Alaska Earthquake and Tsunami Response Tabletop Exercise (TTX):

After Action Report and Improvement Plan

December 4, 2024

THE PARTNERSHIP
FOR INCLUSIVE DISASTER STRATEGIES

STATEWIDE INDEPENDENT LIVING COUNCIL
SILC
ALASKA

Executive Summary

The Alaska Earthquake and Tsunami Response Tabletop Exercise (TTX) was conducted on December 4, 2024, to evaluate and enhance disaster response and recovery strategies with a focus on inclusion of people with disabilities. This three-hour exercise gathered a diverse group of participants – from Independent Living advocates to emergency managers – to collaboratively address a magnitude 8.2 earthquake scenario impacting Southeast Alaska communities. The exercise objectives were to assess current emergency plans, identify gaps, enhance multi-agency coordination, improve support for individuals with disabilities, and promote collaborative problem-solving. Over the course of the TTX, participants discussed immediate response actions, short-term recovery needs, and long-term recovery strategies.

Key findings from the exercise reveal both strengths and areas for improvement. Participants demonstrated strong commitment to accessibility and coordination, and leveraging established community networks and volunteer organizations for disaster response. Community resilience was highlighted as a strength – Alaskans are accustomed to harsh conditions and often help each other, sharing resources such as allowing neighbors to use their generators during outages. The exercise also identified critical challenges. Communication systems were severely disrupted in the scenario, exposing the need for better backup communication methods and information dissemination to reach all residents, including people who are Deaf or non-English speaking. Logistical difficulties in evacuation and supply chain were apparent, especially given the remote geography – damage to ports and infrastructure could isolate communities and delay essential goods. Accessibility gaps emerged, such as evacuating people who use wheelchairs from multi-story buildings when elevators are out, and ensuring shelters and services accommodate disability-related needs. Coordination issues were noted particularly for small rural communities lacking full-time emergency managers, requiring local organizations to fill the gap in disaster response.

Overall, the exercise underscored the importance of inclusive planning, robust communication networks, accessible resources, and strong partnerships to improve whole community resilience. This After-Action Report (AAR) provides an overview of the exercise, analyzes these key findings by functional area, and outlines a practical Improvement Plan (IP). The Improvement Plan includes specific corrective actions, responsible parties, and timelines to address identified gaps. By acting on these recommendations, stakeholders can bolster Alaska's preparedness for earthquakes, tsunamis, and other emergencies, ensuring no one is left behind when disaster strikes.

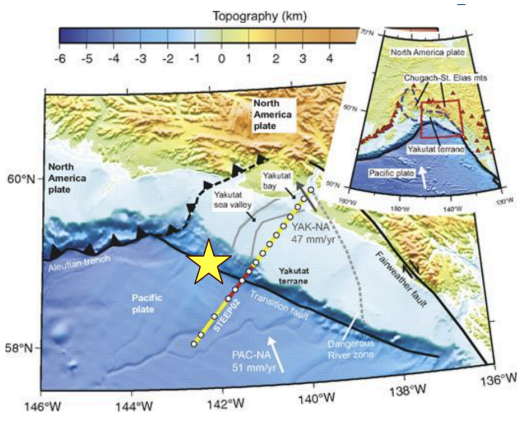
Exercise Overview

Exercise Name: Alaska Earthquake and Tsunami Response Tabletop Exercise (TTX)

Date and Duration: December 4, 2024 – 3 hours (9:30 AM to 12:30 PM)

Organizers: Statewide Independent Living Council (SILC) of Alaska and The Partnership for Inclusive Disaster Strategies

TTX Participants: Alaska Department of Health and Social Services, the Alaska Division of Homeland Security & Emergency Management, local emergency managers from the Kenai Peninsula Borough and Mat-Su Borough, Kawerak Inc., federal agencies including the Coast Guard, the Department of Housing and Urban Development, and the Department of Veterans Affairs, Alaska Native Medical Center, Anchorage Neighborhood Health Center, and Bartlett Regional Hospital, Hope Community Resources, the Food Bank of Alaska, Connecting Ties, Samaritan's Purse, the Statewide Independent Living Council of Alaska, the University of Alaska Fairbanks, KCAW FM. The Governor's Council on Disabilities and Special Education.



Exercise Scenario: The scenario simulated a major earthquake (Magnitude 8.2) striking offshore in the Northeast Pacific near the Aleutian Trench and the Yakutat sea valley. at 9:00 AM, followed by a massive tsunami warning for Southeast Alaska. Strong shaking lasting 2-3 minutes caused significant structural damage and dozens of casualties. The tsunami brought 20-30 foot waves along the coast, compounding the destruction. Critical infrastructure was impacted – communication networks were disrupted, power outages occurred, transportation routes and ports were damaged, and immediate evacuation orders were issued for coastal areas. The exercise progressed through three modules corresponding to time phases: Immediate Response (first hours), Short-Term Recovery (72 hours post-event), and Long-Term Recovery (45 days post-event). Each module introduced evolving scenario conditions (aftershocks, prolonged outages, emerging recovery issues) and prompted participants to discuss key questions in breakout groups.

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Scope and Methodology: The TTX was conducted via Zoom with both plenary (main room) sessions and breakout group discussions. An earthquake scientist, Gabriel Loto, PhD, provided an overview of Alaska's earthquake/tsunami risk and scenario context to set the stage. Participants were then divided into breakout rooms (with approximately 6-10 people each) to discuss scenario-driven questions about response and recovery. Discussion prompts focused on functional areas such as immediate life-safety priorities, communication of warnings, evacuation of individuals with disabilities, resource coordination, and long-term recovery challenges. Each breakout group had a facilitator and was asked to assign a note-taker and a reporter to capture key points and report back in the main room. This approach allowed for candid, small-group dialogue. The exercise emphasized a no-fault environment – participants were encouraged to openly identify gaps and brainstorm solutions without fear of criticism.

Accessibility Measures: Aligned with inclusive planning principles, the exercise itself modeled accessibility best practices. Communication Access Realtime Translation (CART) captioning was embedded into Zoom with an external link for viewing captions in a separate window. American Sign Language (ASL) interpreters were provided and spotlighted on screen.

Evaluation Methodology: Data for this AAR was gathered from multiple sources during the exercise. Each breakout group's note-taker captured discussion highlights, and the designated spokesperson shared these in the plenary debrief. The exercise was recorded to support after-action analysis. Transcripts of the main room and breakout room discussions were reviewed to identify common themes, strengths, and areas needing improvement. The evaluation was based on observations and participant feedback relative to the exercise objectives. The analysis especially focused on the effectiveness of current plans/protocols and the inclusivity of response strategies for people with disabilities. Key observations and direct participant quotes were extracted from the transcripts to provide evidence for findings. After the exercise, an electronic feedback survey was sent to the participants. The survey asked about overall satisfaction, perceived realism of the scenario, clarity of roles and responsibilities, and confidence in inclusive emergency response strategies. The majority of respondents reported that the realistic scenario, focused breakout discussions, and emphasis on disability access significantly increased their awareness of accessibility gaps particularly in transportation, emergency communication, and the availability of equipment for people with disabilities. Several participants indicated they would like more training on redundant communications and accessible evacuation procedures.

Key Findings and Analysis

This section breaks down the exercise outcomes by **strengths**, **challenges**, and **areas for improvement** that emerged. The analysis is organized into the following key areas: **Communication**, **Logistics**, **Disability Integration**, and **Coordination**. Direct quotes from participants are included to illustrate critical observations. Overall, while participants showed commendable strengths – such as community resourcefulness and existing partnerships – they also identified important gaps in plans and capabilities. Each subsection below summarizes what worked well and what needs enhancement.

Communication

Strengths: Participants recognized multiple existing assets for emergency communication. Many communities have redundant communication systems (e.g., satellite phones, ham radios, radio stations, social media channels) that can be used if primary networks fail. For example, a local public radio representative described an established process to automatically broadcast emergency alerts (EAS) from the National Weather Service and the ability to broadcast remotely if the station must evacuate. Their station and transmitter have generators to keep broadcasting during power outages. Another strength is Alaska's Federal Communications Commission (FCC) waiver that allows radio stations to broadcast personal messages in disasters – a valuable practice for rural and isolated communities. Wireless Emergency Alerts (WEA) would also be triggered for a tsunami warning, sending immediate alerts to cell phones at the event onset. The presence of trained Public Information Officers (PIOs) at the state level was another asset; they can amplify local messages via social media to spread information widely.

Challenges: Despite these assets, significant communication challenges were identified. The earthquake scenario assumed widespread disruption of normal channels (phone lines, internet), which would severely impact real-time information sharing. Participants noted that while many agencies have backup communication tools (like ham radios or sat phones), there is no comprehensive directory or awareness of these resources across agencies. One participant explained, "we don't know all the capabilities throughout the state of who has ham radio and who has satellite phones… there's no one-stop shop directory… A lot of us have redundant communications, but that redundant communication is useless if other people don't know that you have it or how to reach you on those communication methods." This quote highlights a critical gap of interoperability and knowledge of communication networks. Agencies might each have a radio or frequency, but without coordination, those backups lose value.

Another challenge is ensuring accessible communication for all community members. Standard warning systems like sirens or phone alerts may not reach everyone – for instance, a Deaf individual won't hear a siren. A state official emphasized the need for pre-planned alternative notification methods for people with disabilities, she pointed out, if such plans aren't made *before* the disaster, "you can't expect the day of a disaster" to solve it. Additionally, language barriers can impede communication; it was noted that outreach must include translators or culturally relevant channels (e.g., having spokespeople for communities with limited English proficiency). The exercise revealed that while multiple communication avenues exist, they are not fully integrated or accessible to all, leading to potential delays or gaps in reaching at-risk groups during a fast-moving disaster.

Areas for Improvement: To address these challenges, participants discussed several improvements. One idea was developing a central communications directory or protocol so that all responding organizations know what backup systems (ham radio operators, frequencies, sat phone numbers, etc.) are available and how to connect with them. This would ensure, for example, that if the internet and phones are down, local shelters, the state emergency operations center (SEOC), and others can find each other on radio or satellite channels. Regular drills and practice using those backup systems was also identified as an important area for improvement.

Another improvement area is accessible messaging that integrates multiple formats (audio sirens, visual text alerts, door-to-door notification, etc.) to reach everyone. As well as engaging community organizations (like Centers for Independent Living and cultural groups) to support as communication hubs by distributing messages and ensuring messages are in plain language and translated as needed. These enhancements are further detailed in the Improvement Plan section, with responsible parties (such as emergency management agencies for the directory, and PIOs for accessible messaging protocols) and timelines for implementation.

Logistics (Evacuation, Resources and Supply Chain)

Strengths: The exercise highlighted that many Alaskan communities, though remote, have strong local knowledge and some resources to manage immediate needs. Participants from both urban and rural areas noted they have designated evacuation sites and procedures. For example, in Sitka the radio station staff knew to evacuate to the high school (the predetermined shelter outside the inundation zone) and even had equipment (generators, remote broadcast gear) to continue operations from there. A participant from the Mat-Su Borough Department of Emergency Services explained they

have Memoranda of Understanding (MOUs) with local stores and neighboring jurisdictions for supplies, and a process to request additional resources from the state via formal incident command system forms (213 RR requests). Participants also highlighted community and volunteer support as a logistical strength – local schools can serve as shelters (often run with Red Cross support), and many Voluntary Organizations Active in Disasters (VOADs) such as, Salvation Army, food banks, church groups, etc. can contribute to feeding, sheltering, and services in the aftermath. Alaska's tight-knit communities often self-organize to share resources (fuel, food, generators) in an emergency before outside help arrives, which is a crucial buffer in the immediate aftermath.

Challenges: Logistical challenges in this scenario were significant. The earthquake and tsunami damage would damage transportation and supply lines to several communities. Many Southeast Alaska towns are not connected by road, relying on ports and small airports for supplies. Participants agreed that a major tsunami could severely damage boat harbors and docks, cutting off delivery of food, fuel, and medicine for an extended period. Even then, there are only a limited number of vessels available in the region to re-supply isolated areas.

The scenario's timing (no advance notice unlike a typhoon) means communities would be pulling from whatever stockpiles they have. It was stated that "if people don't have reserve kits, they're going to run out of food and water… a lot of our places are not on the road system, so it's water [access only]." This highlights a gap in sustained supplies for at least several days post-disaster. Another challenge is evacuation and transportation, especially for people with disabilities and people who need immediate medical attention.

Immediately after the quake, debris and infrastructure damage such as collapsed roads and downed bridges could impede movement. In the discussion, medical transport and transfer of hospital patients was raised as a major concern if hospitals or congregate care facilities are damaged. Transporting injured individuals to functioning hospitals, which might be in farther away boroughs like Anchorage or out of state, would strain resources. Additionally, some communities might only be accessible by boat or aircraft, requiring specialized logistics to evacuate people or bring in aid.

Shelter operations in the short term also pose challenges, such as while the American Red Cross manages shelters, it was acknowledged that not all shelters are fully equipped for accessibility (e.g., cots, ramps, sign language interpreters) and they might quickly need resupply of items like bedding, durable medical equipment, or even generators for power. One participant shared uncertainty about how well shelters

accommodate people with disabilities and noted “resources are needed to improve accessibility” at shelters.

Staffing is another logistical challenge, as organizations mentioned concern about having enough staff available to check on their members or run operations if employees are also impacted by the disaster. One service provider said their “big one [concern] is just staffing in an emergency – do we have the people that are able to go and provide support” if some staff can’t report in.

Long-term housing was also identified as a looming problem in the long term recovery module of the scenario, which was 45-days post-event . By that point, short-term shelters would close, yet many homes would still be uninhabitable, creating housing shortages especially for people who require accessible homes. The need to find interim housing, such as possibly relocating some survivors to other communities or bringing in temporary housing units was acknowledged as a difficult but necessary logistics task.

Areas for Improvement: Pre-disaster planning for supply chain interruptions is critical. Communities, especially with state support should identify essential commodities and have caches or agreements in place for emergency fuel, food, water, medicine, and other commodities. Improving transportation resilience was also noted – e.g., having plans to use alternate means like small fishing boats, private vessels, or bush planes to reach cut-off areas. Participants suggested establishing a system of points of distribution (PODs) once relief supplies come in, and ensuring outreach to those who cannot physically reach distribution sites by sending out teams or “runners” to deliver aid to people who cannot access the PODs.

For evacuation logistics, a key improvement is to develop and practice evacuation assistance plans for people with disabilities. As a participant highlighted, a wheelchair user in a second-floor apartment will likely need help getting downstairs when the elevator is down. Communities should organize support networks, ensuring that disabled people who may need assistance during evacuations are connected with trusted neighbors, friends, or community volunteers who can provide aid when needed. Ensuring shelter accessibility is another improvement area. Communities should work with the American Red Cross and local emergency managers to identify and stock adaptive equipment such as, accessible cots, visual communication boards, wheelchairs, canes, charging stations for assistive devices, etc. at shelters, as well as training shelter staff and volunteers in meeting functional needs.

In the short term recovery module, the State Dept. of Health representative mentioned using the HHS emPOWER data, a tool that lists individuals on power-dependent

medical equipment, to identify those who will need power or medical support in shelters. Such tools should be incorporated into local shelter planning, noting emPOWER data only captures a segment of power-dependent people living in the community. Medical transportation plans should be refined as well – e.g., pre-arrange with air ambulance services or the Coast Guard for patient evacuation if local hospitals are impacted.

Disability Integration

Strengths: The exercise's central focus on people with disabilities brought out several strengths in current practices. Many participating agencies already integrate access and functional needs into their emergency plans. For instance, one participant shared that the State Emergency Operations Center has a Mass Care group that includes agencies focused on people with disabilities, alongside Red Cross and other relief organizations. This mass care team regularly meets and coordinates to ensure that during disasters "all folks, whether you have a disability or don't, have your needs being met." Additionally, local organizations serving people with disabilities, like Centers for Independent Living, have established communication trees and check-in protocols to be in communication with their consumers after an event. One Anchorage service provider described having phone and text trees, email lists, and even encrypted databases to quickly assess the needs of individuals they support.

The exercise itself demonstrated awareness and knowledge-sharing from participants. Representatives from disability organizations educated others about disability related needs like accessible transportation, while emergency managers shared information such as, identifying the Alaska Disability Advisory Group as a resource, which some participants were unaware of and were encouraged to join. Such cross-sector communication is a strength that can be built upon.

Challenges: A primary challenge identified was evacuation of people with disabilities during the initial response, and the distinct barriers disabled people encounter during emergencies. One discussion highlighted the example of a wheelchair user in a building with an elevator which would shut down due to the earthquake and without a personal evacuation plan or assistance that person could be trapped upstairs. The challenge is not just the physical act of evacuation, but that many multistory buildings lack prior planning or awareness of how to support disabled people during an emergency evacuation.

Another challenge is maintaining essential services for people with disabilities after the disaster. The scenario indicated disrupted services for weeks. Participants noted that some survivors might experience long-term displacement if their accessible housing is

destroyed, and interim solutions such as staying in a shelter or with friends/family might not fully meet their needs. There could also be shortages of accessible housing units for relocation. Additionally, some people with disabilities rely on routine services (personal assistance, dialysis, etc.) which might be disrupted.

One major insight raised was that disasters can create new disabilities – a person may be injured or experience emotional trauma as a result of the event. This challenge can lead to more disabled people needing access to services, yet many may not know how to navigate available resources. Psychological trauma and mental health needs to be part of the recovery process – community members will need support, counseling, and community rebuilding activities to recover. Participants from community organizations stressed the importance of "healing and repair work… connecting folks and checking in on them" as part of long-term recovery, beyond just the physical rebuild.

Another challenge repeatedly mentioned in various discussions concerns the reliance on—or assumption of the existence of—disability "registries." While registries may initially sound helpful, participants and disability advocates cautioned that they can be misleading and create a false sense of security, meaning people with disabilities might assume they are automatically accounted for in a disaster simply by signing up. Additionally, there is no guaranteed mechanism to identify or contact everyone on these registries in real time as people relocate. Privacy issues arise regarding who owns the data and how it is shared. A more effective alternative is cultivating partnerships with community-based agencies such as, Centers for Independent Living, home health providers, and transportation services to coordinate and reach disabled community members quickly and reliably. These stakeholder-driven, contractual relationships—rather than static lists—provide ongoing engagement and proactive planning with people with disabilities at the center, and helps ensure no one is forgotten during a disaster.

Areas for Improvement: First and foremost is ensuring that disabled people are actively leading and meaningfully included in pre-disaster planning. Local emergency managers and disability-led organizations and advocates should collaborate to review emergency plans to ensure people with disabilities and accessibility concepts are included in every aspect of planning, response, and recovery.

Another recommendation is conducting community workshops, exercises, and trainings on emergency preparedness for people with disabilities to help with individual planning. As one participant emphasized, planning is good but practicing the plan is vital.

Strengthening shelter accessibility was also identified as an important area for improvement. The Red Cross and local communities should assess shelter sites for physical accessibility and stockpile disability-related supplies and equipment on a regular basis. This might include pre-staging wheelchair-accessible porta-potties, ramps, accessible cots or lift equipment, sign language interpreter availability (on-site and via video remote interpreting), and communications in alternative formats such as, Braille, large print, and pictorial. The state mass care group can assist by providing guidance or caches of such items.

For long-term recovery, a crucial improvement is to incorporate disability expertise in recovery committees. This ensures rebuilding efforts take into account accessibility compliance, and that programs like FEMA Individual Assistance (IA), temporary housing, and case management are easy for people with disabilities to navigate. Outreach and case management for newly disabled survivors should be planned – possibly by collaborating with Centers for Independent Living and Area Agencies on Aging to do proactive outreach offering support and information about services to anyone who was seriously injured or traumatized.

Many participants also noted the importance of policy advocacy and using lessons from this exercise to advocate for stronger building codes for accessible and resilient housing when rebuilding, and funding for backup power for disability equipment. These policy and procedural changes are longer-term efforts but critical for sustained improvement in inclusive disaster resilience.

Coordination and Collaboration

Strengths: Coordination among agencies and organizations is the backbone of effective disaster response. The exercise demonstrated some robust coordination mechanisms already in place in Alaska. At the state level, the Incident Command System structure in the State Emergency Operations Center facilitates multi-agency coordination. The Mass Care group brings together government, nonprofit, and disability-sector agencies to coordinate shelter, feeding, and human services. The state is also part of the Emergency Management Assistance Compact, meaning if Alaska's resources are overwhelmed, they can request support from other states – a form of interstate coordination that has been used in past disasters.

At the local level, participants described how they would convene regular coordination meetings in response to the event, bringing together different working groups, e.g., a "senior care group," and a "feeding group" to tackle specific needs and share information. By 45 days post-disaster, these types of coordination structures can double

as resilience-building forums, embedding lessons learned and shaping future plans. The involvement of Voluntary Organizations Active in Disasters (VOAD) was a strong point of discussion. Local and regional VOADs, which include organizations and groups such as Salvation Army, American Red Cross, faith-based groups, etc. can greatly expand coordination capacity by providing trained volunteers and resources.

Public-private partnerships were also identified as evident strengths. Including MOUs with businesses for supplies, as well as outreach to utilities and transport companies, which form part of many local plans. Another strength is coordination for inclusive communication by ensuring information reaches diverse communities, such as non-English speakers and disabled people, through trusted messengers and accessible formats.

An often-overlooked coordination strength is the role of neighbors and community groups at the hyper-local level. Participants frequently mentioned that in Alaska's small communities, "people help each other out" in disasters. This informal coordination of neighbors checking on each other and sharing information via word of mouth or community bulletin boards (one borough uses physical "message boards" in central locations after wildfires) – is a valuable asset that formal plans can support by organizing neighborhood response teams.

Challenges: The exercise also revealed coordination challenges, particularly related to rural and remote communities. Many smaller towns in Southeast or rural Alaska do not have a full-time emergency manager or well-developed emergency plans. Often, a local fire chief or police officer may take on these additional responsibilities without adequate training or resources. This means that when a disaster strikes, these communities may struggle to coordinate response and recovery beyond the very local and immediate efforts. As one state official observed, in these places "they may not have as good of plans as some of the larger communities. And so that's where the organizations who are serving in those smaller communities will really make an impact helping those with disabilities recover." In other words, local nonprofits, health clinics, or tribal organizations might have to take the lead in coordinating aid and services, which can be challenging if they are not integrated into broader emergency management systems.

Another coordination challenge is information flow and clarity in a fast-evolving event. With so many players (local, state, federal, tribal, private), confusion can arise over who is doing what. This hints at a gap in pre-established coordination frameworks that include all relevant stakeholders. Additionally, while the state will support local needs, it was emphasized that "disasters start and end locally" – the state will amplify messages and coordinate large-scale support, but will not override local authorities. If local

capacity is low, that coordination principle can leave a gap unless outside help is requested timely. The process of requesting resources itself can be a coordination challenge, for example smaller jurisdictions may not be familiar with the required forms or processes to ask for assistance and/or supplies.

In the long-term recovery phase, coordination challenges include sustaining momentum and inclusion. One participant pointed out that after each disaster, many lessons are learned but “a lot of times we don’t get it written down… those lessons learned go with that person [who leaves], and we end up learning the lesson again.” This underscores the need for stronger knowledge management and documentation practices to ensure institutional memory is retained and shared across agencies over time.

Engaging the whole community in recovery can be difficult as some stakeholders might disengage after the immediate threats have passed. Keeping everyone, from government agencies to grassroots groups, engaged in long-term recovery coordination is a complex challenge that demands sustained effort and strategic organization.

Areas for Improvement: A key area for improvement is to build capacity in small communities.This could involve the state providing training and support to establish at least part-time emergency management coordinators in rural areas, or developing regional coordination agreements where a nearby community’s emergency manager also assists smaller neighborhoods. Ensuring local organizations such as tribal councils, health clinics, and disability service providers are included in planning and exercises will help create a network of capable responders. Establishing or strengthening regional coalitions such as regional emergency planning committees or disability inclusive disaster coalitions can help to formalize the coordination among these stakeholders.

Another improvement area is to develop a statewide directory or network of specialized resources and points of contact. For instance, who can be contacted for sign language interpretation or which agency can provide accessible transportation so that during an incident, local responders can quickly pull in the expertise they need.

From a process standpoint, simplifying or providing templates for resource requests such as the 213 RR forms and having liaisons to assist local entities in navigating state/federal coordination channels will speed up the flow of assistance.

In long-term recovery, a big improvement area is to implement a formal After-Action Review and information-sharing process after every significant event. This means writing down lessons learned, circulating them to all stakeholders, and updating plans accordingly.

Fostering community-level resilience committees like the groups meeting in the scenario at 45 days should be an ongoing effort, not just post-disaster. Having key stakeholders such as aging services, disability services, housing, emergency management, etc. meet periodically during “steady state” will help them to be ready to coordinate smoothly during disasters. The Improvement Plan will detail steps such as regular coordination meetings, inclusion of underserved communities in planning, and agreements to support small communities, which are all aimed at strengthening the collective response framework.

Corrective Actions and Recommendations

Building on the key findings, this section outlines specific corrective actions and recommendations to improve future preparedness and response. The recommendations are organized by theme, corresponding to the functional areas above, and they emphasize actionable steps, responsible parties, and suggested timelines. The goal is to translate the exercise insights into concrete improvements in plans, policies, and capabilities.

1. Strengthen Emergency Communications and Information Sharing

- **Develop a Statewide Emergency Communications Directory:** Establish a centralized directory (maintained by the State Emergency Management office) listing critical backup communication resources – e.g., ham radio operators/frequencies by region, satellite phone numbers for key facilities, radio station contacts, etc. This directory should be shared with all relevant agencies and updated annually.

  Responsible: Division of Homeland Security and Emergency Management (DHS&EM) in partnership with local emergency managers and amateur radio clubs.

  Timeline: Initial directory within 6 months, with semiannual updates.

- **Implement Regular Drills for Backup Communications:** Provide training and conduct periodic drills that require agencies to communicate using backup systems (radio, satellite, runners) instead of phones/internet. This will familiarize all parties with the procedures and expose any technical or knowledge gaps for example, ensuring everyone knows how to operate a satellite phone or access a particular radio channel.

Responsible: Local emergency management offices with support from the State.

Timeline: Integrate into the annual exercise schedule, e.g., next 12 months.

- **Enhance Accessible Alerting Systems:** Improve methods to reach individuals with disabilities and non-English speakers in an emergency. This could include implementing a SMS text alert system that complements sirens/WEA with links to videos in sign language for people who are Deaf or hard-of-hearing (HOH), establishing a "neighbor alert" program to physically check on those who might not get messages, and translating emergency messages into multiple languages common in the community. Outreach prior to disasters should ensure people know how they will be alerted and what to do.

  Responsible: Local governments and PIOs, with disability organizations.

  Timeline: Develop improved protocols within 9 months and test them in the next scheduled drill.

- **Outreach and Education on Communication Plans:** Conduct community education campaigns about where to get reliable information during disasters such as which radio station, official social media pages, etc. Make sure this information is in plain language and accessible formats. Encourage households to have battery-operated or crank/ham radios and backup power for communication devices.

  Responsible: DHS&EM and local emergency managers.

  Timeline: Ongoing, ramp up ahead of high-risk seasons.

2. Improve Evacuation and Shelter Operations

- **Enhance Evacuation Planning for People with Disabilities:** Each community, including apartments and assisted living facilities should develop specific evacuation plans addressing disability needs. For instance, create a roster of volunteers or first responders assigned to assist people who cannot evacuate independently from high-rises or remote homes. Provide evacuation aids such as evacuation chairs for stairs in multistory buildings. These plans should be practiced with the individuals involved.

  Responsible: Local emergency managers in collaboration with disability service providers and housing authorities.

Timeline: Develop or update plans within 6 months, conduct drills within 12 months.

- **Personal Preparedness Support for At-Risk Individuals:** Initiate programs to help people with disabilities, older adults, and people with access and functional needs to prepare “go kits” and shelter-in-place supplies. Encourage having at least a 7-day supply of essential medications whenever possible, along with backup power solutions for devices. This could involve service coordinators assisting with personalized preparedness plans.

  Responsible: Local emergency managers, public health departments, Centers for Independent Living.

  Timeline: Start outreach immediately, with measurable increase in preparedness kit distribution in 6 months.

- **Stockpile Accessible Shelter Resources:** Work with American Red Cross and community partners to create a cache of disability-related supplies and equipment for shelters such as accessible cots, shower chairs, wheelchairs, hearing aid batteries, communication boards, ect.. Identify which local shelters are most physically accessible and prioritize those for use. Pre-survey and modify shelter sites to accommodate mobility devices such as widening doorways.

  Responsible: Local emergency management and local Red Cross chapters, supported by State Mass Care.

  Timeline: Inventory needs in 3 months, acquire stockpiles in 6-9 months.

- **Train Shelter Staff in Disability Integration:** Provide training to shelter managers and volunteers on assisting people with various disabilities. Include concepts such as how to set up accessible sleeping areas and how to engage sign language interpreters.

  Responsible: Local emergency managers, Red Cross, and disability organizations.

  Timeline: Incorporate training before the next major exercise or real activation, ideally within 6 months.

- **Plan for Sustained Logistics in Isolated Communities:** Develop contingency plans for communities that could be cut off. This includes identifying small boats, bush pilots, or National Guard assets that could deliver supplies if ports/airports are damaged. Establish community PODs and a system to deliver essentials to people who cannot leave their homes, perhaps using local search and rescue teams or volunteers. Also coordinate with state/federal partners for priority clearance of debris from harbors and roads.

  Responsible: Local emergency planning committees with State coordination.

  Timeline: Incorporate into local emergency operations plans at next annual update, and discuss with partners within 4 months.

3. Expand Coordination and Partnerships

- **Support Small Communities Lacking Emergency Management Capacity:** The state should identify communities with limited emergency management personnel and provide them with additional support and training. Options include assigning a regional emergency manager to cover multiple small communities, offering training workshops for local officials like fire chiefs and tribal leaders on disaster coordination, and encouraging the formation of local emergency planning committees where none exist.
  Responsible: DHS&EM.
  Timeline: Needs assessment of communities in 3 months, roll out support program within 12 months.

- **Strengthen the Alaska Disability Advisory Group (ADAG):** Increase participation in the ADAG or similar coalition so that more disability organizations and community representatives are directly plugged into state-level emergency coordination. Host monthly meetings either virtual, in-person, or hybrid to maintain relationships and share information on inclusive planning. This group can also be mobilized during disasters to advise on issues and connect resources.
  Responsible: DHS&EM, Governor's Council on Disabilities and Special Education and SILC.

Timeline: Next ADAG meeting within 2 months, with recruitment of new members ongoing.

- **Formalize Communication Protocols Among Agencies:** Develop clear protocols for how information and requests flow between local EOCs, the SEOC, and support agencies. For example, ensure everyone understands the resource request process (ICS forms) and knows who to call at the SEOC for various needs such as mass care, infrastructure, public health, etc. Create a quick-reference guide for local incident commanders.

  Responsible: DHS&EM and local emergency managers.

  Timeline: Draft protocol and guide within 6 months, distribute to locals and train on it within 9 months.

- **VOAD and Community Organization Integration:** Encourage local VOADs to include disability stakeholders and to broaden their reach into all communities. In the exercise, VOAD groups proved invaluable for long-term needs – this should be solidified by having VOAD points of contact in each region and ensuring they coordinate with local governments. Regular disaster coordination meetings should be held in each borough or region, bringing together government, nonprofits, healthcare, disability groups, faith-based, and private-sector to build relationships before any disaster.

  Responsible: Local emergency managers and VOAD leadership.

  Timeline: Initiate regional coordination meetings within 6 months, and at least annually thereafter.

- **Knowledge Management and Documentation:** Establish a process after every incident or exercise to document what was learned and track improvement actions. This can be as simple as a debrief meeting followed by an AAR, but importantly, create a central repository at the state or regional level for these AARs and recommendations. Ensure that new personnel are briefed on past lessons so institutional knowledge is retained.

  Responsible: DHS&EM in partnership with all exercise/drill planners.

  Timeline: Implement immediately using this TTX. Distribute the AAR/IP and schedule follow-up checks on progress in 6 months.

4. Address Policy and Long-Term Recovery Considerations

- **Inclusive Recovery:** As recovery progresses, ensure that people with disabilities and people with access and functional needs have representation in recovery committees such as housing, infrastructure, health services, etc. This will help drive policies like accessible rebuilding. For example, advocate for rebuilding homes with universal design features if prior accessible housing was lost. Conduct community town halls/events 45-60 days post-disaster to gather input from affected individuals about their needs – whether it's housing, employment, mental health support, or replacing medical equipment.

  Responsible: Long-Term Recovery Groups and local government.

  Timeline: Incorporate into recovery frameworks immediately to initiate within weeks after an incident.

- **Housing and Displacement Strategies:** Develop plans for intermediate and long-term housing for displaced residents, especially those who cannot use standard temporary housing, e.g., someone who needs a wheelchair-accessible unit. Pre-identify accessible hotel rooms, dorms, or modular units that could be used. Advocate for FEMA's accessible housing resources and ensure local case managers help people apply for assistance like FEMA Individual Assistance (IA) and housing assistance. Also involve housing authorities early to begin addressing anticipated shortages.

  Responsible: Local housing task forces with support from Alaska Housing Finance Corporation and Department of Housing and Urban Development, local emergency managers, DHS&EM, FEMA, and ADA coordinators.

  Timeline: Planning stage now, activation in event of disaster.

- **Mental Health and New Disabilities:** Integrate mental health services into recovery operations. Set up support groups or counseling resources for survivors, including peer support for newly disabled individuals by connecting them with Centers for Independent Living or support networks who can guide them in accessing services. Public health and behavioral health agencies should be part of the recovery Incident Command Structure to coordinate these efforts.

  Responsible: State/Local Health Departments, Behavioral Health agencies, disability advocates.

Timeline: incorporate into the recovery phase of plans within 3 months, ensure services are activated immediately post-disaster.

- **Policy Advocacy for Resilience:** Use the lessons from this exercise and disaster events to inform policy improvements. For example, consider advocating for requirements or incentives for backup power for group homes and assisted living facilities, funding for community resilience centers that are fully accessible, or state policies that mandate inclusive planning at the local level reinforcing or going beyond the ADA requirements. Another policy area is emergency communications and advocating for telecom improvements in rural areas such as satellite backups and ensuring the WEA system messages are accessible e.g., not just text but compatible with text-to-speech for people who use screen-reader software. These advocacy efforts may be led by SILC and partners, influencing state legislation or agency regulations.

  Responsible: SILC, Centers for Independent Living, The Partnership for Inclusive Disaster Strategies, advocacy groups.

  Timeline: ongoing, with specific advocacy/policy priorities developed within 12-18 months.

Each of these recommendations is aimed at addressing the gaps identified during the TTX. By assigning clear responsibility and timelines, the Improvement Plan below intends to drive accountability. The following Improvement Plan Matrix summarizes the major action items and allows tracking of their implementation.

Improvement Plan Matrix

The Improvement Plan Matrix below consolidates the areas for improvement identified in the AAR and outlines specific corrective actions. It also assigns responsible parties and target completion dates for each action. This matrix serves as a roadmap for stakeholders to enhance preparedness, response, and recovery capabilities. Progress on these items should be reviewed periodically e.g., quarterly or at the next exercise to ensure continuous improvement.

Issue/Area for Improvement	Corrective Action	Responsible Party	Target Completion
Lack of integrated backup communication awareness *(Agencies have ham radios/sat phones but no directory or shared knowledge).*	Create and maintain a **Statewide Emergency Comms Directory** listing all backup comms (ham radio operators, sat phone numbers, etc.) and contacts. Disseminate to all emergency response agencies and update it regularly.	DHS&EM communications division; Local emergency managers; Amateur radio clubs.	Initial directory in 6 months; updates quarterly or as needed.
Limited practice with redundant communication systems *(Users may not know how to use or reach others via backup systems).*	Conduct **semiannual drills** where normal communications are down and agencies must use backup methods like radios to communicate. Include testing accessible message delivery such as, sending a test WEA or door-to-door checks. Provide training on equipment usage beforehand.	DHS&EM, including exercise planners; All participating agencies; Disability org representatives.	First drill within 12 months; semiannual thereafter.

Accessible warning gaps *(Deaf/HOH people, non-English speakers may miss alerts).*	Implement an **accessible alert system**. Ensure WEA messages are in plain language; add SMS/text subscription for emergency info; set up agreements with community leaders to do in-person or bilingual announcements.	Local emergency management and 911 centers; Public Information Officers; Community orgs (disability, cultural and neighborhood groups).	Protocols in place within 9 months; evaluate in next annual exercise.
Evacuation difficulties for some people with disabilities *(No formal plans to assist wheelchair users in multi-story buildings, etc.)*.	Develop **community evacuation assistance programs**.Recruit/train volunteers or staff to assist people who cannot self evacuate during drills and incidents. Equip buildings with evacuation devices e.g., stair chairs. Incorporate these plans into neighborhood emergency teams.	Local emergency managers; Fire departments; Centers for Independent Living; Building managers/landlords; community based organizations.	Plans established and volunteers assigned within 6 months; device procurement within 9 months; drill by 12 months.

Insufficient accessible resources at shelters *(Shelters may lack ramps, adaptive equipment, accessible cots, etc.).*	Create an **accessible shelter kit** for each region. Stockpile items such as ramps, wheelchair-friendly cots, hearing assistive devices, etc. Train shelter staff on disability accommodations and assign a disability liaison for each shelter activation. Coordinate with Red Cross to include these in shelter SOPs.	Local Emergency Management and Red Cross; State Mass Care lead; CILs and disability-led orgs (for training).	Stockpiles assembled within 9 months; training completed within 12 months.
Staffing shortages for home visits/personal care services in disasters *(Service providers may lack personnel to check on all clients post-disaster).*	Establish a **cross-agency staffing mutual aid** plan. Create agreements among home care agencies, public health, National Guard, etc., to pool personnel for welfare checks and in-home support after a disaster. Identify backup "surge staff" who can be called upon.	State Dept. of Health and Social Services; DHS&EM; Home healthcare agencies; VOAD (for volunteer staffing).	Mutual aid agreements in 12 months; incorporate into state emergency plan.

Isolated communities cut off from supply chain *(Port/airport damage delays relief; risk of running out of food/fuel).*	Develop a **resilient supply strategy**. Pre-identify alternative supply routes like small ports and airstrips and secure agreements with owners/operators of small boats and bush planes to assist. Pre-stock critical supplies like food, water, and fuel in strategic locations. Coordinate with Coast Guard/Army Corps for priority harbor clearance.	DHS&EM; Boroughs; National Guard; Coast Guard District; Tribal governments.	Plan finalized within 8 months; some supplies pre-positioned before spring 2026.
Small communities lack full-time emergency management personnel and sufficient plans.	Launch an **EM support initiative**. Assign regional emergency managers to mentor small communities, help them develop basic emergency operation plans including disability considerations, and participate in regional drills. Possibly fund part-time EM liaisons in high-risk rural communities.	DHS&EM; Borough governments; Tribal governments.	Begin outreach in 3 months; have at least 5 high-risk small communities with draft plans and trained points-of-contact within 12-15 months.

Limited awareness of disability resources among responders *(Not all agencies know about groups like ADAG or available services to support disabled people).*	Improve **disability integration in planning**. Expand the Alaska Disability Advisory Group membership and ensure its roster and guidance are shared with all local EMs. Hold joint meetings or webinars so responders know contacts for resources to support people with disabilities such as, ASL interpreter network and adaptive equipment suppliers.	SILC; Centers for Independent Living, ADAG, DHS&EM.	Invite new members and distribute ADAG info within 3 months; annual orientation for emergency managers starting this year.
Resource request and information flow confusion *(Some are unclear on how to ask for help or share situational info up the chain)*	Create a **simplified guide and training on disaster resource requests**. Create a one-pager on how to fill ICS 213 RR, who to send it to, and examples. Also set up a regular check-in system such as a daily conference call between local incident commanders and the SEOC during disasters for direct coordination.	DHS&EM Planning/Operations; Local emergency managers	Guide completed and distributed in 6 months; incorporate training in next state emergency management conference or webinar.

Need to document and act on lessons learned *(Risk of "reinventing the wheel" each disaster if lessons not retained)*.	Implement a **formal After-Action Review process**. After any major incident or exercise, responsible agencies will produce an AAR and Improvement Plan within 90 days. The State will maintain a repository and convene a debrief virtually, in-person, or hybrid to discuss findings statewide. Require tracking of improvement actions with progress reports at 6 and 12 months.	DHS&EM including Planning/Exercise division; All participating agencies; contractors involved (if applicable).	New AAR/IP policy in effect immediately; apply to all incidents and exercises going forward. First progress check (6 months after this AAR) on action items by June 2025.
Long-term housing for displaced survivors (especially accessible housing).	Form a **Housing Task Force** as part of long-term recovery operations that focuses on finding solutions for displaced individuals. Include housing authorities, disability reps, FEMA IA, and case managers. Develop a catalog of accessible temporary housing options such as hotels, motels, FEMA mobile housing units, etc. and funding sources for needed modifications.	DHS&EM, Local emergency managers, Long-Term Recovery Group; State Housing Authority; FEMA; Disability advocates.	Task force activated within days of disaster (in planning now); list of accessible housing resources compiled and ready as annex to recovery plan by next 6 months.

Support for newly disabled survivors and trauma.	Integrate **mental health and disability services** into recovery. Ensure outreach teams (possibly via Public Health or NGOs) contact survivors who sustained serious injuries or mental health trauma. Provide info on resources such as rehabilitation, counseling, disability benefits. Establish peer support groups.	State Dept. of Health (Behavioral Health); Local clinics/hospitals; Centers of Independent Living; VOAD emotional/spiritual care providers.	Plan for outreach in place within 6 months; implement immediately post-disaster (first 1-2 months of recovery).
Policy gaps (e.g., backup power, building codes, etc.)	Advocate for **policy changes**. SILC and partners will draft recommendations for state legislation or local ordinances, such as resources for home backup power systems, mandating universal design, and resiliency codes in rebuilding projects, and funding for community resilience centers. Present these to policymakers using data from this exercise and real events to justify action.	SILC; Centers for Independent Living, The Partnership for Inclusive Disaster Strategies; other advocacy groups; State legislators (as champions).	Develop policy agenda within 12 months; pursue adoption in 2025-2026.

This matrix is intended to be a living document. As actions are completed, they should be noted, and new issues that arise from real events or further exercises should be

added. By systematically addressing each item, Alaska's emergency preparedness and disability inclusion in emergency management will continually improve.

Conclusion and Next Steps

The Alaska Earthquake and Tsunami Response TTX provided an invaluable opportunity to assess current capabilities and identify gaps in a no-risk environment. The exercise achieved its purpose by bringing together a broad coalition of stakeholders to focus on inclusive emergency management. Through candid discussions, participants collectively recognized that while Alaska has strong community spirit, experience with adversity, and some solid plans in place, there are clear areas that need improvement to ensure an optimal response for a catastrophic event like a significant earthquake and tsunami. Key takeaways include the need for better communication interoperability, more robust logistical preparations for remote areas, greater integration of accessibility and disability-related needs/support in all phases of emergency management, and sustained coordination efforts, especially in rural, remote, and frontier communities.

Moving forward, the priority is to turn the lessons learned into tangible improvements. This After-Action Report and Improvement Plan should be widely circulated among all participating agencies and organizations. Each responsible party identified in the Improvement Plan Matrix are tasked with reviewing their assigned actions and developing an internal implementation plan. It is recommended that the Statewide Independent Living Council of Alaska and the State Emergency Management authorities convene a follow-up meeting in approximately 6 months to review progress on the Improvement Plan items. In that meeting, stakeholders can report on what has been accomplished, discuss any barriers, and adjust timelines or strategies as needed. Such follow-up is critical to maintain momentum and accountability and ensures this AAR is not just a document, but a driver of change.

Additionally, the insights from this exercise should be integrated into actual emergency plans and training curricula. For example, local emergency operations plans should be updated to reflect new communication protocols or resource strategies identified. The disability community representatives should be included in those plan update processes. Future training and exercises should incorporate scenarios that test the specific improvements for instance, an exercise where the new ham radio directory is utilized, or a drill that practices evacuating a person with a mobility disability from an upper floor in a multistory building. By practicing improvements, agencies can validate them and ensure they are effective.

Another next step is to continue fostering the relationships built or strengthened during this TTX. Many participants noted that connecting with each other gave them new ideas and contacts, for example, a radio station manager realizing the benefit of connecting with the local Center for Independent Living to plan for communications support. Maintaining these connections through periodic coordination calls or joint meetings will enhance real-world response. The involvement of volunteers and community organizations like VOADs should likewise be maintained and strengthened, as they are essential partners in disaster response and recovery.

From an accessibility standpoint, this exercise underscored that disability-focused planning is not a one-time task but an ongoing commitment. Stakeholders should ensure that people with disabilities have a seat at the table in all preparedness efforts. This includes involving people with disabilities in planning committees, investing in assistive technologies for emergency response such as text-to-911 or high-decibel vibrating alarms for Deaf/HOH individuals, and ensuring compliance with the Americans with Disabilities Act (ADA) and related obligations in all emergency programs. The whole community approach means recognizing the diverse needs of Alaskans, whether it's a senior with limited mobility, a person in a remote community, or someone with a service animal, and planning accordingly.

The TTX demonstrated that Alaska's preparedness for an earthquake and tsunami can be significantly improved by implementing the recommendations in this report. Strengthening communication, logistics, disability integration, and coordination will not only benefit people with disabilities but enhance safety and resilience for all Alaskans. Disasters of the scale envisioned are daunting, but by addressing policy, procedural, and training gaps now, agencies and communities will be much better positioned to respond effectively when faced with a real event. The next steps are clear. Take action on the Improvement Plan, monitor progress, and keep the inclusive, collaborative spirit alive. As one participant wisely noted, even a long-term recovery of years begins with the critical early actions – in the same vein, the journey to preparedness is ongoing, and every improvement made now is an investment in lives and livelihoods saved in the future.

The organizers and facilitators of this exercise extend their gratitude to all participants for their engagement and honest feedback. This AAR/IP will serve as a guiding document moving forward. By working together on the identified improvements, Alaska can lead the way in demonstrating how inclusive planning and community partnerships build sustainable resilience.