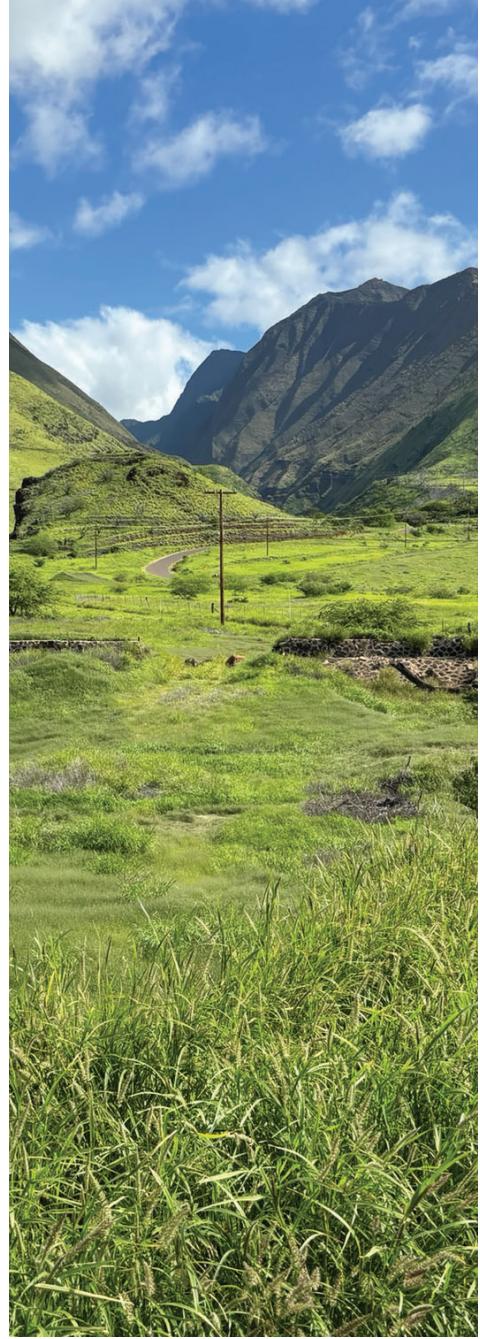
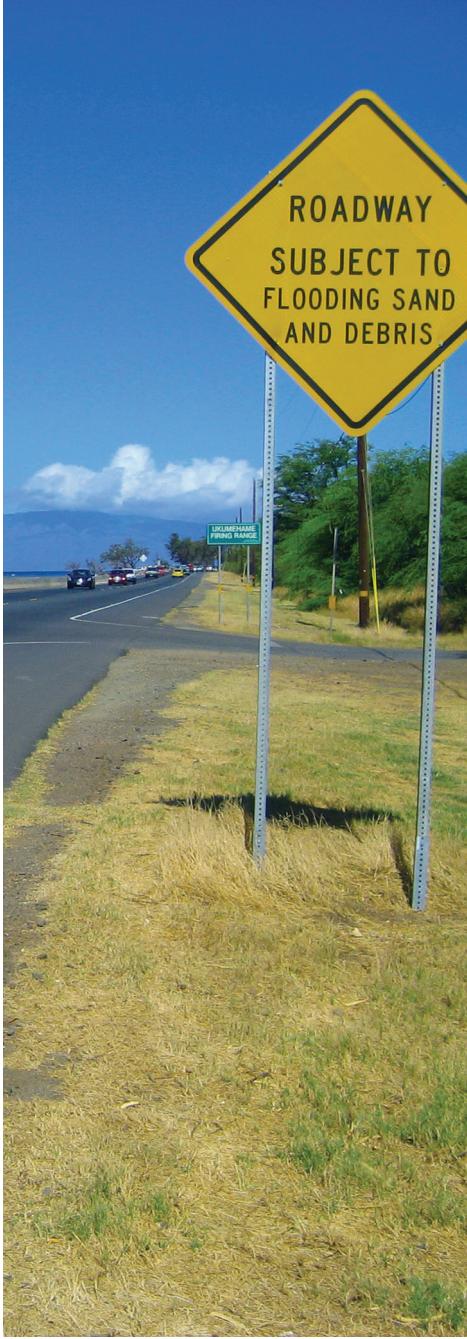


# Honoapi'ilani Highway Improvements Project

## West Maui: Ukumehame to Launiupoko

### Draft Environmental Impact Statement

Submitted Pursuant to 42 U.S.C. 4332(2)(c) and 49 U.S.C. 303  
Chapter 343, Hawaii Revised Statutes (HRS)



US Department of Transportation  
Federal Highway Administration (FHWA)  
Hawaii Department of Transportation (HDOT)

December 2024



Honoapi'ilani Highway  
Improvements

Honoapi'ilani Highway Improvements Project,  
West Maui: Ukumehame to Launiupoko  
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**Submitted by:**

U.S. Department of Transportation, Federal Highway Administration (FHWA)  
and  
Hawai'i Department of Transportation (HDOT)

*In cooperation with:*

National Marine Fisheries Service  
U.S. Army Corps of Engineers  
U.S. Environmental Protection Agency  
U.S. Fish and Wildlife Service  
Hawaii Department of Lands and Natural Resources  
State Historic Preservation Division  
Maui County Department of Planning and Permitting  
Maui Planning Department of Parks and Recreation

**APPROVALS**



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12/20/24

Date

Richelle Takara, Division Administrator  
Federal Highway Administration



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12/19/24

Date

Ed Sniffen, Director  
Hawai'i Department of Transportation

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To the extent that a court may conclude that the Council on Environmental Quality (CEQ) regulations at 40 CFR parts 1500–1508 implementing the National Environmental Policy Act (NEPA) are not judicially enforceable or binding on this agency action, the FHWA has nonetheless elected to follow the version of those regulations in effect when the NEPA analysis for this project began, in addition to the FHWA's procedures/regulations implementing NEPA at 23 CFR part 771, to meet the agency's obligations under NEPA, 42 U.S.C. §§ 4321 et seq. Pursuant to 23 CFR 771.109(a)(1), the provisions of 23 CFR part 771 and the CEQ regulations apply to actions where the Administration exercises sufficient control to condition the permit, project, or other approvals. Additionally, as provided at 23 CFR 771.101, the regulations at 23 CFR part 771 also set forth procedures to comply with 23 U.S.C. 109(h), 128, 138, 139, 325, 326, and 327; 49 U.S.C. 303; 49 U.S.C. 24201; and 5323(q); Public Law 112-141, 126 Stat. 405, section 1301 as applicable; and Public Law 114-94, 129 Stat. 1312, section 1304.



This Draft Environmental Impact Statement (Draft EIS) and Section 4(f) Evaluation has been prepared for the Honoapi'ilani Highway Improvements Project in West Maui, Hawai'i. The Project's primary purpose is to provide a reliable transportation facility in West Maui and improve Honoapi'ilani Highway's resilience by reducing its vulnerability to coastal hazards. The alternatives evaluated in this Draft EIS include the No Build Alternative and four Build Alternatives within two distinct segments in Olowalu and Ukumehame. The potential adverse effects of these alternatives on the natural and human environment have been assessed. Based on the results of the impact assessment, the Draft EIS has identified the Preferred Alternative as a combination of Build Alternative 2 in Olowalu and Build Alternative 1 in Ukumehame.

Comments on this Draft EIS are due by February 24, 2025, and can be sent by regular mail to Ken Tatsuguchi at the above address, via email at [honoapiilanieis@online.wspis.com](mailto:honoapiilanieis@online.wspis.com) and through the project's website at <https://www.honoapiilanihwyimprovements.com/>.

At the conclusion of the environmental process, the FHWA will issue a single Final EIS and Record of Decision document pursuant to 23 U.S.C. 139(n)(2), unless the FHWA determines statutory criteria or practicability considerations preclude issuance of the combined document.

UPC: 111427

HDOT Project No.: RAEM-030-1(59)

FHWA Project No.: 0301059

FHWA-HI-EIS-23-01-D



## FOREWORD

The Honoapi'ilani Highway Improvements Project (the Project) Draft EIS was started well before the devastating 2023 wildfire that destroyed Lāhainā and resulted in significant human loss and suffering as well as difficult economic impacts.

While the fire did not physically damage the existing highway in the project area—or where the proposed new highway alignments could be located within Olowalu and Ukumehame—HDOT and the FHWA understand that all of Maui, and West Maui in particular, continues to struggle in the aftermath of the disaster and that the focus is to regroup, provide residents with housing, and rebuild homes, businesses, and communities.

With this understanding, HDOT believes that continuing to plan the Project is part of the State of Hawai'i's commitment to the larger Lāhainā rebuilding effort and a helpful step forward. A sustainable and resilient transportation system designed in anticipation of climate change and sea level rise would benefit the whole community—this is now more urgent than ever. Because Honoapi'ilani Highway is a vulnerable link in the transportation system that connects West Maui to resources and 'ohana on other parts of the island, the Project supports long-term Lāhainā rebuilding efforts.

At the time of the wildfire, the Draft EIS technical evaluations were largely complete and being reviewed and refined. The goal was to publish this Draft EIS toward the end of 2023. After the wildfire, HDOT and the FHWA reviewed each technical evaluation to acknowledge and identify whether changes in the analyses would be appropriate based on the wildfire's effects.

While there was extensive public participation before the wildfire, HDOT and the FHWA understand that the community's focus has been on rebuilding efforts. To accommodate these shifting priorities, more time was added to the final review and publication schedule for this Draft EIS.

As we persevere in the wake of this terrible wildfire disaster and continue to plan for our future generations, we are reminded of the 'ōlelo no'eau (proverb) of our forebearers:

*He 'a'ali'i kū makani mai au; 'a'ohe makani nāna e kula'i.  
I am a wind-resistant 'a'ali'i shrub; no gale can knock me over.*



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# Abbreviations and Acronyms

ABBREVIATION/ ACRONYM	DEFINITION
AADT	annual average daily traffic
AASHTO	American Association of State Highway and Transportation Officials
ACB	asphalt concrete base
ACHP	Advisory Council on Historic Preservation
ACS	American Community Survey
AIS	Archaeological Inventory Survey
ALISH	Agricultural Lands of Importance to the State of Hawai‘i
ANSI	American National Standard Institute
APE	Area of Potential Effects
AVE	Area of Visual Effect
BFE	base flood elevation
BGEPA	Bald and Golden Eagle Protection Act
BLNR	Board of Land and Natural Resources
BMP	best management practice
BSM	Blackburn’s sphinx moth
BWS	Board of Water Supply
CAAP	Hawai‘i Climate Adaption Action Plan
CAFE	Corporate Average Fuel Economy
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CGG	Coastal Geology Group
CIA	Cultural Impact Assessment
CRESI	Coastal Road Erosion Susceptibility Index
CRC	Cultural Resource Commission
CSH	Cultural Surveys Hawai‘i, Inc.
CSS	Context Sensitive Solutions
CWA	Clean Water Act
DAR	Division of Aquatic Resources
DART	Deep-ocean Assessment and Reporting of Tsunamis
dB	decibel
dBA	A-weighted decibels
DBEDT	Department of Business Economic Development and Tourism
DHHL	Department of Hawaiian Home Lands
DLNR	Department of Land and Natural Resources
DOFAW	Division of Forestry and Wildlife



ABBREVIATION/ ACRONYM	DEFINITION
DPR	Department of Parks and Recreation
EA	Environmental Assessment
EDR	Environmental Data Resources, Inc.
EFH	Essential Fish Habitat
EIS	Environmental Impact Statement (Draft EIS, Final EIS)
EISPN	Environmental Impact Statement Preparation Notice
EJ	environmental justice
ENSO	El Niño–Southern Oscillation
EO	Executive Order
ERP	Environmental Review Program
ESA	Endangered Species Act
ETC	Estimated Time of Completion
°F	degrees Fahrenheit
FAST Act	Fixing America's Surface Transportation Act
FEA	Final Environmental Assessment
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FPPA	Farmland Protection Policy Act
GHG	Greenhouse Gases
GIS	geographic information systems
GPS	Global Positioning System
HAR	Hawai'i Administrative Rules
HCCC	Hawai'i Climate Change Mitigation and Adaptation Commission
HDOA	Hawai'i Department of Agriculture
HDOH	State of Hawai'i Department of Health
HDOT	State of Hawai'i Department of Transportation
HEPA	Hawai'i Environmental Policy Act
HEPA	Hawai'i Revised Statutes, Chapter 343
HRHP	Hawai'i Register of Historic Places
HRS	Hawai'i Revised Statutes
HUI	Hui O Ka Wai Ola
HVO	Hawaiian Volcano Observatory
IBC	International Building Code
IRC	International Residential Code
IIJA	Infrastructure Investment and Jobs Act
IPaC	Information, Planning and Consultation
IPCC	Intergovernmental Panel on Climate Change
KVP	key viewpoints



ABBREVIATION/ ACRONYM	DEFINITION
LCA	Land Commission Award
LEP	Limited English Proficiency
$L_{eq}$	the energy average noise level, in dBA, for a specific period
LOS	Level of Service
LRFI	Literature Review and Field Inspection
MBTA	Migratory Bird Treaty Act
MECO	Maui Electric Company
MEMA	Maui Emergency Management Agency
MHHW	Mean higher high water
MMPO	Maui Metropolitan Planning Organization
mm/year	millimeter per year
MOU	Memorandum of Understanding
mph	miles per hour
MPO	Metropolitan Planning Organization
MSAT	mobile source air toxics
NAAQS	National Ambient Air Quality Standards
NAC	Noise Abatement Criteria
NEPA	National Environmental Policy Act
NGPC	Notice of General Permit Coverage
NHC	National Hurricane Center
NHO	Native Hawaiian Organization
NHOPI	Native Hawaiian or Other Pacific Islander
NHPA	National Historic Preservation Act
NHTSA	National Highway Traffic Safety Administration
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NOI	Notice of Intent to Prepare an Environmental Impact Statement
NOx	Nitrogen Oxides
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NWI	National Wetlands Inventory
OHWM	ordinary high water mark
OPSD	Office of Planning and Sustainable Development
OSTP	Office of Science and Technology Policy
PA	Programmatic Agreement
PASH	Public Access Shoreline Highway
PCC	Portland Cement Concrete



ABBREVIATION/ ACRONYM	DEFINITION
PCB	polychlorinated biphenyl
PDO	Property Damage Only
PGA	peak ground acceleration
PM <sub>2.5</sub>	particulate matter less than 2.5 microns in aerodynamic diameter
PM <sub>10</sub>	particulate matter less than 10 microns in aerodynamic diameter
ppb	parts per billion
ppm	parts per million
Project	Honoapi'ilani Highway Improvements Project
PS&E	Plans, Specifications, and Estimate
PUC	Public Utilities Commission
RCNM	Roadway Construction Noise Model
RCRA	Resource Conservation and Recovery Act
RFP	Request for Proposal
RHA	Rivers and Harbors Act
ROD	Record of Decision
SAAQS	State Ambient Air Quality Standards
<i>Sackett</i>	<i>Sackett v. EPA</i>
SAFE	Safer Affordable Fuel-Efficient
SCHPR	Statewide Coastal Highway Program Report
SDC	seismic design category
SHPD	State Historic Preservation Division
SHPO	State Historic Preservation Officer
SIHP	State Inventory of Historic Places
SLOSH	Sea, Lake, and Overland Surges from Hurricanes
SLR-XA	Sea Level Rise Exposure Area
SMA	Special Management Area
SOEST	School of Ocean and Earth Science and Technology
SOI	Secretary of the Interior
STIP	Statewide Transportation Improvement Program
SWPPP	Storm Water Pollution Prevention Plan
Task Force	Sea Level Rise and Coastal Flood Hazard Scenarios and Tools Interagency Task Force
TAZ	traffic analysis zone
TDM	Transportation Demand Management
TDSR	Temporary Debris Staging and Reduction
TERC	Transportation Environmental Resource Council
TMDL	total maximum daily load
TMK	Tax Map Key
TNM	Traffic Noise Model



ABBREVIATION/ ACRONYM	DEFINITION
TSM	Transportation System Management
TSMO	Transportation System Management and Operations
TWSC	Two-way STOP-control
$\mu\text{g}/\text{m}^3$	micrograms per cubic meter
Uniform Act	Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970
USACE	U.S. Army Corps of Engineers
U.S.C.	United States Code
USCG	U.S. Coast Guard
USDA	U.S. Department of Agriculture
USDOT	U.S. Department of Transportation
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
Viewer	State of Hawai'i Sea Level Rise Viewer
VMT	vehicle miles traveled
WUI	Wildland-Urban Interface



# Hawaiian Terms

TERMS	DEFINITION
'ili	a subdivision or a smaller area of land within an ahupua'a
ahupua'a	A traditional land district that typically extends from the top of the mountains to the sea and includes a watershed
hoa 'āina	Hawaiian native land tenants
ka'ao	myths
kahakō	A macron indicating a long vowel sound in Hawaiian language (ā, ē, ī, ō, ū)
kalo	Taro ( <i>Colocasia esculenta</i> ), a native plant critical to agriculture and for which its cultivation is at the core of Native Hawaiian culture and identity.
kuleana claim	Maka'ainana (native Tenant) Mahele land claim. Carved out of claims already made by the government and chiefs
Koe na Kuleana o Kanaka	Reserving the Rights of Native Tenants
konohiki	ahupua'a managers
Māhele/māhele	The Māhele was a historical event in Hawaiian history that began in 1845 with the establishment of a Board of Commissioners to Quiet Land Titles, also known as the Land Commission; māhele means a share, portion, land division
mauka/makai	inland/seaward, which correspond to generally easterly/westerly directions
Mele	songs and chants
moku	traditional district
mo'olelo	stories and history
nēnē	Hawaiian goose
'okina	Symbol representing the glottal stop in Hawaiian language; used only in front of vowels
'Ōlelo Hawai'i Terminology	The Hawaiian language, 'Ōlelo Hawai'i, is an important source of knowledge and reference in establishing historical context as well as current definitions of location, setting, and lineage. See mauka/makai
pali	cliff, steep hill, or slope; also refers to a specific place of steep topography south of the project area
wahi pana	storied places