



Photo Credit: Dahlquist Photography

Lahaina Fire Comprehensive Report & Timeline

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Research
Institutes





Research Institutes



- UL Research Institutes is a leading independent safety science organization.
- We sense and act on risks to public safety with bold hypotheses and objective investigations.
- Global footprint and a lineage dating back to the formation of Underwriters Laboratories (UL) in 1894 – with fire safety as a catalyst.
- FSRI is dedicated to addressing the world’s unresolved fire safety risks and emerging dangers.
- As part of UL Research Institutes, we are committed to sharing our fire safety insights with everyone to advance UL’s public safety mission of providing safe living and working environments for people everywhere.
- FSRI experts participate in firefighter fatality and near miss investigations by providing fire dynamics and fire suppression analysis.
- 200+ years of collective experience researching, responding to, managing, and recovering from major fire incidents around the globe.

Lahaina Fire Reports

Phase 1 Report

Comprehensive Report & Timeline to describe the progression of the fire that destroyed much of Lahaina Town on August 8, 2023, and August 9, 2023, starting where the origin and cause investigation concludes.

Phase 1 Output

Fact-based report and minute-by-minute timeline of how the fire unfolded from August 8, 14:55 to August 9, 08:30.

Phase 2 Report

Incident Analysis Report to provide detail on conditions influencing the original fire situation, attempts to stop its rapid progression through Lahaina Town, and evacuation efforts.

Phase 2 Output

Analysis of the data, determining how various fire protection systems functioned in this fire incident.

Phase 3 Report

Forward-Looking Report to answer the critical question, “*How do we prevent this from happening again?*”

Phase 3 Output

Best practices that incorporate additional data and recommendations for Hawai'i to act toward prevention.

Data Collection

FSRI captured all available recorded facts relating to preparedness and response of the Lahaina fire incident August 8, 2023 through August 9, 2023.

Written Requests for Information

- Collected radio communication logs, transcripts, recordings, and other preparedness and response time-stamped data. (Information request process was agreed upon by Maui County Department of Corporation Counsel and FSRI.)
- Listened to and transcribed radio transmissions on multiple channels from Maui County 911 calls, Maui Fire Department, and Maui Police Department (MPD), and MPD Dispatch.
- Listened to Hawaiian Electric dispatch communications.

Site Visits

- Toured the exclusion zone from late August 2023 through January 2024.
- Captured high-definition imagery (stills and video) of un-damaged, damaged, and destroyed structures and remaining vegetative fuel components.
- Surveyed the area via helicopter, capturing aerial imagery of all burned and adjacent unburned areas.

Technical Discussions (TDs)

- Engaged in TDs to capture experiences and imagery (stills and video) from individuals present August 8, 2023 through August 9, 2023, including:
 - Local and State Leaders;
 - County Employees (PD, FD, MEMA, Department of Water Supply);
 - Residents; and
 - Hawaiian Electric

Pre-Fire Conditions: Lahaina PM Fire

August 8, 2023



Before the
Lahaina PM Fire

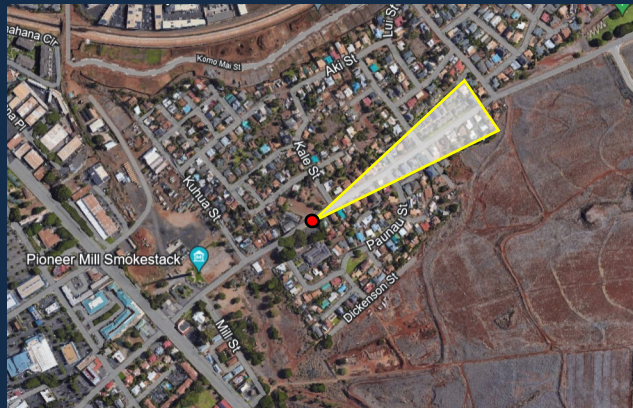


Image captured at 09:07

Report Figure 4.2.3.1 Image capture of civilian video showing westbound traffic on Lahainaluna Road between Kale Street and Pauoa Street at 09:07. (Inset above represents camera operator's approximate visual scope.)



Pre-Fire Conditions: Lahaina PM Fire



Looking west down Lahainaluna Road from Luakini Street.
Source: Google Earth (2019).

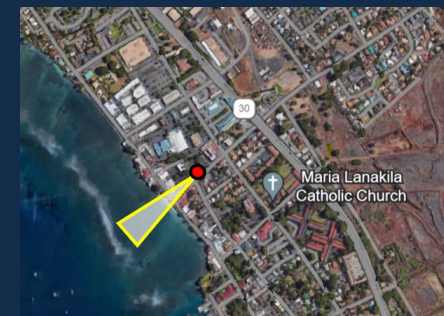


Image captured at 13:46

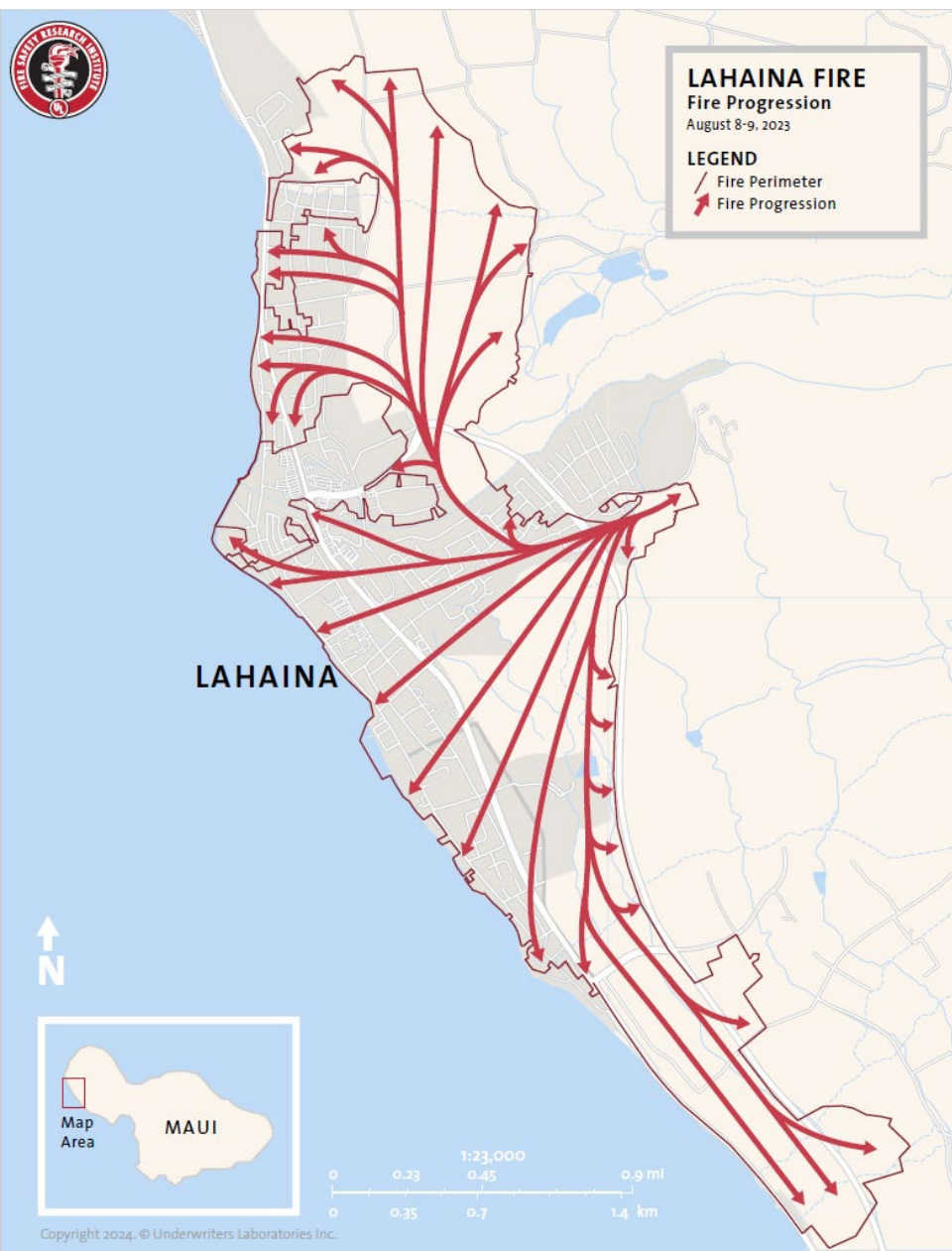
Report Figure 4.2.3.4 August 8, 2023, civilian photo taken at 13:46 showing roof damage, looking west down Lahainaluna Road from Luakini Street. (Inset at right: represents camera operator's approximate visual scope.)



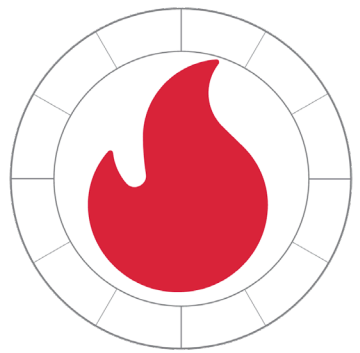
Before the
Lahaina PM Fire



Lahaina PM Fire Progression



Report Figure 4.3.1.1
Comprehensive fire progression map of the greater Lahaina and western Maui areas. Arrows indicate the general direction of fire spread based on the data collected.

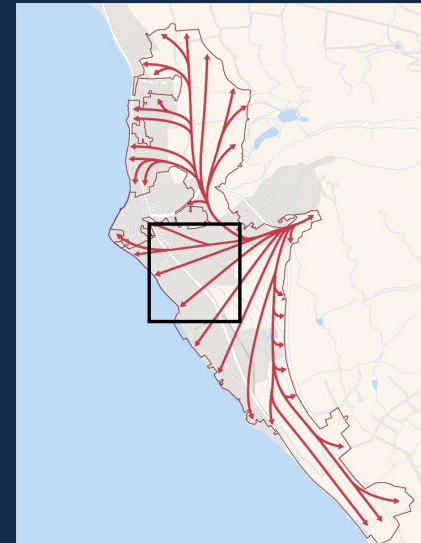
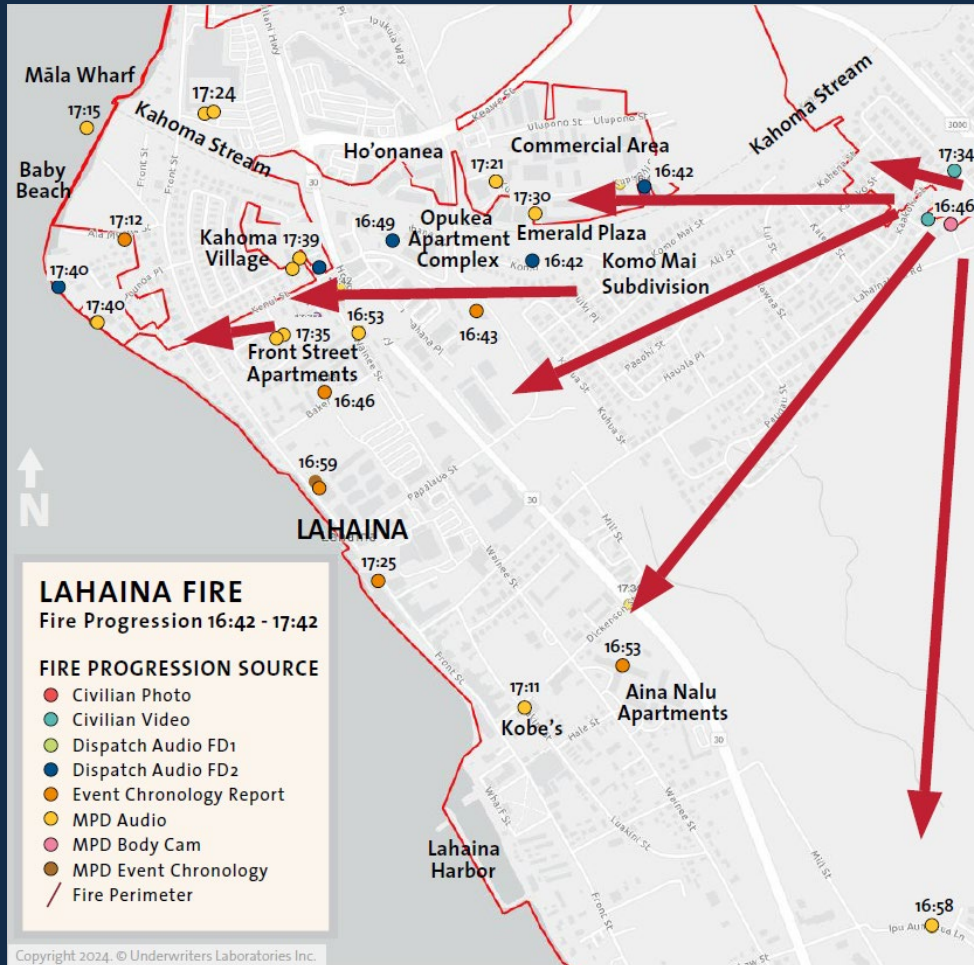


Lahaina PM fire
August 8, 2023 14:55 to
August 9, 2023 08:30

Animation of Report
Figure 4.3.1.2
Fire progression map of western Maui with detailed data from various sources.



Fire Progression



16:42 to 17:42

Report Figure 4.3.1.9 Fire progression map showing particularly fierce fire spread in the Wainee Street area from 16:42 through 17:42. (Inset above: represents the approximate map area within Lahaina.)



After Lahaina PM
Fire Starts

Fire Progression



Image captured at 18:14

Report Figure 4.3.1.14 Image capture from a civilian video of the far west end (makai) of Komo Mai Street (18:14). (Inset at right represents the camera operator's approximate visual scope.)

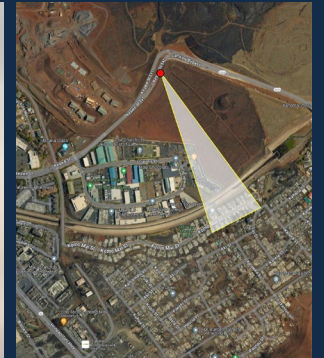


Image captured at 18:14

Report Figure 4.3.1.16 Image capture from a civilian video of the west end (makai) of Komo Mai Street (18:14). (Inset at right represents the camera operator's approximate visual scope.)

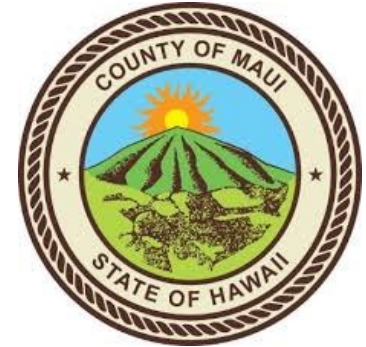
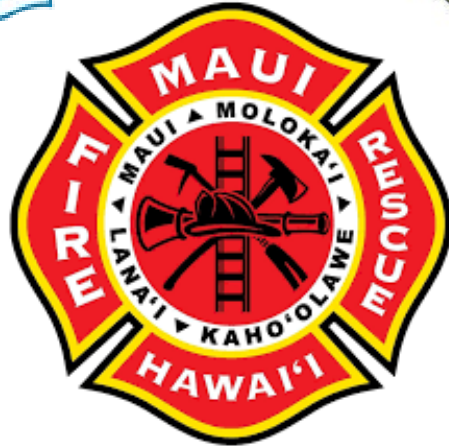


After Lahaina PM
Fire Starts

Initial Emergency Response



COUNTY OF MAUI
DEPARTMENT OF WATER SUPPLY
WATER RESOURCES & PLANNING



**Hawaiian
Electric**

**Private Heavy
Equipment
Contractors**



Download the Lahaina Fire Comprehensive Report & Timeline

<https://ag.hawaii.gov/maui-wildfire-investigation-resources-page/> and fsri.org



Lahaina Fire Report

- 375-page narrative about pre-fire conditions, fire progression and emergency response

Date	Time	Address	Units/ People Involved	Notes	Source	Event Type / Call N
8/8/2023	04:11:00	Honoapi'ilani Highway	4A20	Event Closed	MPD Event Chronology	SFTY (Safety Condition)
8/8/2023	04:11:24		Central 406	406: (?couldn't understand)	MPD Dispatch	
8/8/2023	04:11:40	7XX Ku'ialua St		IN a vehicle trying to get out // but not able to	MPD Event Chronology	FIRE (Fire Report/Brush/VEH/Rubbin)
8/8/2023	04:11:44	XX Ipu Wai Ln, Ka Hale	4A10, 416	Second Unit Assigned 416	MPD Event Chronology	FIRE (Fire Report/Brush/Veh/Rubbin)
8/8/2023	04:12:56		4A20	4A20: How big is the fire off (Haleakala?) Responder: Pretty big. All the way from Olinda	MPD Dispatch	
8/8/2023	04:13:17			103: Is there a report number for the Olinda br Dispatch: No one has pulled a number yet LT. I	MPD Dispatch	
8/8/2023	04:13:41		4A50	Everything appears secure and in tact. Control	MPD Dispatch	
8/8/2023	04:14:47		E3	E3: Met with caller, no signs of smoke or fire. L	MPD Dispatch	
8/8/2023	04:15:10	XX Ipu Wai Ln, Ka Hale	4A10, 416	E3- Met with C1.. No signs of smoke or fire	MPD Event Chronology	FIRE (Fire Report/Brush/Veh/Rubbin)
8/8/2023	04:15:11			Calling out about Highway & Dickinson signal	MPD Dispatch	
8/8/2023	04:15:23	Honoapi'ilani Highway	4A20	Flashing yellow on Highway. Red on Dickerson.	MPD Event Chronology	SFTY (Safety Condition)
8/8/2023	04:16:39		4A10	10-8 UTO for any fires	MPD Dispatch	
8/8/2023	04:16:47	XX Ipu Wai Ln, Ka Hale	4A10, 416	Event Closed	MPD Event Chronology	FIRE (Fire Report/Brush/Veh/Rubbin)
8/8/2023	04:17:06		4A30	Off at the 33	MPD Dispatch	
8/8/2023	04:19:00		Paul Coe Cell Log	808-758-XXXX	MEMA	1 min
8/8/2023	04:19:00		From Alert to HA	MEMA Alert: EVACUATION ORDER on Maui for	Herman Andaya Texts	
8/8/2023	04:19:00			(per Document ID 00015065) Andaya received	MEMA EOC Operations and Staffing Report	
8/8/2023	04:20:00			Flash Report (From Hilo)	HIEMA	COL James Barros & Staff

Lahaina Fire Minute-by-Minute Timeline

- 12,000+ records from every organization represented in the report.