

Continuity of Society in the North

Multi-Modal Resiliency in Arctic Defense

Executive Summary



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Purpose

This Executive Summary is a standalone companion to the *Continuity of Society in the North: Multi-Modal Resiliency in Arctic Defense* Final Report. It is designed for senior decision-makers, NORAD/USNORTHCOM leadership, the Homeland Defense Institute, FEMA, CISA, Alaska DHS&EM, tribal governments and Alaska Native organizations, and the family readiness, civilian workforce, behavioral health, and community sustainment organizations whose operational role this research documents, who require an operationally grounded synthesis of the research without engaging the full Final Report on first read.

Every section of this document points back to the corresponding section of the Final Report by section title. The findings, recommendations, and analytical framing presented here are drawn directly from the Final Report; no new analysis is introduced. Where the body of the Final Report provides operational specificity, the Executive Summary provides the decision frame.

Target audience: senior decision-makers operating under time constraints who need to know what was found, what it means for Arctic homeland defense, and what should be done, in that order.

Final Report Reference: Executive Summary (full development of all material summarized here).

Research at a Glance

A one-page orientation for the reader. Four questions, in plain language, with a pointer back to the Final Report for full development.

What is this research?

A federally commissioned study examining how the stability of military families, the civilian and contractor workforce, tribal and Alaska Native communities, and the civil–military governance architecture that connects them determine whether Arctic homeland defense mission assurance holds under contested conditions. It was conducted by the Private Sector Emergency Management Association (PSEMA) in support of the Homeland Defense Institute and NORAD/USNORTHCOM Arctic mission assurance priorities. The research is analytically distinct from its companion study, *Private-Sector Lifelines in the Arctic: Predicting and Assessing Risk to Critical Infrastructure*, which addresses the physical infrastructure dimensions of the same disruption environment. Where the companion study traces what happens to systems, this research traces what happens to people because of those system failures, and what those human and societal effects mean for the installations that depend on them.

What did it set out to do?

Strengthen the resilience and adaptability of the Arctic homeland defense ecosystem by identifying how human systems, families, workforce, tribal communities, and governance architecture, function as operational variables in mission assurance rather than as welfare considerations downstream of infrastructure analysis. The work is directly responsive to the HDAS Multi-Modal Resiliency research focus area, and to the NSM-22 and DoDD 3020.40 frameworks that recognize military readiness as inseparable from civilian community stability.

What did it find?

Arctic homeland defense depends on community systems that were not designed for the stress conditions a dual-theater disruption would impose. They degrade faster than planners assume, cascade more broadly than frameworks anticipate, and leave decision-makers operating without adequate governance capacity during the Days 0–14 window when choices are most consequential. The nine finding clusters developed in the Final Report consolidate into six operationally consequential conclusions, presented in the Six Findings Section of this Executive Summary.

What does this research recommend?

Layered investment across overlapping time horizons: pre-positioned protocols and exercised coordination architecture in the near term; behavioral health surge capacity, formalized tribal consultation, and advanced P3 maturity in the mid-term; and multi-year modeling, operational piloting, and codified doctrine in the long term, operating concurrently, not sequentially. Section 8 presents the recommendation set in compact form.

Final Report Reference: Executive Summary and Strategic Implications

Strategic Context: Why This Research Matters

This section establishes a strategic frame. It draws directly from the Final Report's Introduction, Doctrinal and Strategic Grounding, and Strategic Implications sections.

The Contested Homeland

The homeland is no longer a sanctuary. The 2025 National Defense Strategy identifies homeland defense and the Western Hemisphere as the stated first regional priority and explicitly names the simultaneity problem, coordinated or opportunistic adversary activity across multiple theaters concurrently, as a primary planning challenge. The Arctic has transitioned from managed cooperation to active great-power competition. Russia has reactivated and modernized Arctic military bases. China has increased dual-use presence. Russian GPS jamming, undersea telecommunications cable interference, and simulated attacks on NATO targets are documented ongoing tactics. Military security dialogue has been suspended since 2014, compressing the time available to adapt.

Human Systems as the Operational Substrate

Arctic installations depend on a civilian and contractor workforce to operate base support services. That workforce lives in communities that depend on the same fragile supply chains the installation does. Military families live on and off post, connected to schools, healthcare, food distribution, behavioral health infrastructure, and commercial communications systems not designed for disruption. Tribal communities across Alaska operate fuel distribution, airstrip maintenance, local emergency response, and subsistence provisioning that underpin regional stability, whether or not defense planning frameworks account for them. Household instability in an Arctic disruption scenario is not a welfare concern. It is a readiness variable, and it belongs in the operational planning model.

The Pre-Disruption Baseline Is Itself Fragile

The Arctic is warming at approximately three times the global average. Permafrost thaw, coastal erosion, and flooding directly threaten housing, transportation, food systems, and economic livelihoods. One hundred forty-four Alaska Native communities face infrastructure damage from ongoing environmental change. The framework cannot treat infrastructure resilience as a static investment target; it must treat it as a moving envelope that narrows as climate pressure compounds. The Days 0–14 window operates against a baseline that is itself in motion.

Why Now

The dual-theater scenario this research models is structurally consistent with the simultaneity problem the 2025 National Defense Strategy identifies as a primary planning challenge. The Days 0–14 decision window, during which governance assumptions fail and consequential decisions must be made under uncertainty, is the period for which preparatory investment yields the highest operational return. It is also the period for which preparatory investment must be made before disruption occurs; once the window opens, the options narrow with each passing day.

Final Report Reference: Introduction and Strategic Context; Doctrinal and Strategic Grounding; Strategic Implications.

Scenario Framework: The Dual-Theater Disruption

This section summarizes the scenario that grounds the research. It is a planning stress test, not a prediction.

The Scenario in One Sentence

An adversary degrades major West Coast port operations (Days 0–14) concurrent with an Arctic escalation requiring rapid mobilization through limited northern corridors (Days 10–45).

Why This Scenario

West Coast ports, principally the Seattle/Tacoma gateway complex and the Los Angeles/Long Beach complex, are the maritime gateways through which most Alaska-bound freight, fuel, and population-supporting supply flows. The Port of Alaska is the single node through which approximately half of inbound freight and fuel for approximately 90 percent of the state's population moves. When that gateway degrades, disruption is not distributed gradually across the state. It arrives statewide, immediately, at a single point with no equivalent substitute. Arctic escalation forces the system to draw on the same constrained logistics architecture that port degradation has already strained. The scenario is calibrated to be operationally realistic, consistent with the threat picture in published, open-source defense literature, not a worst-case theoretical construction.

How the Scenario Reaches Human Systems

Commercial inventory buffers for essential goods in Alaska are limited. Food distribution systems operate on an estimated 6–10 day commercial pipeline under normal conditions, with retail warehousing capacity measured at 3–7 days and effective household availability collapsing toward 2–3 days under demand surge. These figures are not abstract supply chain metrics. They are the actual decision horizon within which families, workforce members, and community caregivers must decide about feeding, heating, and medical access. Within the first 72 hours, disruption arrives at the household level before it arrives at the installation level.

Seasonal Asymmetry

The vulnerability is not uniform across the year. A West Coast port disruption between October and April operates against already-depleted community reserve margins with no barge resupply option available. Depleted reserves cannot be replenished until spring breakup, compressing the time from port degradation to critical shortage from weeks to days. Mission assurance planning that does not differentiate seasonally underestimates winter vulnerability by an operationally significant margin.

Concurrent Arctic Escalation

As West Coast logistics remain impaired, Arctic operational requirements increase. Elevated missions, expanded surveillance, and increased demand for fuel, mobility, and installation services impose greater demands on systems already stressed by the primary disruption. Increased operational demand does not merely add to existing civilian system strain; it amplifies it, accelerating competition for limited resources across military and community systems in ways that governance frameworks are not currently designed to manage.

Final Report Reference: Scenario Development (Framework Overview, Primary Disruption, Early-Phase Stressors, Concurrent Arctic Escalation, Scenario Conditions, Societal Stressors to Be Modeled).

Methodology in Brief

This section summarizes the analytical approach, validation anchors, and limits. It is drawn from the Final Report's Research Foundation and Methodology sections.

Seven-Deliverable Architecture

The research was structured as seven integrated deliverables, each building on the prior: Scenario Framing and Societal Stressors; Civil–Military and Governance Mapping; Tribal and Alaska Native Resilience Assessment; Family Readiness and Human Factors Review; Infrastructure and Multi-Modal Sustainment Snapshot; Preliminary Multi-Modal Resilience Framework; and Stakeholder Engagement. Together with the Interim Report submitted in March 2026, these deliverables establish the operating environment, map the governance architecture, and document both the protective capacity and the critical vulnerabilities that determine whether Arctic continuity of society holds under stress.

Analytical Posture

Arguments lead; research corroborates. The analytical posture throughout is operational, not theoretical. Vulnerabilities are framed in operational terms: what fails first, how fast, with what cascading effect, and at what point intervention is no longer feasible. The distinction between paper redundancy and real redundancy is maintained throughout. The research does not treat the existence of coordination structures as evidence of resilience. It evaluates whether those structures are accessible, sufficient, and actionable under the specific stress conditions documented.

Three Lines of Work

The research was conducted through: (1) an extensive literature review spanning military family readiness, civilian and contractor workforce dynamics, tribal governance and Alaska Native sovereignty frameworks, civil–military coordination under contested conditions, and governance architecture across tribal, municipal, state, federal, and military authorities in Alaska; (2) strategic conversations with current and former NORAD and USNORTHCOM leadership; and (3) structured stakeholder engagement conducted through a SurveyMonkey-distributed Stakeholder Input Survey, supplemented by limited informal conversations with select PSEMA network members. Tribal engagement was limited due to time constraints.

Limits and Boundaries

The research was conducted within a three-month performance period. The analytical window is bounded at Days 0–14 of the dual-theater disruption; extended sustainment beyond Day 14 is identified as the most consequential follow-on research priority and is not delivered within this engagement. Stakeholder engagement is non-attributed; no proprietary, sensitive, or classified data was requested or used. Conclusions are operationally specific where the evidence supports operational specificity and are deliberately framed in conditional language where it does not.

Final Report Reference: Research Foundation; Methodology; Limits, Boundaries, and What This Methodology Cannot Deliver.

Six Key Findings

The Final Report develops findings in full across nine analytical clusters that move from the strategic context decision-makers are already operating in, through the operational core of what fails first, into the governance and decision architecture that determines whether disruption is contained or cascades. The six findings presented here are the consolidated, operationally most consequential conclusions. Each follows the same structure: headline statement, why it matters, what the evidence shows, and a reference to the Final Report section where it is developed in full.

Finding 1: Continuity of Society Is a Prerequisite for Continuity of Operations

Headline

Household instability is a leading indicator of mission degradation, not a lagging consequence. Community and family-level disruption from supply chain degradation emerges before installation-level impacts become visible.

Why it matters

The communities surrounding Arctic installations are not the beneficiaries of defense operations. They are the operational substrate on which defense operations depend. Their workforce operates installation support services. Their stability determines military family readiness. Their governance systems shape the resource allocation decisions that determine whether disruption stays manageable or cascades by Day 14. Arctic mission assurance planning that treats community continuity as a secondary concern is planning that accepts the degradation of its own operational foundation. Decision-makers who wait for installation-level operational indicators before engaging will be acting after the window for effective intervention has closed.

What the evidence shows

Installations are not self-sustaining beyond approximately fourteen days without external logistics and civilian workforce support. That workforce lives in communities experiencing the same supply disruptions as the installation, and household stability directly determines workforce availability. Commercial inventory buffers are measured in days: food distribution systems operate on a 6–10 day commercial pipeline, with retail warehousing measured at 3–7 days and effective household availability collapsing toward 2–3 days under demand surge. Penn State Military Families Research Institute documents that family-related stressors reduce deployability, focus, morale, and mental health directly, with spousal support associated with retention increases of up to 1.98 times for senior officers. Family stability translates into force readiness through specifically quantified, measurable pathways, not directional claims. The workforce-family dynamic creates a feedback loop that single-variable planning frameworks cannot capture.

Final Report Reference: Key Findings Clusters 2 and 5; Family Readiness and Human Factors; The Workforce-Family Feedback Loop; Civilian-Military Contractor Workforce Dependency.

Finding 2: The Days 0–14 Window Is the Practitioner Reality, and the Day 3–7 Governance Inflection Determines the Cascade

Headline

Planning assumptions about recovery timelines are systematically too optimistic. The Days 0–14 window must be planned for as a period of near-complete self-reliance. Within that window, the Day 3 to Day 7 interval is the governance inflection: the absence of predefined protocols for adjudicating competing civilian and military claims on scarce resources produces decisions under time pressure that accelerate cascading failure rather than contain it.

Why it matters

External assistance and resupply arrive in days to weeks, not hours. Rerouting alternatives are constrained by mode capacity, Canadian sovereignty, weather, and airfield throughput limits. The conflicts that emerge at Days 3–7, civilian and military claims on the same fuel, food, transportation, medical capacity, and communications, are structurally inevitable, driven by limited supply and competing survival priorities, not coordination failures. Designing resolution mechanisms before the crisis is a low-cost, high-return investment. The absence of those mechanisms under time pressure produces decisions that accelerate cascading failure rather than containing it. Pre-staged, exercised civil–military coordination protocols are the preparatory investment whose absence is itself the vulnerability.

What the evidence shows

Multi-jurisdictional coordination research documents a consistent pattern under disruption: formal coordination frameworks that specify decision authority in pre-disaster planning documents consistently fail to activate as designed, not because the frameworks were poorly written, but because the interpersonal and organizational relationships required to make them function had not been built during normal operations. The most common failure mode is not disagreement about authority but confusion about it. Across households and families, the first fourteen days produce reduced availability of food, heating fuel, medications, and essential household goods before any external support mechanism can reach the household. State emergency management planning in Alaska explicitly recognizes that outside assistance may require 24 hours or more, confirming that the Days 0–14 analytical window reflects operational reality already recognized by state practitioners.

Final Report Reference: Key Findings Clusters 2 and 3; Civil–Military and Governance Mapping; Governance Friction Points; Analytical Implications.

Finding 3: Paper Redundancy Is Not Real Redundancy, and Institutional Trust Is a Pre-Event Variable

Headline

Documented coordination frameworks consistently fail to activate as designed under stress, not because the frameworks were poorly written, but because the interpersonal and organizational relationships required to make them function had not been built during normal operations. Institutional trust is not generated in the moment of crisis by competent communication; it accumulates over time through demonstrated responsiveness, equitable treatment, and consistent delivery on commitments.

Why it matters

Cross-sector mental-model misalignment is the structural condition that produces the paper-vs-real redundancy gap. Operators within a single lifeline sector tend to hold accurate models of their own system's vulnerabilities while holding incomplete or inaccurate models of the dependencies that link their system to adjacent ones. Stakeholder engagement documents this pattern sector-by-sector: downstream operators overestimated upstream supply chain resilience; healthcare operators assumed pharmaceutical distribution would prioritize Alaska absent specific pre-incident agreement; installation logistics personnel assumed commercial cargo prioritization would account for defense sustainment requirements, an assumption carriers confirmed is not built into routine cargo allocation logic. Populations whose trust has been eroded by prior inequitable treatment or consultation-without-action will not generate the cooperative behavioral responses that plans assume under stress.

What the evidence shows

The federal architecture lacks a permanent cross-sector supply-chain coordination capability, and the absence of that capability is a structural condition the Days 0–14 window cannot accommodate. Responses to supply chain disruption have historically been organized through temporary, ad hoc task forces assembled after the crisis is underway and disbanded when the acute phase passes, leaving no persistent institutional capability. Most Alaska jurisdictions relevant to this research currently operate at the Basic or low-Intermediate tier of the FEMA Public-Private Partnership maturity model, characterized by episodic, transactional, incident-driven engagement insufficient for the sustained coordination Arctic mission assurance requires. Exercised protocols, sustained relational infrastructure, and pre-crisis institutional investment are not optional supplements to the planning architecture; they are the planning architecture.

Final Report Reference: Key Findings Cluster 3; Civil–Military and Governance Mapping; Analytical Implications; Preliminary Multi-Modal Resilience Framework (Institutional Coordination as a Risk Amplifier).

Finding 4: Family Readiness Has Eroded More Than Plans Acknowledge, and the Behavioral Health Ceiling Constrains Workforce Surge

Headline

Traditional Family Readiness Group structures have eroded in ways that command-channel reporting does not fully surface. Behavioral health capacity is the ceiling on workforce surge: when household stress, family instability, and community uncertainty accumulate faster than behavioral health systems can absorb, workforce availability degrades regardless of how robust other resilience investments may be.

Why it matters

The Military Family Readiness System was built around a deployment model in which stressors are largely sequential, and support timelines are predictable. Arctic supply disruption does not fit that model. Under dual-theater disruption, household-level stressors, employment, healthcare, childcare, financial stability, communications, do not emerge sequentially. They activate simultaneously, within the first fourteen days, before any external support mechanism can reach the household. Household communications failure under degraded commercial systems accelerates the workforce-family feedback loop: when households cannot reach service members and service members cannot reach households, workforce absenteeism rises and community sustainment degrades, compounding household instability further. Fewer than one-third of active-duty families nationally would recommend military service to a young family member, establishing a fragile baseline before any Arctic disruption begins.

What the evidence shows

Five population categories within the military and contractor community are systematically underweighted in existing family-readiness frameworks and are particularly exposed under Arctic disruption: single service members, military caregivers, non-traditional family structures, dual-career households, and families with exceptional family needs. Each faces a distinct pathway of household-stability degradation that the deployment-era FRG model does not accommodate. The seafood processing workforce, approximately 27,000 shoreside workers, many seasonal or H-2B visa holders, represents a policy-sensitive lifeline dependency whose exposure runs through immigration and travel policy rather than traditional logistics chains. Workforce continuity planning must address policy-decision-mediated exposure, not only infrastructure-mediated risk.

Final Report Reference: Key Findings Cluster 5; Family Readiness and Human Factors; Behavioral Health Surge Capacity; Underweighted Populations in Family Readiness Analysis; The Generational Preparedness Gap.

Finding 5: Tribal Coordination Requires Sustained Pre-Crisis Investment Under Sovereignty, Consent, and Reciprocity; Federal-Program Access Is a Structural Gap

Headline

Alaska Native governments and organizations are central to regional resilience and to the sustainment of installations operating within and adjacent to Native lands. Coordination during disruption cannot be improvised; the relationships and decision protocols that underpin it must exist before the disruption. Federal-program access compounds the challenge: over one-third of highly threatened Alaska Native villages received no relevant federal assistance during a recent five-year period, and twenty federal programs have been identified with at least one design feature that obstructs access for small remote communities.

Why it matters

The Alaska Native governance ecosystem includes 12 regional corporations, more than 200 village corporations, federally recognized tribal governments, regional nonprofits, and statewide Native organizations, collectively serving more than 160,000 Alaska Native shareholders. Approximately 75 percent of Alaska Native communities are not road-accessible. Resilience under disruption depends on coordination across the ecosystem rather than on the authority of any single entity. Planning frameworks that identify a single tribal point of coordination miss the architecture through which tribal resilience actually functions. External decisions, particularly fuel diversion and transportation prioritization, can unintentionally collapse local resilience systems that planning frameworks do not even know exist. Tribal governments are sovereign entities, not subordinate actors in the state or federal response chain.

What the evidence shows

Approximately 25 percent of surveyed Arctic communities are adequately prepared relative to their risk exposure; approximately 50 percent are moderately prepared; approximately 25 percent are structurally under-equipped for the risk profile they face, located on average 120 or more miles from formal response centers. Twenty federal programs have at least one design feature obstructing tribal access, including competitive grants, cost-share requirements, cost-benefit analysis rules that disadvantage small populations, hazard mitigation plan prerequisites, and national competition that small remote communities cannot win against urban applicants with larger administrative capacity. Recommendations that rely on federal-assistance pathways as a backstop are operating on availability assumptions the access record contradicts. Tribal-system preservation must address federal-system reform as a governance-layer concern, not only a community-level concern.

Final Report Reference: Key Findings Cluster 6; Tribal and Alaska Native Resilience Assessment; Native Corporations as Regional Sustainment Actors; Federal-Program Access Barriers.

Finding 6: Whole-of-Society Preparedness Culture Is a National-Will Variable That the United States Has Moved Against

Headline

Finland, Sweden, Estonia, and Latvia have built measurable whole-of-society preparedness cultures by embedding shared risk awareness in civic education, maintaining conscription or universal service systems, sustaining community-level civil defense organizations with genuine resources and recognized authority, and building institutional trust through decades of consistent investment. U.S. preparedness policy has moved decisively in the opposite direction since the post-civil-defense era.

Why it matters

The cooperative, adaptive behaviors that effective crisis response requires, mutual aid, information sharing, collective resource management, and deference to coordinated authority, are practiced behaviors that documented exemplar populations have rehearsed rather than aspirational behaviors that governments hope will emerge under stress. The U.S. shift toward an individualized, consumer-oriented preparedness model produces measurable input activity, kits sold, websites visited, plans acknowledged, but not the social cohesion, practiced cooperation, and institutional trust that genuine national will requires. The shift has concentrated preparedness burden in households with fewer resources, less institutional connectivity, and more exposure to the hazards preparedness is supposed to address.

What the evidence shows

The generational preparedness gap converts potential surge capacity into additional demand. Teenagers and young adults, the population most needed for entry-level and gig-economy surge roles under disruption, are characterized by near-total dependence on mobile devices and digital connectivity. When communications infrastructure degrades, precisely the condition the dual-theater scenario produces, this population loses situational awareness, cannot navigate without GPS, cannot coordinate with employers or community resources, and cannot comply with emergency directives that reach them only through digital channels. They become focused on meeting immediate personal needs rather than contributing to community response at the moment their physical capacity is most needed. For Arctic mission assurance, the cooperative behaviors emergency plans assume cannot be created in the moment of crisis by communication alone; they must be in place before the disruption arrives.

Final Report Reference: Key Findings Cluster 7; Whole-of-Society Preparedness Culture as a Resilience Variable; The Generational Preparedness Gap as an Operational Variable; Key Findings Cluster 9 (Methodological Convergence)

Bottom Line

A single page that distills the analytical record into the three structural conditions Arctic mission assurance requires, and that do not currently exist at adequate scale.

Arctic homeland defense cannot be sustained against the dual-theater disruption scenario this research models without three things:

1. Pre-positioned reserves of fuel, food, pharmaceuticals, and critical materiel sufficient to bridge the Days 0–14 window. Inventory buffers measured in days, seasonal compression in winter, and the operational impossibility of large-scale aviation substitution for maritime resupply combine to make pre-positioning the only mechanism that closes the early-phase supply gap inside the analytical window.
2. Multi-layer communications redundancy that does not depend on any single commercial provider or terrestrial pathway. Communications failure is a force degrader on every other failure mode and on every human system the research examines, household coordination, behavioral health check-ins, family readiness, governance communications, and workforce availability. Closing that gap requires architecture, not procurement of any single technology.
3. A pre-defined civil–military coordination architecture, exercised against the dual-theater scenario before disruption requires it, with private-sector cargo prioritization agreements in place before the crisis. Coordination architectures designed for single-incident response, and architectures that exist on paper but have not been exercised against realistic Arctic conditions, do not function under simultaneous multi-theater stress.

None of the three is a capital investment problem in isolation. All three are systems problems requiring layered, multi-partner, multi-year investment, operating concurrently rather than sequentially. The recommendations below organize the path forward.

Final Report Reference: Executive Summary (Bottom Line)

Recommendations at a Glance

This section presents the recommendation set in compact form. Recommendations are layered, not sequenced; all three tiers must run concurrently. Each is summarized in two to three sentences here; full development, partner architecture, cost-benefit framing, and implementation parameters appear in the Final Report's Recommendations section and Appendix K.

Near-Term Recommendations (0–12 Months)

Investments activatable within the current planning and budget cycle that materially compress the activation timeline of early-phase response. Return is realized before disruption occurs.

Civil–Military Coordination Protocol Pre-Staging.

Establish, exercise, and pre-position protocols for adjudicating competing civilian and military claims on scarce fuel, food, transportation, medical capacity, and communications under Days 0–14 conditions. Build around the existing Alaska Emergency Operations Plan and Defense Coordinating Officer integration. Convert paper authority structures into operationally tested adjudication capacity before the next disruption.

Family Communications Hardening.

Pre-position hardened communications equipment, exercised analog protocols, and backup family communications pathways at the household level, not only the command level. Addressing household-level communications failure directly interrupts the workforce-family feedback loop at its most consequential point.

Exercise-Based Validation of Paper Governance Architectures.

Conduct integrated civil–military exercises that stress-test paper coordination architectures under Days 0–14 conditions, with explicit emphasis on the human-systems consequences, workforce absenteeism, family readiness degradation, tribal coordination gaps, and behavioral health surge. After-action findings convert paper redundancy into operationally validated capacity.

Family Readiness Group Rebuilding Through Hybrid Public-Private-Nonprofit Structures.

Resource the rebuilding of family readiness capacity through hybrid models combining military family services, civilian nonprofit capacity, faith-based networks, and tribal community capacity where applicable. Preserve military command relationships while distributing operational delivery, designed to absorb the five underweighted population categories the research surfaces, not only the deployment-era FRG baseline.

Tribal Coordination Protocol Pre-Staging Under Sovereignty, Consent, and Reciprocity.

Pre-stage tribal coordination protocols with Alaska Native governments and organizations under sovereignty protocols, tribal-led in design and delivery, focused on Days 0–14 resource allocation, communications coordination, and reciprocal information flow. These protocols must exist before the disruption; they cannot be improvised under time pressure.

Household-Level Preparedness Extension to Underserved Populations.

Extend household-level preparedness engagement to the thirteen-to-thirty demographic, the segment most likely to staff entry-level civilian workforce roles during Days 0–14 and least prepared to function when digital infrastructure degrades. Build analog protocols,

offline coordination capacity, and community role assignments into preparedness design for this cohort.

Workforce Continuity Planning for Civilian and Contractor Populations.

Establish workforce continuity planning, rapid activation procedures, emergency credentialing pathways, and pre-negotiated incentive structures for the civilian and contractor workforce identified as the single most consequential point of failure in Arctic installation sustainment. Include explicit treatment of policy-sensitive exposure pathways, including immigration-policy-mediated workforce categories.

Final Report Reference: Near-Term Recommendations (Under 12 Months) within the Recommendations Roll-Up by Investment Horizon and Decision Authority section.

Mid-Term Recommendations (12–36 Months)

System-level gaps that near-term protocol work cannot fully close. These actions build the durable institutional architecture the near-term protocols depend on.

Behavioral Health Surge Capacity Expansion.

Expand the trained behavioral health provider pool serving Arctic populations, tele-behavioral health infrastructure capable of operating under degraded communications, and tribal-led behavioral health programming under sovereignty protocols, scaled to surge demand under Days 0–14 conditions. Behavioral health capacity is the ceiling on workforce surge and belongs in the Tier 1 resilience-investment category alongside fuel storage and communications redundancy.

Formalized Tribal Consultation Architecture.

Move from pre-positioned protocols to durable institutional coordination, tribal-designed and tribal-led, preserving sovereignty, consent, and reciprocity as governing principles throughout. Advance from event-driven engagement to the sustained relational architecture that effective coordination under stress requires.

Integrated Civil–Military Exercise Series Stressing Societal Sustainment Thresholds.

Establish a sustained exercise series that explicitly stresses societal sustainment thresholds, workforce, family readiness, tribal coordination, behavioral health, household cascades, rather than treating community continuity as background context for logistics and infrastructure exercises.

Federal Cross-Sector Supply Chain Coordination Capability.

Develop a permanent federal cross-sector supply chain coordination capability that integrates human-systems and lifeline dependencies, operates alongside FEMA, CISA, and DoD Defense Coordinating Officer architectures, and treats Alaska operating conditions as distinct from CONUS assumptions. The absence of this capability is itself a Days 0–14 vulnerability, not only a procedural limitation.

Final Report Reference: Mid-Term Recommendations (12 to 36 Months) within the Recommendations Roll-Up by Investment Horizon and Decision Authority section.

Long-Term Recommendations (36 Months or More)

The follow-on agenda that translates the analytical foundation of this research into sustained operational capability.

Multi-Year Continuity-of-Society Modeling.

Establish a multi-year modeling capability that develops the validation and quantification framework, including a Community Resilience Index, translating analytical findings into decision-grade parameters for long-horizon Arctic planning. Identified as the single most consequential follow-on research priority within the human-systems dimension of this engagement.

Longitudinal Family Readiness Studies Under Prolonged Arctic Disruption.

Establish longitudinal studies examining how baseline family readiness conditions evolve under sustained Arctic operational stress, how the workforce-family feedback loop manifests over multi-year horizons, and how cohort-based engagement affects outcomes at scale.

Operational Piloting of Integrated Human-Systems Resilience Frameworks.

Conduct operational piloting across military-adjacent communities, tribal communities under sovereignty protocols, rural Alaska hubs, and high logistics-dependency regions — institutionalizing preparedness as civic infrastructure equivalent to transportation, utilities, and public health systems.

Arctic Societal Sustainment Testbed (Paired with Companion Study Infrastructure Testbed).

Establish a societal sustainment testbed paired with the companion study's integrated Arctic logistics testbed as connected research infrastructure, enabling integrated, sustained research on Arctic continuity that treats infrastructure and human-systems dependencies as a single problem set requiring unified analytical and operational treatment.

Final Report Reference: Long-Term Recommendations (36 Months or More) within the Recommendations Roll-Up by Investment Horizon and Decision Authority section; Arctic Rising Generation Preparedness Campaign Framework.

Strategic Implications

This section translates the findings and recommendations into the language of mission assurance, planning cycles, and partner equities. Each subsection identifies what the analytical record implies for a specific mission partner and where in the Final Report the partner-specific material is developed.

For NORAD / USNORTHCOM

The dual-theater scenario is structurally consistent with the simultaneity problem the 2025 National Defense Strategy identifies as a primary planning challenge. Arctic mission assurance planning should integrate the Days 0–14 decision window, and the Day 3–7 governance inflection, at the operational specificity that command-level decisions require. Human-systems variables, civilian workforce availability, military family readiness, behavioral health surge capacity, belong in the operational planning model alongside fuel storage and communications redundancy. The connective infrastructure framing of this Executive Summary identifies the institutional architecture under which sustained Arctic mission assurance coordination becomes operationally executable.

For the Homeland Defense Institute

This research provides the analytical foundation for follow-on commissioned work in multi-year continuity-of-society modeling, operational piloting, and the Arctic societal sustainment testbed identified in the long-term recommendations. The companion study *Private-Sector Lifelines in the Arctic: Predicting and Assessing Risk to Critical Infrastructure* extends the analytical record into the physical infrastructure dimension. The connective infrastructure framing identifies the institutional architecture under which subsequent research commissioned by HDI can be executed at the cross-sector specificity Arctic mission assurance requires.

For FEMA, CISA, and DOT

The findings reinforce the relevance of the FEMA Public-Private Partnership maturity model, the CISA Critical Infrastructure Partnership framework, and federal emergency management doctrine, and identify where each currently sits relative to Arctic operational requirements. Advancement from Basic and low-Intermediate maturity toward Advanced tier is the mid-term institutional priority. Pre-staging of civil–military adjudication protocols, identified in the near-term recommendations, converts a governance mechanism that may otherwise activate too late into an operationally usable tool within the Days 0–14 window.

For Alaska DHS&EM and the State of Alaska

The Alaska Emergency Operations Plan, the Defense Coordinating Officer integration, the Mass Care Group and Feeding Task Force, and the Alaska Food Value Chain Coordination Council are the operational platforms on which Days 0–14 human-systems response will run. Tabletop validation against the dual-theater scenario is the near-term priority, with explicit emphasis on the household-level cascade dynamics the research documents. The mid-term investment is in advancing P3 maturity and formalizing tribal consultation

architecture; the long-term commitment is in sustaining the coordination architecture so that it remains exercised, current, and operationally credible.

For Tribal Governments and Alaska Native Organizations

Engagement is governed by sovereignty, consent, and reciprocity protocols, consistent with the framework PSEMA applied throughout the research. This report identifies the absence of pre-existing relationships between non-tribal institutions and tribal governments as a structural coordination gap and a primary risk-amplifier condition. The implementation parameters, protocols, timelines, and the role of sustained relationship over event-driven engagement, are addressed throughout the Final Report's Tribal and Alaska Native Resilience Assessment section and in the companion study for the infrastructure dimension.

For Family Readiness, Behavioral Health, and Workforce Organizations

This report formally integrates family readiness, behavioral health surge capacity, and civilian workforce continuity into the mission assurance planning architecture as first-order operational variables. The near-term recommendations identify the hybrid public-private-nonprofit FRG rebuilding model and household-level communications hardening as the immediate priorities. The mid-term investment in behavioral health surge capacity is the ceiling that determines whether workforce surge is feasible when operational demand increases.

Final Report Reference: Strategic Implications; From Recommendations to Implementation.

Connective Infrastructure: From Recommendations to Implementation

This section names the institutional finding the research surfaces and the role PSEMA is positioned to play. The compact form here is supported by the full institutional case developed in the Final Report.

Every recommendation in this report identifies multiple external partners: HDI, NORAD/USNORTHCOM, Alaska DHS&EM, FEMA, CISA, tribal governments and Alaska Native organizations, academic institutions, and the private-sector operators across the lifeline sectors examined. The recommendations are operationally executable. What requires explicit articulation is the connective infrastructure under which they become operationally executable at scale and across years.

The most analytically significant institutional finding of this research is that the architecture necessary to translate between defense mission requirements and the community, workforce, and governance systems that sustain them, non-attribution, sector-neutral, operationally credible, sustained across years rather than activated during

incidents, does not currently exist within the federal architecture at the maturity Arctic mission assurance requires. Federal entities, by virtue of their statutory mandates and regulatory roles, cannot occupy the sector-neutral intermediary position; commercial operators cannot occupy it across competitors; nongovernmental and academic partners can occupy parts of it but do not have the cross-sector reach that Arctic mission assurance requires.

PSEMA is positioned to fill that gap. The institutional case is developed in full in the Final Report. The summary points:

- What the gap is, episodic, transactional partnership frameworks insufficient for sustained Arctic mission assurance coordination across the human systems, governance, and lifeline dimensions that the recommendation architecture requires.
- Why a sector-neutral, non-attribution intermediary is the operational requirement, and why federal entities cannot fill that role within their statutory mandates.
- How PSEMA's membership architecture, engagement protocols, and connective relationships across lifeline sectors, tribal and Alaska Native organizations, military commands, and academic institutions align with the requirement, with operational credibility established through the research engagement itself.
- Where PSEMA connects to external partners across near-term, mid-term, and long-term recommendations, including the institutional architecture under which subsequent research commissioned by HDI can be executed at the cross-sector specificity Arctic mission assurance requires.
- What continuation availability looks like beyond the May 2026 final submission, sustained engagement, follow-on research, operational piloting, and the integrated societal sustainment testbed identified in the long-term recommendations.

Final Report Reference: From Recommendations to Implementation and The PSEMA Network as Connective Infrastructure.

Continuation, Limitations, and Forward Linkage

An honest accounting of what this research is, what it is not, and where it goes next.

What This Research Is

An analytical foundation for operational planning, organized around seven integrated deliverables and validated through strategic conversations with NORAD/USNORTHCOM leadership and structured stakeholder engagement across infrastructure, energy, supply chain, communications, community, tribal, and state/local sectors. The findings are corroborated against an independent body of published, validated research on military family readiness, civilian workforce dynamics, tribal governance, civil–military coordination, and Alaska operating conditions. The analytical posture is operational, not theoretical.

What This Research Is Not

It is not operational planning. It is not classified analysis. It does not produce decision-grade quantification of failure thresholds at the precision that command-level investment decisions ultimately require. The Days 0–14 analytical window is bounded; extended sustainment beyond Day 14, recovery dynamics, structural reconstitution, multi-month sustainment trajectories, is identified as a follow-on research priority, not delivered within this engagement. Tribal and Alaska Native organizational engagement did not occur within the engagement window and is identified as a priority for future research under sovereignty, consent, and reciprocity protocols.

Forward Linkage to the June 2026 HDAS Briefing

The findings, recommendations, and connective infrastructure framing carry forward to the Homeland Defense Awareness Symposium briefing in Colorado Springs in June 2026. The presentation will be positioned against the operational planning cycles of the audience institutions, with the human-systems integration question, the continuity-of-society-as-prerequisite framing, surfaced for direct discussion alongside the companion study's infrastructure findings.

Companion Study

Private-Sector Lifelines in the Arctic: Predicting and Assessing Risk to Critical Infrastructure addresses the physical infrastructure dimensions of the same dual-theater disruption environment, fuel, food, transportation, communications, medical supply, and supply-chain distribution, and examines the failure cascades that produce the household and community-level consequences this study traces. The integrated picture across the two studies positions the homeland defense research community to engage Arctic resilience as the systems-design and institutional-coordination challenge the analytical record establishes it to be.

Continuation Availability

PSEMA views this engagement as a foundational exploration that establishes the analytical baseline for the follow-on work the long-term recommendations identify — multi-year continuity-of-society modeling, operational piloting, the Arctic societal sustainment testbed, and codified coordination doctrine spanning infrastructure and human systems simultaneously. PSEMA is committed to that work and welcomes the opportunity to discuss with HDI, NORAD/USNORTHCOM, and mission partners how this research can be extended and deepened in support of Arctic homeland defense and the community systems that make it possible.

Final Report Reference: Conclusion and End State; Continuation and Extension.

Reader's Guide to The Full Final Report

A navigation aid for readers moving from the Executive Summary into the Final Report. Section references correspond to the May 2026 Final Report.

Executive Summary and Key Findings.

The integrated opening synthesis, including the Bottom Line and Strategic Implications. Starting point for readers who want the full strategic frame before engaging analytical chapters.

Research Foundation.

Analytical framework, posture, methodological validation anchors, and limits. Recommended for readers evaluating the analytical robustness of the research.

Scenario Development.

Dual-theater disruption framework, West Coast port degradation, early-phase stressors, concurrent Arctic escalation, scenario conditions, and societal stressors. Recommended for readers focused on scenario calibration and the human-systems onset windows.

Civil-Military and Governance Mapping.

Authority structure, civil–military resource allocation tensions, governance friction points, and analytical implications. The empirical foundation for the governance and paper-redundancy findings.

Tribal and Alaska Native Resilience Assessment.

Engagement protocol, traditional and community-based resilience practices, continuity constraints, Native corporations as regional sustainment actors, and federal-program access barriers. The empirical foundation for the tribal coordination finding.

Family Readiness and Human Factors.

Family readiness as a system variable, FRG erosion, workforce-family feedback loop, generational preparedness gap, behavioral health surge capacity, underweighted populations, and informal support systems. The empirical foundation for the family readiness and workforce findings.

Infrastructure and Multi-Modal Sustainment Snapshot.

Maritime dependency dominance, airlift limitations, ALCAN constraints, civilian-military competition across modes, and cascading impact narratives in the human-systems dimension.

Preliminary Multi-Modal Resilience Framework.

Framework proposition, layers, cross-layer integrative findings, substitution and redundancy reality check, institutional coordination as a risk amplifier, design principles, and cost-benefit posture.

Stakeholder Engagement.

Sectors engaged, cross-sector assumption misalignments, engagement findings carried forward, question architecture, and synthesized findings.

Recommendations.

Near-term, mid-term, and long-term recommendation architecture in full, with partner mapping and implementation parameters.

Arctic Rising Generation Preparedness Campaign Framework.

Strategic foundation, cohort architecture, engagement architecture, offline coordination protocols, and pilot design for the household-level preparedness extension recommendation.

From Recommendations to Implementation.

Institutional coordination architecture, the connective infrastructure finding, and the PSEMA network framing.

Conclusion.

End-state framing, continuation availability, and the companion study linkage.

Final Report Reference: Table of Contents

Closing Source Note

This Executive Summary is a synthesis of material developed in full in the *Continuity of Society in the North: Multi-Modal Resiliency in Arctic Defense* (May 2026) Final Report. No new analysis, no new findings, and no new recommendations are introduced in this document. The Final Report is the authoritative source for the substantive material summarized here, including the full reference list, the citation-supported development of each finding, and the partner-specific implementation parameters of the recommendation architecture.