

Readers' Guide to Kea'au-Pāhoa Road Improvements Draft Environmental Assessment

Chapter	Subchapter	Content	Description/Questions Answered
n/a		Front Matter	<ul style="list-style-type: none"> Signature sheet, summary matrix, table of contents
1	1.0	Purpose and Need for Action	<ul style="list-style-type: none"> What is the purpose and need to justify the project? Why was an EA produced? What was the project history, funding, and community participation by KPAG?
2	2.0	Alternatives	<ul style="list-style-type: none"> What is the reasonable set of alternatives considered in the EA?
	2.1 to 2.5	Alternatives 1 through 5	<ul style="list-style-type: none"> Detailed discussion of each of the five alternatives
	2.6	Intersection Treatment Alternatives	<ul style="list-style-type: none"> How will traffic be handled at intersections: signals, stop-sign control or roundabouts?
	2.7	Project Cost Estimates	<ul style="list-style-type: none"> What is the comparative range of costs to construct each of the five alternatives?
	2.8	Alternatives Considered But Not Analyzed	<ul style="list-style-type: none"> What was the range of alternatives considered before arriving at the five discussed in the EA? Was a reasonable universe of alternatives considered?
3 and 4	3.0/4.0	Chapter 3: Affected Environment Chapter 4: Environmental Impacts and Mitigation Measures	<ul style="list-style-type: none"> Chapter 3: What are conditions today in the natural, social, and physical environment? Chapter 4: How will each of the five alternatives impact the natural, social, and physical environment and how will impacts be mitigated?
	3.1/4.1	Land Use	<ul style="list-style-type: none"> Will project alternatives require land to be acquired or people to be relocated? Will access to properties be changed? What kinds of land use have been planned/designated for the area and are the project alternatives consistent with those plans?
	3.2/4.2	Traffic and Transportation	<ul style="list-style-type: none"> How does traffic perform now and in the future under all alternatives? How does traffic perform at signals or roundabouts? How will safety be addressed? How will transit, bicycles, and pedestrians be accommodated?
	3.3/4.3	Socioeconomics and Community Impacts	<ul style="list-style-type: none"> What is the demographic composition of the community? Are there Environmental Justice Communities in the area? What are the community character, economy, and facilities? How does the community perceive this project? Will the project alternatives have an adverse effect on the community or Environmental Justice populations?
	3.4/4.4	Air Quality	<ul style="list-style-type: none"> Will the project alternatives create any adverse impacts on air quality, either from traffic or from construction equipment? Is mitigation needed to protect air quality?

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3 and 4 cont'd	3.5/4.5	Noise	<ul style="list-style-type: none"> • How much noise is present in the corridor today? • Will the project alternatives create any adverse impacts on noise, either from traffic or from construction equipment? Is mitigation needed to reduce noise?
	3.6/4.6	Biological Resources	<ul style="list-style-type: none"> • What kinds of flora, fauna, and aquatic biota are present in the corridor? • Will the project alternatives create adverse impacts on endangered species or critical habitat? Is mitigation needed to protect these resources?
	3.7./4.7	Water Resources	<ul style="list-style-type: none"> • Are surface waters, wetlands, and floodplains present in the corridor? • Will project alternatives create adverse impacts on water resources? • How will impacts on water resources be mitigated?
	3.8/4.8	Geographic Setting and Natural Hazards	<ul style="list-style-type: none"> • Does the study area's geology raise concerns? Are there lava tubes? • Are there threats from lava flows or earthquakes? • How do the project alternatives handle emergency response during natural disasters?
	3.9/4.9	Cultural Resources	<ul style="list-style-type: none"> • What is the historic context of the area? • Are there archaeological resources or historic sites that would be affected by the project alternatives? Is mitigation needed to protect these resources? • What cultural practices take place in the study area, and would they be affected by the project alternatives? Is mitigation needed to protect cultural practices?
	3.10/4.10	Parks and Recreational Resources	<ul style="list-style-type: none"> • What parks or recreational resources would be affected and is mitigation needed to protect them?
	3.11/4.11	Agricultural Lands	<ul style="list-style-type: none"> • Is there agricultural activity and important farmlands near the roadway? • How would project alternatives affect agriculture, and is mitigation needed to minimize impacts on farmland?
	3.12/4.12	Visual Environment	<ul style="list-style-type: none"> • What is the view to the corridor and the view from the corridor? • How would the project change the visual environment under each alternative? • Will landscaping or other measures be employed to mitigate impacts?
	3.13/4.13	Utilities	<ul style="list-style-type: none"> • What utilities are in the corridor, and how would the project alternatives affect them? • Will utilities need to be relocated? • Will there be stoppages in service, and how will adverse effects on customers be minimized?
	3.14/4.14	Hazardous Materials	<ul style="list-style-type: none"> • Are there any concerns about subsurface contamination?

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4	4.15	Construction Impacts	<ul style="list-style-type: none"> Are there special construction-related temporary impacts on air, noise, water, vegetation, traffic, utilities, hazardous materials, etc.? How will they be mitigated?
	4.16	Laws, Permits, Orders and Approvals	<ul style="list-style-type: none"> What Federal, State, and County Laws, Permits, and Approvals are needed?
	4.17	Coastal Zone Management Consistency	<ul style="list-style-type: none"> How is the project consistent with the Hawai'i's Coastal Zone Management program?
	4.18	Indirect and Cumulative Impacts	<ul style="list-style-type: none"> Will the project create impacts that are indirect? Indirect impacts are a result of the project, and can be anticipated, but would happen either: <ul style="list-style-type: none"> Much later (after the highway construction is completed and it has been operating for awhile), for example future development Far from the immediate project corridor, for example, if the project resulted in traffic congestion a mile away Will the project contribute to cumulative impacts? This project could have a minor impact on a particular resource (for example, a rare plant), but taken together with other impacts on that plant in the past, present or future (like agriculture, residential development, etc.) have a major cumulative effect on that plant.
	4.19/4.20	Short Term Uses/Long Term Productivity and Irreversible/Irretrievable Commitments of Resources	<ul style="list-style-type: none"> Do the short-term effects of construction justify the long term benefits? What resources will be consumed as a result of this project, and is that reasonable?
5	5.0	Section 4(f) Evaluation	<ul style="list-style-type: none"> Does the project result in a taking of parks, recreation areas, refuges, or historic properties regulated by Section 4(f) of the Department of Transportation Act of 1966? Are there reasonable and feasible alternatives to affecting such properties? Have measures been taken to minimize harm to such properties?
6	6.0	Anticipated Determination	<ul style="list-style-type: none"> With mitigation, will the project alternatives be expected to have a "significant" impact on the environment? Is a Finding of No Significant Impact (FONSI) anticipated?
7	7.0	Public Involvement	<ul style="list-style-type: none"> How was the Context Sensitive Solutions Process handled? What other measures were used to inform and reach out to the community? What did KPAG do at their meetings? What Public Information Meetings were held? How do I access the project website? What stakeholders (agencies, community institutions, etc.) were consulted?

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8	8.0	List of Preparers	<ul style="list-style-type: none"> • Who wrote or reviewed this EA?
9	9.0	References	<ul style="list-style-type: none"> • What are the references cited in this EA?
	Appendices		<ul style="list-style-type: none"> • What are the other materials to be consulted as background materials? <ul style="list-style-type: none"> ○ Design Plans ○ Pre-consultation Comments ○ Studies on traffic, water quality, noise, air, social impacts, fauna, botany, archaeology, cultural impacts, drainage ○ Farmland Conversion Impact Rating (Natural Resources Conservation Service)