

PĀ‘IA RELIEF ROUTE PROJECT

Project STP-036-1(11)

Maui, Hawai‘i

**FINAL ENVIRONMENTAL ASSESSMENT /
ENVIRONMENTAL IMPACT STATEMENT PREPARATION NOTICE**

**DRAFT STATEMENT OF PURPOSE AND NEED
PRE-SCOPING INFORMATION AND PRE-ASSESSMENT OF WATERS OF THE U.S.**

Prepared Pursuant to:

Hawai‘i Revised Statutes, Chapter 343

SAFETEA-LU, Sections 6001 and 6002

**Memorandum of Understanding: National Environmental Policy
Act and Clean Water Act Section 404—Integration Process for
Surface Transportation Projects in the State of Hawai‘i**

Submitted by:

Hawai‘i Department of Transportation

June 8, 2010

Notice of Chapter 343 Determination

Project Name:

Pā'ia Relief Route Project
Project STP-036-1(11)

Proposing Agency:

Hawai'i Department of Transportation (HDOT)
869 Punchbowl Street, Room 301
Honolulu, HI 96813

Accepting Authority:

Governor, State of Hawai'i
Hawai'i State Capital
Executive Chambers
Honolulu, HI 96813

Brief Description of the Proposed Action:

The Pā'ia Relief Route Project (the project) proposes to: construct a new road that would improve safety and provide traffic relief to the town of Pā'ia, Maui, make adjustments to the existing Hāna Highway, or both. The project is needed in response to capacity limitations and roadway safety and reliability issues.

Determination:

Implementation of this project will be pursuant to both the State Environmental Impact Statement (EIS) law (Chapter 343 of the Hawai'i Revised Statutes), and the National Environmental Policy Act (NEPA). In addition, the project will comply with SAFETEA-LU Sections 6001 and 6002.

Reasons Supporting Determination:

The determination was made because state and federal funds may be used. Because potentially significant environmental, economic, and social impacts could result from construction, an Environmental Impact Statement (EIS) is appropriate for this project.

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Project Summary

The Hawai'i Department of Transportation (HDOT), in cooperation with the Federal Highway Administration (FHWA), will be preparing an Environmental Impact Statement (Draft and Final EIS) to evaluate new relief roadway alignments and/or adjustments to the existing Hāna Highway alternatives to provide increased roadway capacity, safety, and reliability for the Pā'ia-Ha'ikū area, Island of Maui, State of Hawai'i. Because potentially significant environmental, economic, and social impacts could result from construction, an Environmental Impact Statement (EIS) is the appropriate form of environmental document for this project.

Additionally, because of anticipated federal funding of this project, the National Environmental Policy Act (NEPA) is also triggered. A Draft Environmental Impact Statement (Draft EIS) and Final Environmental Impact Statement (Final EIS) will be prepared for this project, and these documents are anticipated to satisfy the requirements of both Chapter 343 of the Hawai'i Revised Statutes and NEPA.

Under Chapter 343, HDOT is required to prepare a Final Environmental Assessment/Environmental Impact Statement Preparation Notice (FEA-EISPN) and announce its availability in the Office of Environmental Quality Control's (OEQC) *The Environmental Notice*. The FEA-EISPN is used to invite public agency comments on the proposed action before the preparation of the Draft EIS. In addition to publication in *The Environmental Notice*, the FEA-EISPN will also be sent to federal, state, county, and city resource and jurisdictional agencies, as well as elected officials; neighborhood, community, civic, business, and transportation organizations; and utility companies.

NEPA requires FHWA to announce the preparation of an EIS by publishing a "Notice of Intent" in the *Federal Register*. The Notice of Intent for this project appeared in the *Federal Register* on November 17, 2009.

HDOT will conduct an Alternatives Analysis that evaluates a range of alternatives prior to issuing the Draft EIS. It is expected that only those alternatives advancing from the Alternatives Analysis will receive detailed assessment in the Draft EIS.

Tax Map Keys

The Study Area covers all or part of the following Tax Map Zones and Sections: 2-5-01, 2-5-03, 2-5-04, 2-5-05, 2-5-06, 2-5-11, 2-5-12, 2-5-13, 2-6-02, 2-6-03, 2-6-04, 2-6-05, 2-6-06, 2-6-07, 2-6-10, 2-6-11, 2-6-12, 2-6-13, 3-8-01, 3-8-02, 3-8-03, 3-8-78.

Location

Island of Maui, Wailuku and Makawao Districts

Project Area

The project limits include an approximately 6.5 mile-long study area from the intersection of Hāna Highway with Haleakalā Highway, through the Town of Pā'ia to Maliko Gulch. The project study area width extends mauka approximately three miles from Hāna Highway at its widest point.

Landowners

The primary affected land owner includes Alexander & Baldwin Properties, Inc (A&B). Other smaller, private land owners may be affected depending on the determination of the preferred alternative. No federal or state land will be directly impacted by the project.

Project Description

The purpose of the project is to provide improved mobility for all modes of transportation in the congested area of Pā'ia-Ha'ikū. Alternatives will incorporate the following objectives: increase roadway capacity, enhance safety, and improve the reliability of travel. Current alternatives include changes to the existing Hāna Highway and construction of a new roadway on a new alignment, along with the no-action alternative. Additional alternatives may be introduced and examined as a result of the scoping process.

State Land Use Designation

The State Land Use designations of the study area are agricultural and urban. Small areas of conservation-designated property border the outside edge of the Study Area in the vicinity of Ho'okipa Beach Park. The majority of the study area is cultivated agricultural land use for the production of sugar cane. The urban area surrounds Hāna Highway and Baldwin Avenue.

Pā'ia-Ha'ikū Community Plan

The Pā'ia-Ha'ikū Community Plan designates the study area as agriculture, open space, heavy industrial, and residential land uses.

County Zoning Designations

The Maui County zoning designations within the project study area are designated mainly as agricultural with minimal areas designated as urban and heavy industrial.

Flood Zones

Sections of Hāna Highway west of Baldwin Avenue within the study area are located in the Stream and Costal Flood Zone AE as defined by Federal Emergency Management Agency; therefore, the area is subject to inundation by a one-percent-annual chance flood event.

Special Management Area

Sections of the study area along Hāna Highway are located within the Special Management Zone as defined by Maui County and State of Hawai'i Revised Statutes 205A.

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CHAPTER 1: INTRODUCTION

The Hawai'i Department of Transportation (HDOT), in cooperation with the Federal Highway Administration (FHWA), will be preparing an Environmental Impact Statement (EIS) to evaluate alternatives to improve the roadway capacity, safety, and reliability of Hāna Highway (HI-36) between the intersection of Haleakalā Highway and Hāna Highway and Maliko Gulch on the north side of Central Maui in the Pā'ia-Ha'ikū region (see **Figure 1: Project Study Area**). This segment of the road is the main vehicular travel way for people and goods between central and west Maui.

1.1 Regulatory Purposes Fulfilled by this Document

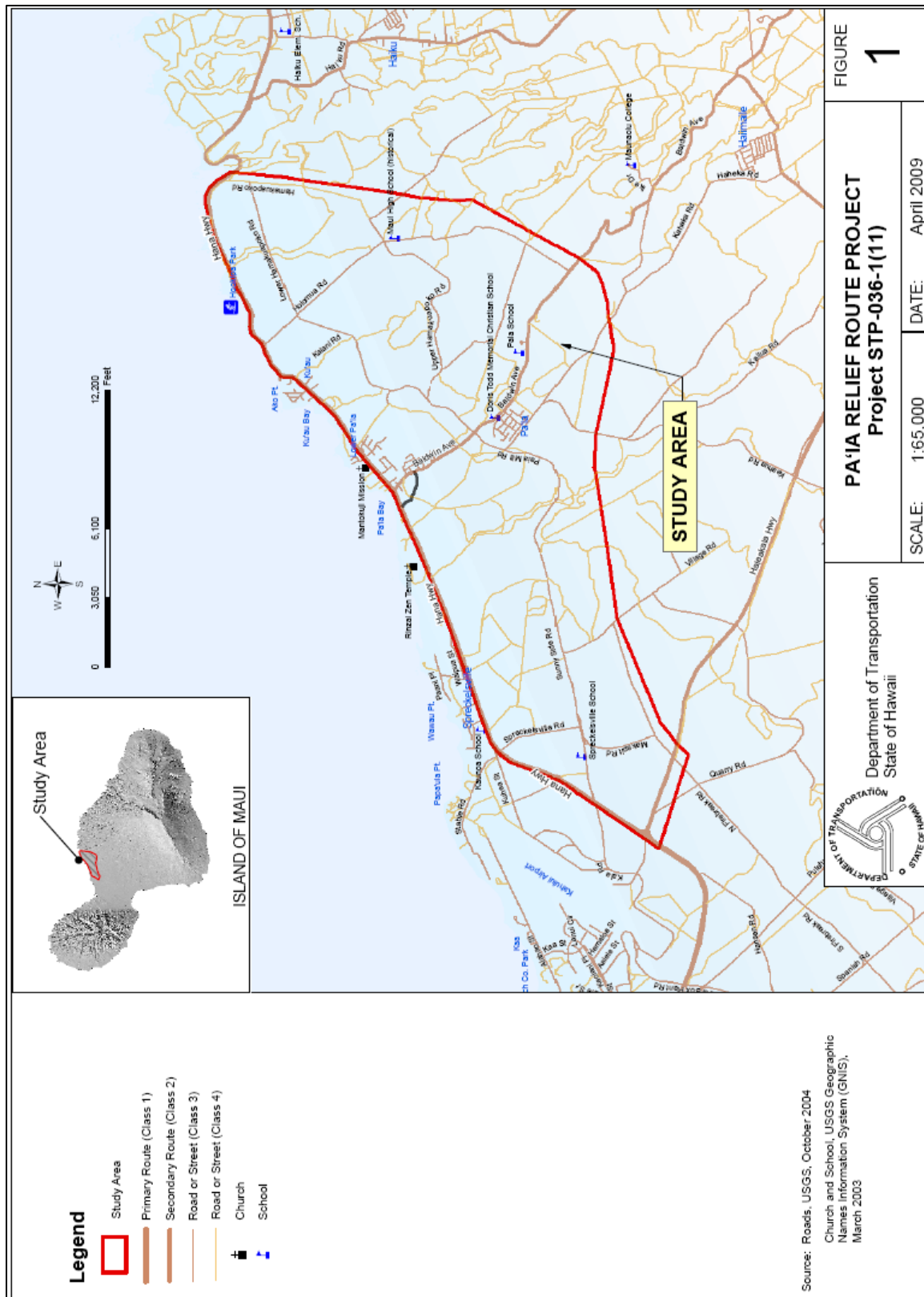
This document is intended to satisfy three separate regulatory requirements, thereby expediting the environmental review process. Details of the regulations being satisfied by this document may be of most interest to government agencies, and are discussed briefly below.

Chapter 343, Hawai'i Revised Statutes: Chapter 343 is Hawai'i's EIS Law. This law requires the preparation, notice, and distribution of a Final Environmental Assessment/Environmental Impact Statement Preparation Notice (FEA-EISP). The purpose of the FEA-EISP is to announce that an EIS will be prepared, and provide sufficient information for agencies and the public to provide input on the scope of the EIS. This document is intended to be the FEA-EISP for this project.

Section 6002 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU): Section 6002 requires that government agencies be provided with a draft purpose and need statement for their review and comment. **Section 1.2: Purpose and Need for Action** is intended to be the draft purpose and need statement required by SAFETEA-LU. This document is being distributed to government agencies. Input received will be documented and taken into consideration when developing the final Statement of Purpose and Need.

Memorandum of Understanding: National Environmental Policy Act (NEPA) and Clean Water Act Section 404—Integration Process for Surface Transportation Projects in the State of Hawai'i: This Memorandum of Understanding (MOU) is intended to coordinate the NEPA process with the permit process for individual permits issued under Section 404 of the Clean Water Act (covering discharge of fill material into waters of the U.S., including wetlands). This project may need an individual Section 404 permit because of potential impacts on waterbodies. The MOU states that HDOT will send to those agencies involved in the Section 404 permit process "pre-scoping information and pre-assessment of waters of the U.S." This document is being distributed to all of the agencies involved in the Section 404 permit process, and is intended to be the "pre-scoping information" specified in the MOU. **Section 3.2.4: Water Resources** is intended to be the "pre-assessment of waters of the U.S."

Figure 1: Project Study Area



The project is located in the Pā'ia-Ha'ikū area. The study area extends from the intersection of Hāna Highway and Haleakalā Highway to Maliko Gulch (see **Figure 1: Project Study Area**) for approximately 6.5 miles in length.

The width of the study area extends mauka-makai (from the mountains to the sea) from the three-mile marker on Baldwin Avenue to Hāna Highway, and varies in width as shown in **Figure 1: Project Study Area**. The land use of the study area is predominantly sugar cane fields. The study area lies within the ahupua'a of Hōkū'ula, Hālī'imaile, and Hāmākuapoko.

1.2 Purpose and Need for Action

The Purpose and Need for the project has been formulated through a collaborative effort on the part of the Pā'ia Relief Route Advisory Group (PRAG). The following discussion of the project's purposes (project goals) and needs (current conditions needing improvement) is expected to be further refined during the scoping process for the EIS. The EIS will evaluate project alternatives and show how well they address the needs for the project and thereby meet the purposes of the project.

The needs of the project are as follows:

1. Safety Needs to be Improved for Motorists, Pedestrians, Bicyclists, and Transit Users

The Traffic Branch of the Hawai'i Department of Transportation has conducted a traffic safety study (HWY-TS 2.418) for the subject location under its Highway Safety Improvement Program (HSIP) of Title 23, United States Code, Section 148. This traffic safety study is protected under Title 23, U.S.C., sections 402(k) and 409, and is intended for highway safety and educational purposes only.

There are locations in the corridor with relatively high accident rates. Between milepost 7.3 and 8.3 (Hāna side of Pā'ia Town to Holomua Road) the accident rate was 106.38 accidents per hundred million vehicle miles for the years 2005-2007. This average exceeds both county-wide and state-wide averages for those years. Two locations along the corridor were also listed on the latest high accident location listings for Maui County. The segment of highway between milepost 7.1 and 7.3 had an accident rate of 146.81 accidents per million vehicle miles in 2004 to 2006, which was the second-highest non-intersection accident in Maui County for those years. The Hāna Highway and Haleakala Highway intersection was the intersection with the 20th highest accident rate in the county for those years.

In addition, traffic volumes pose street crossing safety concerns for pedestrians in Pā'ia Town and elsewhere along Hāna Highway. Within town, there is heavy pedestrian activity, and pedestrians experience difficulty in crossing streets because of the traffic volumes. Outside of town, the undivided two-lane Hāna Highway poses safety concerns for motorists, since there are limited opportunities for passing maneuvers, which may frustrate motorists. Just east of this area lies Hookipa Beach Park, a popular wind surfing location. High numbers of visitors bring an element of less-focused traffic, contributing to potential safety concerns. By shifting through traffic away from high-volume areas of congestion, the traffic that will remain in the

existing corridor will be more focused on local access and destinations within Pā'ia, and provide a safer environment for pedestrians and visitors.

Existing Hāna Highway does not provide continuity for bicyclists. While areas outside of Pā'ia town offer wider shoulder areas for bicycle travel, on-street parking and narrower cross sections are not as bicycle friendly within town.

2. Motorists are Burdened by Excessive Delays from Existing Congestion

Traffic along the study portion of Hāna Highway is frequently congested and results in lengthy travel times. Hāna Highway carried about 18,410 vehicles per day in 2001, and this is slated to increase to 29,170 vehicles per day, a 58 percent increase. Congestion is observed not only during the morning and afternoon peak periods, but also throughout the day. Traffic congestion specifically caused by roadway capacity constraints includes queuing formed by those making left turns and inability to maneuver around traffic accidents or lane blockages. Parking maneuvers in Pā'ia Town are also a cause of congestion. Enhanced roadway capacity and diversion of through trips outside of Pā'ia Town is needed now to reduce the delays caused by turning movements, parking maneuvers and crashes or blockages. Enhanced capacity would improve the reliability of travel on the roadway.

3. Signalized Intersections in Pā'ia Town are Currently Congested and Future Traffic Growth is Projected

Several traffic movements at intersections are experiencing long or very long traffic delays with poor Levels of Service (LOS). During the AM peak hour, the intersection of Hāna Highway and Baldwin Avenue operates at LOS F ("extreme congestion") for its westbound left turn from Hāna Highway to Baldwin Avenue. Its makai-bound left turn from Baldwin Avenue to Hāna Highway operates at LOS E ("very long traffic delays"). The mauka-bound Kala Road at Hāna Highway operates at LOS E ("very long traffic delays").

During the PM peak hour, the intersection of Hāna Highway and Baldwin Avenue operates at an overall LOS F ("extreme congestion") and its makai-bound approach and westbound left turn experiences serious queuing, with all these movements operating at a LOS F as well. Several side streets operate at LOS E ("very long traffic delays") because of high volumes along the mainline of Hāna Highway.

Existing plans project further growth and development in the Pā'ia-Ha'ikū area, which would correspondingly increase travel demand. Traffic volumes along Hāna Highway are expected to grow 58 percent between the year 2001 and 2030, reflecting a 1.6 percent annual population growth and 0.8 percent annual employment growth along Hāna Highway east of Haleakalā Highway. Considering existing levels of congestion in the study area, additional demand from growth cannot be accommodated by the current transportation infrastructure.

4. The Existing Roadway System Limits Travel Options and Reliability to and from the Study Area

Hāna Highway is the only practical connection between study area communities and business/employment centers in Wailuku, Kahului, and Kihei. With no other options for travel

to areas beyond the Study Area, the existing corridor takes on great importance, both in terms of serving daily commute patterns and providing access to Emergency Providers and Civil Defense.

A variety of incidents have forced closure of the Hāna Highway within the study area. Improvements are needed to reliable and safe access to the study area. Furthermore, the current alignment of Hāna Highway places it within the Tsunami Inundation Zone, defined by Maui Civil Defense and Stream and Coastal Flood Zone AE, defined by the Federal Emergency Management Agency (FEMA). Therefore, a stated need of Maui Civil Defense, FEMA, and Maui Department of Planning is to have an alternative evacuation route outside of the tsunami inundation and flood plain zones.

5. Pā'ia's Quality of Life is Adversely Affected by Congestion

The business environment for commercial properties in Pā'ia Town is highly affected by traffic congestion. Congestion makes traveling to the downtown area less pleasant, inhibits pedestrian crossings of Baldwin Avenue and Hāna Highway, and detracts from the community ambience. Furthermore, residents' and commuters' quality of life are affected by their expenditure of time and resources due to congestion.

To address all the needs listed above, the purpose of the project is to address these needs through alternatives that would either improve the existing roadway alignment, construct a new roadway alignment around Pā'ia, or potentially implement a combination of the two.

Therefore, the purposes of the project are to:

- Improve Safety for All Modes of Travel
- Reduce Vehicle Travel Times
- Alleviate Congestion in Pā'ia
- Provide Improved, More Convenient Access to the Towns of Pā'ia and Ha'ikū
- Support Pā'ia's Quality of Life through Transportation Improvements

A community advisory group, Paia Relief Route Advisory Group (PRAG), has been meeting as part of a context sensitive solutions process initiated by HDOT. In addition to the above noted purposes and needs, the PRAG identified several important context sensitive criteria for a successful alternative. These are as follows:

- Emphasize native landscaping and shading
- Integrate this project with County planning efforts to promote logical patterns of land use
- Create the least impact on agricultural lands
- Expedite the effort to take advantage of existing and future funding programs
- Accommodate ample parking in Pā'ia Town

1.3 Planning Process

1.3.1 EIS Trigger

Since the project would use state funds and property, it must undergo environmental review in accordance with Hawai'i Revised Statutes (HRS) Chapter 343 (the State EIS law). Similarly, since federal funds may be used, the project must also comply with NEPA. A single EIS document will be prepared to comply with both state and federal EIS requirements.

1.3.2 Significance Criteria

Based on Significance Criteria specified in Hawai'i Administrative Rules (HAR) Chapter 200, HDOT has determined that the proposed action may have a significant impact on the environment; therefore, HDOT will prepare an EIS. This FEA-EISPN will be announced in the Office of Environmental Quality Control's (OEQC) publication, *The Environmental Notice*.

The FHWA has also determined that the project will have a significant impact on the environment and FHWA has therefore published on November 17, 2009 a "Notice of Intent" (NOI) to prepare an EIS in *the Federal Register*.

1.3.3 Scoping

Scoping activities, including analysis of input received from noticing and distributing the FEA-EISPN, will be conducted before the preparation of the Draft EIS (see **Chapter 4: PLANNED SCOPING ACTIVITIES** for a more complete discussion of scoping activities). A 30-day public comment period will follow the publication of the FEA-EISPN, and input will be considered in the development of the Draft EIS. A public scoping meeting will be scheduled during the 30-day comment period.

1.3.4 Alternatives Screening

The scoping process and engineering investigation will identify a list of possible roadway improvement alternatives. HDOT will prepare an Alternatives Analysis Report that will evaluate the range of alternatives. It is expected that only those most feasible and prudent alternatives advancing from the alternatives analysis will receive detailed assessment in the Draft EIS.

1.3.5 Draft and Final Environmental Impact Statements

The Draft EIS will describe the project alternatives being considered, and discuss potential impacts of the alternatives in a comparative format. It will define the issues that differentiate between the alternatives, and provide a basis for choice by decision makers and the public. Areas of potential impact to be discussed will be finalized after the completion of the scoping process, but may include land use and zoning; parklands; economic development; community disruption and displacements; environmental justice; aesthetics; air quality; noise; wildlife, vegetation, threatened and endangered species; farmland; water quality, wetlands, waterways, and floodplains; energy; hazardous materials; indirect and cumulative impacts; construction-phase impacts; and cultural, historic, and archaeological resources. Impacts to resources

covered by Section 4(f) of the 1966 U.S. Department of Transportation Act also will be addressed.

Upon completion of the Draft EIS, a notice of availability will be published in Hawai'i State Department of Health's Office of Environmental Quality Control's (OEQC) *The Environmental Notice*, and a notice of availability will be published in the *Federal Register*. The OEQC notice will trigger a 45-day public review period, and the *Federal Register* notice will trigger a 60-day public review period. A public hearing will be held during the comment period. All comments received by the later deadline will be considered.

Comments will be incorporated into a Final EIS. The alternative determined to be the most prudent and practicable by HDOT and FHWA will be identified in the Final EIS as the Preferred Alternative.

Upon acceptance by the Governor of Hawai'i of the Final EIS, a notice of acceptance of the Final EIS will be published in the OEQC's *The Environmental Notice*, initiating a 60-day challenge period.

Availability of the Final EIS also will be published in the *Federal Register*, initiating a 30-day public review period. After that time, a federal Record of Decision (ROD) will be filed by FHWA. The ROD will record the federal recommendation of the selected alternative and document the decisions made by the implementing agencies. It will also document any commitments made as conditions for construction, such as mitigation requirements.

1.3.6 Accepting Authorities

The accepting authorities of the Final EIS are the Governor of Hawai'i and the FHWA Hawai'i Division Administrator. Once the Governor accepts the Final EIS, the requirements of Chapter 343 will be satisfied. At the federal level, the Record of Decision (ROD) will be prepared and signed by the Division Administrator after acceptance of the Final EIS. Approval of the ROD by the FHWA completes the NEPA process.

1.3.7 Statute of Limitations

A new provision in Section 6002 of SAFETEA-LU allows HDOT and FHWA to invoke a 180-day statute of limitations on claims for all environmental and other approval actions made during this planning process. Statute of limitations applies to a permit, license, or approval action by a Federal agency if:

- The action relates to a transportation project; and
- A statute of limitations notification is published in the *Federal Register* (FR) announcing that a federal agency has taken an action on a transportation project that is final under the Federal law pursuant to which the action was taken.
- HDOT and FHWA intend to invoke the 180-day statute of limitations provision for this project.

CHAPTER 2: ALTERNATIVES

The scoping process being initiated by the distribution of this FEA-EISPN, and a separate engineering evaluation, are intended to generate a range of project alternatives for subsequent evaluation. Public input on alternatives that would help to satisfy project purposes is requested. A screening process is envisioned, with the range of feasible and prudent alternatives being addressed in greater detail in the Draft EIS. Public input on the criteria to determine which alternatives are feasible and prudent also is requested.

For those alternatives to be discussed in greater detail, the Draft EIS will summarize the environmental consequences of each alternative, comparing and defining the differences between them.

2.1 No Build Alternative

The Draft EIS will describe the No Build alternative, which would leave Hāna Highway in its current condition except for programmed short-term and minor activities such as safety upgrades and maintenance. It will discuss projected traffic volumes and other environmental conditions under this scenario, and assess the impact of the No Build alternative. The degree to which the No Build alternative satisfies the project's purpose and need will also be discussed.

2.2 TSM Alternative

A Transportation System Management (TSM) alternative requiring minimized construction and capital investment will also be described in the Draft EIS. TSM measures may include lower-capital investment solutions such as restriping the roadway, establishing contra flow lanes, enhancing transit, encouraging ridesharing, minor widening of the roadway in-place (for shoulders or other non-capacity purposes), and/or raising the roadbed in areas of high shoreline hazard. The TSM could also include establishing and improving intersections along the existing roadway, including channelization, removing parking stalls, roundabouts, or left turn lanes.

The TSM alternative will attempt to improve the performance of existing transportation facilities through minimized initial cost. However, the cost of ongoing maintenance and repairs to the facility may be higher with a TSM alternative. Whether the maintenance costs of the TSM alternative appear to be substantially different from the maintenance costs of the other alternatives will be examined.

2.3 Alternative Alignments of Relief Road

The Draft EIS will consider multiple alignments of new mauka relief road construction. Pending the results of the scoping process, widening the existing alignment of Hāna Highway is not expected to be considered as it does not meet the Purpose and Need for the project and would have extensive anticipated adverse impacts upon Pā'ia Town.

2.4 Key Issues and Evaluation Criteria for Alternatives

Criteria will be used to differentiate among improvement alternatives. Input on the criteria that should be used to screen and evaluate the alternatives is welcome.

An initial list of criteria that are expected to differentiate among the alternatives is:

- Achievement of project purposes and needs;
- Environmental impact, such as impacts on cultural resources, archaeological resources, biological resources, and water resources;
- Social and community impacts;
- Indirect and cumulative impacts;
- Ease of implementation, including engineering feasibility and cost-benefit ratio; and
- Construction cost.

CHAPTER 3: ENVIRONMENTAL SETTING AND PROPOSED IMPACT STUDIES

This section provides a brief overview of the existing environmental conditions in the study area. Implementation of the project would produce both adverse and beneficial impacts to the environment, and this section will briefly describe the current understanding of potential impacts to be analyzed in the Draft EIS. In turn, the following topics may also help evaluate the improvement alternatives listed in Section 2.

3.1 Transportation System

Effects of each project alternative on the transportation system will be addressed in the Draft EIS, including traffic, transit, pedestrians, bicyclists, and parking.

3.2 Physical Environment

3.2.1 Geology and Soils

The Draft EIS will show the location of soil types in the area and describe their suitability for construction. Some of these soil types may be considered “prime” or “significant” in terms of agricultural use. Use of farmland is discussed in greater detail in **Section 3.3.1.1: Use of Prime Agricultural Lands** below.

3.2.2 Air Quality

Air quality impacts will be discussed qualitatively, since Hawai'i is in attainment of the National Ambient Air Quality Standards. It is not expected that air quality impacts will differentiate among the alternatives. In general, reduction of congestion should lower air emissions at intersections experiencing high level of traffic delay.

Construction would cause localized, short-term air quality impacts. Mitigation measures for construction-phase air pollutant emissions will be discussed.

3.2.3 Noise

The alternatives would increase noise levels at certain locations both during construction and roadway use. Noise analyses will be conducted to determine whether the noise impacts would vary among the alternatives. If feasible and reasonable, consideration of noise walls may be warranted at locations that exceed the FHWA Noise Abatement Criteria or have a substantial increase in noise levels.

3.2.4 Water Resources

3.2.4.1 Streams

There are natural gulches with intermittent waterbodies in the study area. There are also multiple named and unnamed man-made ditches created for irrigation purposes that cross the natural gulches in the project study area. The Draft EIS will identify major streams and “waters

of the U.S.” in the study area. The impacts of the alternatives on these surface water resources will be discussed.

3.2.4.2 Wetlands and Floodplains

No natural wetlands are known to exist within the study area. There are several man-made irrigation ponds that were created for agricultural purposes.

Some areas of the Hāna Highway are located within the 100-year floodplain. The Draft EIS will include current Flood Insurance Rate Map information and identify flood-prone areas. Because a new roadway could affect regional drainage patterns, the Draft EIS will examine the impact of each of the project alternatives on area hydrology, drainage, and flood conditions.

3.2.4.3 Aquifers

The Pā'ia and Ha'ikū aquifers are basal aquifers containing large reserves of fresh groundwater that supply much of the island. In addition, parts of the Pā'ia-Ha'ikū area are served by surface water that flows from the Kailua Gulch and Maliko watersheds. There have been some concerns about the reliability of Maui's potable water supply due to droughts in recent years. The potential impact on groundwater resources is not expected to differentiate among the project alternatives and will be discussed in the EIS.

3.2.4.4 Coastal Zones

The project study area is regulated under Coastal Zone Management. The existing Hāna Highway is in close proximity to the shoreline, with portions in the Special Management Area. The Draft EIS will consider regulatory controls of activities in Coastal Zones, including Special Management Areas and Shoreline Setback Areas where appropriate.

3.2.5 Biological Resources

3.2.5.1 Terrestrial Fauna

The Draft EIS will include an assessment of zoological resources. No wetlands that might serve as water bird habitats are currently known to be located within the study area. A wetlands conservation area is located approximately one-mile west of the project study area. The project alternatives will be compared based on their relative impact to the terrestrial fauna, including threatened and endangered species and their habitats. If impacts to these species or their habitat cannot be avoided, mitigation measures will be identified.

3.2.5.2 Aquatic Resources

Streams within the project area are primarily impacted by agricultural activities; however, some may provide habitat for native and introduced species of fish, insects, mollusks, and crustaceans. The Draft EIS will examine impacts on aquatic resources, particularly with respect to any differential impact that the alternatives could generate. The study will also recommend mitigation to minimize the impact of project-related construction activities.

3.2.5.3 Botanical Resources

The Draft EIS will include a botanical survey and wetland study that will identify vegetation types and plant communities within the study area. The Draft EIS will discuss the presence or absence of threatened and endangered species or species of concern along the alternative roadway alignments. Differential environmental impacts generated by the alternatives will be identified and appropriate mitigation measures proposed.

3.2.5.4 Threatened or Endangered Species Consultation

Consultation with the U.S. Fish and Wildlife Service will be conducted in accordance with Section 7 of the Endangered Species Act. The State of Hawai'i Department of Land and Natural Resources (DLNR) will also be consulted in accordance with the Hawai'i Endangered Species Act, Chapter 195D, Hawai'i Revised Statutes. The project alternatives will be compared based on its relative impacts to threatened and endangered species including the threatened Newell's Shearwater and endangered Hawaiian Petrel.

3.2.6 Hazardous Materials

It is possible that some sites with a history of industrial or agricultural use within the study area may contain contaminated soil and groundwater. The Draft EIS will include a hazardous materials study, including a database search of potential sources of contamination and assessments of whether the proposed action would potentially trigger releases of contamination. Differential impacts of the alternatives will be discussed.

3.3 Social Environment

3.3.1 Land Ownership and Land Use

The study area includes primarily privately owned lands, which are developed and undeveloped. Properties within the study area are designated as agriculture, and urban by the State Land Use Commission. Small areas of conservation-designated property border the outside edge of the Study Area in the vicinity of Ho'okipa Beach Park. The majority of the study area is cultivated agricultural land use for the production of sugar cane. The urban area surrounds Hāna Highway and Baldwin Avenue.

The land use impacts of the different project alternatives may vary substantially. Therefore, comparing the land use impacts of the alternatives is expected to be a focus of the Draft EIS. The Draft EIS will provide information on land ownership and use, including future land uses. The Draft EIS will also address possible impacts that the alternatives may cause, including residential or commercial displacements, adverse impacts on existing businesses, partial acquisition of properties and any changes in access to properties that would affect their use. Mitigation measures will be discussed.

3.3.1.1 Use of Prime Agricultural Lands

Much of the study area is classified as “Prime Agricultural Land” according to the Agricultural Lands of Importance to the State of Hawai'i (ALISH) land classification system (1977). Much of the study area is currently under active sugar cane cultivation.

Construction of the project may impact agricultural fields. The federal Farmland Protection Policy Act (FPPA) requires consideration of adverse effects on farmland. The alternatives will be evaluated in accordance with the requirements of the FPPA, and the Draft EIS will identify potential impacts on agricultural lands, either from land acquisition or changes in parcel configuration.

3.3.2 Social and Economic Conditions

3.3.2.1 Population and Housing

In 2006, the County of Maui Planning Department prepared the Socio-Economic Projections for the Maui County General Plan 2030. In 2000, the population of Maui Island was 117,644 persons, and the population of West Maui was 17,967. By 2030, the population of Maui Island is anticipated to increase to 186,254 persons. The island's de facto (residents and visitors) population is projected at 246,532 by 2030 if development continues at historic rates. These projected population and visitor increases will present additional demands on the transportation infrastructure of the area.

From 2000 to 2005 Maui County has experienced strong housing demand, some of which can be attributed to off-island investor interest in Maui real estate. About 20 percent of Maui residential property has an out-of-state owner. From 2000 to 2030, housing demand on the island of Maui is projected to increase from 44,041 to 70,058 households.

The alternatives will be evaluated in terms of their ability to accommodate future travel demand, against this backdrop of population and growth and housing construction.

3.3.2.2 Employment

The Draft EIS will list major employment centers in the area. Analyses will be conducted of potential impacts to commercial and business districts, as well as any tax revenue impacts on the County of Maui.

3.3.2.3 Executive Order on Environmental Justice

In accordance with the Executive Order on Environmental Justice (Executive Order 12898), the Draft EIS will include information on the location of and project effects on minority and low-income populations. The Draft EIS will also include measures to avoid disproportionately high and adverse effects on minority and low-income populations' health or environment and involve these populations in evaluation of the project and its alternatives.

3.3.3 Parks and Recreation Areas

Recreational resources along Hāna Highway are primarily found at the coastline. Within the study area there is one developed park: Hookipa Park (**Figure 1: Project Study Area**). While there is only one developed park, the coastline provides a continuous venue for ocean activities such as surfing, fishing, swimming, picnicking, sunbathing, snorkeling, relaxing and sightseeing. Potential direct and indirect impacts on these resources and on smaller parks and recreational areas will be evaluated in the Draft EIS. If the proposed action uses land from a public park or recreational area, a Section 4(f) evaluation would be conducted in accordance with the requirements of the U.S. Department of Transportation (DOT) Act of 1966. The focus of this analysis will be on distinguishing the impacts of the alternatives, and ensuring compliance with Section 4(f), which requires avoidance of any impact unless there is no “reasonable or prudent” alternative.

Recreational properties protected under Section 6(f) of the Land and Water Conservation Act will be identified if relevant, and the need to avoid these properties will be discussed in the Draft EIS.

3.3.4 Archaeological, Historic, and Cultural Resources

Archaeological and historic sites may exist within the study area including pre-contact sites and post-contact agricultural features such as ponds, ditches, siphons, and pipelines as well as historic structures built to support the sugar plantations. An archaeological assessment of the project area will be conducted, and major archaeological and historic areas in the study area will be identified. Potential direct and indirect impacts on these resources will be evaluated in the Draft EIS. The Draft EIS will document compliance with Section 106 of the National Historic Preservation Act and Section 4(f) of the U.S. DOT Act as well as HRS Chapter 6E. HDOT will coordinate with the State Historic Preservation Division (SHPD), County of Maui, Office of Hawaiian Affairs, the Maui Island Burial Council, and other relevant public and native Hawaiian organizations. Documentation of the Section 106/Chapter 6E consultation process will be included in the Draft and Final EIS.

Parties with an interest in the project's potential impact on archaeological and cultural resources, especially Native Hawaiian organizations, are asked to notify HDOT during the FEA-EISPN review and scoping process so that proper consultation can take place.

3.3.5 Visual Resources

Hāna Highway presents unparalleled viewing opportunities from the highway and from fixed points along the route. There are also aesthetic resources within Pā'ia's community center. Visual and aesthetic resources in the study area include panoramic and mauka-makai view planes of the ocean and Haleakalā. The Draft EIS will identify these visual resources and determine whether the proposed action will adversely affect them. Additionally, the visual impact of the alternatives on any neighborhood and streetscape views will be determined. Views of the relief road, under the different alternatives, will also be considered.

3.4 Indirect and Cumulative Impacts

The indirect and cumulative impacts of the alternatives may vary substantially between the alternatives. The President's Council on Environmental Quality (CEQ) regulations implementing NEPA defines indirect impacts as those:

"...which are caused by the proposed action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to the induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems."

Cumulative impacts are those impacts:

"...which result from the incremental consequences of an action when added to other past and reasonably foreseeable future actions" (Code of Federal Regulations, Title 40, Section 1508.7).While impacts can be differentiated by direct, indirect and cumulative, the concept of cumulative impacts takes into account all disturbances since cumulative impacts result from the compounding of the effects of all actions over time. Thus the cumulative impacts of an action can be viewed as the total effects on a resource, ecosystem, or human community of that action and all other activities affecting that resource no matter what entity (federal, non-federal, or private) is taking the actions." (*Consideration of Cumulative Impacts in EPA Review of NEPA documents, U.S. Environmental Protection Agency, Office of Federal Activities (2252A), EPA 315-R-99-002/May 1999*)

The indirect and cumulative impacts of the project on natural, physical, and social environment will be considered in a section of the Draft EIS.

3.5 Project Cost and Phasing Plan

Because of the very high cost of realigning this segment of roadway, a phasing approach will be presented in the Draft EIS. The phasing program might allow some improvements to be made relatively quickly, while funds are sought for the more expensive parts of the project.

3.6 Permits and Approvals

The permits, processes, reviews, and approvals that may be required will depend on the specific features of the alternative selected. However, the following permits may be needed. This list will be refined as the alternatives are developed in more detail. Input on other approvals that may be necessary is requested from government agencies and other participants in the environmental review process.

Federal

National Environmental Policy Act, environmental review process

Department of Army Permit, Section 404 Clean Water Act

Section 4(f) Evaluation, Department of Transportation Act of 1966

Section 7 of the Endangered Species Act (U.S. Fish and Wildlife Service, National Marine Fisheries Service)

Section 106, National Historic Preservation Act

Title VI (Nondiscrimination in Federally Assisted Programs) of the Civil Rights Act of 1964, 42 USC 2000(d)-2000(d)(1) and Executive Order 12898 regarding Environmental Justice

Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970

Farmland Protection Policy Act

U.S. Coast Guard Bridge Permit

Americans with Disabilities Act Accessibility Guidelines

Coastal Zone Management Act federal consistency review

State

Chapter 343 HRS, environmental review process

Department of Health

Noise permit during construction

Section 402, National Pollutant Discharge Elimination System (NPDES) Permit

Chapter 6E, HRS consultation, State Historic Preservation Division

Act 50 (April 26, 2000), Cultural Impact Assessment

Department of Land and Natural Resources, State Endangered Species Act

Department of Land and Natural Resources, Stream Channel Alteration Permit

Department of Land and Natural Resources, Conservation District Use Permit

Maui County

Special Management Area (SMA) Permit

CHAPTER 4: PLANNED SCOPING ACTIVITIES

A public scoping meeting will be held during the 30-day scoping period. It will be held in the project area at an accessible location, with hearing and language assistance provided upon request. Input will be collected and recorded.

The Pā'ia Relief Route Advisory Group (PRAG) has been working to help HDOT with defining key aspects of the project and the group's involvement will continue into the Environmental Impact Statement process. Topics will include 1) project goals; 2) development and ranking of alternatives; 3) construction phasing plan; and 4) mitigation measures. All PRAG Meetings are open to the public.

PRAG members represent a range of interests, such as government agencies, environmental groups, landowners, residents, and business owners. Similar to all community meetings, the PRAG meetings are open to the public, held in the study area, and are accessible to people with disabilities.

This FEA-EISPN will be distributed to a range of federal, state, and Maui County agencies. The FEA-EISPN will also be sent to environmental, community, civic, and business organizations, and individuals with a known interest in the study area.