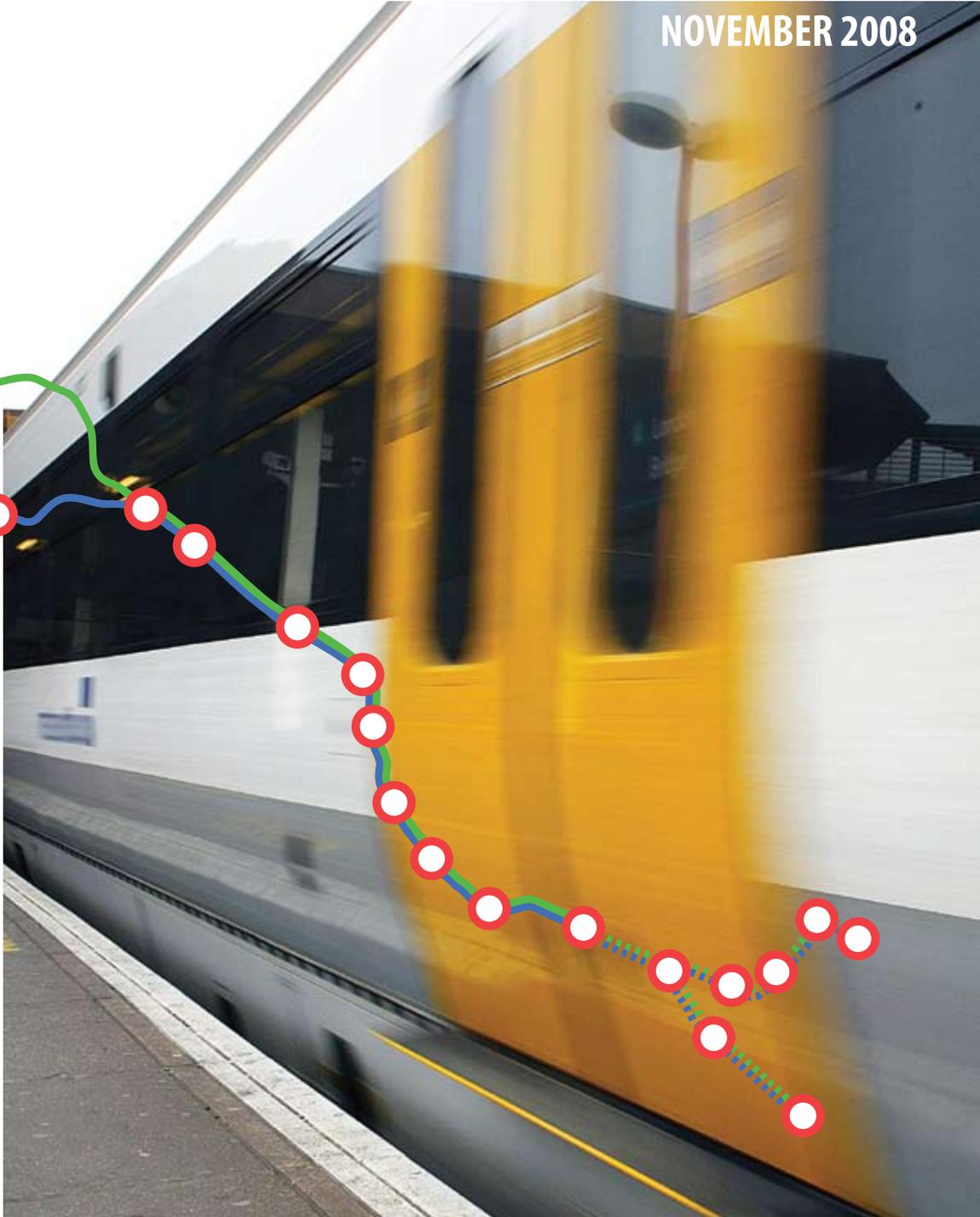




# Honolulu High-Capacity Transit Corridor Project

## DRAFT ENVIRONMENTAL IMPACT STATEMENT/SECTION 4(f) EVALUATION

NOVEMBER 2008





# Honolulu High-Capacity Transit Corridor Project

## City and County of Honolulu, O`ahu, Hawai`i

### Draft Environmental Impact Statement/Section 4(f) Evaluation

Submitted pursuant to 49 USC 1601 et seq., 16 USC 470(f), 49 USC 303, 42 USC 4332(2)(c), 23 CFR 771, and Hawai`i Revised Statutes Chapter 343.

*by the*

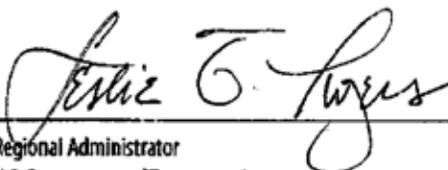
U.S. Department of Transportation Federal Transit Administration  
City and County of Honolulu Department of Transportation Services

*in cooperation with the*

U.S. Department of Defense (U.S. Army Corps of Engineers)  
U.S. Department of Defense (U.S. Army Garrison—Hawai`i)  
U.S. Department of Homeland Security (U.S. Coast Guard—14th Coast Guard District)  
U.S. Department of Transportation Federal Highway Administration  
State of Hawai`i Department of Transportation

OCT 29 2008

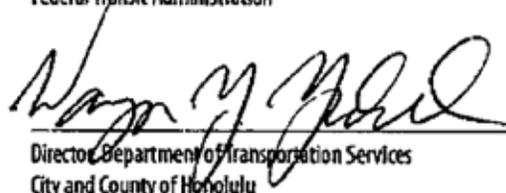
Date of Approval



Regional Administrator  
U.S. Department of Transportation  
Federal Transit Administration

October 29, 2008

Date of Approval



Director, Department of Transportation Services  
City and County of Honolulu

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## **Abstract**

This Draft Environmental Impact Statement/Section 4(f) Evaluation identifies the current and future need to address mobility and travel reliability issues, to support transportation and land use planning policies, and improve transportation equity in the corridor between Kapolei and the University of Hawai'i at Mānoa on the Island of O'ahu in the State of Hawai'i. In compliance with the National Environmental Policy Act, this document considers a No Build and three Build Alternatives that would provide high-capacity transit service in the corridor between East Kapolei and Ala Moana Center. The alternatives range between 19 and 25 miles of elevated guideway and include transit stations, park-and-ride facilities, a maintenance and storage facility, and other ancillary facilities to support the transit system. This document evaluates the transportation effects and potential consequences on the natural and human environment, including effects on land use and economic activity; communities and neighborhoods; air quality and energy; noise and vibration; hazardous materials; natural resources; water quality; and archaeological, cultural, and historic resources. Financial implications of construction and operation of the proposed transit system are also evaluated. This document also includes a Section 4(f) Evaluation in compliance with the U.S. Department of Transportation Act of 1966.

## **Comments**

Comments are requested by January 7, 2009, and should be returned to Mr. Matley and Mr. Yoshioka at the above address. A DVD of the document is available at no cost. The document is available on the project website at [honolulutransit.org](http://honolulutransit.org) and may be reviewed at the following locations:

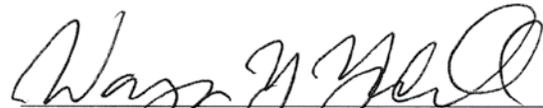
- City and County of Honolulu Municipal Library
- All O'ahu public libraries
- City and County of Honolulu Department of Transportation Services, 650 South King Street, 3rd floor
- City and County of Honolulu Department of Transportation Services, Rapid Transit Division, 1099 Alakea Street, 17th floor

Printed copies of the document are available for purchase.

## State of Hawai'i Chapter 343 Draft EIS Summary Sheet

<b>Description of Project</b>	The Project would provide high-capacity transit service on O'ahu in the travel corridor between Kapolei and the University of Hawai'i at Mānoa (UH Mānoa)	
<b>Substantial Beneficial and Adverse Effects</b>	<ul style="list-style-type: none"> <li>• Improve transit access, speed and reliability</li> <li>• Improve access to planned development</li> <li>• Increase travel options for transit dependent, limited income and aging populations</li> <li>• Moderate future traffic congestion</li> <li>• Reduce air pollutant emissions</li> <li>• Reduce transportation energy use</li> <li>• Loss of parking, turn lanes and bicycle lanes in some locations</li> <li>• Right-of-way acquisition and displacement in some locations along the alignment</li> <li>• Changes to views associated with an elevated guideway, light, glare, and shadows</li> <li>• Noise impacts</li> <li>• Prune, remove, and transplant street trees</li> <li>• Adverse effects to historic and cultural resources</li> <li>• Temporary adverse effects during construction for access, noise, and traffic</li> </ul>	
<b>Proposed Mitigation Measures</b>	<ul style="list-style-type: none"> <li>• Incorporate new traffic management into design, replace some parking in lots</li> <li>• Provide relocation assistance for displaced residents and businesses</li> <li>• Minimize visual impacts with project design</li> <li>• Noise mitigation, such as sound-absorptive materials</li> <li>• Transplant or replant street trees</li> <li>• Relocation assistance for cultural practices</li> <li>• Measures to avoid, minimize, and mitigate harm to historic resources, such as Historic American Building Surveys</li> </ul>	
<b>Alternatives Considered</b>	<ul style="list-style-type: none"> <li>• No Build Alternative</li> <li>• Salt Lake Alternative</li> <li>• Airport Alternative</li> <li>• Airport &amp; Salt Lake Alternative</li> </ul>	
<b>Unresolved Issues</b>	<ul style="list-style-type: none"> <li>• Preferred alternative</li> <li>• Selection of the site of the maintenance and storage facility</li> <li>• Mitigation of adverse impacts to the natural and built environment during construction and operation</li> <li>• Historic resource effect determination</li> </ul>	
<b>Compatibility with Plans and Policies</b>	The Build Alternatives would be consistent with adopted State and Local government transportation and land use plans and policies.	
<b>Permits and Approvals</b>	<ul style="list-style-type: none"> <li>• Archaeological Inventory Survey Plan</li> <li>• Archaeological Resource Protection Permit</li> <li>• Certificate of Inclusion HDLNR (Division of Forestry and Wildlife)</li> <li>• Clean Water Act Section 404</li> <li>• Coastal Zone Management</li> <li>• Drainage Injection Well</li> <li>• Farmland Conversion Impact Rating</li> <li>• Floodplain Management and Protection Approval</li> <li>• Jurisdictional Determination Clean Water Act Section 401</li> </ul>	<ul style="list-style-type: none"> <li>• National Pollutant Discharge Elimination System (Dewatering)</li> <li>• National Pollutant Discharge Elimination System (General)</li> <li>• Noise Variance</li> <li>• Road Closure</li> <li>• Section 10</li> <li>• Section 106 Memorandum of Agreement</li> <li>• Sole Source Aquifer</li> <li>• Stream Channel Alteration</li> </ul>

October 30, 2008  
Date

  
Director, Department of Transportation Services  
City and County of Honolulu

*This document was prepared under my direction or supervision. The information, to the best of my knowledge, fully addresses document content requirements of HAR Section 11-200-17 and 11-200-18, as applicable.*



# Preface

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## **Purpose of the Draft Environmental Impact Statement**

The purpose of this Draft Environmental Impact Statement (EIS) is to provide the City and County of Honolulu Department of Transportation Services Rapid Transit Division (RTD), the Federal Transit Administration (FTA), and the public and interested parties with the information necessary to make an informed decision, based on a full and open analysis of costs, benefits, and environmental impacts of alternatives considered. Prior to this Draft EIS, the *Honolulu High-Capacity Transit Corridor Project Alternatives Analysis Report* (DTS 2006b) was completed in 2006. After review of the Alternatives Analysis Report and consideration of public comments, the Council of the City and County of Honolulu selected the Locally Preferred Alternative to be a fixed guideway project from Kapolei to the University of Hawai‘i at Mānoa (UH Mānoa) with a connection to Waikiki. The City Council directed the first construction project to be fiscally constrained to anticipated funding sources. The First Project was defined as extending from East Kapolei to Ala Moana Center via Salt Lake Boulevard.

A Hawai‘i Revised Statutes Chapter 343 EIS preparation notice was issued for this Project on December 8, 2005. The Notice of Intent to prepare this Draft EIS was published in the *Federal Register* on March 15, 2007. After distribution of the Draft EIS for public and agency review, a public hearing will be held to receive comments from the public and agencies. A Final EIS will then be prepared, which will respond to the comments received. A recommended alternative will be identified. Following publication of the Final EIS, the Governor of Hawai‘i will accept the EIS and the FTA will sign a Record of Decision. The Record of Decision will summarize the alternatives considered, factors that support selection of the recommended alternative, and commitments to measures that mitigate substantial environmental impacts.

The Honolulu High-Capacity Transit Corridor Project would provide high-capacity transit service in the travel corridor between Kapolei and UH Mānoa on O‘ahu. This corridor includes the majority of housing and employment on O‘ahu. The east-west length of the corridor is approximately 23 miles. The north-south width is at most 4 miles,

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because much of the corridor is constrained by the Koʻolau and Waiʻanae Mountain Ranges to the north and the Pacific Ocean to the south. This document discusses 34 miles of guideway within the 23-mile corridor included in the Locally Preferred Alternative selected by the City Council. However, the detailed environmental analysis and documentation applies to the core 19-mile alignment between East Kapolei and Ala Moana Center. Future planned extensions are from East Kapolei to West Kapolei and from Ala Moana Center to UH Mānoa and to Waikīkī. These future planned extensions are addressed as cumulative effects in Section 3.6, Cumulative Transportation System Effects, and Section 4.18, Indirect and Cumulative Effects.

This document builds on the finding of the Alternatives Analysis Report, follows FTA planning and guidance, and provides information on the four alternatives studied:

- No Build Alternative
- Fixed Guideway Transit Alternative via Salt Lake Boulevard (Salt Lake Alternative)
- Fixed Guideway Transit Alternative via the Airport (Airport Alternative)
- Fixed Guideway Transit Alternative via the Airport & Salt Lake (Airport & Salt Lake Alternative)

The Project is proposed to be constructed in the following four phases (Figure 2-44):

- East Kapolei to Pearl Highlands
- Pearl Highlands to Aloha Stadium
- Aloha Stadium to Middle Street
- Middle Street to Ala Moana Center

For the Airport & Salt Lake Alternative, the section between East Kapolei and Ala Moana Center along Salt Lake Boulevard would be constructed first, followed by the connection from the Middle Street Transit Center to the Honolulu International Airport, and finally the connection from the Airport to Aloha Stadium.

This document is a joint NEPA and Hawaiʻi Revised Statutes Chapter 343 Draft EIS. It is intended to provide decision-makers and the public with information on the Project's environmental impacts and benefits. It also serves as documentation of the coordination conducted in compliance with Section 106 of the National Historic Preservation Act of 1966, as amended, and as the Draft Section 4(f) Evaluation prepared under Section 4(f) of the Department of Transportation Act of 1966.

## **Organization of the Draft Environmental Impact Statement**

This document is divided into two volumes. This volume contains the Draft EIS, which consists of the following eight Chapters:

Chapter 1 discusses the Project's background, describes the study corridor from Kapolei to UH Mānoa and Waikīkī, and explains the Purpose and Need for the fixed guideway project.

Chapter 2 details the alternatives and technologies considered during the screening and selection process and summarizes the alternatives considered during and after the Alternatives Analysis process.

Chapter 3 describes existing and future transportation conditions in the study corridor, presents consequences, and discusses proposed mitigation for potential transportation impacts.

Chapter 4 describes existing and future environmental conditions, presents consequences, and discusses proposed mitigation for the potential environmental impacts of all the alternatives.

Chapter 5 discusses the Project's effects on public parks, recreation areas, and historic properties to support determinations required to comply with the provisions of the U.S. Department of Transportation Act of 1966 (commonly referred to as Section 4(f)).

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Chapter 6 presents the various funding sources and estimated capital and operating costs.

Chapter 7 compares the alternatives based on the information in Chapters 3 through 6.

Chapter 8 discusses the overall public outreach and agency coordination components.

Volume II consists of electronic files for the appendices referenced in the Draft EIS. The CD is located at the end of this volume. Technical reports supporting the analysis presented in this Draft EIS are available for review from the City and County of Honolulu.

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List of Preparers

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