

Key Takeaways

- Providing regional training and training support could reinforce key maintenance requirements and improve recordkeeping.
- Reliability and consistency of fuel supply is paramount for the success of any consolidation solution.
- Any consolidation where costs are included for operations, maintenance, repair, and replace will drive prices up.

What are the Proposed Scenarios for Analysis?

Proposed Scenarios	1 – Status Quo*	2 – Centralized Organization	3 – Cooperative	4 – Consolidated Ownership
Description	Assumes no changes to current ownership or management. <i>*Will consider the continued trend of decreased funding availability and related anticipated cost increases.</i>	Tank farm owners contribute to a centralized new or existing entity that coordinates fuel purchasing, training, maintenance, and knowledge sharing.	Everything is consolidated except for tank farm ownership.	All tank farm ownership and maintenance is consolidated.
Example	No change	AVCP, Kawerak, KANA	AVEC	n/a

Assumptions:

- The analysis compares each scenario once **operational**. It does not consider the start up costs to transition to that model.
- The analysis will assume aggregation will happen **regionally** (e.g., Bering Strait Region, Northwest Arctic Borough).

Consolidation Scenarios – The Details! X = includes this option ---- = does not include this option	1 – Status Quo	2 – Centralized Organization	3 – Cooperative	4 – Consolidated Ownership
A. Expanded training for owners, operators, and administrators/managers	N/A	X	X	X
B. Standardization of parts and facility design	N/A	N/A	X	X
C. Centralized maintenance and training	N/A	X	X	X
D. Centralized facility repair and replacement	N/A	N/A	X	X
E. Centralized access to technical resources and technicians	N/A	N/A	X	X
F. Centralized ways to share knowledge such as mentor and peer networks	N/A	X	X	X
G. Centralized fuel purchasing and delivery	N/A	X	X	X
H. Building ongoing maintenance and training costs into the price of fuel	N/A	N/A	X	X
I. Centralized administration, operations, and bookkeeping	N/A	N/A	X	X
J. Centralized tank farm ownership	N/A	N/A	N/A	X

What does financial modeling look like?

	Aggregation	Costs	Savings
Scenario A <i>(status quo)</i>	None	We will use average financial data for tank farms to determine the impact of the different models on tank farm operating costs, fuel prices, training, etc. What savings are possible? 	
Scenario B	Some		
Scenario C	Most		
Scenario D	All		

**We need
your help!**

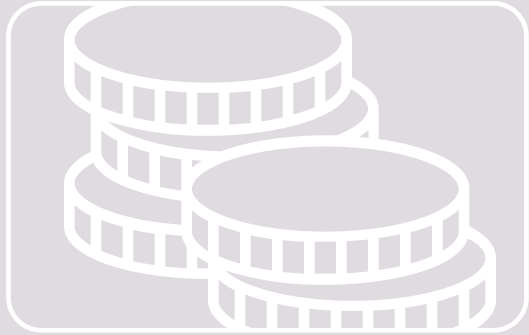
For this analysis to be successful, we need participating tank farms to share their financial information with us...

We Need Your Help!

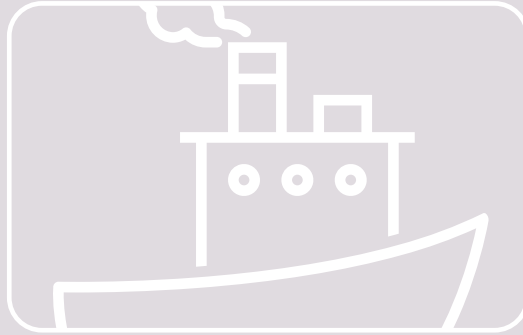
- We are seeking **financial data from tank farm owners and operators serving different size communities**, ranging from:
 - Medium to large-sized villages (population 400~900)
 - Smaller to medium-sized villages (population under 400)



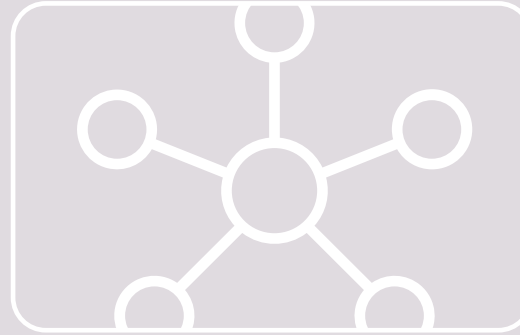
Our Financial Modeling Research Questions



1. What are the current costs associated with operating and maintaining your fuel tank farm?



2. How do transportation costs impact your overall expenses?



3. How do you currently manage fuel inventory and what are the associated costs? Are there potential cost savings if fuel storage is centralized regionally?



3. How do you anticipate regional aggregation would affect you, in terms of pricing strategy, revenue, financial risks, capital investment plans, insurance, or other ways?

What to Expect If You Agree to Participate:

■ ***Step 1: Data Request (November, December)***

- The data request will ask you to share financial information about your tank farm operation.

■ ***Step 2: Interview (November, December)***

- We will schedule an interview with you to learn more about your operation and ask any questions we have about your financials. We can also answer any questions you have for us about the aggregation options, and you can share your thoughts about aggregation – what makes sense/doesn't make sense.

■ ***Step 3: Financial Modeling (November-January)***

- We will develop a financial model of bulk fuel tank farm operations to evaluate the feasibility of different aggregation scenarios. Once we believe we have modeled operations correctly, we may also invite you to look at what we've developed to confirm our understanding and assumptions.

How your information will be used

Information will be used to develop estimated financial impacts of different representative sizes of bulk fuel operations in Alaska. We will **average or anonymize** any information you provide.

Next Steps

- **Rural AK tank farm owners and operators** –
Want to participate? Want to learn more?
Contact us! 
- Financial modeling underway.
- Share final report in spring 2026.

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