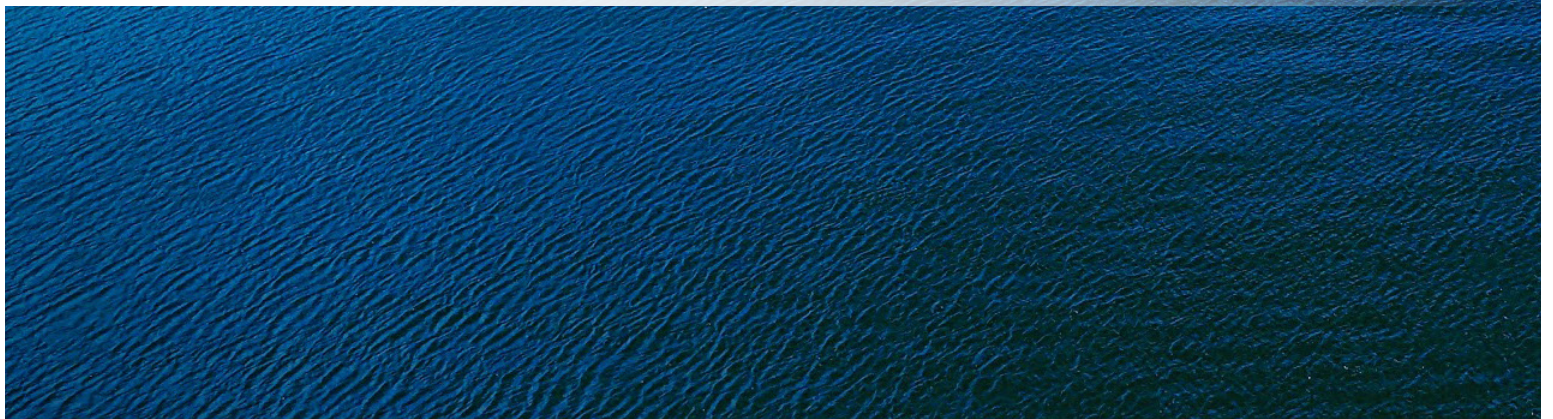




HCR 40/HR 44 (2023)

**TASK FORCE TO ADDRESS KEY FINDINGS VALIDATED BY THE 2022
RESILIENCY ASSESSMENT REPORT OF THE HAWAII MARITIME
TRANSPORTATION REGIONAL RESILIENCY ASSESSMENT PROGRAM
PROJECT AND PLAN RESILIENCY ENHANCEMENTS**

FINAL REPORT | DECEMBER 2024



PREFACE

The Hawai'i Maritime Transportation Regional Resiliency Assessment Program Project (RRAP Project) is well-intentioned with the goal of better preparing for, responding to, and recovering from a catastrophic incident affecting the state's maritime transportation system. There is no dispute around the criticality of the Port of Honolulu as the hub of the hub-and-spoke system, or the anticipated widespread impact of a disruption to cargo operations in this port. The dispute and disagreement around the RRAP Project findings are the "validated" options for the state should the Port of Honolulu become inoperable. The task force found the proposed options of an alternate port and a reverse hub-and-spoke concept to be flawed, infeasible, and problematic.

It is unfortunate that the RRAP Project culminated in key findings that are so narrow and disregard the reality of Hawai'i's maritime transportation system. Neither the six neighbor island ports on the system that handle container cargo nor Pearl Harbor are equipped to serve as an alternate port; there is insufficient cargo handling equipment, laydown areas, or labor for a successful operation especially in an emergency. As such, the key findings and any resulting work to address them will not support improving the resilience of Hawai'i's maritime transportation system. Efforts to evaluate these key findings detract from meaningful and valuable work aimed at increasing the resilience of the Port of Honolulu. Increasing port resilience -- the ability to withstand, adapt to, and recover quickly from disruptions -- is paramount.

The task force acknowledges that the state does need robust and well-crafted plans to deliver goods to the state should the Port of Honolulu be inoperable. There are currently no procedures to address critical resource delivery if there are extensive delays in reopening the port. While there are practical and workable options that were not considered in the RRAP Project (for example, a temporary "milk run" or a multi-stop vessel operation to temporarily support cargo delivery to neighbor island ports or to Kalaheo Barbers Point Harbor subject to availability of adequate equipment at the port), additional time and resources (at the level provided for the RRAP Project) are necessary to develop and vet such a plan. Additional input beyond the expertise of this task force is also required; information from entities involved in local food production and distribution, airlift capabilities, utility operations, and general emergency relief must be factored into these plans. The Hawai'i Emergency Management Agency has already engaged a consultant to develop this plan.

In the Preliminary Report (December 2023), see Appendix 1, the task force prepared initial responses to the three key findings and 16 resilience enhancement options given the time allowed between adoption of the resolution and the report deadline and with existing staffing and resources. In continuing the investigation and evaluation of the key findings and resilience enhancement options, the task force found the manpower required to complete the task would be better allocated to undertakings that are sure to advance resilience for the Port of Honolulu.

It is the recommendation of the task force to shift focus away from the RRAP Project key findings and instead devote its collective efforts to the following action items:

- 1. Eliminate and/or mitigate anticipated risks to port infrastructure during an emergency event, with a focus on the Port of Honolulu;**
- 2. Revisit, renew, and exercise agreements for risk mitigation and emergency response;**
- 3. Identify and prepare to engage resources, tools, and solutions ahead of emergency situations; and**
- 4. Identify long-term plans and infrastructure to build resilience across port facilities statewide.**

TASK FORCE RESILIENCY ASSESSMENT: FOUR ACTION ITEMS

Action Item #1: Eliminate and/or mitigate anticipated risks to port infrastructure during an emergency event, with a focus on the Port of Honolulu

The safety and security of our ports are maximized when the number of vessels in port during heavy weather events is limited. Winds and storm surge can cause vessels to break from moorings, collide with piers, wharves, or other vessels, and sink in the port waterways. In emergency preparedness exercises, there are often scenarios in which vessels that do not evacuate cause damage to piers and port infrastructure or otherwise impede restoration of port operations.

There are several derelict and inoperable vessels in the Port of Honolulu that are unable to safely evacuate leading up to a storm. This action aims to prevent damage to port facilities and obstructions in waterways during and following emergency events.

Honolulu serves as the critical center point of the state's hub-and-spoke network of commercial ports. As a significant majority of overseas cargo enters the state at this port, the focus of these actions is Port of Honolulu.

Task 1.1: Removal of derelict and inoperable vessels and structures

There are several derelict and inoperable vessels of varying types and sizes currently in Honolulu Harbor, some of which have been abandoned by owners. For at least three vessels, HDOT is at various stages of the removal process, including but not limited to termination of dispositions for submerged lands and mooring/berth agreements, impoundment, administrative hearings, auctions for sale, solicitations for services to remove and/or dispose of the vessels. For other vessels, HDOT will need to initiate removal procedures.

In some cases, there are structures that are in poor condition that pose a risk to adjacent waterways. For example, there is an aged sodium hydroxide tank on HDOT property at Pier 31. It is a hazard that poses a threat to port operations. In a storm with high winds or strong ocean surges, damage to the tank could result in the spill of 630,000 gallons of this chemical on to the cargo area or into the waterway. The storage tank sits 500 feet from the Kapālama Channel connecting two vessel turning basins in Honolulu Harbor and a spill into the waterway will impede vessel traffic into, out of, and through Honolulu Harbor and associated movement of cargo. Demolition of this tank and relocation of the contents to different location prevents disruptions to the state's supply chain.

Support from port stakeholders is necessary to support the efforts to remove these vessels and structures.

TARGET COMPLETION: Ongoing

LEAD: HDOT

Task 1.2: Restrict port entry to inoperable vessels

In times of emergency, inoperable vessels cannot evacuate ports, increase risk of damage to facilities, and may impede restoration of port operations. To prevent these conditions, inoperable vessels

should not be permitted to enter ports except for in cases of extreme extenuating circumstances and when there are resources available to remove the inoperable vessel within a limited and specified time period. While the existing HDOT administrative rules provide guidelines and requirements for port entry, these regulations must be updated to clarify a restriction against port entry for inoperable vessels.

TARGET COMPLETION: July 1, 2026

LEAD: HDOT

Task 1.3: Increase severity of penalties against vessels for failure to evacuate during an emergency

In times of emergency, it is essential that vessels evacuate the ports when ordered by the harbor master. There have been instances in the recent past when the United States Coast Guard has closed a commercial harbor as part of an emergency response, and persons responsible for a vessel have not followed the harbor master's order to evacuate. While there are broad authorities for evacuations and parameters for penalties available to HDOT, legislation is required to specify the requirements to follow an order to evacuate and to set higher penalties for noncompliance. Draft legislation to be introduced during the 2025 Regular Session of the Hawai'i State Legislature is included in Appendix 2.

TARGET COMPLETION: July 1, 2025

LEAD: HDOT

Action Item #2: Revisit, renew, and exercise agreements for risk mitigation and emergency response

The RRAP Project identified several key agreements are already in place that provide guidance to stakeholders on responses and action sequences following an emergency event. The following agreements were included in the report but are unexercised, expired, or obsolete. In some cases, the conditions that existed when the agreements were established have changed, no longer exist, or are not reliable. To be effective during and after emergencies, these agreements must be regularly revisited, renewed, and exercised. Agreements that are expired and no longer applicable should be documented as such.

Task 2.1: Revisit, renew, and exercise: MEMORANDUM OF UNDERSTANDING BETWEEN UNITED STATES COAST GUARD SECTOR HONOLULU; NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, OFFICE OF COAST SURVEY; STATE OF HAWAII, DEPARTMENT OF TRANSPORTATION; AND UNITED STATES ARMY CORPS OF ENGINEERS REGARDING MARITIME EMERGENCY HARBOR ASSESSMENTS WITHIN FEDERAL WATERWAYS IN THE STATE OF HAWAII (June 2020)

Summary: This MOU addresses improves the efficiency and effectiveness of the assessment of the operational condition of Federal waterways and navigation systems within Hawai'i in the event of an emergency or disaster. Its stated objectives are as follows:

- a. Expedite the restoration and reopening of domestic ports and waterways following an emergency or disaster.*

- b. Assure timely and effective action to provide safe navigation to the maritime community.
- c. Ensure effective communication and coordination between State and Federal agencies.
- d. Identify capabilities, roles and responsibilities of each party for efficient assessment of the operational condition of Federal waterways and navigation systems.
- e. Identify capability gaps and provide redundant capabilities through identification of deployable assets.
- f. Develop procedures and priorities for deployment of resources where assets are required in emergency or disaster events.

Attachment 1 of the MOU (omitted from the RRAP Project Appendix E) identifies assets available to support hydrographic surveys, including sonar capabilities and the owners thereof.

This MOU has proven effective but expired on September 30, 2024.

TARGET COMPLETION: June 30, 2025

LEAD: HDOT

Task 2.2: Revisit and exercise: MEMORANDUM OF UNDERSTANDING BETWEEN COMMANDER, NAVY REGION HAWAII AND SECTOR COMMANDER, U.S. COAST GUARD SECTOR HONOLULU, HAWAII [SUBJECT: MEMORANDUM OF UNDERSTANDING FOR ANCHORAGE OF COMMERCIAL VESSELS IN PEARL HARBOR FOR PRE-HURRICANE SITUATIONS] (July 2018)

Summary: This MOU establishes a protocol for requesting and granting permission for the use of facilities in Joint Base Pearl Harbor-Hickam (JBPHH) to position maritime vessels, construction cranes, mobile cranes for container off-load, passenger launches, and pollution response assets in pre-hurricane conditions. The JBPHH Commander may grant approval to the U.S. Coast Guard Captain of the Port to offer availability of facilities to prioritized assets. There are anchorage positions in East Loch suitable for barges using a four-point moor, up to three nested barges, or a ship using a two-point moor.

To the knowledge of the task force, this MOU may have been used on a single occasion. It has not been exercised in the past five years. The MOU is set to expire in July 2027.

The task force recommends this MOU be revisited to ensure the findings remain valid and anchorages remain available. Upon confirmation, this MOU should be exercised prior to its expiration.

TARGET COMPLETION: 2027

LEAD: HDOT (revisit), HI-EMA (exercise)

Task 2.3: Revisit: MEMORANDUM OF UNDERSTANDING BETWEEN COMMANDER, NAVY REGION HAWAII AND SECTOR COMMANDER, U.S. COAST GUARD SECTOR HONOLULU, HAWAII AND STATE OF HAWAII [SUBJECT: OFFLOADING COMMERCIAL VESSELS AT JOINT BASE PEARL HARBOR-HICKAM DURING EMERGENCY SITUATIONS] (November 2014)

NOTE: This MOU terminated in November 2020. During the Rim of the Pacific (RIMPAC) exercises in 2024, HDOT had the opportunity to collaborate with the U.S. Naval Cooperation and Guidance for Shipping (NCAGS) to evaluate the feasibility of U.S. Navy vessels utilizing berths in Port of Honolulu

and private cargo vessels utilizing Pearl Harbor facilities for the off-load of civilian cargo during times of emergencies. This exchange resulted in an assessment of and determination that Kilo Pier in Pearl Harbor is only suitable for roll-on, roll-off cargo vessel equipped with a specific ramp. The pier is not suitable for laydown or staging of loaded containers. Based on this initial determination coupled with reports that the crane described in the subject agreement has not been maintained or operated, HDOT and HI-EMA have separately engaged with the Navy Region Hawai'i Emergency Manager to memorialize the diminished effectiveness of this MOU. HI-EMA is also taking action to assess and prepare the FEMA-funded crane (cited in the RRAP Project) for removal from JBPHH.

TARGET COMPLETION: 2025

LEAD: HI-EMA

Action Item #3: Identify and prepare to engage resources, tools, and solutions ahead of emergency situations

Past incidents during both emergency and steady-state conditions have highlighted the need for early identification and acquisition of resources required to mitigate risks and quickly restore port operations.

Task 3.1: Acquire additional sonar equipment to support the assessment of waterways

HDOT maintains vessels equipped with sonar scans in each of its districts statewide. This equipment is available for the assessment of the operational condition of port waterways following an emergency to promote the expedient restoration of port operations. In some cases when use of a manned vessel is deemed unsafe, an unmanned device with sonar scan capabilities can be safely deployed to conduct the assessment. When not in use during emergencies, HDOT may use the devices to conduct bathymetric surveys that can inform port planning initiatives.

HDOT has included funding in its biennium budget request for this equipment.

TARGET COMPLETION: December 31, 2025

LEAD: HDOT

Task 3.2: Inventory available equipment on O'ahu to support restoration of port operations

In March 2022, the sailing vessel Christiana sank in the Port of Honolulu main entrance channel blocking all large vessel traffic. The impacted waterway falls under the jurisdiction of the U.S. Army Corps of Engineers, but a response required a three-day lead time. While two inbound container vessels awaited clearance to enter the port, HDOT engaged and mobilized a private marine salvage service provider under an emergency procurement contract to remove the sunken vessel from the channel. A potential days-long interruption was reduced to a four-hour delay.

This incident prompted HDOT to execute an open-ended contract with a service provider with appropriate equipment to remove obstructions and promote quick restoration of port operations. While this is a key first step in building port resilience, a broader inventory of service providers, capabilities, and available equipment on O'ahu will support quick resumption of operations.

In addition to privately-owned assets, Department of Defense assets and support available through subsections of Indo-Pacific Command (INDOPACOM) and Naval Sea Systems Command Supervisor of Salvage and Diving (SupSalv) will be critically important during emergencies. Understanding that the Department of Defense is unable to commit specific capabilities ahead of an emergency event, discussions and exchanges ahead of the emergency to identify state-level capability gaps can facilitate a defense-assisted emergency response.

This task may also include resources and equipment out-of-state that could be deployed during an emergency.

TARGET COMPLETION: 2026

LEAD: HDOT, HI-EMA

Action Item #4: Develop long-term plans that identify infrastructure needs and result in capital improvements to build resilience across port facilities statewide

As used in this report, the term “port resilience” means the ability to withstand, adapt to, and recover quickly from disruptions. Action Items #1, #2, and #3 focus on port resilience in the short-term immediately following an emergency event. The associated tasks are generally operations-oriented. This Action Item focuses on long-term planning around physical engineering improvements at all HDOT port facilities across the state. The identified capital improvements to be designed and constructed will mitigate known and projected hazard risks and improve resilience so ports maintain operational capacity following disaster events. Improvements are determined by site-specific conditions and include raising pier heights, erosion controls, rebuilt bulkheads, installation of sheet piles, and increasing capacity of storm drain infrastructure.

Task 4.1: Develop a Statewide Port Resilience Improvement Plan

The projections for sea level rise and impacts to the state necessitate that HDOT coordinate with partners to build resilience to rising seas by identifying and addressing vulnerabilities of port infrastructure. HDOT initiated a project in 2024 that integrates digital twin technology into port planning and management as a proactive response to these challenges. By creating real-time, virtual replicas of physical port environments, HDOT can simulate various sea level rise scenarios and their impacts on port infrastructure, logistics, and supply chains.

The creation of accurate predictions and visualizations based on current National Oceanic and Atmospheric Administration (NOAA) data on sea level rise will enable informed, data-driven decisions on project prioritization that ensure the future safety and functionality of state piers, wharves, terminals, and roadways around the port facilities. From this digital twin model, HDOT can develop a Statewide Port Resilience Improvement Plan.

TARGET COMPLETION: June 30, 2026

LEAD: HDOT

APPENDIX 1

House Concurrent Resolution 40/House Resolution 44 (2023)

TASK FORCE TO ADDRESS KEY FINDINGS VALIDATED BY THE 2022 RESILIENCY ASSESSMENT REPORT OF THE HAWAII MARITIME TRANSPORTATION REGIONAL RESILIENCY ASSESSMENT PROGRAM PROJECT AND PLAN RESILIENCY ENHANCEMENTS

Preliminary Report – December 2023

SECTION 1 : INTRODUCTION AND BACKGROUND

Hawai'i's isolated island geography underscores the significance of ocean cargo transport as the lifeline and only viable means to serve and support every facet of the local economy, including tourism, construction, national defense, agriculture, and all other industries. An estimated 85% of all goods consumed in Hawaii are imported, and 91% of the imported goods arrive through the commercial harbor system, specifically through Honolulu Harbor. Hawai'i's residents heavily depend on its commercial harbor system and a disruption of ocean transport services and the delay of movement of cargo from the harbor to a final destination will severely impair the state economy.

In normal operations, the commercial harbors operate as a hub-and-spoke system. Honolulu Harbor serves as the hub with all overseas cargo arriving at this critical port. Cargo is then transshipped and delivered by barge to ports on the neighbor islands: Hilo, Kawaihae, Kahului, Kaunapau, Kaunakakai, and Nāwiliwili.

Hawai'i's economy operates on a just-in-time supply chain. There are no large-scale warehouses to store consumer goods between arrival on a cargo vessel and delivery to store shelves. Often, the shipping containers that carry these goods serve as the "warehouse." It is common to see containers on chassis in the parking lots of retail stores. This just-in-time system means service disruptions and loss of efficiency at Hawai'i's ports can greatly impact the daily life of residents and businesses.

The Regional Resiliency Assessment Program (RRAP) is a cooperative assessment of specific critical infrastructure within a designated geographic area and a regional analysis of the surrounding infrastructure that address a range of infrastructure resilience issues that could have regionally and nationally significant consequences. These voluntary, non-regulatory RRAP projects are led by the Cybersecurity and Infrastructure Security Agency (CISA) and are selected each year with input and guidance from federal, state, and local partners. CISA is a federal agency that is the operational lead for federal cybersecurity and is the national coordinator for critical infrastructure security and resilience.

The Hawai'i Emergency Management Agency (HI-EMA) partnered with CISA's RRAP to examine various factors related to the ability of the state's commercial harbor system or Hawai'i Maritime Transportation System (MTS) to sustain operations should Honolulu Harbor become inoperable for an extended period. The project focused on the reliance upon Pearl Harbor as the alternate for Honolulu Harbor and considered the question of whether other ports could serve as an alternate port. The project also examined a reverse hub-and-spoke concept, as well as factors impacting the rapid recovery of Honolulu Harbor.

CISA published the Resiliency Assessment Hawai'i Maritime Transportation RRAP Project in July 2022. The project comprised interviews, site visits, review of stakeholder plans, review of open-source and scholarly literature, and attendance at related workshops, conferences, and exercises.

Task Force Members

House Concurrent Resolution 40/House Resolution 44 (2023) (see Appendix 1) requests the establishment of a two-year task force to address key findings set forth in the Resiliency Assessment Hawai'i Maritime Transportation RRAP Project. The task force members are the Administrator of HI-EMA (James Barros), the Hawai'i Department of Transportation (HDOT) Deputy Director of

Transportation for Harbors (Dre Kalili), and a designee for the Hawai'i Harbors Users Group (HHUG) (Jay Ana).

HI-EMA is part of the State of Hawai'i Department of Defense and is the coordinating agency on emergencies of all kinds between federal and local agencies, including the four county emergency management agencies – Hawai'i County Civil Defense, Maui Emergency Management Agency, City and County of Honolulu Department of Emergency Management, and Kaua'i Emergency Management Agency – and the Federal Emergency Management Agency (FEMA). The agency plans for and responds to both natural and human-caused emergencies. These include emergencies resulting from all hazards, from tsunamis, wildfires, and hurricanes to incidents involving hazardous materials or nuclear power. The agency prepares and implements a statewide Comprehensive Emergency Management Plan, and routinely conducts extensive exercises to test state and county emergency response capabilities. After an incident, HI-EMA conducts damage assessment surveys and advises the Governor on whether to declare an emergency and seek federal relief funds.

HDOT is charged with providing a safe, efficient, accessible, and sustainable inter-modal transportation system that ensures the mobility of people and goods and enhances and/or preserves economic prosperity and the quality of life. Through its Harbors modal operation, it effectively manages and operates all commercial harbors and port facilities suitable for containerized, autos, dry bulk, and liquid bulk cargo. HDOT's commercial port system supports the efficient movement of goods and people (cruise ship passengers) to, from, and between the Hawaiian Islands.

HHUG is a non-profit maritime industry group established in 2005 for the purpose of coordination in identifying, prioritizing, and supporting needed improvements to Hawai'i's commercial port system. Its members include 23 companies that represents a wide range of operations, including container cargo, tugs, barges, cruise ships, harbor pilots, drydocks, and emergency response vessels. HHUG supports HDOT in securing legislative changes and shaping decisions related to financing key infrastructure projects. The group's members are all HDOT tenants and lessees.

SECTION 2: RESILIENCY ASSESSMENT HAWAII' I MARITIME TRANSPORTATION RRAP PROJECT KEY FINDINGS AND TASK FORCE RESPONSE

This preliminary report outlines the task force members' findings and responses to the Resiliency Assessment Hawai'i Maritime Transportation RRAP Project key findings and resiliency enhancement options. The final report of the task force due to the Hawai'i State Legislature no later than December 1, 2024, will include final findings and responses and any supplementary data and information.

The key findings are found on pages 29 through 32 of the project report.

Key Finding #1: The alternate port and reverse hub and spoke concepts lack necessary formalization, documentation, and testing.

Task Force Response: Task force members concur with this key finding, but emphasize that alternate port and reverse hub and spoke are infeasible and problematic. While historically these concepts may have been explored at a high level, formalization, documentation and testing may not have materialized because these concepts simply will not work in Hawai'i's commercial port system.

Honolulu Harbor currently serves as the hub of the hub-and-spoke system, and 100% of all overseas cargos are discharged here. As 66% of the state's population reside on O'ahu, about 70% of in-bound overseas cargo are destined for this island and the balance of the cargo is transshipped to a neighbor island port. A small portion of overseas cargo may be transshipped from Honolulu Harbor to other locations in the Pacific including Guam and American Samoa.

The cargo terminals and port facilities in Honolulu Harbor are equipped to move the entire volume of overseas cargo. Neither the six neighbor island ports on the system that handle cargo nor Pearl Harbor are equipped to serve as alternate hub port; there is insufficient cargo handling equipment, laydown areas, or labor for a successful operation especially in an emergency situation.

Rather than focus on an alternate port, efforts must be concentrated on restoration of Honolulu Harbor and continuity of operations in the hub. Increasing resilience in the hub is paramount.

Resilience Enhancement Option 1.1: HDOT, in conjunction with HI-EMA, should lead the development of formal alternate port and reverse hub and spoke plans. The plans should include input from key federal, state, local, and private sector stakeholders, and testing at regular intervals.

Task Force Response: See response to Key Finding #1.

- 1. Key stakeholder functions and capabilities, priorities, primary and secondary functions during a disaster are broadly outlined in Appendix 2.*
- 2. Capabilities and operations at specific piers are publicly available online at hawaii.portcall.com. In addition, the Port Hawaii Commercial Harbors System Handbook (<https://hidot.hawaii.gov/harbors/library/port-hawaii-handbook/>) includes more detailed information and will be updated upon completion of the Kapālama Container Terminal.*
- 3. Each shipping company, vessel owner, and agent is responsible for determining compatibility with the various port facilities across the system. Pilots are responsible for recommendations on safe vessel operations in the federal and state waterways. Additional information to be provided in the Final Task Force Report in 2024, subject to further investigation and availability of data.*

4. *Each shipping company and terminal operator is responsible for validating capabilities and operations with HDOT personnel for on-harbor laydown areas. Appendix 3 shows a one-mile radius area around each port capable of cargo operation; this is a starting point for identifying options in proximity to the ports for off-harbor laydown areas.*
5. *Requirements for transferring cargo to end users are the responsibility of individual shipping companies and the owners of the cargo. Additional information to be provided in the Final Task Force Report in 2024, subject to further investigation and availability of data.*
6. *HDOT, through its Highways operations, maintains and provides data on the engineering capabilities of roads, bridges, and overhead infrastructure. Additional information to be provided in the Final Task Force Report in 2024, subject to further investigation and availability of data.*
7. *The use of pier facilities at Joint Base Pearl Harbor Hickam (JBPHH) for civilian cargo operations has not been fully evaluated. Security requirements and process, including civilian workforce vetting, foreign vessel access, and tractor trailer fleet access to the base will be determined if the use of JBPHH for civilian cargo operations is deemed a viable option.*
8. *Capacity analysis of both piers and container yards will be provided in the Final Task Force Report in 2024, subject to further investigation and availability of data.*

Resilience Enhancement Option 1.2: Because military readiness is contingent on the efficient functioning of the civilian MTS, Navy Region Hawaii should consider all available suitable Pearl Harbor piers and laydown areas for immediate use in the hours and days following diminished capacity of Port of Honolulu. Use of untasked Pearl Harbor cranes should also be considered to support emergency operations.

Task Force Response: Any follow up activity in response to this REO is outside the purview of the identified task force members. Additional information to be provided in the Final Task Force Report in 2024, subject to further investigation and availability of data.

Resilience Enhancement Option 1.3: HI-EMA, in conjunction with HDOT, should work with the private sector to identify certified crane operators, union contractual agreements, and insurance requirements in support of emergency MTS crane operations. HI-EMA should prepare for emergency crane maintenance and repairs, and associated supply chain sourcing and timelines. Given the remote location of Hawaii, HI-EMA should consider whether “just-in-time” shipping of extra parts for the FEMA-funded mobile crane should be replaced by “just in case” storage of critical maintenance and repair parts, so they are on-hand for an MTS emergency.

Task Force Response: MTS cranes are owned and maintained by individual private companies, and the same companies are responsible for union contract agreements that include crane operators. The task force members defer to these companies to provide additional input on how to mitigate risks associated with emergency crane operations. Additional information to be provided in the Final Task Force Report in 2024, subject to further investigation and availability of data.

Resilience Enhancement Option 1.4: HI-EMA should identify and validate cargo laydown areas near all Hawaii commercial ports, in coordination with the State of Hawai'i Office of Homeland Security (OHS), and statewide GIS data management efforts. Laydown area analysis should ensure sufficient acreage to accommodate large trucks and cargo handling equipment, road clearance and structural capabilities to and from the laydown area, proximity of inundation zones, number of container slots, identification of available electric power, lighting, security requirements, access points, and safety.

Task Force Response: Appendix 3 shows a one-mile radius area around each port capable of cargo operation; this is a starting point for identifying options in proximity to the ports for off-harbor

laydown areas. Additional information to be provided in the Final Task Force Report in 2024, subject to further investigation and availability of data.

Resilience Enhancement Option 1.5: HI-EMA and the FEMA should have protocols to quickly set up lines of accounting for financial commitments in an MTS emergency including establishment of daily rates for MTS response and recovery tasks, intergovernmental charges, MOUs, and pre-negotiated contracts with stevedores, equipment operators, and private sector maritime logistics contractors

Task Force Response: Additional information to be provided in the Final Task Force Report in 2024, subject to further investigation and availability of data.

Resilience Enhancement Option 1.6: HDOT, in conjunction with HI-EMA, should solicit information from tenants, shippers, and government organizations regarding lifeline service requirements for steady-state and emergency operations at Hawai'i ports.

Task Force Response: The Hawai'i Harbors Users Group has assembled a working group specifically to collect lifeline service requirements for steady-state and emergency operations at Hawai'i ports. A similar effort with government organizations will be underway shortly. Additional information to be provided in the Final Task Force Report in 2024, subject to further investigation and availability of data.

Resilience Enhancement Option 1.7: HI-EMA, Hawai'i OHS, FEMA, and U.S. Department of Transportation (USDOT) should coordinate to create Pre-Scripted Mission Assignments (PSMAs) specifically to support an MTS Alternate Port Plan and Reverse Hub and Spoke Concepts.

Task Force Response: Additional information to be provided in the Final Task Force Report in 2024, subject to further investigation and availability of data.

Resilience Enhancement Option 1.8: HI-EMA should coordinate with Department of Defense to identify all available landing areas for beachcraft vehicles, which could be critical for augmenting more traditional port-vessel transloading operations.

Task Force Response: Generally speaking, landing beachcraft vehicles carrying cargo, even in an emergency situation, is unsafe and impractical. The working group will complete an assessment over the next calendar year to identify any suitable landing areas near Port of Honolulu. Additional information to be provided in the Final Task Force Report in 2024, subject to further investigation and availability of data.

Resilience Enhancement Option 1.9: HDOT to identify tractor and chassis inventory in the state through the motor vehicle registry.

Task Force Response: Chassis are registered in the broader category of "Trailers" and the data for this category as of December 2023 is as follows:

County of Hawai'i – 2,679

County of Maui - 887

City and County of Honolulu – 8,385

County of Kaua'i – 602

The task force will work with the Hawai'i Harbors Users Group and owners of the chassis to segregate chassis data from motor vehicle registration data. Additional information to be provided in the Final Task Force Report in 2024, subject to further investigation and availability of data.

Resilience Enhancement Option 1.10: The USCG and MTSRU partners should update plans and decision-related rubrics to account for changing conditions.

Task Force Response: Any follow up activity in response to this REO is outside the purview of the identified task force members. Additional information to be provided in the Final Task Force Report in 2024, subject to further investigation and availability of data.

Resilience Enhancement Option 1.11: Future Alternate Port and Reverse Hub and Spoke plans should include emergency-related alternate mooring configuration details.

Task Force Response: Information to be provided in the Final Task Force Report in 2024, subject to further investigation and availability of data.

Key Finding #2: Detailed security protocols for the alternate port and reverse hub and spoke concepts are not sufficiently included in MOUs or agency plans.

Task Force Response: Information to be provided in the Final Task Force Report in 2024, subject to further investigation and availability of data.

Resilience Enhancement Option 2.1: HI-EMA, HDOT, and Navy Region Hawai'i should ensure emergency MTS plans have detailed security policies, procedures, and screening protocols for stevedores, truck drivers, food service, sanitation workers, and other personnel required for operations.

Task Force Response: The use of pier facilities at Joint Base Pearl Harbor Hickam (JBPHH) for civilian cargo operations has not been fully evaluated. Security requirements and process, including civilian workforce vetting, foreign vessel access, and tractor trailer fleet access to the base will be determined if the use of JBPHH for civilian cargo operations is deemed a viable option. Additional information to be provided in the Final Task Force Report in 2024, subject to further investigation and availability of data.

Resilience Enhancement Option 2.2: The USCG and Navy Region Hawai'i should document the decision mechanisms for whether and which foreign commercial vessels should be allowed to utilize Pearl Harbor. Plans should include details regarding security screening of foreign vessels, personnel, and cargo. Internal DoD plans should be coordinated with HI-EMA for situational awareness and planning considerations.

Task Force Response: The use of pier facilities at Joint Base Pearl Harbor Hickam (JBPHH) for civilian cargo operations has not been fully evaluated. Security requirements and process, including civilian workforce vetting, foreign vessel access, and tractor trailer fleet access to the base will be determined if the use of JBPHH for civilian cargo operations is deemed a viable option. Additional information to be provided in the Final Task Force Report in 2024, subject to further investigation and availability of data.

Key Finding #3: The designation of an alternate port other than Pearl Harbor has not been sufficiently examined.

Task Force Response: See response to Key Finding #1.

In general, the only viable option for an alternate port is one located on the island of O'ahu. As such, Kalaeloa Barbers Point Harbor (KBPH) emerges as the sole candidate alternate port.

KBPH is the secondary commercial port for O'ahu and is the second busiest harbor in the system. This port is suitable to take dry-bulk (e.g., cement, sand, scrap metal, and aggregates), liquid-bulk (e.g., petroleum products, ethanol, and asphalt), and some containerized cargo, and also provides space for vessel maintenance and repair services. Over the last twenty years, bulk cargo volumes

range from 3.5 million to 4.3 million short tons. There are specialized cargo handling facilities like a pneumatic cement pump system, but there are no gantry cranes or crane rails at this facility to support large-scale and efficient container cargo operations. Improved laydown areas are extremely limited.

KBPH features a 92-acre main basin (2,300 feet by 1,800 feet, 38 feet deep), an expansion basin (600 feet by 1,110 feet, 38-feet deep), a 2,700-foot continuous wharf, a 47-acre concrete paved storage yard, and 45,000 square feet of shed space. Port entry is limited to vessels of 738 feet in length or shorter.

Resilience Enhancement Option 3.1: HI-EMA and HDOT should consider undertaking a comprehensive study that considers options beyond Pearl Harbor as an alternate port.

Task Force Response: See response to Key Finding #1.

Resilience Enhancement Option 3.2: In order to provide the best information for assessing another port as a better Alternate Port, planners must have validated off-port laydown areas. Current Neighbor Island harbors do not have enough laydown space on the port footprint to accommodate a higher cargo transfer tempo anticipated to occur in an Alternate Port environment. HI-EMA, in conjunction with HDOT-H, county emergency managers and offsite landowners, should consider options for offsite property that can be used as laydown yards during an emergency.

Task Force Response: See response to Key Finding #1 and Resilience Enhancement Option 1.1. See also Appendix 3.

Resilience Enhancement Option 3.3: The capacity for a port to transfer heavy cargo at one or more piers simultaneously is a key factor in identifying a better Alternate Port. As with all infrastructure, port infrastructure deteriorates over time, therefore, HDOT should factor considerations such as, but not limited to potential commercial harbor Alternate Port candidates into assessments for prioritizing repairs, major capital improvements to port infrastructure, adjacent road infrastructure, and coordination with the private sector regarding material handling equipment required for increased throughput and heavy cargo operations.

Task Force Response: See response to Key Finding #1.

APPENDIX 1

HOUSE OF REPRESENTATIVES
THIRTY-SECOND LEGISLATURE, 2023
STATE OF HAWAII

H.C.R. NO. 40
S.D. 1

**HOUSE CONCURRENT
RESOLUTION**

REQUESTING THAT THE HAWAII EMERGENCY MANAGEMENT AGENCY ESTABLISH
A TWO-YEAR TASK FORCE TO ADDRESS KEY FINDINGS VALIDATED BY
THE 2022 RESILIENCY ASSESSMENT REPORT OF THE HAWAII
MARITIME TRANSPORTATION REGIONAL RESILIENCY ASSESSMENT
PROGRAM PROJECT AND PLAN RESILIENCY ENHANCEMENTS.

1 WHEREAS, the Regional Resiliency Assessment Program (RRAP)
2 of the Cybersecurity and Infrastructure Security Agency is a
3 cooperative assessment and analysis of specific critical
4 infrastructure that identifies a range of infrastructure
5 resilience issues that could have significant regional and
6 national consequences; and
7

8 WHEREAS, the RRAP fosters strong partnerships with federal,
9 state, and local government officials, as well as private sector
10 organizations to ensure the quality of critical infrastructure;
11 and
12

13 WHEREAS, the Hawaii Emergency Management Agency partnered
14 with the Cybersecurity and Infrastructure Security Agency's RRAP
15 with the goal of better preparing for, responding to, and
16 recovering from a catastrophic incident affecting maritime
17 transportation systems; and
18

19 WHEREAS, the Hawaii Emergency Management Agency
20 specifically requested that the project identify best practices
21 and lessons learned from past disruptions of the maritime
22 transportation systems; and
23

24 WHEREAS, Hawaii's maritime transportation system is vital
25 to the State's supply chains and also plays an important role in
26 the supply chains serving American Samoa, Guam, the Commonwealth
27 of the Northern Mariana Islands, and Micronesia; and
28



1 WHEREAS, the port of Honolulu, a crucial part of the
2 maritime transportation system, is critical in providing goods
3 to the residents of the State; and

4
5 WHEREAS, approximately eighty percent of all inbound
6 products transit through the port of Honolulu; and

7
8 WHEREAS, any prolonged interruption of the port's operation
9 could quickly create severe commodity shortages and cascading
10 consequences for the State; and

11
12 WHEREAS, the Hawaii Maritime Transportation RRAP Project
13 (RRAP Project) examined various factors related to the ability
14 of Hawaii's maritime transportation system to sustain operations
15 should the port of Honolulu become inoperable for an extended
16 period of time; and

17
18 WHEREAS, the RRAP Project validated two options for the
19 State if the port of Honolulu were to become inoperable; and

20
21 WHEREAS, the RRAP Project focused on the reliance on Pearl
22 Harbor as the alternate port and considered the question of
23 whether other ports could serve as an alternate for the port of
24 Honolulu; and

25
26 WHEREAS, the RRAP Project also examined a Reverse Hub and
27 Spoke Concept; and

28
29 WHEREAS, the RRAP Project resulted in a Resiliency
30 Assessment report, which included three key findings and
31 resiliency enhancement options for each finding; and

32
33 WHEREAS, the Resiliency Assessment report's three key
34 findings include:

- 35
36 (1) That the alternate port concept and Reverse Hub and
37 Spoke concept lack necessary formalization,
38 documentation, and testing;
39
40 (2) Detailed security protocols for the alternate port
41 concept and Reverse Hub and Spoke concept are not
42 sufficiently included in Memorandums of Understanding
43 or agency plans; and
44



1 (3) That the designation of an alternate port other than
2 Pearl Harbor has not been sufficiently examined; and
3

4 WHEREAS, the Resiliency Assessment report further found
5 that Hawaii will need to update and create a robust alternative
6 port and Reverse Hub and Spoke plan and consider significant
7 investments in resiliency-related infrastructure upgrades across
8 the State; and
9

10 WHEREAS, addressing the key findings in the Resiliency
11 Assessment report and planning resiliency enhancements will
12 better inform the State and its key maritime stakeholders
13 regarding alternate emergency maritime options and assist in the
14 creation of more robust plans; now, therefore,
15

16 BE IT RESOLVED by the House of Representatives of the
17 Thirty-second Legislature of the State of Hawaii, Regular
18 Session of 2023, the Senate concurring, that the Hawaii
19 Emergency Management Agency, in conjunction with the Harbors
20 Division of the Department of Transportation, is requested to
21 establish a two-year task force to address the key findings of
22 the July 2022 Resiliency Assessment report of the Hawaii
23 Maritime Transportation RRAP Project and plan for related
24 resiliency enhancements; and
25

26 BE IT FURTHER RESOLVED that the task force is requested to
27 include but not be limited to:
28

29 (1) The Administrator of the Hawaii Emergency Management
30 Agency, who is requested to serve as the chairperson
31 of the task force;
32

33 (2) The Deputy Director of Transportation, Harbors
34 Division; and
35

36 (3) The Executive Director of the Hawaii Harbors Users
37 Group or their designee; and
38

39 BE IT FURTHER RESOLVED that in addressing or implementing
40 the key findings or resilience enhancement options, the
41 Administrator of the Hawaii Emergency Management Agency is
42 requested to invite other representatives of organizations to
43 participate in the task force, as necessary; and
44



1 BE IT FURTHER RESOLVED that the task force is requested to
2 submit a preliminary report of its findings and recommendations,
3 including any proposed legislation, to the Legislature no later
4 than December 1, 2023; and
5

6 BE IT FURTHER RESOLVED that the task force is requested to
7 submit a final report of its findings and recommendations,
8 including any proposed legislation, to the Legislature no later
9 than December 1, 2024; and
10

11 BE IT FURTHER RESOLVED that certified copies of this
12 Concurrent Resolution be transmitted to the Deputy Director of
13 Transportation, Harbors Division; Administrator of the Hawaii
14 Emergency Management Agency; and Executive Director of the
15 Hawaii Harbors Users Group.



APPENDIX 2

Scenario Matrix: Honolulu Harbor (Preliminary*)

		RESPONSIBLE PARTY						
		HDOT	U.S. Army Corps of Engineers	Matson	Pasha Hawai'i	Young Brothers	Par Hawaii Refining	Other
POTENTIAL DISRUPTION SCENARIO	Harbor Entrance Obstruction	Primary Responsibility (State waterway)	Primary Responsibility (Federal waterway)	Secondary Responsibility (Implement redundancy measures)	Secondary Responsibility (Implement redundancy measures)	Secondary Responsibility (Implement redundancy measures)	Secondary Responsibility (Implement redundancy measures)	Secondary Responsibility (U.S. Coast Guard; inspections for port re-opening)
	Turning Basin Obstruction	Primary Responsibility (State waterway)	Primary Responsibility (Federal waterway)	Secondary Responsibility (Implement redundancy measures)	Secondary Responsibility (Implement redundancy measures)	Secondary Responsibility (Implement redundancy measures)	Secondary Responsibility (Implement redundancy measures)	Secondary Responsibility (U.S. Coast Guard; inspections for port re-opening)
	Channel Obstruction	Primary Responsibility (State waterway)	Primary Responsibility (Federal waterway)	Secondary Responsibility (Implement redundancy measures)	Secondary Responsibility (Implement redundancy measures)	Secondary Responsibility (Implement redundancy measures)	Secondary Responsibility (Implement redundancy measures)	Secondary Responsibility (U.S. Coast Guard; inspections for port re-opening)
	Pier Damage	Primary Responsibility						
	Other Facility Damage (State Property)	Primary Responsibility						
	Power Outage	Secondary Responsibility (Implement redundancy measures)		Secondary Responsibility (Implement redundancy measures)	Secondary Responsibility (Implement redundancy measures)	Secondary Responsibility (Implement redundancy measures)	Secondary Responsibility (Implement redundancy measures)	Primary Responsibility (Utility to restore power)
	Partial Crane Dysfunction/ Failure			Primary Responsibility (Repair cranes; alternate cargo discharge operation)	Primary Responsibility (Repair cranes; alternate cargo discharge operation)			
	Complete Crane Dysfunction/ Failure			Primary Responsibility (Repair cranes; alternate cargo discharge operation)	Primary Responsibility (Repair cranes; alternate cargo discharge operation)			
	Other Cargo Handling Equipment Dysfunction/ Failure			Primary Responsibility (Repair cranes; alternate cargo discharge operation)	Primary Responsibility (Repair cranes; alternate cargo discharge operation)	Primary Responsibility (Repair cranes; alternate cargo discharge operation)	Primary Responsibility (Repair cranes; alternate cargo discharge operation)	

* - Additional detail on areas of responsibility and response actions will be provided in the HCR40/HR44 Final Report in 2024.

APPENDIX 3 – Commercial Ports Capable of Cargo Operations + One-Mile Radius

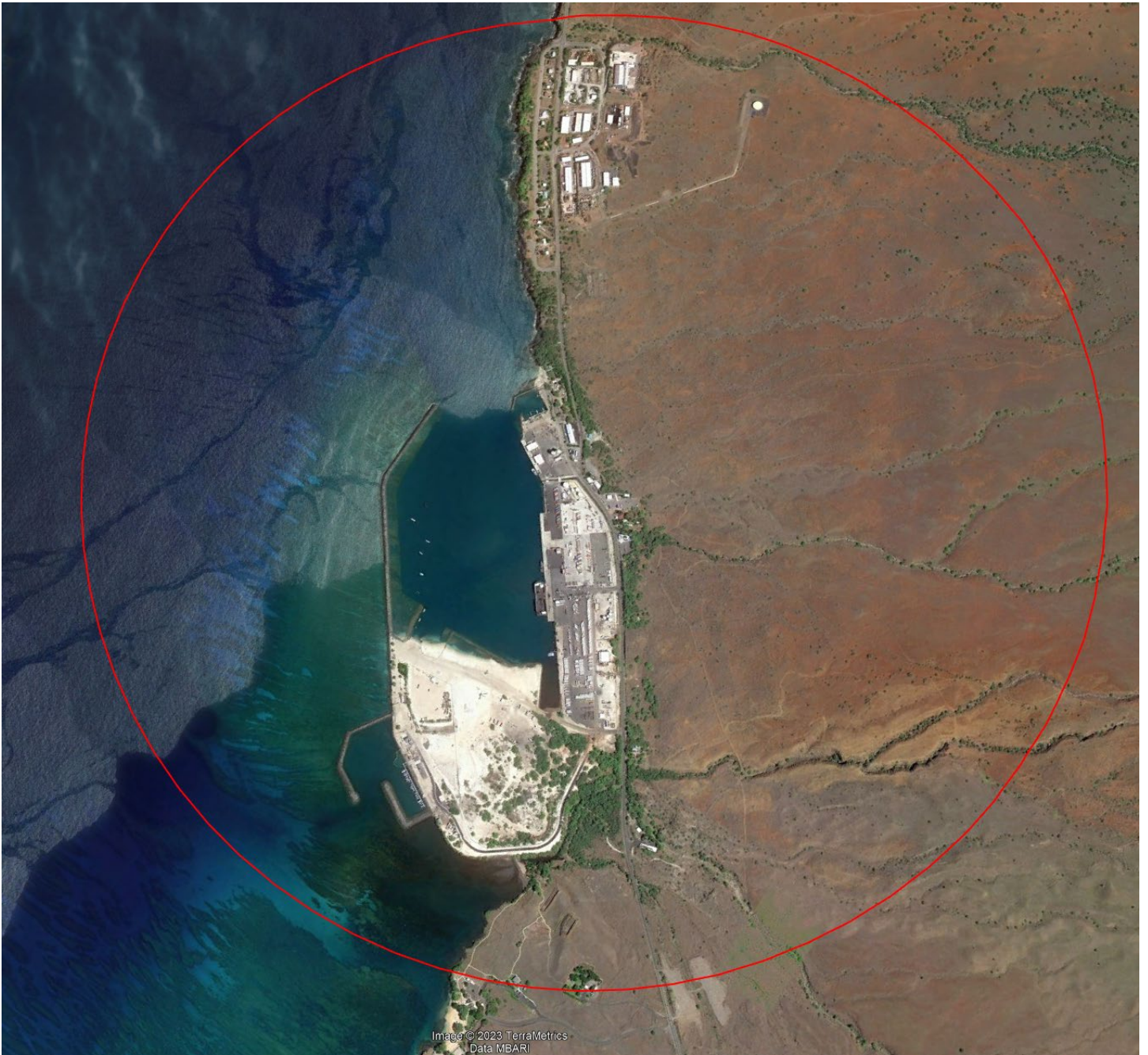
To identify prospective off-harbor laydown areas

PORT OF HILO (HAWAI'I ISLAND)



APPENDIX 3

PORT OF KAWAIHAE (HAWAI'I ISLAND)



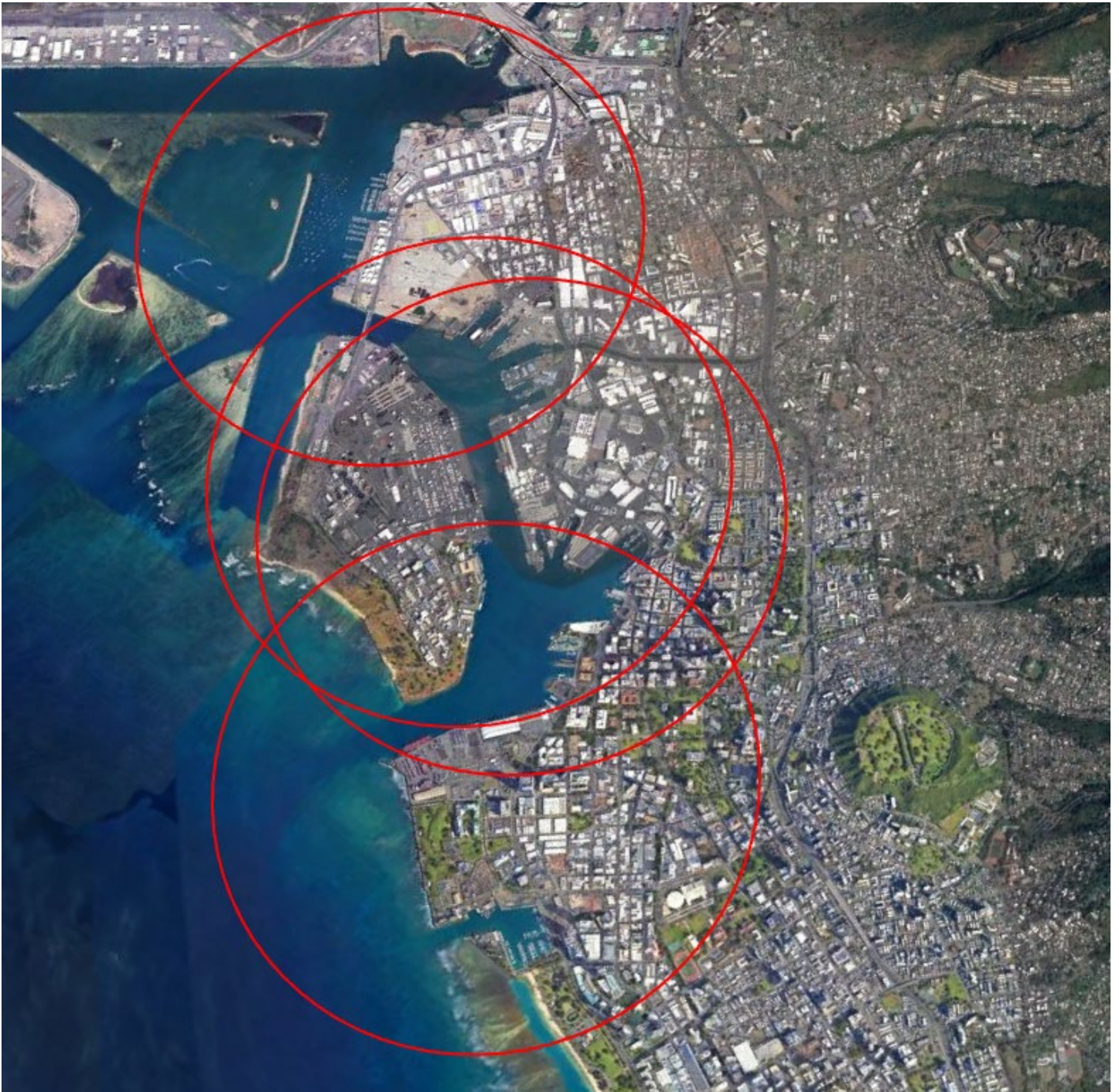
APPENDIX 3

PORT OF KAHULUI (MAUI)



APPENDIX 3

PORT OF HONOLULU (O'AHU)



APPENDIX 3

PORT OF KALAELOA BARBERS POINT (O'AHU)



APPENDIX 3

PORT OF NĀWILIWILI (KAUA'I)



APPENDIX 2

___B. NO. ___

A BILL FOR AN ACT

RELATING TO COMMERCIAL HARBORS.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF HAWAII:

1 SECTION 1. Chapter 266, Hawaii Revised Statutes is amended
2 by adding to Part I a new section to be appropriately designated
3 and to read as follows:

4 "~~§266-~~ Order to evacuate a commercial harbor;
5 penalties. (a) During an emergency, any master or person in
6 charge of a vessel using the commercial waterways and facilities
7 under the jurisdiction of the department of transportation shall
8 comply with and carry into effect any evacuation order from a
9 commercial harbor issued by the harbor master assigned to that
10 commercial harbor.

11 (b) Notwithstanding any law to the contrary, any person,
12 including but not limited to a vessel master, agent, owner, or
13 crew, who violates this section, shall be fined \$10,000 for each
14 day of violation per vessel; provided that in addition to the
15 finest, a court, the department of transportation, or a hearing
16 officer may deprive the offender of the privilege of entering
17 the secured area of a commercial harbor or obtaining an

.B. NO.

1 operating or mooring permit for any vessel in a commercial
2 harbor for a period of one year.

3 (c) When used in this chapter, unless context otherwise
4 requires:

5 "Emergency" has the same meaning as in section 127A-2.

6 "Evacuation" means the immediate and rapid movement of
7 individuals and vessels away from the threat or actual
8 occurrence of any hazard, emergency, or disaster, which includes
9 leaving any commercial harbor under the jurisdiction of the
10 department of transportation.

11 "Harbor master" means any person appointed to that office
12 by the director of transportation and vested with the
13 operational control of a state commercial harbor and includes
14 any "harbor district manager", "commercial harbors manager", and
15 "harbor agent".

16 "Vessel" means all description of watercraft that are used
17 or are capable of being used as a means of transportation on or
18 in the water."

19 SECTION 2. Section 266-19, Hawaii Revised Statutes, is
20 amended by amending subsection (a) to read as follows:

21 **"§266-19 Creation of harbor special fund; disposition of**
22 **harbor special fund.** *[Effect and application. L 1989, c 309,*

.B.NO.

1 §10.] (a) There is created in the treasury of the State the
2 harbor special fund. All moneys received by the department of
3 transportation from the rates, fees, fines, and administrative
4 penalties pursuant to sections 266-17(a)(1), 266-25, 266-28,
5 [~~and~~] 266-30, and 266- shall be paid into the harbor special
6 fund. The harbor special fund and the second separate harbor
7 special fund heretofore created shall be consolidated into the
8 harbor special fund at such time as there are no longer any
9 revenue bonds payable from the second separate harbor special
10 fund. The harbor reserve fund heretofore created is abolished.

11 All moneys derived pursuant to this chapter from harbor
12 properties of the statewide system of harbors shall be paid into
13 the harbor special fund and each fiscal year shall be
14 appropriated, applied, or expended by the department of
15 transportation for the statewide system of harbors for any
16 purpose within the jurisdiction, powers, duties, and functions
17 of the department of transportation related to the statewide
18 system of harbors, including, without limitation, the costs of
19 operation, maintenance, and repair of the statewide system of
20 harbors and reserves therefor, and acquisitions (including real
21 property and interests therein), constructions, additions,
22 expansions, improvements, renewals, replacements,

.B. NO.

1 reconstruction, engineering, investigation, and planning, for
2 the statewide system of harbors, all or any of which in the
3 judgment of the department of transportation are necessary to
4 the performance of its duties or functions."

5 SECTION 3. Statutory material to be repealed is bracketed
6 and stricken. New statutory material is underscored.

7 SECTION 4. This Act shall take effect upon its approval.

8

9

INTRODUCED BY: _____

BY REQUEST

10

____.B. NO.____

Report Title:

DOT; Commercial Harbor; Evacuation Orders; Emergencies

Description:

Specifically requires a master or person in charge of a vessel to follow an order by a harbor master to evacuate a commercial harbor in an emergency. Establishes higher penalties for noncompliance. Amends section 266-19(a) to include fines collected for violations of this section as moneys to be paid into the special harbor fund.

The summary description of legislation appearing on this page is for informational purposes only and is not legislation or evidence of legislative intent.