

**RICHARD T. BISSEN, JR.**  
Mayor

**JOSIAH K. NISHITA**  
Managing Director

**AMOS LONOKAILUA-HEWETT**  
Emergency Management Administrator



**MAUI EMERGENCY  
MANAGEMENT AGENCY**  
COUNTY OF MAUI  
200 SOUTH HIGH STREET  
WAILUKU, MAUI, HAWAII 96793  
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March 11, 2025

Honorable Richard T Bissen, Jr.  
Mayor, County of Maui  
200 South High Street  
Wailuku, HI 96793

APPROVED FOR TRANSMITTAL

A handwritten signature in black ink, appearing to read "Richard T. Bissen, Jr.", written over a horizontal line. To the right of the signature, the date "3/13-25" is written in black ink. Below the signature line, the word "Mayor" is printed in green, and below the date, the word "Date" is printed in green.

For Transmittal to:  
Honorable Tamara Paltin, Chair  
Disaster, Resilience, International Affairs, and Planning Committee  
County of Maui  
Wailuku, HI 96793

**Dear Chair Paltin:**

**SUBJECT: BILL 103 (2024), AMENDING CHAPTER 19.08, MAUI COUNTY CODE, RELATING TO DENSITY WITHIN RESIDENTIAL DISTRICTS (DRIP-2)**

Please see the Maui Emergency Management Agency's response to the Disaster, Resilience, International Affairs, and Planning Committee's letter of February 28, 2025, requesting a response to the following:

**1: In the event of a natural disaster or emergency, does your agency rely on studies or a methodology to determine the number of vehicles on a roadway during an evacuation?**

The Maui Emergency Management Agency (MEMA) has implemented a dual-technology solution to enhance evacuation planning capabilities. The first solution to the system integrated Ladris AI Technology with real-time traffic monitoring to provide a comprehensive situational awareness during hazard events.

Ladris AI leverages Geographic Information Systems (GIS) datasets, organizing location-based information such as building footprints and road networks into layered data structures. This enables precise estimations of residential and vehicular density within designated areas, facilitating accurate projections of evacuation timelines.



Ladris AI also includes a “Live Traffic” feature that aggregates real-time GPS data from in-transit vehicles. This dynamic traffic flow analysis provides up-to-the-minute insights into vehicular movement, allowing for continuous refinement of evacuation strategies and ensuring optimal response times.

Genasys EVAC/PROTECT Technology is a zoned evacuation technology that enables communities, divided into specific zones, to be notified of their specific zone status through an alert system. This system systematically evacuates the zones closest to the impacted area. Zone statuses include “Evacuation Order”, “Evacuation Warning”, “Advisory”, and “Shelter in Place”, depending on how their zone is being impacted by the hazard. By integrating data from Ladris Technology, Genasys can better support evacuation timelines, ensuring a more accurate and efficient process for each zone.

Additionally, The County of Maui, through the Maui Emergency Management Agency, has applied for a \$2,788,564 PROTECT grant from the U.S. Department of Transportation to fund the West Maui Disaster Preparedness Planning Initiative. This project aims to develop a comprehensive wildfire evacuation model for West Maui, particularly focusing on Lahaina, which was devastated by wildfires in August 2023. The initiative will leverage advanced technologies, including AI-derived image pattern analysis and Large Language Model text analysis, to integrate data from natural systems, the built environment, and socio-economic factors, creating a more accurate and effective evacuation model. This model will be instrumental in improving disaster preparedness and community resilience by identifying and reinforcing critical roadway segments, developing clear evacuation routes and zones, and establishing accessible messaging for vulnerable populations. By collaborating with technology vendor Ladris AI, the Maui Emergency Management Agency will gather crucial hazard information, analyze human behavior during evacuations, and develop robust community alert systems. The project will also create continuity plans to ensure sustained response operations, adhering to Federal Emergency Management Agency best practices. Ultimately, this initiative seeks to save lives and protect property by reducing hazard vulnerability through proactive measures, building upon the lessons learned from the 2023 wildfires and informing similar disaster preparedness models nationwide.

## **2. Can our public transit system be an alternative mode of evacuation dedicated to non-drivers, including disabled individuals and the elderly?**

The Maui Emergency Management Agency (MEMA) acknowledges the public transit system’s vital role as a lifeline during evacuations, particularly for non-drivers, including disabled individuals and the elderly. To this end, MEMA is committed to integrating the transit system into comprehensive evacuation plans, establishing pre-determined routes and accessible pickup points. While the Department of Transportation provides essential support, MEMA recognizes the need to enhance current public transit evacuation capabilities. A thorough resource assessment will be conducted to ensure sufficient capacity for vulnerable populations, and we will actively pursue surge capacity partnerships to bolster our response capabilities.

Thank you for your attention to this matter. Should you have any questions, please contact me at ext. 7281.

Me ka ‘Oiaī’o no,

  
**Amos Lonokailua-Hewett**

Emergency Management Administrator



## DRIP Committee

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**From:** Michelle L. Santos <Michelle.Santos@co.maui.hi.us>  
**Sent:** Friday, March 14, 2025 10:23 AM  
**To:** DRIP Committee  
**Cc:** Amos K. Lonokailua-Hewett; Nicole R. Amoral; Cynthia E. Sasada; Erin A. Wade; Josiah K. Nishita; Kelii P. Nahooikaika  
**Subject:** MT#10998 Bill 103  
**Attachments:** MT#10998-DRIP Committee.pdf