



**STERLING HIGHWAY Milepost 37-60  
Draft Environmental Impact/Section 4(F) Statement**

STATE OF ALASKA  
Department of Transportation and Public Facilities and The Federal Highway Administration

PROJECT RF-021-2(15)

STERLING HIGHWAY  
MILEPOST 37-60

DRAFT

ENVIRONMENTAL IMPACT/SECTION 4(f) STATEMENT

U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION

AND

ALASKA DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES

Date

6/29/82

FHWA

The following persons may be contacted for additional information concerning this document:

Mr. Keith R. Morberg  
Central Region  
Highways Engineering Chief  
Alaska Department of  
Transportation & Public Facilities  
Pouch 6900  
Anchorage, Alaska 99502

Mr. Gene Hanna  
Division Administrator  
Federal Highway Administration  
P.O. Box 1648  
Juneau, Alaska 99809

Telephone: 907-266-1502

Telephone: 907-586-7421

The project involves reconstructing a 22-mile section of the Sterling Highway between Skilak Lake Road and the Seward Highway junction.

Comments on this Draft EIS are due by October 15, 1982 and should be sent to Mr. Keith R. Morberg at the address shown above.

TABLE OF CONTENTS

SUMMARY. . . . . 1

I. PURPOSE AND NEED. . . . . 5

II. ALTERNATIVES. . . . . 11

III. AFFECTED ENVIRONMENT. . . . . 26

IV. ENVIRONMENTAL CONSEQUENCES. . . . . 38

    A. Visual Impacts . . . . . 51

    B. Social and Economic Impacts. . . . . 57

    C. Relocation Impacts . . . . . 70

    D. Air Quality. . . . . 72

    E. Noise Impacts. . . . . 74

    F. Water Quality Impacts. . . . . 85

    G. Stream Modification Impacts. . . . . 101

    H. Coastal Zone Involvement . . . . . 110

    I. Wetlands Impacts and Mitigation. . . . . 111

    J. Floodplain Involvement . . . . . 120

    K. Natural Resources Impacts. . . . . 122

    L. Land Use Planning Impacts. . . . . 127

    M. Historical/Cultural Site Impacts . . . . . 131

    N. Construction Impacts . . . . . 133

    O. Permits. . . . . 145

    P. Draft 4(f) Evaluation. . . . . 146

V. Comments and Coordination . . . . . 156

VI. List of Preparers . . . . . 163

    List of Contacts. . . . . 164

    References. . . . . 169

APPENDICES

Appendix A - Comments and Coordination Documents

Appendix B - Noise Quality Report

Appendix C - Supportive Data

INDEX

## LIST OF FIGURES

	Page
1. System Linkage . . . . .	6
2. Rejected Alternative Routes. . . . .	24-A
3. Physiographic Constraints. . . . .	24-B
4. Seward Wye . . . . .	24-C
5. Mid-Community Alternatives . . . . .	24-D
6. Location and Vicinity Map. . . . .	27
7. Distribution of Known Minerals . . . . .	34-A
8. Existing and Future Development. . . . .	36-A
9. Regional Land Management Jurisdiction. . . . .	37
10. Section 4(f) Involvement Locations . . . . .	148
10A. 4(f) Parcel Number 1 . . . . .	148
10B. 4(f) Parcel Number 2 . . . . .	149
10C. 4(f) Parcel Number 3 . . . . .	149
10D. 4(f) Parcel Number 4 . . . . .	150
10E. 4(f) Parcel Number 5 . . . . .	150

LIST OF TABLES

1-A. A Comparative Analysis of Alternatives -- Alternative B -vs- Juneau Creek Alternative . . . . .	45
1-B. A Comparative Analysis of Alternatives -- Mid-Community Alternative . . . . .	46
1-C. A Comparative Analysis of Alternatives -- Alternative B -vs- Quartz Creek Alternative . . . . .	47
1-D. A Comparative Analysis of Alternatives -- No Action -vs- Action Alternatives. . . . .	48
2. Project Cost Estimate . . . . .	60
3. Carbon Monoxide Emissions in Grams per Mile . . . . .	73
4. Comparisons of Alternatives for Noise Impacts Analysis. . . . .	76
5. Mean Hourly Equivalent Sound Levels, All Construction Phases. . . . .	81
6. Summary of Suspended Sediment Data. . . . .	90
7-A. Erosion and/or Sedimentation Potential -- Alternative B -vs- Juneau Creek Alternative . . . . .	92
7-B. Erosion and/or Sedimentation Potential -- Alternative B Station 1730-1812 -vs- Bean Creek Alternative Station 1726-1812 . . . . .	93
7-C. Erosion and/or Sedimentation Potential -- Alternative B Station 1730-1812 -vs- Bean Creek Alternative Station 1726-1812 . . . . .	94
7-D. Erosion and/or Sedimentation Potential -- Alternative B -vs- Quartz Creek Alternative . . . . .	95
8. Summary of Stream Modifications . . . . .	108
9. Wetlands Involvement. . . . .	115
10. Wildlife in the Kenai Lake Area . . . . .	124
11. Fuel Consumption. . . . .	126

## SUMMARY

### A. Description of the Proposed Action

The proposed project is a highway improvement involving the reconstruction of the existing Sterling Highway between the Skilak Lake Road and the junction with the Seward Highway, a distance of about 22 miles. This is the only overland transportation corridor through the Kenai Mountains to the western and southern Kenai Peninsula. Improvements within the corridor are necessary to provide for the safe and convenient passage of existing and projected traffic. Also included in this proposal is a partial interchange at the Seward Highway junction.

The existing facility is a narrow, winding, two-lane highway originally constructed in the early 1950's. The proposed reconstruction would provide a two-lane roadway meeting current American Association of State Highway Officials (AASHO) standards for width, design speed and alignment. Existing right-of-way would be used to the maximum extent possible.

### B. Feasible Alternatives

Alternatives include (1) No Action; (2) upgrading on the existing location; and (3) construction partially on new location. Options exist for combinations of alternative alignments, including a by-pass of the

Cooper Landing community with partial control of access on the new bypass section, and multiple bridge crossings of the Kenai River. Because of the mountainous terrain, low population density, and length of the project, other modes of transportation are not alternatives.

C. Significant Impacts

All action alternatives will improve safety and conveniences for highway users. Traffic noise will be one of the most significant negative impacts experienced by individuals in the vicinity of new alignments. Views of the landscape and of the roadway will be altered in varying degrees with realignment and widening of the highway. Wetlands and vegetation will be lost with any but the No Action Alternative, with impacts to fish and wildlife as well. Some cultural sites will also be affected by highway improvements. Many of these environmental impacts will also be experienced as social impacts where they affect community development. Economic effects are possible with changes in traffic patterns resulting from one alternative.

D. Area of Concern

Two conditions exist which require consideration of Section 4(f) of the Department of Transportation Act of 1966: 1) avoidance of wetlands

creates extensive cut slopes, making it necessary to acquire additional right-of-way through portions of the Kenai National Wildlife Refuge; and 2) the project will disturb historic/cultural features which are within an area eligible for listing on the National Register of Historic Places.

#### Distribution List

The following agencies were mailed copies of this document:

I. Kenai Peninsula Borough Planning Commission

II. Local Organizations

Cooper Landing Advisory Planning Commission  
Cooper Landing Community Club  
Cooper Landing Homemakers Club  
Cooper Landing Lions Club  
Cooper Landing Post Office  
Cook Inlet Region, Inc.

III. State Agencies

Office of the Governor, Coastal Management  
Department of Natural Resources, Division of Parks  
and State Historic Preservation Officer  
Department of Natural Resources, Division of Forest,  
Land, and Water Management  
Department of Fish and Game  
Department of Environmental Conservation

IV. Federal Agencies

Army Corps of Engineers, Alaska District  
Department of the Interior

1. Washington, D.C.
2. Bureau of Indian Affairs, Alaska Area Director
3. Office of the Secretary, Anchorage
4. Fish and Wildlife Service
  - a. Alaska Area Director, Anchorage
  - b. Kenai National Wildlife Refuge Manager, Soldotna
5. Heritage Conservation and Recreation Service,  
Alaska Area Office, Anchorage
6. Geological Survey, Water Resources Division, Anchorage

Department of Commerce

1. Deputy Assistant Secretary for Environmental Affairs,  
Washington, D.C.
2. National Marine Fisheries Service, Regional Director,  
Juneau
3. National Marine Fisheries Service, Anchorage Field  
Office Supervisor



Environmental Protection Agency

1. Washington, D.C.
2. Seattle, Washington
3. Alaska Operations office

Department of Agriculture, Forest Service

1. Region 10 Environmental Coordinator, Juneau
2. Chugach National Forest Supervisor, Anchorage
3. District Ranger, Seward