

### Knik-Goose Bay Road Reconstruction: MP 0.3 to 6.8 Centaur Avenue to Vine Road

Federal No. STP-0525(16) / State No. 52464

# **Environmental Assessment**





Alaska Department of Transportation & Public Facilities

July 2015

#### Knik-Goose Bay Road Reconstruction

#### Environmental Assessment

Project No. 0525016/52464

Submitted Pursuant to 42 USC 4332(2)(c) by the U.S. Department of Transportation, Federal Highway Administration, and State of Alaska Department of Transportation/and/Public Facilities

Date of Approval

Alaska Department of Transportation and Public Facilities, (DOT&PF)

Date of Approval

Federal Highway Administration, FHWA

The project proposes to improve Knik-Goose Bay Road between Centaur Avenue and Vine Road to reduce congestion, improve safety, and increase travel efficiency. Two alternatives are being carried forward in this Environmental Assessment (EA) - the No Build Alternative and Build Alternative. The Build Alternative would construct a four lane divided highway from Centaur Avenue to the Palmer-Wasilla Highway and Mack Road to Vine Road and a six-lane divided highway from the Palmer-Wasilla Highway to Mack Road. This project is part of the Statewide Transportation Improvement Program.

Comments on this EA are due by <u>August 20, 2015</u> and should be sent to Brian Elliott Regional Environmental Manager, Department of Transportation and Public Facilities, P.O. Box 196900, Anchorage, Alaska 99519-6900.

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

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## SAFETEA-LU Section 6002: Efficient Environmental Review Limitation on Claims Notices, 23 U.S.C. Section 139

A Federal agency may publish a notice in the Federal Register, pursuant to 23 USC §139(1), indicating that one or more Federal agencies have taken final action on permits, licenses, or approvals for a transportation project. If such notice is published, claims seeking judicial review of those Federal agency actions will be barred unless such claims are filed within 180 days after the date of publication of the notice, or within such shorter time period as specified in the Federal laws pursuant to which judicial review of the Federal agency action is allowed. If no notice is published, then the periods of time that otherwise are provided by the Federal laws governing such claims will apply.

#### **EXECUTIVE SUMMARY**

The Alaska Department of Transportation and Public Facilities (DOT&PF), in cooperation with the Federal Highway Administration (FHWA), is proposing to reconstruct Knik-Goose Bay (KGB) Road from Centaur Avenue in Wasilla, Alaska, to Vine Road in the Matanuska-Susitna Borough (MSB). The proposed project would address safety concerns and improve mobility along the project corridor.

#### **Purpose and Need**

The purpose of this proposed project is to improve mobility for people and freight and to enhance access management along KGB Road between Centaur Avenue and Vine Road. The project would correct problems created by unconstrained access, thereby improving safety and reducing congestion for roadway users. The purpose of this proposed project is precipitated by three needs:

#### 1. Safety

KGB Road currently experiences above average crash rates and is a designated Traffic Safety Corridor.

#### 2. Congestion Relief

Traffic volumes during peak travel periods cause unacceptable congestion on KGB Road. Without improvements the forecast traffic volumes lower the Level of Service (LOS) to F.

#### 3. Travel Efficiency

As an urban principal arterial, KGB Road's primary purpose is to move large volumes of traffic from one area to another while providing reasonable access.

#### **Existing Conditions**

Knik-Goose Bay Road is a rural two-lane road extending approximately 20 miles from the Parks Highway in Wasilla, Alaska, to the Goose Bay Airport in the MSB. This proposed project begins at Centaur Avenue [milepost (MP 0.3)] and ends at Vine Road (MP 6.8), for a total length of 6.5 miles. Within the project limits KGB Road has two 12-foot wide travel lanes, paved shoulders varying from four to six feet in width, and gradual side slopes. DOT&PF functionally classifies KGB Road as a Principal Arterial between the Parks Highway (MP 0) and the Goose Bay Airport (MP 19.9).

Within the proposed project area, KGB Road is a high-traffic-volume corridor connecting numerous residential neighborhoods to the Parks Highway. Current traffic volumes are approximately 20,000 vehicles per day, and traffic forecasts show that number increasing to over 50,000 by the 2039 design year. Segment capacity analysis indicates KGB Road is currently operating between LOS C and F within the project limits. Without improvement, design year traffic flow for the entire project area is predicted to deteriorate to LOS F and the entire existing facility will be over capacity.

#### **Alternatives Considered**

This Environmental Assessment (EA) carries two alternatives forward for detailed consideration:

1. **Preferred**: Six-lanes (three lanes in each direction) from Palmer Wasilla Highway (PWH) to Mack Road with a raised urban median and four-lanes (two in each direction)

- from Mack Road to Vine Road, with a non-traversable depressed grass median. The section from Centaur Avenue to PWH would provide space to expand from two to four lanes.
- 2. **No-Build**: The No-Build alternative would leave the road in its current state and no improvements would be made. The DOT&PF would continue to perform road maintenance.

The six-lane section (PWH to Mack Road) would consist of three 12-foot wide travel lanes in each direction with six-foot wide outside shoulders with curb and gutter, four-foot wide inside shoulders, and a 30-foot wide raised median. The four-lane section (Mack Road to Vine Road) would consist of two 12-foot wide lanes in each direction with eight-foot outside shoulders, four-foot inside shoulders, and a 30-foot wide depressed grass median.

#### **Environmental Consequences**

#### No-Build Alternative

The No-Build alternative would not provide additional safety and capacity improvements. DOT&PF would continue to perform maintenance activities to the existing roadway, but these wouldn't address the congestion and safety issues.

#### Preferred Alternative

The potential effects of the Preferred Alternative are summarized in Table ES-1 and are fully described in chapter 3.

**Table ES-1: Comparison of Environmental Consequences** 

| Resource Category      | No-Build       | Preferred Alternative                                     |
|------------------------|----------------|---|
| Air Quality            | No effect      | No effect   |
| Coastal Barriers       | No effect      | No effect   |
| Coastal Zone           | No effect      | No effect   |
| Cultural Resources     | No effect      | No effect   |
| Farmland               | No effect      | No effect   |
| Fisheries              | No effect      | No effect   |
| Floodplains            | No effect      | No effect   |
| Joint Development      | No effect      | No effect   |
| Parks and Recreation   | No effect      | No effect   |
| Areas [Section         |                |   |
| 4(f)/Section 6(f)]     |                |   |
| Threatened and         | No effect      | No effect   |
| Endangered Species     |                |   |
| Waterbodies            | No effect      | No effect   |
| Wild and Scenic Rivers | No effect      | No effect   |
| Land Use               | No new effects | Right-of-way acquisition                                  |
|                        |                | <ul> <li>Project is consistent with applicable</li> </ul> |
|                        |                | transportation and land use plans                         |

| Socioeconomics  | <ul> <li>No new effects</li> <li>Travel conditions will continue to deteriorate</li> </ul>   | <ul> <li>Improved mobility and safety</li> <li>Temporary increase in employment opportunities during construction</li> <li>No disproportionately high and adverse effects on minorities or low-income populations</li> <li>Improved access for emergency services</li> </ul>                                    |
|---|--|---|
| Relocation  | No acquisition of ROW  | <ul> <li>One full parcel acquisition</li> <li>One residential relocation</li> <li>106 partial acquisitions</li> <li>Total affected area is approximately 70 acres</li> </ul>  |
| Considerations Relating to Pedestrians and Bicyclists | No effect  | New pathway surface   |
| Noise   | <ul> <li>39 receptors would<br/>experience noise<br/>impacts by the project<br/>design year</li> <li>Wouldn't consider<br/>abatement measures</li> </ul> | <ul> <li>40 receptors would experience noise impacts by the project design year</li> <li>Abatement analysis is recommended at three locations along the proposed project</li> </ul>   |
| Water Quality   | No new effects   | No permanent effects on water quality are anticipated   |
| Invasive Species                                      | No new effects   | Potential to introduce or spread invasive species   |
| Wetlands  | No encroachment on wetlands  | Approximately 0.60 acre encroachment into palustrine wetland  |
| Wildlife  | No new effects   | <ul> <li>Loss of roadside habitat</li> <li>Further fragmentation of habitat</li> <li>Reduced frequency of moose-vehicle crashes</li> </ul>  |
| Hazardous Waste                                       | No effect  | Potential impacts to human health and safety are minimal  |
| Visual  | <ul> <li>No new effects</li> <li>Existing trends in view shed changes would continue</li> </ul>  | Overall appearance and character would change from a rural two-lane to a more urban divided arterial roadway  |
| Construction Impacts                                  | No effect  | <ul> <li>Reduced air quality</li> <li>Increased noise levels</li> <li>Slight potential for reduced water quality</li> <li>Traffic delays and detours</li> <li>Wildlife avoidance of project area during construction</li> <li>Potential for interference with commercial traffic during construction</li> </ul> |

| Irreversible and Irretrievable Commitment of Resources | No effect | <ul> <li>Additional land necessary is approximately 70 acres</li> <li>Project will require approximately:         <ul> <li>66,000 cubic yards of surface course materials</li> <li>900,000 cubic yards of borrow materials</li> <li>700,000 cubic yards of excavation</li> </ul> </li> </ul> |
|--|-----------|--|
|  |           | Estimated project cost is approximately \$96,000,000   |

#### **Regulatory Permits**

- U.S. Army Corps of Engineers (USACE), Clean Water Act (CWA) Section 404 Permit
  - Permit will authorize the discharge of fill material into the wetlands located west of Lakewood Drive on the north side of KGB Road.
- ADEC, CWA Section 401 Water Quality Certification
  - Due to the anticipated area of impact, 0.60 acre, the project doesn't fit within the limits of any applicable nationwide permits and an individual permit will be necessary, and ADEC will be given the opportunity to provide a water quality assurance certificate.
- ADEC, Alaska Pollution Discharge Elimination System (APDES) General Permit for Discharges from Large and Small Construction Activities (Construction General Permit)
  - Coverage under this permit is necessary because the project will disturb greater than one acre of soil and there is potential for storm water to leave the project and enter waters of the U.S.

#### **Public and Agency Coordination**

The DOT&PF sought public and agency input on the KGB Road Reconstruction Project in order to develop public awareness, receive input from potentially affected parties, identify resource agency concerns, and develop project alternatives reflecting their input. Outreach activities included the following:

- Agency scoping letters
- Public open houses
- Project website
- Newspaper advertisements
- Project comment e-mail address
- Presence at Mat-Su Valley Transportation Fairs

- Mail and e-mail information distribution lists for the public, government, and elected officials
- Presentations to local planning commissions and transportation advisory boards
- Presentations and meetings with local government, community councils, and churches

These activities generated more than 100 written comments and attendance by over 200 citizens, agency representatives, and appointed and elected officials. Agency and public involvement has been ongoing throughout the environmental process and would continue through construction of the proposed project.

The Preferred Alternative has received positive feedback from the majority of project stakeholders. They all recognize the importance of the roadway as a principal arterial and how critical the proposed capacity and safety improvements are for the community. A common comment DOT&PF received for this project is, "why hasn't this been done sooner?" The City of Wasilla engaged heavily in preliminary design coordination with the Department as they had concerns over the project as initially proposed. However, through analysis and discussion of additional alternatives, the DOT&PF developed a preferred alternative that the City of Wasilla supports.