Honoapi'ilani Highway Improvements Project West Maui: Ukumehame to Launiupoko

Second Final Environmental Impact Statement

Submitted Pursuant to Chapter 343, Hawaii Revised Statutes (HRS)



Hawaii Department of Transportation (HDOT)

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Honoapiilani Highway Improvements Project, West Maui: Ukumehame to Launiupoko Second Final Environmental Impact Statement

Hawaii Revised Statutes (HRS) Chapter 343

Submitted by:

Hawaii Department of Transportation (HDOT)

In cooperation with:

U.S. Department of Transportation, Federal Highway Administration (FHWA)

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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This Final Environmental Impact Statement (Final EIS) and Final Section 4(f) Determination have been prepared for the Honoapi'ilani Highway Improvements Project (the 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 Preferred Alternative identified in the Draft EIS was based on the assessment of the No Build Alternative and four Build Alternatives within two distinct segments in Olowalu and Ukumehame. The potential effects of these alternatives on the natural and human environment resulted in the identification of the Preferred Alternative as a combination of Build Alternative 2 in Olowalu and Build Alternative 1 in Ukumehame along with additional refinements identified in this Final EIS. As presented in this Final EIS, HDOT has established that the Preferred Alternative is the Selected Alternative for the Project which is reflected in this Final EIS.

UPC: 111427 HDOT Project No.: RAEM-030-1(59) FHWA Project No.: 0301059 FHWA-HI-EIS-23-01-D



FOREWORD

The Hawai'i Department of Transportation (HDOT) has completed this Final Environmental Impact Statement (Final EIS) for the Honoapi'ilani Highway Improvements Project (the Project). The Project's Draft EIS was released on December 20, 2024, starting a public review period that extended to February 24, 2025. Two public hearings were held: the first on January 23, 2025, which was an inperson hearing, and the second on January 28, 2025, which was a virtual public hearing. There were a variety of methods available for individuals to submit comments on the Draft EIS: via email, via online webform, via physical comment form, and verbally at the public hearings. All substantive comments received on the Draft EIS have been summarized and responded to in this Final EIS.

In the Draft EIS, FHWA and HDOT identified the Preferred Alternative. In this Final EIS, HDOT has selected the Preferred Alternative as the "Selected Alternative" for the Project which will be carried forward into the design build process. This determination is based on the impact assessment as presented in the Final EIS including consideration of public input and continued consultation with cooperating and participating agencies. Overall, there were few substantive changes to the impact assessment as presented in the Draft EIS. The entirety of the Draft EIS is available on the project website for the reader as a companion to this Final EIS. For the Final EIS, new or revised text is double-underlined while fully deleted text is shown with a strike-through.

Substantive changes evaluated in this Final EIS are primarily based on design refinements to the Selected Alternative that include the following:

- Adding a shared-use pathway along the makai edge of the right-of-way
- Adding a second signalized intersection at Ehehene Street in Ukumehame
- Using a bridge crossing of the intermittent Awalua Stream rather than a culvert
- Modest shifts to the location or configuration of the alignment to optimize design and to avoid and minimize disturbance of archaeological resources

This Final EIS includes supplemental assessments associated with information not presented in the Draft EIS (including based on public comments on the Draft EIS and continued coordination with consulting agencies). These additional analyses did not result in new or different adverse effects of the Preferred Alternative as defined in the Draft EIS or the Selected Alternative as defined in the Final EIS. The Final EIS also includes the documentation of the Section 106 process with an executed Programmatic Agreement; the final Section 4(f) determination of a *de minimis* effect on the Ukumehame Firing Range and potential expanded historic district; and completion of a Biological Opinion by the U.S. Fish and Wildlife Service (USFWS).



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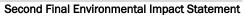




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Abbreviations and Acronyms

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	
ВМР	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	

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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	

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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		
МВТА	Migratory Bird Treaty Act		
MECO	Maui Electric Company		
MEMA	Maui Emergency Management Agency		
MHHW	Mean higher high water		
ММРО	Maui Metropolitan Planning Organization		
mm/year	millimeter per year		
MOU	Memorandum of Understanding		
mph	miles per hour		
МРО	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		

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ABBREVIATION/ ACRONYM	DEFINITION	
PCB	polychlorinated biphenyl	
PDO	Property Damage Only	
PGA	peak ground acceleration	
PM _{2.5}	particulate matter less than 2.5 microns in aerodynamic diameter	
PM ₁₀	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	
Sackett	Sackett v. EPA	
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	

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ABBREVIATION/ ACRONYM	DEFINITION	
TSM	Transportation System Management	
TSMO	Transportation System Management and Operations	
TWSC	Two-way STOP-control	
µg/m³	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	

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Hawaiian Terms

TERMS	DEFINITION	
ʻili	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 (Colocasia escuelenta), 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	
ʻokina	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	

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HAWAII ADMINISTRATIVE RULES, FINAL ENVIRONMENTAL IMPACT STATEMENT REQUIREMENTS CHECKLIST

HAR REF		REQUIREMENT	DEIS SECTION		
	DEIS CONTENTS (HAR 11-200.1-24)				
d	The	draft EIS shall contain a summary that concisely discusses the following:			
	1	Brief description of the action	Summary pages S-8 to S-13		
	2	Significant beneficial and adverse impacts,	Summary pages S-19 to S-22		
	3	Proposed mitigation measures;	Chapter 5, Section 5.5		
	4	Alternatives considered	Summary page S-9 to S-13		
	5	Unresolved issues	Chapter 7		
	6	Compatibility with land use plans and policies, and a list of permits or approvals	Summary Table S-1 (page S-4), Chapter 3.1, Appendix 2		
	7	A list of relevant EAs and EISs considered in the analysis of the preparation of the EIS	N/A in Summary, Chapter 3.20, Section 3.20.2		
е	The	draft EIS shall contain a table of contents	Front Matter, Table of Contents (pages i to vi)		
f	The draft EIS shall contain a separate and distinct section that includes the purpose and need for the proposed action		Chapter 1, Section 1.3; 1.4; 1.5		
g	but	draft EIS shall contain a description of the action that shall include the following information, need not supply extensive detail beyond that needed for evaluation and review of the ronmental impact:			
	1	A detailed map (such as a United States Geological Survey topographic map, Flood Insurance Rate Maps, Floodway Boundary Maps, or state sea level rise exposure area maps, as applicable) and a related regional map	Front Matter, Table of Contents (pages xi to xv) contains a list of FEIS figures		
	2	Objectives of the proposed action	Chapter 1, Section 1.3 to 1.5		
	3	General description of the action's technical, economic, social, cultural, and environmental characteristics	Chapter 1, Section 1.2.2. Chapter 2, Section 2.3.		
	4	Use of state or county funds or lands for the action	Chapter 3.4, Section 3.4.3 and Section 3.4.4		
	5	Phasing and timing of the action	Summary (page S-24), and Chapter 1, Section 1.7.3		

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HAR REF	REQUIREMENT		DEIS SECTION	
	6	Summary technical data, diagrams, and other information necessary to enable an evaluation of potential environmental impact by commenting agencies and the public	Summary pages S-19 to S-22, and Chapter 5, Section 5.4	
	7	Historic perspective	Chapter 1, Section 1.2.2	
h	no a secti impa migh	draft EIS shall describe in a separate and distinct section discussion of the alternative of ction as well as reasonable alternatives that could attain the objectives of the action. The ion shall include a rigorous exploration and objective evaluation of the environmental acts of all such alternative actions. Particular attention shall be given to alternatives that it enhance environmental quality or avoid, reduce, or minimize some or all of the adverse ronmental effects, costs, and risks of the action. Examples of alternatives include		
	1	Alternatives requiring actions of a significantly different nature that would provide similar benefits with different environmental impacts;	Chapter 2, Section 2.4	
	2	Alternatives related to different designs or details of the proposed action that would present different environmental impacts	N/A	
	3	Alternative locations for the proposed action. In each case, the analysis shall be sufficiently detailed to allow the comparative evaluation of the environmental benefits, costs, and risks of the proposed action and each reasonable alternative. For alternatives that were eliminated from detailed study, the section shall contain a brief discussion of the reasons for not studying those alternatives in detail. For any agency actions, the discussion of alternatives shall include, where relevant, those alternatives not within the existing authority of the agency	Chapter 2, Section 2.3	
i	The draft EIS shall include a description of the environmental setting, including a description of the environment in the vicinity of the action, as it exists before commencement of the action, from both a local and regional perspective. Special emphasis shall be placed on environmental resources that are rare or unique to the region and the action site (including natural or humanmade resources of historic, cultural, archaeological, or aesthetic significance); specific reference to related actions, public and private, existent or planned in the region shall also be included for purposes of examining the possible overall cumulative impacts of such actions. Proposing agencies and applicants shall also identify, where appropriate, population and growth characteristics of the affected area, any population and growth assumptions used to justify the proposed action, and any secondary population and growth impacts resulting from the proposed action and its alternatives. The draft EIS shall expressly note the sources of data used to identify, qualify, or evaluate any and all environmental consequences		Environmental Setting – Chapter 1, Section 1.2 Chapter 3, including: Section 3.6 (Historic Resources), Section 3.7 (Cultural Resources), Section 3.8 (Visual and Scenic Character), Section 3.9 (Water Resources), Section 3.10 (Flora and Fauna), Section 3.19 (Socioeconomic), and Section 3.20 (Cumulative Effects)	

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HAR REF	REQUIREMENT	DEIS SECTION
j	The draft EIS shall include a description of the relationship of the proposed action to land use and natural or cultural resource plans, policies, and controls for the affected area. Discussion of how the proposed action may conform or conflict with objectives and specific terms of approved or proposed land use and resource plans, policies, and controls, if any, for the affected area shall be included* Where a conflict or inconsistency exists, the draft EIS shall describe the extent to which the agency or applicant has reconciled its proposed action with the plan, policy, or control, and the reasons why the agency or applicant has decided to proceed, notwithstanding the absence of full reconciliation	Chapter 2, Section 2.6 (State and County Plans), Section 3.1 (Land Use and Zoning), Appendix 2 (Government Plans).
k	The draft EIS shall also contain a list of necessary approvals required for the action from governmental agencies, boards, or commissions or other similar groups having jurisdiction. The status of each identified approval shall also be described	Chapter 1, Section 1.6
I	The draft EIS shall include an analysis of the probable impact of the proposed action on the environment, and impacts of the natural or human environment on the action. This analysis shall include consideration of all phases of the action and consideration of all consequences on the environment, including direct and indirect effects. The interrelationships and cumulative environmental impacts of the proposed action and other related actions shall be discussed in the draft EIS. The draft EIS should recognize that several actions, in particular those that involve the construction of public facilities or structures (e.g., highways, airports, sewer systems, water resource actions, etc.) may well stimulate or induce secondary effects. These secondary effects may be equally important as, or more important than, primary effects, and shall be thoroughly discussed to fully describe the probable impact of the proposed action on the environment. The population and growth impacts of an action shall be estimated if expected to be significant, and an evaluation shall be made of the effects of any possible change in population patterns or growth upon the resource base, including but not limited to land use, water, and public services, of the area in question. Also, if the proposed action constitutes a direct or indirect source of pollution as determined by any governmental agency, necessary data regarding these impacts shall be incorporated into the EIS.	Chapter 3, Environmental Consequences, Construction Effects, and Indirect Effects under each topic: 3.1.4; 3.1.5; 3.1.6; 3.2.3; 3.2.4; 3.2.5; 3.3.4; 3.3.5; 3.3.6; 3.4.4; 3.4.5; 3.4.6; 3.5.4; 3.5.5; 3.5.6; 3.6.4; 3.6.5; 3.6.6; 3.7.5; 3.8.4; 3.8.5; 3.8.6; 3.9.4; 3.9.6; 3.9.7; 3.10.6; 3.10.7; 3.10.8; 3.11.4; 3.11.5; 3.11.6; 3.12.3; 3.12.5; 3.12.6; 3.13.4; 3.13.5; 3.13.6; 3.14.4; 3.14.5; 3.14.6; 3.15.4; 3.15.5; 3.15.6; 3.16.4; 3.16.5; 3.16.6; 3.17.4; 3.17.5; 3.17.6; 3.18.5; 3.18.6; 3.18.7; 3.19.4 Cumulative Effects – Section 3.20
m	The draft EIS shall include in a separate and distinct section a description of the relationship between local short-term uses of humanity's environment and the maintenance and enhancement of long-term productivity. The extent to which the proposed action involves tradeoffs among short-term and long-term gains and losses shall be discussed. The discussion shall include the extent to which the proposed action forecloses future options, narrows the range of beneficial uses of the environment, or poses long-term risks to health or safety. In this context, short-term and long-term do not necessarily refer to any fixed time periods, but shall be viewed in terms of the environmentally significant consequences of the proposed action	Chapter 6, Section 6.3

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HAR REF	REQUIREMENT	DEIS SECTION
n	The draft EIS shall include in a separate and distinct section a description of all irreversible and irretrievable commitments of resources that would be involved in the proposed action should it be implemented. Identification of unavoidable impacts and the extent to which the action makes use of non-renewable resources during the phases of the action, or irreversibly curtails the range of potential uses of the environment, shall also be included. The possibility of environmental accidents resulting from any phase of the action shall also be considered.	Chapter 6, Section 6.5
O	The draft EIS shall address all probable adverse environmental effects that cannot be avoided. Any adverse effects such as water or air pollution, urban congestion, threats to public health, or other consequences adverse to environmental goals and guidelines established by environmental response laws, coastal zone management laws, pollution control and abatement laws, and environmental policy including those found in chapters 128D (Environmental Response Law), 205A (Coastal Zone Management), 342B (Air Pollution Control), 342C (Ozone Layer Protection), 342D (Water Pollution), 342E (Nonpoint Source Pollution Management and Control), 342F (Noise Pollution), 342G (Integrated Solid Waste Management), 342H (Solid Waste Recycling), 3421 (Special Wastes Recycling), 342J (Hazardous Waste, including Used Oil), 342L (Underground Storage Tanks), 342P (Asbestos and Lead), and 344 (State Environmental Policy), HRS, and those effects discussed in this section that are adverse and unavoidable under the proposed action must be addressed in the draft EIS. Also, the rationale for proceeding with a proposed action, notwithstanding unavoidable effects, shall be clearly set forth in this section. The draft EIS shall indicate what other interests and considerations of governmental policies are thought to offset the adverse environmental effects of the proposed action. The draft EIS shall also indicate the extent to which these stated countervailing benefits could be realized by following reasonable alternatives to the proposed action that would avoid some or all of the adverse environmental effects	Chapter 7, Section 7.2
p	The draft EIS shall consider mitigation measures proposed to avoid, minimize, rectify, or reduce impacts, including provision for compensation for losses of cultural, community, historical, archaeological, and fish and wildlife resources, including the acquisition of land, waters, and interests therein. Description of any mitigation measures included in the action plan to reduce significant, unavoidable, adverse impacts to insignificant levels, and the basis for considering these levels acceptable shall be included. Where a particular mitigation measure has been chosen from among several alternatives, the measures shall be discussed and reasons given for the choice made. The draft EIS shall include, where possible, specific reference to the timing of each step proposed to be taken in any mitigation process, what performance bonds, if any, may be posted, and what other provisions are proposed to ensure that the mitigation measures will in fact be taken in the event the action is implemented	Chapter 3, sections: 3.1.7; 3.2.6; 3.3.7; 3.4.7; 3.5.7; 3.6.7; 3.7.6; 3.8.7; 3.9.8; 3.10.9; 3.11.7; 3.13.7; 3.15.7; 3.16.7; 3.17.7; 3.18.8. Chapter 5, Section 5.5.

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HAR REF		REQUIREMENT	DEIS SECTION
q	and	draft EIS shall include a separate and distinct section that summarizes unresolved issues contains either a discussion of how such issues will be resolved prior to commencement of action, or what overriding reasons there are for proceeding without resolving the issues	Chapter 7
r	gove draf	draft EIS shall include a separate and distinct section that contains a list identifying all ernmental agencies, other organizations and private individuals consulted in preparing the tEIS, and shall disclose the identity of the persons, firms, or agency preparing the draft EIS, ontract or other authorization	Chapter 9
s	The draft EIS shall include a separate and distinct section that contains		
	1	Reproductions of all written comments submitted during the consultation period required in section 11-200.1-23	Appx 8: Scoping Report, Section 5
	2	Responses to all substantive written comments made during the consultation period required in section 11-200.1-23. Proposing agencies and applicants shall respond in the draft EIS to all substantive written comments in one of two ways, or a combination of both, so long as each substantive comment has clearly received a response	Appx 8: Scoping Report Section 5
	3	For comments that are form letters or petitions, that contain identical or near-identical language, and that raise the same issues on the same topic: (A) The response may be grouped under paragraph (2) (A) with the response to other comments under the same topic and issue with all commenters identified in the distinctly labeled section identifying commenters by topic	Appx 8: Scoping Report Section 5
	4	A summary of any EIS public scoping meetings, including a written general summary of the oral comments made, and a representative sample of any handout provided by the proposing agency or applicant related to the action provided at any EIS public scoping meeting	Appx 8: Scoping Report Section 4
	5	A list of those persons or agencies who were consulted and had no comment in a manner indicating that no comment was provided	Appx 8: Scoping Report, Section 4.1
	6	A representative sample of the consultation request letter	Appx 3.6, Agency Correspondence
	An addendum to a draft EIS shall reference the original draft EIS to which it attaches and comply with all applicable filing, public review, and comment requirements set forth in subchapter 10		

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FEIS CONTENTS HAR 11-200.1-27			
1	The draft EIS prepared in compliance with this subchapter, as revised to incorporate substantive comments received during the review processes in conformity with section 11-200.1-26,	See Foreword for description of FEIS revisions.	
	including reproduction of all comments and responses to substantive written comments;	Reproductions of all submittals are included in Appendix 9	
2	A list of persons, organizations, and public agencies commenting on the draft EIS	See Chapter 9	
3	A list of those persons or agencies who were consulted in preparing the final EIS and those who had no comment shall be included in a manner indicating that no comment was provided	Section 9.2.1	
4	A written general summary of oral comments made at any EIS public scoping meeting	Chapter 9	
5	The text of the final EIS written in a format that allows the reader to easily distinguish changes made to the text of the draft EIS	See Foreword for conventions used in FEIS to indicate changes that have occurred since DEIS.	

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S. Summary

The State of Hawai'i Department of Transportation (HDOT), as the project sponsor and lead agency, in coordination with the Federal Highway Administration (FHWA), the federal lead agency, has prepared this Draft Final Environmental Impact Statement (Draft Final ElS) for the Honoapi'ilani Highway Improvements Project (the Project) in accordance with the requirements of the Council on Environmental Quality's regulations for implementing the procedural provisions of the National Environmental Policy Act (NEPA) and the-Hawaii Environmental Policy Act (HEPA) (HRS Chapter 343). Consistent with HRS 343-5(h), whenever an action is subject to both the National Environmental Policy Act (NEPA) and HRS 343, The State of Hawai'i, Office of Planning and Sustainable Development, Environmental Review Program and State agencies will cooperate with federal agencies as much as possible, although it is noted that separate HEPA and NEPA Final ElS documents have been prepared for the Project based on new federal requirements and existing state requirements. A single Draft ElS has been prepared jointly to satisfy the requirements of both the applicable federal and State of Hawai'i environmental review regulations.

Consistent with the Council on Environmental Quality's regulations for the implementation of NEPA (2022 Phase One revisions to 2020 CEQ regulations, 40 CFR §1502.12), tThis summary provides information regarding the major conclusions and issues considered in the Draft and Final EIS. Specifically, this summary discusses the purpose and need for the Project, the alternatives considered to address the purpose and need, the costs of the proposed improvements, the potential environmental effects, agency coordination, public involvement, and next steps. This summary is presented in a question-and-answer format and includes commonly asked questions. These questions are generally presented in the order in which a discussion of each topic is introduced in this document. This Draft EIS has been prepared in compliance with the Environmental Review Process of 23 U.S.C. 139 and meets the criteria of a "major project" to apply One Federal Decision provisions.

WHAT IS AN EIS?

An EIS is a document required by NEPA and HEPA for projects that are likely to significantly affect the environment. The EIS includes both a Draft EIS which was released for public review and commentary followed by this Final EIS which incorporates a summary and response to comments and any updated information or analysis including identification of the Selected Alternative. An EIS considers the environmental effects of federal and State agency actions—in this case, the action is to approve and fund the Project. The Record of Decision, which is issued by the FHWA based on the NEPA Final EIS, memorializes the findings of the EIS, affirms the Selected Alternative, and delineates the environmental commitments and mitigation measures identified in the assessment.

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What are the process milestones in creating an EIS?

Initiation and Scoping

After early project coordination with HDOT and FHWA, the environmental review process formally starts with first step in the process is publication of the NEPA Notice of Intent (NOI) and the HEPA EIS Preparation Notice, which provides an opportunity for the public and other agencies to review and provide comments on the Project and the federal and local actions necessary for implementation. Pursuant to NEPA regulations in effect at the time, the NOI was published in the Federal Register on November 23, 2022. In accordance with HEPA (HRS 343-5(a)(1) and HRS 343-5(b)), the environmental review process for the Project began with the publication of an EIS Preparation Notice, which was published in the Hawai'i Environmental Review Program's The Environmental Notice on November 24 23, 2022. Three public scoping meetings (one in-person, two virtual) were held in December 2022, and a final Scoping Report was issued in May 2023.

What are the key milestones for an EIS? Preparation and Release of the Draft EIS and Public Comment

An EIS process has three milestones: Based on the information presented during Scoping and input from public or agencies regarding the scope of work, the Draft EIS provides the core of the environmental impact assessment. For this project, the Draft EIS was completed on December 20, 2024, and made available to the public through the website on that date along with publication of the Notice of Availability in the *Federal Register* and *The Environmental Notice* in January 2025. This initiated a 45-day public review period extending to February 24, 2025. Two public hearings were held: an in-person hearing on January 23, 2025, and a virtual public hearing on January 28, 2025.

Preparation of the Final EIS and Completion of the Record of Decision

- All substantive comments received on the Draft EIS are summarized and responded to in the Final EIS. In addition, the Final EIS updates any new information or revised technical analyses based on public comment, updated site conditions, or ongoing consultation with regulatory agencies. Upon completion of the Final EIS, the NEPA lead agency memorializes its findings and decisions through the Record of Decision, For HEPA, the lead agency publishes the Final EIS in The Environmental Notice and the decision document is finalized as part of the Governor's acceptance of the Final EIS. First, when the federal lead agency determines that the environmental document is sufficiently ready for public review and comment, the Draft EIS is published.
- Next, upon completion of the public review period of 45 days, the lead agency will direct the
 preparation of a Final EIS, which provides any refinements to the impact assessment (or to a
 project itself) and responses to substantive public and agency comments on the Draft EIS.
- Finally, the lead agency completes the Record of Decision (ROD), which memorializes the agency's evaluation of environmental considerations and is the basis for agency decision making on actions necessary to implement a project.

Consistent with NEPA regulations, the intent for the Project is to issue the Final EIS and ROD at the same time. For HEPA, HDOT will coordinate completion of the Final EIS and upon its acceptance by the governor, a notice of acceptance will be published in *The Environmental Notice*.

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What are the key dates for this Draft EIS?

The joint Draft EIS public comment period extends to February 24, 2025, to provide a minimum 45 day public review period from both the January 3, 2025, Draft EIS Notice of Availability in the Federal Register and the January 8, 2025, publication in the State of Hawaii's *The Environmental Notice*. Two public hearings are scheduled to allow for one virtual public hearing on January 28, 2025, and one in person public hearing on January 23, 2025.

Project documents, a calendar of hearings, and, presentation materials, and a comment form are available on the Project's website at https://www.honoapiilanihwyimprovements.com/.

WHO IS LEADING THE EIS?

The FHWA is responsible for authorizing federal funds to implement the Project and is therefore identified as the lead federal agency for NEPA. HDOT is the lead State agency and is responsible for administering federal funds for highway improvements in Hawaii. HDOT is also the lead agency coordinating the HEPA review. For the Final EIS, there are separate NEPA and HEPA documents.

WHAT OTHER AGENCIES ARE INVOLVED IN THIS EIS?

Many local, state, and federal agencies participate and provide information and guidance as part of an EIS. For the Project, this includes two various agencies within Maui County (that is, e.g., Planning, and Parks and Recreation), Hawai'i State agencies such as multiple divisions of the Department of Land and Natural Resources and the Department of Health, as well as key federal agencies with roles in the development of the EIS and the necessary permits required by the Project (the U.S. Environmental Protection Agency, the U.S. Army Corps of Engineers, the National Oceanic and Atmospheric Administration, and the U.S. Fish and Wildlife Service). Chapter 8, Public Involvement and Agency Coordination, summarizes this agency coordination and public participation efforts. This outreach from the FHWA and HDOT was guided by the detailed Coordination Plan for Public and Agency Participation (published in November 2022) and was developed in compliance with applicable legislation and policies that guide public involvement in project development.

The roles of agencies involved in project consultation are described in 23 Code of Federal Regulations (CFR) 771 23 United States Code 139 including the roles of lead agencies, cooperating agencies, and participating agencies. According to the Council on Environmental Quality (40 Code of Federal Regulations Part 1508.1(e)), "Cooperating agency" means any Federal State, Tribal, or local agency, other than a lead agency, which that has jurisdiction by law or special expertise with respect to any environmental impact involved in a proposaled and has been designated as a cooperating agency by the lead agency. Project or project alternative A participating agency is a Federal, State, local, or federally recognized Indian Tribal governmental unit regional, or local government agency that has with an interest in the proposed project and has agreed accepted an invitation to be a participating agency to participate in the NEPA/HEPA and scoping processes.

TABLE S-1 identifies the federal, State of Hawai'i, and County of Maui agencies and their roles in implementing the Project. These agencies were have been contacted early in the NEPA process and

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accepted roles as cooperating and participating agencies (<u>except the U.S. Coast Guard which determined there were no bridges with Coast Guard jurisdiction</u>). Please note that the FHWA and HDOT will continue to consult with some agencies regardless of their status as a coordinating or participating agency.

TABLE S-1. Anticipated Permits and Approvals and Cooperating Agencies

PERMIT/APPROVAL	ISSUING/APPROVING AGENCY	
FEDERAL		
National Environmental Policy Act	Federal Highway Administration (FHWA)	
Department of Army Permit, Clean Water Act, Section 404	U.S. Army Corps of Engineers (USACE)	
Department of Transportation Act of 1966, Section 4(f) Evaluation	Federal Highway Administration FHWA	
Endangered Species Act, Section 7 consultation	U.S. Fish and Wildlife Service; National Oceanic and Atmospheric Administration, National Marine Fisheries Service	
Farmland and Conversion Impact Rating, pursuant to the Farmland Protection Policy Act	U.S. Department of Agriculture, Natural Resources Conservation Service	
Magnuson-Stevens Fishery Conservation and Management Act, Essential Fish Habitat coordination	National Oceanic and Atmospheric Administration, National Marine Fisheries Service	
National Historic Preservation Act Section 106 consultation	Advisory Council on Historic Preservation, State Historic Preservation Officer (SHPO)	
Section 309 of the Clean Air Act	U.S. Environmental Protection Agency (USEPA)	
Rivers and Harbors Act Section 10 Impacts to Navigable Waters (if applicable specific to tidal water influence)	U.S. Army Corps of Engineers USACE	
U.S. Coast Guard Bridge Permit Coordination	U.S. Coast Guard (USCG)	
Flood Map Change Request (if no-rise condition cannot be achieved)	Federal Emergency Management Agency (FEMA), County of Maui Emergency Management Agency	
STATE OF HAWAI'I		
Hawai'i Revised Statutes (HRS) Chapter 343, environmental review compliance	Governor, State of Hawai'i	
Coastal Zone Management Act Consistency Determination	Department of Business, Economic Development and Tourism, Office of Planning and Sustainable Development, Coastal Zone Management Program (DBEDT-OPSD, CZM)	
Clean Water Act, Section 401, Water Quality Certification	Department of Health (HDOH), Clean Water Branch	
Clean Water Act, Section 402, National Pollutant Discharge Elimination System Permit	HDOH, Clean Water Branch	
HRS Chapter 6E-8, State Historic Preservation review	Department of Land and Natural Resources (DLNR), State Historic Preservation Division (SHPD)	
HRS Chapter 195D, Conservation of Aquatic Life, Wildlife, and Land Plants	DLNR, Division of Forestry and Wildlife and Division of Aquatic Resources	
Stream Channel Alteration Permit	DLNR, Commission on Water Resource Management (CWRM)	

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PERMIT/APPROVAL	ISSUING/APPROVING AGENCY	
Conservation District Use Permit	DLNR, Office of Conservation and Coastal Lands (OCCL)	
Americans with Disabilities Act Accessibility Guidelines	HDOH, Disability and Communication Access Board (DCAB)	
Community Noise Permit/Community Noise Variance	HDOH, Indoor and Radiological Health Branch	
COUNTY OF MAUI		
Special Management Area Permit (modification for Olowalu subdivision existing permit; new permit for highway construction)	County of Maui Planning Department	
Building and Grading Permits	County of Maui Planning Department	
Maui County Ordinance 5421 Compliance (applicability to be determined in final design by design-build contractor and HDOT ROW in coordination with Maui County)	Maui County Council	
Flood Map Change Request (if no-rise condition cannot be achieved)	County of Maui Emergency Management Agency, FEMA	

WHERE IS THE PROJECT AREA?

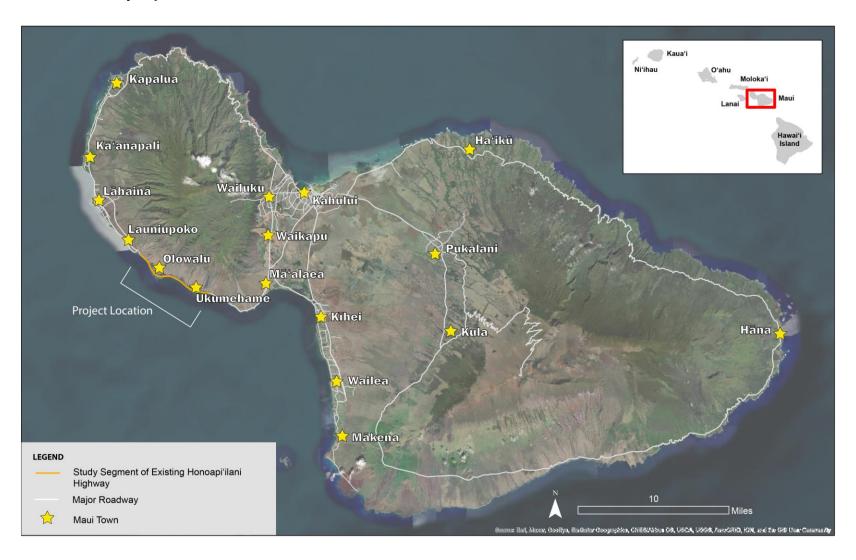
As shown in FIGURE S-1, the Project is located in West Maui south of Lāhainā and generally within the ahupua'a of Ukumehame and Olowalu. FIGURE S-2 provides a closer look at the project area between milepost 11 and milepost 17 on the existing Honoapi'ilani Highway, which is from the point where the highway connects with the Pali portion of the existing highway towards Central Maui and where it reconnects with the existing Lāhainā Bypass to the north.

The proposed southern terminus of the Project at milepost 11 is in Ukumehame at the Pali connection and within the vicinity of Pāpalaua Wayside Park. The northern terminus of the Project is at milepost 17 in Launiupoko, where Honoapi'ilani Highway intersects the southern terminus of Lāhainā Bypass. FIGURE S 3 shows the approximately 6 mile long and 0.75 mile wide project area encompassing all of the Build Alternatives identified in FIGURE S 4.

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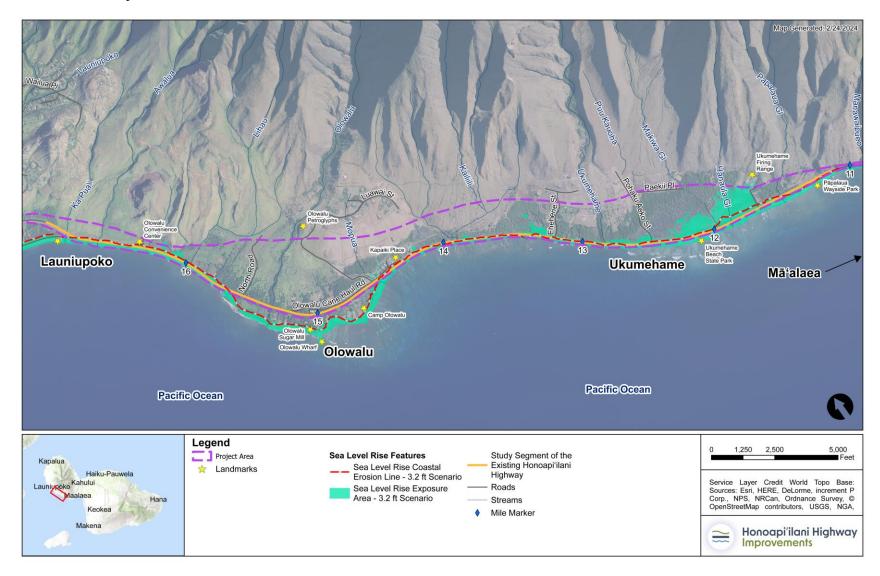
FIGURE S-1. Vicinity Map



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FIGURE S-2. Project Area





WHY IS THIS PROJECT IMPORTANT?

Honoapi'ilani Highway is the primary transportation route for people and goods between West Maui and the rest of the island. As part of Maui's Belt Road system, Honoapi'ilani Highway is a two-lane principal arterial highway that provides the main access between communities along Maui's west coast and the rest of the island. The highway connects West Maui to transportation hubs such as Kahului Airport and Kahului Harbor, hospital and medical services, and goods and services not readily available in West Maui. While its population is only about 15% of the island's total population, West Maui is the second largest employment center. West Maui is a hub of tourism and many workers in the tourist industry travel from outside of West Maui. As the main access to this part of the island, roadway closures and delays carry severe consequences to West Maui's economy and residents.

Over the past 10 years, Honoapi'ilani Highway has been repaired three times after storm and high-wave events undermined pavement sections and overtopped the highway, making the roadway impassable. These projects are short-term fixes because they address only the most severe locations where Honoapi'ilani Highway is already undermined. The need for the Project is directly tied with climate change and sea level rise and the harm it is already causing to the existing highway. A comprehensive model of predicted change developed by the Hawai'i Climate Change Mitigation and Adaptation Commission, the Sea Level Rise Exposure Area (SLR-XA) confirms that road disruptions and emergency repairs will increase over time as a result of more frequent and severe flooding. The SLR-XA is a comprehensive model of the effects of sea level rise including passive flooding, coastal erosions, and high-wave flooding.

As presented in more detail in Chapters 1 and 2 of this Draft Final EIS, HDOT commissioned the Statewide Coastal Highway Program Report in 2019. The report utilized a scientifically rigorous methodology to assess and rank the susceptibility of Hawai'i's coastal roads to erosion and structural degradation caused by multiple ocean hazards (for example, waves, currents, tides, and sea level rise). The report evaluated over 300 individual coastal highway segments statewide that are threatened by coastal hazards and climate change and then prioritized these segments using a new ranking system called the Coastal Road Erosion Susceptibility Index. The report ranked a segment of Honoapi'ilani Highway in Olowalu that is within the project area as second in priority statewide and recommended hardening or relocating the segment. Ukumehame is ranked 11th in priority with a recommendation to elevate or relocate this segment of Honoapi'ilani Highway. The HDOT Hawaii Highways Climate Adaptation Action Plan: Exposure Assessments (2021) build on the Statewide Coastal Highway Program Report and further confirms the vulnerability of this segment of highway.

WHAT IS THE PURPOSE AND NEED OF THE PROJECT?

The Purpose and Need Statement establishes why a public agency is proposing a project and serves as the primary criteria in the alternatives screening process. In other words, project alternatives (that is, different approaches to designing and building a proposed project) are screened based on whether they align with the Purpose and Need Statement. As detailed in Chapter 1, Introduction, Purpose and Need, the Project's purpose is to provide a reliable transportation facility in West Maui that can serve the community with increased reliability and safety to withstand coastal hazards.

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Specifically, the Project is intended to address existing coastal erosion and flooding, as well as future coastal erosion and flooding caused by anticipated sea level rise. Much of existing Honoapi'ilani Highway in the project area (51% in Olowalu and 73% in Ukumehame) is within the projected 3.2-foot SLR-XA as defined by the Hawai'i Climate Change Mitigation and Adaptation Commission and the Hawai'i Department of Land and Natural Resources.

In short, the primary purpose of the Project is to reduce the highway's exposure to the SLR-XA, where feasible. Because there is no other route to central Maui, road closures, and even slowing traffic along this stretch can have significant effects on the movement of people and freight. Strengthening and reinforcing the highway's reliability would improve the efficiency of daily travel demands important not only to Maui residents, businesses, and visitors, but also to critical emergency response services as it would provide a more reliable evacuation route from wildfires and other disaster situations.

Two secondary objectives support the overall purpose and need for the Project:

- Provide regional transportation system linkages that support safe movement of people and goods
- Conform with regional land use and transportation plans

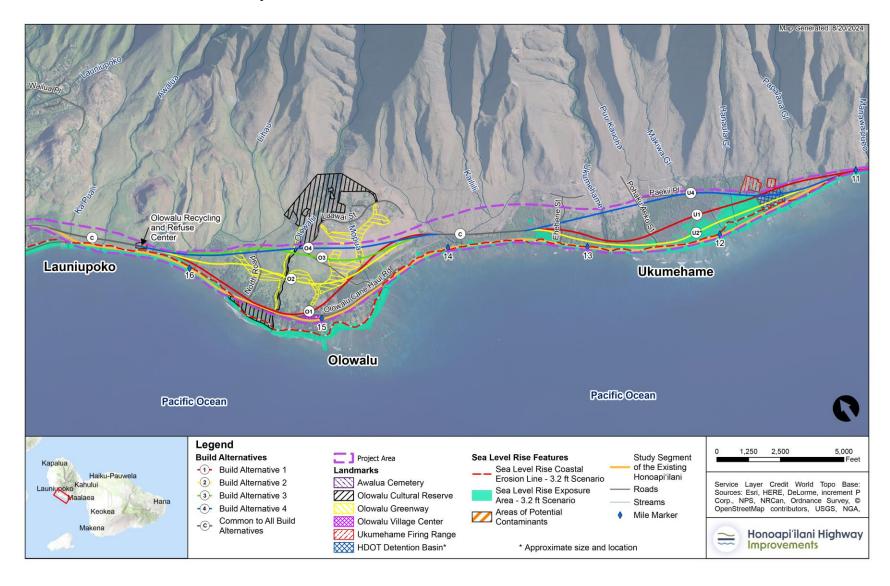
WHAT OPTIONS OR ALTERNATIVES WERE EVALUATED?

Federal and State environmental laws (that is, NEPA and HEPA) require the evaluation of reasonable build alternatives. As summarized in the <u>Scoping Report</u> issued in May 2023, the Draft EIS has considered a No Build Alternative as well as four Build Alternatives. The Build Alternatives are essentially different ways of routing the new highway alignments within the project area and were originally developed and refined based on prior planning studies by both the State of Hawai'i and Maui County (most notably the 2005 Maui County *Pali to Puamana Parkway Master Plan*) as well as early engagement with the community. Before the Draft EIS was started, the planning process identified additional alternatives and options to enhance the performance of the existing transportation network. But these alternatives were not considered further because they did not meet the Project's purpose and need.

Makai (toward the sea) and mauka (toward the mountains), Hawaiian terms that are typically used to define geographic orientation, are used extensively to define and describe conditions in this Draft Final EIS. As described with more detail in Chapter 2, Alternatives, and as shown in FIGURE S-3, the Build Alternatives include highway alignments that reflect variations to provide makai, middle, and mauka options in order to evaluate the potential positive and negative environmental effects (typically referred to as beneficial or adverse effects). As shown in FIGURE S-4 and FIGURE S-5, during the development of the Draft EIS (and in response to public comments during scoping), the Build Alternatives were further refined to assess the best option in two distinct segments for Olowalu and Ukumehame. In certain areas at each end of the project area and in the middle, there is only one viable alignment option due to rugged terrain, feasibility/constructability, and significant adverse effects to both the natural and cultural environment.



FIGURE S-3. Build Alternatives: Full Project Area



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FIGURE S-4. **Build Alternatives: Olowalu**

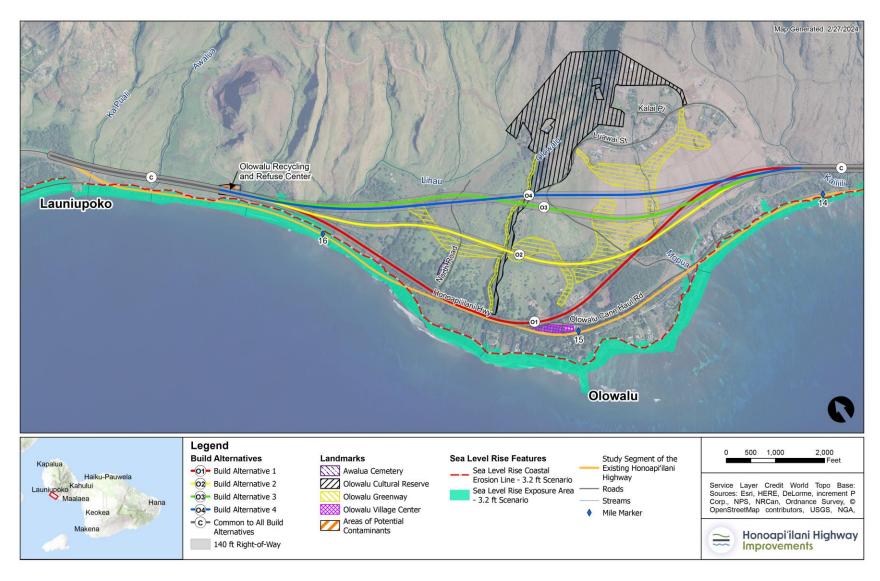
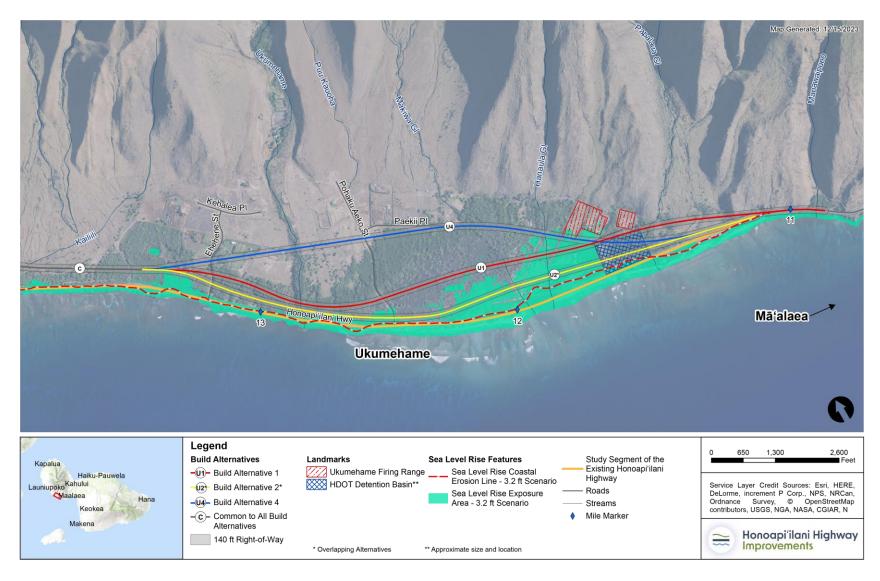




FIGURE S-5. Build Alternatives: Ukumehame



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Over the last decade, the transportation network just north of the Project's limits has changed. HDOT constructed Lāhainā Bypass Phase 1A from the Keawe Street Extension to Lāhaināluna Road in 2012; Phase 1B-1 from Lāhaināluna Road to Hōkiokio Place was completed in 2013; and Phase 1B-2 from Hōkiokio Place to the southern terminus of the Lāhainā Bypass was completed in 2018. These improvements are currently functioning as a two-lane highway but grading, drainage, and structures were designed to be fully built out to four lanes (two travel lanes in each direction), if the need arises and funding is available.

To invest in a new highway alignment that is consistent with these recent highway improvements, the Build Alternatives would have an average right-of-way width of approximately 140 feet with additional area required for intersections and stormwater management infrastructure. The full right-of-way would be cleared and graded but only two lanes (one moving lane in each direction) would be constructed. Other than intersections with existing cross streets that in turn provide access to the existing Honoapi'ilani Highway—which is proposed to become a local Maui County road to provide continued access to homes, business, parks, and a publicly accessible shoreline—the new highway would be limited-access with no driveways or access points to adjacent uses. Should HDOT pursue completion of a four-lane configuration in the future, a supplemental NEPA/HEPA environmental assessment would will be undertaken.

This Draft EIS assessment is based on preliminary concept designs that implement the Build Alternatives as established during the scoping process. Refinements will be made to the Preferred Alternative design during the Final EIS and effects from refined design will be documented in the Final EIS/ROD. For all Build Alternatives, permanent stormwater best management practice (permanent BMP) structures would include grassed swales located in the median and on the outside edges of the pavement structure as well as detention ponds situated at low points along the roadway profile that would collect and detain roadway stormwater. In addition, concept design includes the use of culverts, bridges, and viaducts (that is, longer multispan bridges) that allow for stream crossings or to avoid and minimize potential adverse effects with a Build Alternative.

All Build Alternatives in the Ukumehame segment would be on viaduct through environmentally sensitive areas. A roadway on embankment would harden the shoreline and not meet the Project's need to reduce roadway exposure to sea level rise. Viaduct would avoid new shoreline hardening and reduce effects to sensitive environmental areas. See Chapter 3, Affected Environment and Environmental Consequences, for details on environmental resources. And see Chapter 2, Alternatives, and Appendix 5.1 for more information on viaduct considerations.

The ultimate determination of culvert and bridge specifications, or the use of viaducts to span larger areas, would be based on the selected Preferred Alternative and the length of the span required. Environmental effects, constructability, and costs would also be considered. This will be further evaluated as part of the Final EIS but would be completed during the development of final design documents in the design build process.



WHAT ARE THE POTENTIAL IMPACTS OF THE PROJECT AND IS THERE A <u>SELECTED</u> PREFERRED ALTERNATIVE?

How are the alternatives are evaluated?

Based on a comprehensive evaluation of the Project's Build Alternatives in the Draft EIS, the FHWA and HDOT have identified a Preferred Alternative that comprises Build Alternative 2 in Olowalu and Build Alternative 1 in Ukumehame (FIGURE S-6). While the Preferred Alternative would provide the best overall alignment, this Draft EIS identified certain adverse effects on cultural resources. In identifying the Preferred Alternative, HDOT and the FHWA HDOT has selected the Preferred Alternative (now the Selected Alternative) and, as presented in this Final EIS, have incorporated refinements that would avoid and minimize these adverse effects (Chapter 5, Selected Preferred Alternative, provides a more detailed description). The final design during the design build process may provide additional opportunities to further refine the Preferred Alternative to optimize constructability, lower costs, and minimize environmental effects.

The comprehensive assessment of the Build Alternatives is presented in Chapter 3, Affected Environment and Environmental Consequences. FIGURE S-6 identifies the Draft EIS determination of the Preferred Alternative. FIGURE S-7 presents the Selected Alternative for Olowalu and TABLE S-2 provides a summary of the environmental effects of the Build Alternatives and the Selected Preferred Alternative for Olowalu. FIGURE S-8 and TABLE S-3 provide the same information for and Ukumehame, respectively. TABLE S-4 and TABLE S-5 provide a high-level characterization of the impact assessment leading to the identification of the Preferred Alternative for Olowalu and Ukumehame.

The refined Preferred Selected Alternative as presented in this Final EIS (FIGURE S-7 and FIGURE S-8 for Olowalu and Ukumehame, respectively) has been refined and adjusted in response to public comments, continued agency coordination and completion of concurrent required processes, most notably including:

- Design modifications including addition of a shared-use pathway within the new right-of-way, intersection refinements including a second signalized intersection, alignment design modifications at the Awalua Stream crossing and at Luawai Street and in Ukumehame near the Ukumehame Stream.
- Archaeological and architectural resource considerations in compliance with Section 106 of the National Historic Preservation Act including execution of a Programmatic Agreement that outlines additional assessment and mitigation commitments (see Chapter 3.6).
- Endangered Species Act Section 7 consultation resulting in a Biological Opinion issued by the
 U.S. Fish and Wildlife Service which summarizes the environmental commitments to avoid and
 minimize potential adverse effects on threatened and endangered species. will be assessed
 through the development of the Final EIS as well as the Section 106 Programmatic Agreement.
 This agreement will govern archaeological and architectural reviews through the Final EIS/ROD
 into final design for the Project, including the identification of archaeological resources and
 historic properties for the complete Preferred Alternative.

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What is the design-build construction process?

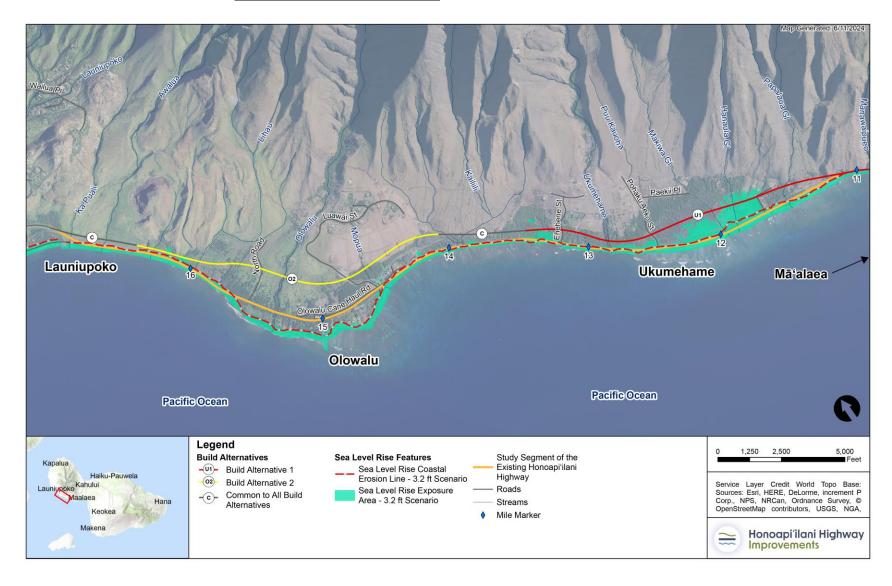
Based on the selected Preferred Alternative determined, HDOT uses a design build construction process to implement major capital projects. With design-build, HDOT procures a contractor through a competitive review of proposals that are submitted in response to a public request for proposals (RFP). The RFP delineates the project area, provides a detailed conceptual engineering package for a Preferred Alternative (as determined through the NEPA process), and identifies the environmental commitments and mitigation that must be incorporated into the contractor's scope and bid. Finally, the private construction team completes final design and construction documents, obtains final approvals and permits, and builds the project for HDOT.

Contractors who submit proposals for a project may identify additional or alternative measures to meet the RFP design or environmental mitigation requirements—measures which may or may not match the completed environmental findings. Such measures may identify ways to complete the work more efficiently (affecting price and schedule) or to more effectively mitigate or meet environmental compliance requirements and reflect the contractor's past experience and approach to design, construction, and project management. These changes may require a new assessment to ensure that the Project remains in conformance with the environmental findings of the ROD. This may require the contractor to complete a NEPA or HEPA reevaluation of the environmental findings and commitments (once the new design is finalized and before construction can begin).

Overall, HDOT design-build projects have shown to be an effective way to procure large capital projects that can result in cost and time savings.



FIGURE S-6. Preferred Alternative Selected from Draft EIS Alternatives



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FIGURE S-7. **Selected Alternative – Olowalu**

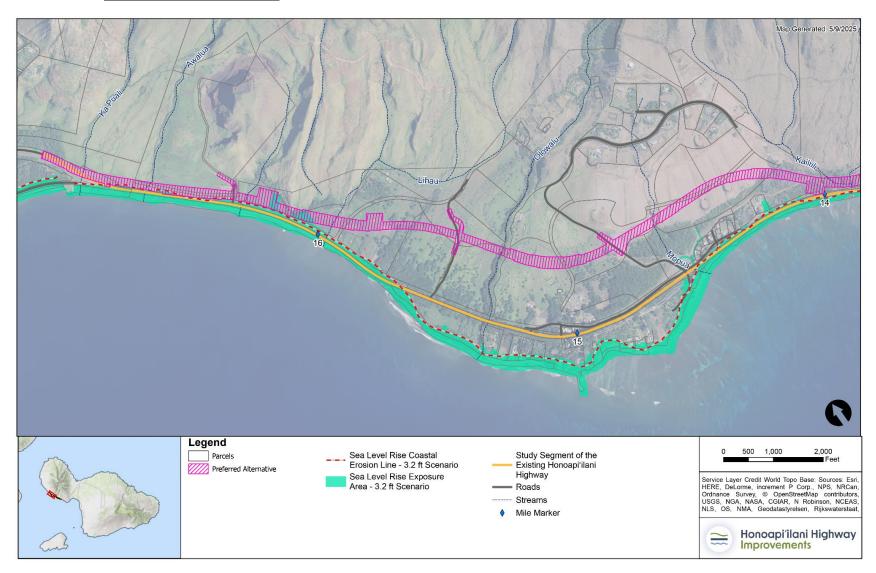
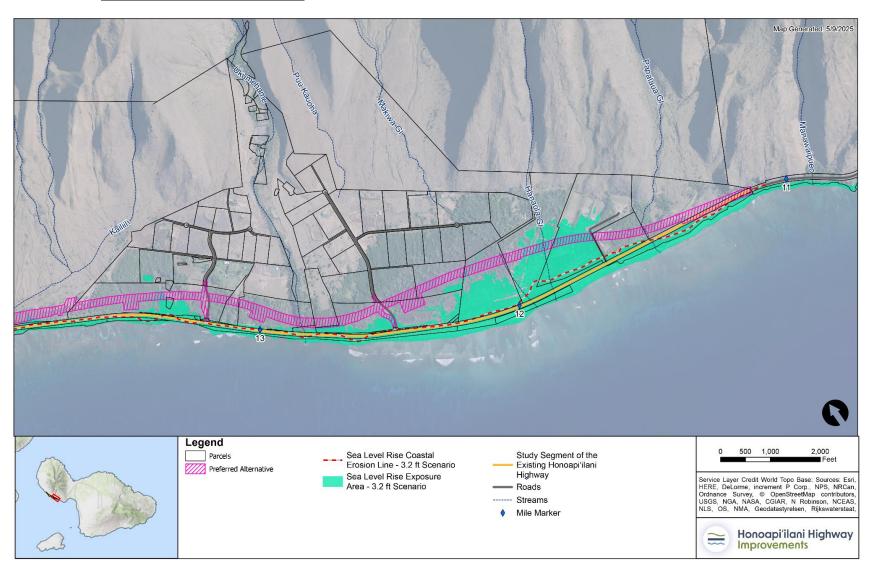




FIGURE S-8. **Selected Alternative – Ukumehame**



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TABLE S-2. Environmental Effects in Olowalu

IMPACT ASSESSMENT	NO BUILD ALTERNATIVE	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4	PREFERRED SELECTED
Number of Private Tax Map Key Properties Affected	0	15	15	15	16	<u>16</u>
Number of Kuleana Properties Affected31	0	3	5	8	5	5
Potential Residential Relocation ²	0	0	0	11	11	0
Potential Commercial/Agricultural Relocation	0	1	1	1	1	1
Community Facilities Relocation	0	0	0	0	0	0
Parks and Recreation Facilities Relocation	0	0	0	0	0	0
Historic Archaeological Resources (Adverse Effects)	0	2	2	2	2	2
Historic Architectural Resources (Adverse Effects)	0	0	0	0	0	0
Traffic Intersection Level of Service	F	Α	Α	Α	Α	А
Traffic Impacts	NA	0	0	0	0	0
Air Quality Impacts	0	0	0	0	0	0
Noise Impacts	0	0	0	0	1	0
Visual and Scenic Character Effects (High, Medium, Low)	Medium	Medium	Low	Medium	High	Low
Wetlands and Other Waters (acres)	0.0	0.7	0.5	0.5	0.6	<u>0.6</u>
Flora and Fauna, Endangered Species (High, Medium, Low)	Low	Low	Low	Low	Low	Low
Sea Level Rise Exposure (percent within SLR-XA) ²	51%	3%	2%	1%	1%	2%
Hazardous Materials Sites, Low Risk	0	2	1	1	1	1
Environmental Justice - Likely Disproportionate Socioeconomic Adverse Effect	No	No	No	No	No	No

¹ Kuleana properties are Land Commission Awards rights granted by the Hawaiian monarchy in the 19th Century

² Overall property is affected by Build Alternative but may not require relocation of the residential use and would be determined during right-of-way acquisition negotiation

^{361%} of the No Build Alternative is within the SLR-XA



TABLE S-3. **Environmental Effects in Ukumehame**

IMPACT ASSESSMENT	NO BUILD ALTERNATIVE	BUILD ALTERNATIVE 1	BUILD ALTERNATIVES 2 AND 3	BUILD ALTERNATIVE 4	PREFERRED SELECTED ALTERNATIVE
Number of Private Tax Map Key Properties Affected	0	3	1	20	3
Number of Kuleana Properties Affected ¹	0	5	6	7	5
Potential Residential Relocation	0	0	0	<u>2</u>	0
Potential Commercial/Agricultural Relocation	0	<u>1</u>	0	2	<u>1</u>
Community Facilities Relocation	0	0	0	0	0
Parks and Recreation Facilities Relocation	0	0	0	0	0
Historic Archaeological Resources (Adverse Effects)	0	6	2	2	2
Historic Architectural Resources (Adverse Effects)	0	0	0	0	0
Traffic Intersection Level of Service	E	Α	A	А	А
Traffic Impacts	NA	0	0	0	0
Air Quality Impacts	0	0	0	0	0
Noise Impacts	0	0	0	0	0
Visual and Scenic Character Effects (High, Medium, Low)	Medium	Low	Low	High	Low
Wetlands and Other Waters (acres)	0.0	6.4	15.9	2.0	4.9
Flora and Fauna, Endangered Species (High, Medium, Low)	Low	Low	Low	Low	Low
Sea Level Rise Exposure (percent within SLR-XA) ¹	73%	12%	35%	8%	12%
Hazardous Materials Sites, Low Risk	0	1	0	1	1
Environmental Justice – Likely Disproportionate Socioeconomic Adverse Effect	No	No	No	No	No

 $^{^1}$ Kuleana properties are Land Commission Awards rights granted by the Hawaiian monarchy in the 19th Century 2 -100% of the No Build Alternative is within the SLR XA

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TABLE S-4. Evaluation of No Build Alternative and Build Alternatives in Olowalu

TOPIC	NO BUILD ALTERNATIVE	BUILD ALTERNATIVE 1	BUILD ALTERNATIVE 2	BUILD ALTERNATIVE 3	BUILD ALTERNATIVE 4	PREFERRED SELECTED ALTERNATIVE
Preliminary Construction Cost Estimates	•	•	•	•	•	•
Land Use and Zoning	•	•		•	•	•
Agriculture and Farmlands	•	•	•	•	•	•
Community Services	•				•	•
Land Acquisition, Displacement, and Relocation	•	•	•	•	•	•
Parklands and Recreational Resources	•	•	•	•	•	•
Archaeological and Architectural Historic Properties	•	•	•	•	•	•
Cultural Resources	•	•	•	•	•	•
Visual and Scenic Character	•	•	•	•	•	•
Water Resources, Wetlands, and Floodplains	0	•	•	•	•	•
Flora and Fauna, Endangered Species	•	•	•	•	•	•
Geology, Soils, and Natural Hazards	•	•	•	•	•	•
Coastal Zone Management/Hawai'i Special Management Areas	0	•	•	•	•	•
Climate Change and Sea Level Rise	0	•	•	•	•	•
Transportation	0	•	•	•	•	•
Air Quality and Energy	•	•	•	•	•	•
Noise	•	•		•		•
Infrastructure and Utilities	•		•	•	•	•
Hazardous Materials	•	•		•	•	
Socioeconomic Conditions/Environmental Justice	•	•	•	•	•	•
OLOWALU OVERALL ASSESSMENT	•	•		•	•	

 \bigcirc = Worst; \bigcirc = Poor; \bigcirc = Neutral; \bigcirc = Good; \bigcirc = Best



TABLE S-5. Evaluation of No Build Alternative and Build Alternatives in Ukumehame

TOPIC	NO BUILD ALTERNATIVE	BUILD ALTERNATIVE 1	BUILD ALTERNATIVES 2 AND 3	BUILD ALTERNATIVE 4	PREFERRED SELECTED ALTERNATIVE
Preliminary Construction Cost Estimates	•	•	0	•	•
Land Use and Zoning	•	•	•	•	•
Agriculture and Farmlands	•	•		•	•
Community Services	•	•	•	•	•
Land Acquisition, Displacement, and Relocation	•	•	•	0	•
Parklands and Recreational Resources	•	•	•	•	•
Archaeological and Architectural Historic Properties	•	•	•	•	•
Cultural Resources	•	•	0	•	•
Visual and Scenic Character	•	•	•	•	•
Water Resources, Wetlands, and Floodplains	•	•	0	•	•
Flora and Fauna, Endangered Species	•	•	•	•	•
Geology, Soils, and Natural Hazards	•	•	•	•	•
Coastal Zone Management/Hawai'i Special Management Areas	0	•	•	•	•
Climate Change and Sea Level Rise	0	•	•	•	•
Transportation	0	•	•	•	•
Air Quality and Energy	•	•	•	•	•
Noise	•	•		•	•
Infrastructure and Utilities	•	•	•	•	•
Hazardous Materials	•	•	•	•	•
Socioeconomic Conditions/Environmental Justice	0	•	•	•	•
UKUMEHAME OVERALL ASSESSMENT	•	•	•	•	•

O = Worst; O = Poor; O = Neutral; O = Good; O = Best

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What is the design-build construction process?

<u>Based on the Selected</u> <u>Once a Preferred</u> Alternative—is <u>determined</u>, HDOT uses a design-build construction process to implement major capital projects. With design-build, HDOT procures a contractor through a competitive review of proposals that are submitted in response to a public request for proposals (RFP). The RFP delineates the project area, provides a detailed conceptual engineering package for a <u>Selected Preferred</u> Alternative (as determined through the NEPA process), and identifies the environmental commitments and mitigation that must be incorporated into the contractor's scope and bid. Finally, the private construction team completes final design and construction documents, obtains final approvals and permits, and builds the project for HDOT.

Contractors who submit proposals for a project may identify additional or alternative measures to meet the RFP design or environmental mitigation requirements—measures which may or may not match the completed environmental findings. Such measures may identify ways to complete the work more efficiently (affecting price and schedule) or to more effectively mitigate or meet environmental compliance requirements and reflect the contractor's past experience and approach to design, construction, and project management. These changes may require a new assessment to ensure that the Project remains in conformance with the environmental findings of the ROD. This may require the contractor to complete a NEPA or HEPA reevaluation of the environmental findings and commitments (once the new design is finalized and before construction can begin).

Overall, HDOT design=build projects have shown to be an effective way to procure large capital projects that can result in cost and time savings.

WHAT ARE THE PRELIMINARY COST ESTIMATES FOR THE <u>SELECTED ALTERNATIVE</u> PROJECT?

The initial construction costs (exclusive of property acquisition and other non-construction costs) presented in the Draft EIS for the Preferred Alternative \$160.8 million. In finalizing the Selected Alternative in the Final EIS, the current construction estimate is \$298 million. This increase of \$138 million is primarily to accommodate the addition of the shared-use path, the second signalized intersection at Ehehene Street, potential passing lanes between Ehehene and Luawai Streets, adding a culvert to maintain access to a kuleana parcel in Ukumehame, and the switch from a culvert to a bridge across the Awalua Stream. In addition, continued refinement of the cost estimate has advanced other costs including mobilization, labor costs, materials (actual costs and transportation costs to import materials and equipment to Maui), as well as escalation and contingencies. Initial property acquisition for Right-of-Way is estimated at \$18 million but would not be finalized until the final alignment is established during the design build process, overall project construction costs and other project costs such as right-of-way acquisition will be finalized.

The Project has a preliminary construction cost estimate of about \$160 million. TABLE S 6 presents a preliminary construction cost estimate for the Project broken down by the Olowalu and Ukumehame segments for each of the Build Alternatives. Because each segment would be selected independently, there is no single total per alternative. Therefore, the range in preliminary construction costs are from \$151.1 million (Olowalu Build Alternative 3 plus Ukumehame Build Alternative 4) to \$159.5 million

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(Olowalu Build Alternative 2 plus Ukumehame Build Alternatives 2 and 3). TABLE S-7 summarizes the preliminary cost estimate for the Preferred Alternative, which is estimated at about \$160.8 million including the refinements to the alignment described in Chapter 5, Preferred Alternative.

TABLE S-6. Preliminary Cost Estimate (Build Alternatives)

SEGMENT	BUILD ALTERNATIVE 1 (MILLIONS)	BUILD ALTERNATIVE 2 (MILLIONS)	BUILD ALTERNATIVE 3 (MILLIONS)	BUILD ALTERNATIVE 4 (MILLIONS)
Olowalu	\$63.8	\$68.2	\$62.9	\$64.0
Ukumehame	\$90.6	\$91.3	\$91.3	\$88.2

TABLE S-7. Preliminary Cost Estimate for the Preferred Alternative

SEGMENT	PREFERRED ALTERNATIVE (MILLIONS)		
Olowalu	\$71.1		
Ukumehame	\$89.7		
Total	\$160.8		

WHEN WILL THE <u>SELECTED</u> PREFERRED ALTERNATIVE BE CONSTRUCTED?

The project sponsors anticipate a combined Final EIS/ROD in 2025. As noted above, HDOT will would then commence a design-build contractor selection process in September 2025, that would allow for construction to start about a year later. In short, HDOT anticipates that project construction would take approximately four years and the Project could potentially be complete and operational by 2030.

HOW HAS THE PUBLIC BEEN INVOLVED IN THE PROJECT?

The Project has offered the public ongoing opportunities to get involved and provide input on project planning and scoping. In 2022, the year prior to starting the EIS, a series of community meetings were held to inform the public about the Project and provide opportunities for early input. Formal scoping meetings on the Draft EIS were held in December 2022. Three public scoping meetings (one in-person, two virtual) were held in December 2022, and a final Scoping Report was issued in May 2023.

With completion of the Draft EIS in December 20, 2024, a 45-day public review period (through February 24, 2025) was initiated which included two public hearings: an in-person hearing on January 23, 2025, and a virtual public hearing on January 28, 2025. There were a variety of methods available for individuals to submit comments on the Draft EIS: email, online form, printed form, and verbally at the public hearings.

Additional meetings continue to be held with the community, including outreach to Native Hawaiian organizations, business and community leaders. And the Project continues to share documents and other important information at key milestones through its website at https://www.honoapiilanihwyimprovements.com/.

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Chapter 8, Public Involvement and Agency Coordination, summarizes the Project's agency coordination and public participation efforts. <u>Chapter 9, Response to Comments provides a summary of public comments and lead agency responses to substantive comments.</u>

<u>Public comments and continued agency coordination were considered by HDOT in the evaluation, refinement, and decision to move forward with the Selected Alternative.</u>

WILL THERE BE ADDITIONAL OPPORTUNITIES FOR PUBLIC PARTICIPATION?

As with all large-scale construction projects, as HDOT initiates the design-build contractor process and through project construction, there will a continued dialogue with the public and information will continue to be shared on the project website.

There are additional opportunities for public participation in the EIS process and in the implementation of the Project leading into construction activities. Specifically related to the publication of the Draft EIS, the public comment period has the following timeline:

- Publication of this Draft EIS starts a formal public review and comment period that lasts for 45 days.
- Within this timeframe, the FHWA and HDOT will accept written comments on the Project and will hold three public hearings where the public can provide their comments on this Draft EIS. Comments provided at the public hearing will be recorded, and written comments can be submitted by email, through the Project's website, or by traditional mail addressed to the people listed below.
- The Final EIS will summarize and respond to all substantive comments on this Draft EIS that are submitted during the 45-day comment period.

WHO CAN I CONTACT FOR FURTHER INFORMATION OR TO SUBMIT COMMENTS ON COMPLETION OF THE FINAL EIS AND RECORD OF DECISION?

For more information, please visit the Project's website at www.Honoapiilanihwyimprovements.com or contact:

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