

DALTON HIGHWAY SCENIC BYWAY

Corridor Partnership Plan



March 2010

Prepared for:

Alaska Department of Transportation and Public Facilities,
State Scenic Byways Program

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Sukakpak Mountain. *NPS photo by volunteer Whitney Root*

CONTENTS

1. EXECUTIVE SUMMARY	1
2. ACKNOWLEDGMENTS	3
3. PLANNING PROCESS AND PUBLIC INVOLVEMENT	4
4. BACKGROUND ON BYWAYS	6
5. CORRIDOR ISSUES AND CONCERNS	9
6. VISION, GOALS, AND OBJECTIVES	19
7. ROUTE DESCRIPTION	24
8. INTRINSIC QUALITY ASSESSMENT	30
9. ROAD AND TRANSPORTATION SYSTEM	53
10. BYWAY VISITATION	66
11. SIGNAGE AND INTERPRETATION	75
12. RECOMMENDATIONS AND IMPLEMENTATION	81
13. CONCLUSION	82
14. BIBLIOGRAPHY	84

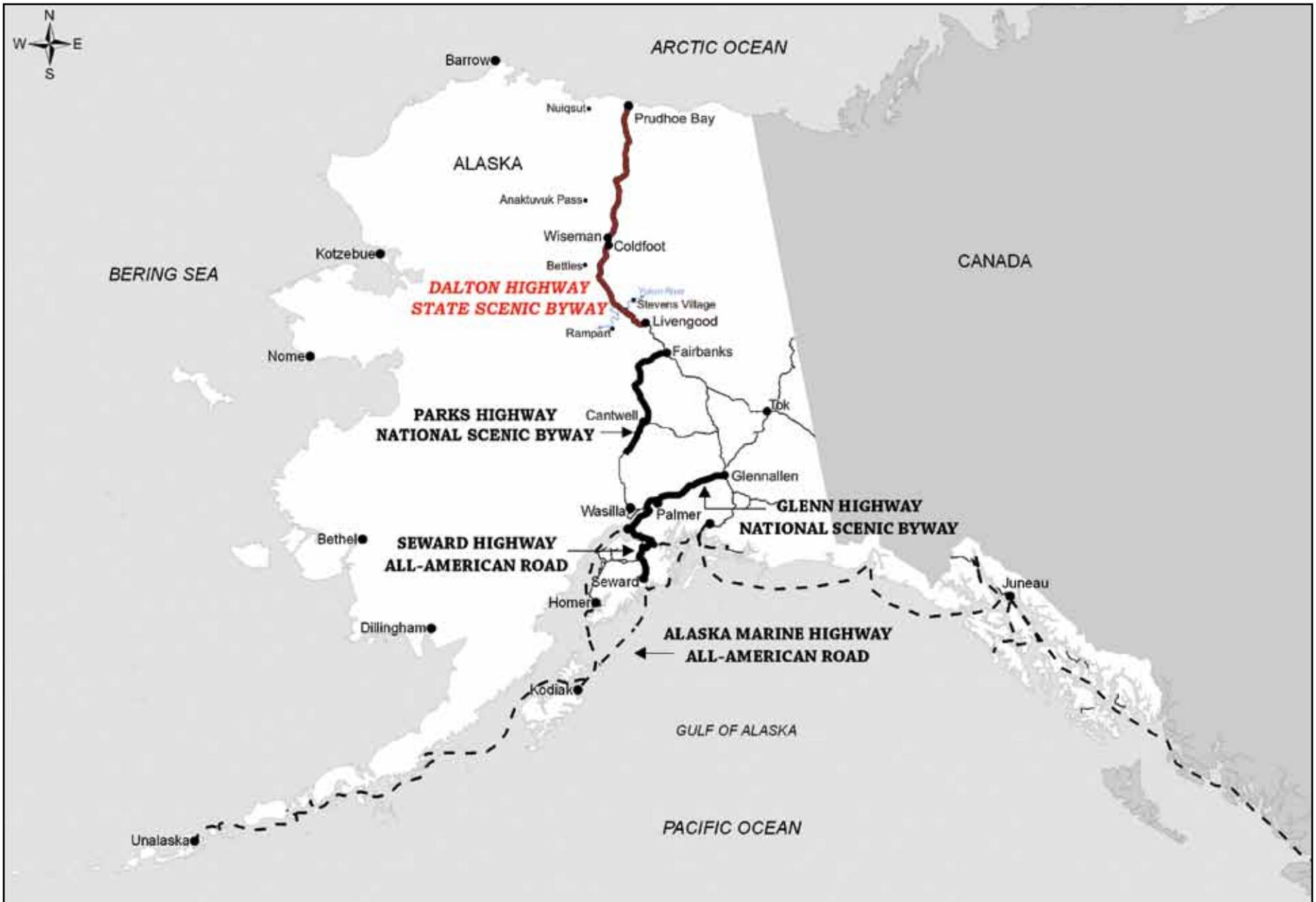


Figure 1. Overview map showing location of Dalton Highway

1. EXECUTIVE SUMMARY

The Dalton Highway Scenic Byway Corridor Partnership Plan (CPP) is a comprehensive evaluation of the byway’s intrinsic qualities and serves as a guide for the management, protection, and enhancement of those qualities over time. The CPP is an expression of local desires, written in cooperation with local communities, organizations, businesses, and public agencies.

In addition to evaluating what makes the Dalton Highway unique and valued by stakeholders, the CPP expresses stakeholders’ concerns voiced during the public process and details how those concerns and challenges influence management and planning. The CPP planning group—the Advisory Team—wishes to use the CPP as a tool to educate others about those concerns and provide suggestions for how to mitigate those concerns.

During the planning process, the Advisory Team felt strongly that the CPP should be a tool for the byway organization to meet the goals and objectives outlined herein. Their mission “to act as a collective voice for all byway stakeholders in order to address concerns relating to current and future uses, management actions, and developments within the Dalton Highway corridor and to preserve, protect, and enhance the byway’s intrinsic qualities...for the benefit of current and future travelers” will aid the implementation of the CPP and development of a working byway organization.

Foremost, the Advisory Team wishes for this document to be a sounding board for issues related to public safety and emergency response infrastructure, visitor services, and preservation of the byway’s non-commercialized traveler experience.

Stakeholders, principally those living and/or working around the community of Wiseman, do not wish for the CPP to be used as a tool to amend or supersede existing state, federal, or local laws—such as ANILCA or ANCSA—or to be used as a tool to undermine or restrict a private citizen’s right to practice subsistence and mining activities within the corridor because of the activities’ cultural significance.



Dalton Highway heading south, north of Atigun Pass

The Dalton Highway Scenic Byway Corridor Partnership Plan

- acknowledges the issues and concerns relating to challenges associated with managing the Dalton Highway corridor;
- outlines goals and objectives that will assist the byway organization in reaching and sustaining their vision;
- provides a descriptive overview of the route;
- provides an assessment of the byway's intrinsic qualities;
- provides an overview of the road and transportation system, including traffic volumes and accident statistics;
- assesses current and future byway visitation and the challenges associated with managing recreational travel on an industrial haul road;
- provides an overview of existing signage and interpretation;
- provides a framework that will help the local byway organization succeed in reaching their stated vision, goals, and objectives.



Musk oxen along the road. Courtesy of John Will

2. ACKNOWLEDGMENTS

A diverse representation of individuals and organizations participated in the Corridor Partnership Plan planning process. The Advisory Team comprised a group of volunteers who functioned as a representative body for stakeholders during the writing of this plan. Other individuals and organizations assisted by reviewing drafts, providing comments, and providing background information.

Advisory Team Members

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3. PLANNING PROCESS AND PUBLIC INVOLVEMENT

The Dalton Highway Corridor Partnership Plan (CPP) planning process was designed to ensure the completion of a comprehensive, community-supported plan. The process included: involving people, businesses, and organizations that represented a variety of interests and backgrounds; reviewing a broad range of documents, websites, and other material; and working with stakeholders invested in the byway's future. All aspects of the planning process were documented to help maintain continuity and integrity in decision making.

A Public Involvement Plan was drafted prior to the start of the public process with the purpose of: identifying stakeholders; describing public involvement and communication goals; outlining communication techniques; and outlining a project schedule.

The public process began with a series of meetings held between June 5, 2008, and July 23, 2008, in the following communities: Barrow, Deadhorse, Wiseman, Coldfoot, and Fairbanks.* The meetings were advertised through local media and public notices, personal notices via phone and email, flyer distribution, radio advertisements, and word of mouth. Forty-five participants attended these meetings, with an additional 11 individuals participating in two teleconferences held on September 10, 2008, and October 7, 2008. Participants in these meetings and subsequent conversations represented a broad range of communities, organizations, and businesses.

At each of these introductory meetings and teleconferences, participants were given an introduction to the state and national byway programs and the CPP planning process. Participants were also given the opportunity to ask questions, express concerns, and share their thoughts about the byway and its resources. Each participant signed in and comments were collected.

The first Advisory Team meeting was held February 12, 2009, with the purpose of reviewing public comments and establishing a vision for the byway. The Advisory Team functioned as a representative body for byway stakeholders and was integral to this plan's success. Participants at public meetings and others who expressed interest in the project were invited to join this team; those individuals listed in the "Acknowledgements" section are those who volunteered to join.

*The northern 179 miles of the byway are within the North Slope Borough; the borough offices are located in Barrow. Although Fairbanks is not technically on the byway, it can be considered the byway's southern gateway.



Public meeting in Fairbanks at the Morris Thompson Cultural and Visitors Center



Public meeting in Wiseman at the community center

An Advisory Team meeting was held May 12, 2009, to discuss comments received on the first draft. After extensive revisions, the second draft was released on August 31, 2009, and subsequent public meetings were held September 29, 2009, October 1, 2009, and November 12-13, 2009, in Fairbanks, Wiseman, Barrow, and Deadhorse. The final Advisory Team meeting was held via teleconference on November 17, 2009, to discuss comments received and to finalize changes.

The plan underwent final text changes and graphic layout December 2009 through March 2010. The plan was printed and distributed in March 2010.



Wiseman Community Center



Dalton Highway from Last Chance wayside, milepost 355

4. BACKGROUND ON BYWAYS

Alaska Scenic Byways Program

In 1993, the State of Alaska established a scenic byways program to recognize and celebrate the state's most scenic travel corridors. Administered by the Alaska Department of Transportation and Public Facilities (AKDOT&PF), the State Scenic Byways Program recognizes routes that provide access to the state's significant scenic, cultural, and recreational resources. Once designated as a State Scenic Byway, the route becomes eligible for National Scenic Byway grant funds to develop a Corridor Partnership Plan. The Dalton Highway was designated a State Scenic Byway in 1998.

The Corridor Partnership Plan

The Dalton Highway Scenic Byway Corridor Partnership Plan (CPP) is a comprehensive evaluation of the byway's intrinsic qualities—scenic, natural, historic, cultural, archaeological, and recreational—and serves as a guide for the management, protection, and enhancement of those qualities over time. The CPP is an expression of local desires, written in cooperation with local communities, organizations, businesses, and public agencies.

The Dalton Highway Advisory Team feels this document is an avenue for expressing their concerns and the challenges associated with managing this truly unique corridor. The Advisory Team will use the CPP as a tool to educate others about the byway's intrinsic qualities and their desires for how those qualities should be preserved and enhanced. The Advisory Team also hopes this plan will assist them in obtaining support and/or funding to alleviate their concerns and address the challenges associated with the annual increase in traffic, both commercial and recreational, and the effect that increase has on the local environment, people, and industries.

Lastly, the CPP describes how byway stakeholders will assume responsibility for the long-term oversight and promotion of the byway's intrinsic qualities.

A Corridor Partnership Plan is **NOT** a

- top-down land use regulation plan;
- mandated document that supersedes local authority;
- plan that restricts private property rights;
- plan that mandates regulations for viewsheds;



Dalton Highway and Trans-Alaska Pipeline
Photo by Steve Hillebrand/USFWS

- plan to allow the DOT or the federal government to regulate land use outside the roadway right-of-way;
- plan that affects permitting processes for mining access on state or federal lands;
- list of mandated new taxes.¹

Defining the Corridor

For the purpose of the Dalton Highway Scenic Byway Corridor Partnership Plan the corridor will be defined according to the Federal Highway Administration’s interim policy for the National Scenic Byways Program. The interim policy defines a *corridor* as “the road or highway right-of-way and the adjacent area that is visible from and extending along the highway. The distance the corridor extends from the highway could vary with the different intrinsic qualities.”²

The scenic byway corridor should not be confused with the five-mile corridor established for hunting and off-road-vehicle restrictions, or with the Bureau of Land Management’s utility corridor.

Due to the byway’s remoteness and distinct differences from other byways within the state and nationwide, stakeholders felt that, although not visible or accessible by road year-round from the byway, the communities of Rampart, Stevens Village, Bettles, Anaktuvuk Pass, and Nuiqsut should be considered during this planning effort.

National Scenic Byways Program

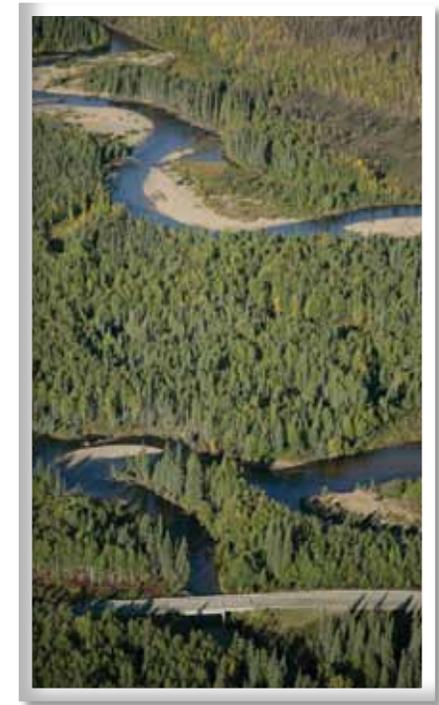
The United States Congress created the National Scenic Byways Program in 1991 to designate roads with outstanding qualities as National Scenic Byways or All-American Roads—collectively referred to as America’s Byways. These byways possess distinctive natural, scenic, historic, cultural, archaeological, or recreational qualities unique to their regions. The National Scenic Byways Program is administered by the U.S. Department of Transportation, Federal Highway Administration (FHWA).

National Scenic Byways Program Vision Statement:

“The *vision* of the program is to create a distinctive collection of American roads, their stories and treasured places.”

1. America’s Byways Resource Center, “CMPs: The Big Questions,” 4-5.

2. Office of the Federal Register, *National Scenic Byways Program* [FHWA Docket No. 95-15], 26759.



Dalton Highway crossing Bonanza Creek
Photo by Steve Hillebrand/USFWS

National Scenic Byways Program Mission Statement:

“The *mission* of the National Scenic Byways Program is to provide resources to the byway community to create unique travel experiences and enhance local quality of life through efforts to preserve, protect, interpret, and promote the intrinsic qualities of designated byways.”

The Federal Highway Administration (FHWA) accepts nominations for byways seeking National Scenic Byway status every three to five years. State Scenic Byways that wish to attain National Scenic Byway or All-American Road status must submit an application and Corridor Partnership Plan that meet FHWA requirements. In Alaska, applications are first submitted to the AKDOT&PF, who reviews, approves, and submits the application to the FHWA. At the national level, a selection committee identifies which nominated corridors are deserving of the National Scenic Byway or All-American Road award. The committee’s recommendations are forwarded to the United States Secretary of Transportation for a final decision.

Benefits of Scenic Byways Programs

Participation in the state and national scenic byways programs is voluntary and involves recognition, not regulation. The programs provide opportunities and resources for communities, organizations, and businesses along a byway to work together to accomplish common goals. They support a realization of stakeholder visions, stewardship efforts, and special projects.

Upon completion of a Corridor Partnership Plan, designated state or national byways are also eligible for federal grant funding in the following eight categories:

1. State and Tribal programs
2. Corridor Management [Partnership] Plans*
3. Safety Improvements
4. Byway Facilities
5. Access to Recreation
6. Resource Protection
7. Interpretive Information
8. Marketing Program

*Funding is available through the Federal Highway Administration, National Scenic Byways Program that can be applied toward updating and/or revising a corridor management plan.

5. CORRIDOR ISSUES AND CONCERNS

As stated in the “Background on Byways” section, the Dalton Highway Advisory Team feels the Corridor Partnership Plan should be an avenue for expressing their concerns and the challenges associated with managing this unique corridor. The Advisory Team also hopes this plan will assist them in obtaining support and/or funding to alleviate their concerns and address the challenges associated with the annual increase in traffic, both commercial and recreational, and the effect that increase has on the local environment, people, and industries.

The following section is an overview of issues and concerns heard repeatedly throughout the planning process. Possible solutions are offered in some areas.

Security—Trans-Alaska Pipeline

Security of the Trans-Alaska Pipeline and pump stations is a concern held primarily by the Alyeska Pipeline Service Company. Pump stations in particular are considered a hazard area and high-security zone, which presents problems with pleasure travelers expecting to receive services at these sites. As one of the only groups of physical structures located along the byway, pump stations are occasionally seen by pleasure travelers as facilities where they can receive services and assistance. According to Alyeska personnel, tour groups have even entered pump station boundaries, disembarked from their bus, and started taking photographs. Besides the fact that access to the pump stations is restricted, once inside the boundaries, people enter a hazard and security zone for which Alyeska is liable.

Alyeska Pipeline Service Company also encounters problems with travelers parking at pipeline access roads and blocking access to the gate. In an emergency, these vehicles would have to be forcibly moved. Vehicles are allowed to pull into access roads but must be careful not to block access.

Possible Solutions

- Increase educational outreach to pleasure travelers and tour operators about the purpose of pump stations and their associated rules and regulations
- Work with the Alaska State Troopers to enforce regulations against blocking pipeline access roads



Pump Station 5
Photo by Steve Hillebrand/USFWS



Pump Station 3

Public Safety and Emergency Response

The Dalton Highway crosses several federal, state, municipal, and private areas of jurisdiction, each of which is responsible for providing differing levels of security, emergency response, search and rescue, aid to motorists, and criminal investigation. For example, much of the area between mileposts 0 and 247 falls within the jurisdiction of the “D” Detachment of the Alaska State Troopers, headquartered in Fairbanks. The State of Alaska has jurisdiction over the entire length of the highway but the “D” detachment’s northern boundary ends at milepost 247 and therefore the Alaska State Troopers do not normally respond north of milepost 247 unless the North Slope Borough makes a formal request. The area north of Atigun Pass, starting at milepost 247 through the end of the highway at milepost 414, is also within the jurisdiction of the North Slope Borough Police Department, who typically respond to incidents within those mile markers. There are no Alaska State Trooper posts along the Dalton Highway; however, there is a one-person post of the Alaska Wildlife Troopers based at Coldfoot, milepost 175.

Most calls for police assistance, motor vehicle crash investigation, search and rescue, or aid to motorists for incidents taking place south of Atigun Pass (within the jurisdiction of the Alaska State Troopers), are handled by troopers based in Fairbanks, which routinely results in response times of several hours and occasionally even longer depending upon road or weather conditions. There is no dependable medical evacuation capability for all sections of the Dalton Highway corridor. There are some private and public air evacuation assets available in both Anchorage and Fairbanks but they are limited by availability, distance, weather, adequate runways, and landing zones.

In emergency situations, the Alaska Wildlife Trooper in Coldfoot can provide some assistance; however, the primary mission of the Alaska Wildlife Troopers is the enforcement of wildlife regulations and due to this, they often travel into sparsely inhabited lands away from the Dalton Highway and are therefore not able to respond quickly to emergencies that occur on or near the Dalton Highway. The Bureau of Land Management has one law enforcement ranger for the Central Yukon Field Area, which covers most of northern Alaska, including the Dalton Highway. In addition, rangers from the National Park Service and U.S. Fish and Wildlife Service sometimes patrol and assist with law enforcement along the Dalton Highway.

The ability of public and private agencies to respond to accidents and emergencies in a timely manner is a constant concern; distances a driver must travel between service stations and physical structures



Pipeline access road—sign reads “Please! Do not block access. Access must be kept clear for emergencies.”

compounds the problem. First responders are oftentimes other drivers or Alyeska Pipeline Service Company personnel who would then have to initiate the response. In addition, the only integrated communication between agencies, communities, and private businesses along the highway is a CB radio—communication in general can be “sketchy” due to the byway’s remoteness, weather, and topography. Cell phone coverage is limited along the highway and the question of “What would be the response to a tour bus crash?” has been posed numerous times.

According to Alyeska Pipeline Service Company employees, Alyeska has become the “cops and docs” of the north; since their pump stations are one of the only groups of physical structures located along the byway, they are oftentimes tasked with responding to accidents and traveler emergencies. Although Alyeska does respond to emergencies, there is a limit to the services they can provide—services that are foremost for their employees. Liability for providing emergency services for the general traveler complicates their business and they are not budgeted for emergency response; Alyeska personnel are typically limited to responding to life or death accidents or medical emergencies. In addition, Alyeska is undergoing a strategic reconfiguration at numerous pump stations. The reconfiguration will make the stations primarily automated, which means there will be fewer people to help with emergencies and longer distances between emergency services.

The Military Assistance to Safety and Traffic (M.A.S.T) program historically responded to critical incidents with a rotor-wing ambulance when private aircraft could not respond; however, M.A.S.T ceased operations on July 1, 2008.

Some feel increases in traffic would strain the already stretched public safety infrastructure, leading to more accidents and infractions by drivers and recreational users. Regardless of traffic volumes, stakeholders feel there needs to be a stronger law enforcement presence along the Dalton Highway and that safety should be a priority for the legislature. Results from a Dalton Highway visitor survey conducted in 2007 by the Bureau of Land Management show that the overall satisfaction rating for “providing law enforcement presence to prevent crime” was 63%. Twenty-five percent of respondents rated the presence as “very good,” 37% said it was “good,” 24% said it was “average,” while 10% and 3% said it was “poor” and “very poor” respectively.¹

1. U.S. Department of the Interior, Bureau of Land Management, *Dalton Highway Visitor Survey*, 5.

Possible Solutions

- Encourage interagency cooperation, legislation, and funding that supports increased law enforcement presence and safety improvements along the corridor
- Increase law enforcement presence to improve safety concerns along the corridor by establishing a one or two trooper post somewhere along the Dalton Highway, possibly at the juncture of the Dalton and Elliot highways
- Suggest the State of Alaska lease or purchase a turbine engine helicopter for “D” detachment of the Alaska State Troopers based in Fairbanks, to be used for year-round response by troopers to emergencies, as well as search and rescue and criminal incidents that occur along the Dalton Highway. A helicopter is needed, as fixed-wing aircraft cannot always safely land where needed
- Develop a multi-agency emergency medical response plan
- Encourage the development of a community-based emergency response unit and support efforts to acquire training, supplies, and equipment
- Support improvements to pedestrian safety in congested areas
- Provide information to motorists about the lack of emergency and police services along the Dalton Highway to ensure they are adequately prepared for the trip. For example, install signs indicating that there is no cell phone coverage along the road. Increase educational outreach about safe practices for Dalton Highway travel
- Encourage the use of CB radios in all vehicles traveling the byway; encourage travelers to obtain, through purchase or rent, satellite phones for emergency communication
- Work with telephone companies to provide cell phone coverage in the area by collocating towers and using existing technology
- Explore how the scenic byways grant program could assist with alleviating safety concerns
- Place emergency call-boxes at strategic locations along the corridor

Lack of Visitor Services

Some people feel that the number of visitor services (outhouses, litter receptacles, dump stations, food, lodging, etc.) along the byway would not accommodate an increase in the number of people traveling the byway. At the same time, others do not want additional waysides, rest stations, and visitor services established along the route regardless of whether the number of travelers increases or not. This point of view stems from their desire to keep the Dalton Highway drive a wild, non-commercialized experience.

The main concern is that marketing the Dalton Highway as a scenic byway and destination point would break the visitor service infrastructure and negatively impact the natural and cultural environment, businesses, and communities. An increase in traffic would increase the accumulation of trash and human waste left by the side of the road, compounding an existing problem that affects visitor health and safety. With an estimated 10% increase in annual traffic, plus the potential for industrial development along the corridor, the number of travelers will most likely dictate whether any additional services are needed.

The Bureau of Land Management (BLM) has used federal highway funds (through the TEA-21 program) to construct outhouses and place bear-resistant trash containers in 13 locations between the Yukon River and milepost 355. The BLM maintains these facilities and hires a seasonal laborer to clean bathrooms and collect trash. Maintenance costs have increased with the cost of fuel. The longest distance between current bathroom/trash facilities is 80 miles—between Galbraith Lake (MP 275) and the Last Chance Wayside (MP 355). The average distance between the other bathroom/trash facilities is approximately 23 miles.

Possible Solutions

- Conduct a carrying capacity study to determine if current infrastructure supports current and estimated traveler numbers
- Promote the Dalton Highway's intrinsic qualities to instill in travelers a preservation ethic and a sense of stewardship
- Consult with land and resource managers to express concerns regarding negative impacts to natural and cultural areas and recommend practical solutions
- Support the continued restriction of commercial and agency development to Deadhorse and designated development nodes; support removal of Chandalar Shelf as a designated development node
- Improve existing pullouts to better accommodate the average 10% annual increase in travelers without negatively impacting the byway's intrinsic qualities



Gobblers Knob wayside, milepost 132

Interpretation and Signage

There are concerns that an abundance of directional signs and interpretive panels create a cumulative, negative effect on the visual and physical environment. While some applaud the efforts of the Bureau of Land Management for their interpretive planning and interpretive waysides, others feel that interpretive signage should be kept at existing development nodes and waysides and not expanded into other areas.

The general feeling is that new interpretive projects should not have a physical footprint. Potential projects could include digital media presentations, podcasts, and self-guided driving and walking brochures.

There is also concern over the number of directional signs. In particular, one recommendation is that the State Scenic Byway signs be removed. Other directional signs should be well planned and placed only where necessary for traveler safety.

Possible Solutions

- Discourage directional signage that is unnecessary for traveler safety; encourage placing necessary signage in locations that do not obstruct the viewshed
- Encourage the consolidation of necessary signage to reduce the overall number of signs and sign posts; provide appropriate locations and safe turnouts for travelers to read signs pertaining to safety and regulations
- Support minimal interpretive signage that enhances the traveler’s experience but does not detract from the corridor’s intrinsic qualities
- Encourage the removal of “State Scenic Byway” signs that are placed along the roadway, except for those posted at the byway’s start and end points

Impacts to the Natural and Cultural Environment

Similar to those concerns regarding visitor services, there are concerns that marketing the Dalton Highway as a scenic byway and destination point would negatively impact the natural and cultural environment. Some are concerned that travelers will not adhere to the preservation ethic held by residents along the corridor—that travelers will not have the knowledge needed to have low-to-no-impact experiences. These individuals feel that land and resource managers should use restraint when planning for Dalton Highway visitor services and industrial developments so as not to destroy



Sagavanirktok River wayside, milepost 348



Highway signs heading south from Deadhorse



State Scenic Byway sign, Dalton Highway

what they feel is unique about the area. They believe that an increase in traffic will invariably increase habitat destruction and activities that are unenforceable because of the byway's remoteness. Land management agencies are also concerned about the spread of invasive weeds throughout the corridor and into federally managed areas; invasive plants threaten native vegetation and potentially the quality of wildlife habitat.

Others feel that the road's purpose as an industrial corridor will ultimately dictate what is planned and implemented along the corridor and that stakeholders should use the Corridor Partnership Plan as a tool to voice their concerns and ideas, which would then hopefully be considered during future project planning.

Some stakeholders feel that tour guides can do a better job explaining the corridor's natural resources and the long-term cultural use of those resources. Tour guides and interpretive materials should also discuss the importance of subsistence practices along the corridor in an effort to instill appreciation for that resource in travelers.

In regard to the cultural environment, there is concern that increased travel and industrial development will damage important cultural and archaeological sites. It was asked that archaeological sites along the corridor not be mentioned in this planning document.

There is also concern regarding how a scenic byways designation—whether state or national—will affect local miners' abilities to access and work their claims and establish new claims. In addition, there is concern that a scenic byway designation will limit what private property owners can do on and with their land that is within the Dalton Highway visual corridor. It was explained during the planning process that the scenic byways programs cannot dictate what private property owners do on their own land (refer to the "Background on Byways" section, under "The Corridor Partnership Plan"). According to the Bureau of Land Management, access to federal mining claims is governed by the regulations in 43 CFR 3809 and the Utility Corridor Resource Management Plan (UCRMP); mine operators are entitled to access their operations consistent with the mining laws. Lands open or closed to mineral entry are established in the UCRMP. Rights and procedures for staking new claims on lands open to mineral entry are governed by the mining laws and the regulations in 43 CFR 3800 et. seq. Furthermore, visual impacts are already taken into consideration in authorizing access to mining claims and mitigated as necessary. Nothing in the Corridor Partnership Plan (CPP) will supersede or substitute for BLM's normal planning processes or implementation of existing laws



"Farthest North Spruce Tree" sign—the tree was killed by a vandal in 2004



Motorhome pulling trailer, Dalton Highway
Photo by Steve Hillebrand/USFWS

and regulatory programs. The CPP cannot alter access to valid mining operations or the rights or procedures for establishing new mining claims, and no consideration of visual impacts beyond what is already considered will result from the CPP. Thus, the CPP presents no obstacle to mining access in the Dalton Highway corridor.²

Similarly, access to mining claims on state owned land is addressed through the Division of Mining, Land and Water permitting process. The CPP does not amend or supersede existing permitting processes or authorities.

Possible Solutions

- Support programs, projects, and publications that educate travelers about the natural and cultural environment, including the importance of subsistence activities, traditions, and resources to Interior and North Slope residents
- Support educational efforts to notify potential travelers about how they can help stop the spread of invasive plants; support projects that actively attempt to stop the spread of invasive plants in the corridor
- Support tourism that does not negatively impact the byway's natural, scenic, and cultural qualities
- Encourage community members, businesses, and public and private organizations to become active members of the byway organization

Hunting

Hunting and Off-Road Vehicles

The Alaska Department of Fish & Game (ADF&G) currently uses the area five miles on either side of the highway to regulate hunting. The ADF&G calls this area the Dalton Highway Corridor Management Area. This is not the same as the BLM Utility Corridor, which has very irregular boundaries. Within this five-mile corridor, hunting is allowed by certified bowhunters only; the five-mile buffer prevents overharvest of wildlife by limiting the number of hunters who use the area and decreases the likelihood of shooting the pipeline.

2. Tim Hammond (BLM), email message sent to Brandon McCutcheon (AKDNR) and forwarded to Kathlene Rowell (AKDNR), November 16, 2009.

Hunters using rifles must travel at least five miles from the highway. Fishing for salmon is not allowed and lake trout are catch-and-release only.

Licensed highway vehicles are allowed only on designated publicly maintained roads (maintained by local or state government) i.e. the Dalton Highway (and Bettles Road when opened in winter). To protect fragile tundra and wetland vegetation, recreational use of off-road vehicles (ORVs) or snowmachines is prohibited by state law within the five-mile corridor. However, people may access the area at any time by boat, airplane, foot, ski, or dog team, depending on the season.

Federal Subsistence Management Regulations do authorize the use of snowmachines for subsistence hunting and trapping by residents living within the Dalton Highway Corridor Management Area. However, any user can start outside the five-mile corridor on a snowmachine and then cross the highway corridor to access other hunting areas or villages.

Subsistence Hunting Concerns

There are concerns about increased threats to subsistence uses and resources along the corridor—particularly caribou, Dall’s sheep, and moose—due to improvements that may facilitate access and/or attract non-subsistence hunters. For this reason, the North Slope Borough (NSB) and the community of Wiseman do not support increased access to the corridor by non-subsistence hunters. To residents of the NSB, who are predominantly Inupiaq Eskimos living a traditional subsistence lifestyle, and to residents of Wiseman, the Dalton Highway is a mixed blessing. It does provide a practical means to transport items that would be prohibitively expensive to deliver via air; on the other hand, the highway has also facilitated easier access by area non-residents to lands and resources upon which residents have based their survival for hundreds to thousands of years. The NSB and community of Wiseman note that this has resulted in an increased incidence of conflict between different user groups—hunters, ATV users, local subsistence hunters, and other special interest groups.

The North Slope Borough feels the five-mile restricted corridor is difficult to enforce because law enforcement officials cannot necessarily see hunters from the highway; they fear that an increase in traffic will increase the number of hunting and other violations. At the same time, the North Slope Borough strongly supports keeping the five-mile restricted corridor.

In general, those who commented during this planning process support the five-mile restricted corridor.

Possible Solutions

- Encourage interagency cooperation that increases the enforcement of hunting, fishing, and trapping regulations along the corridor to protect the health of wildlife populations and prevent overharvest
- Support the continued restriction and regulation of hunting and ORV use within the five-mile Dalton Highway Corridor Management Area
- Encourage the continuation of Dalton Highway hunter check stations during the peak hunting season in an effort to decrease the number of violations by providing hunter information and education
- Support programs, projects, and publications that educate hunters about land ownership and land use regulations bordering and accessed from the byway and that educate travelers about the importance of subsistence activities, traditions, and resources to Interior and North Slope residents

Other Potential Projects/Developments

Gas Pipeline Development

There are general concerns about how gas pipeline development will affect the corridor, mainly the increase in traffic, increase in safety concerns for the traveling public, and degradation to the natural and cultural environment.

Road Improvements

There are general concerns that improved (paved) road surfaces would likely increase average speeds on the highway, resulting in additional safety concerns for other travelers and wildlife. In addition, there are concerns about ancillary facilities (campgrounds, pullouts, side roads, off-road vehicle trails, etc.) being developed as roads are improved and travel increases.

Possible Solutions

- Develop an active byway organization that is educated about and involved in byway issues

6. VISION, GOALS, AND OBJECTIVES

The Dalton Highway Scenic Byway Advisory Team's *mission* statement defines the purpose of the Advisory Team for this planning process and for future oversight of the byway's intrinsic qualities. The Dalton Highway Scenic Byway *vision* statement is an expression of how byway stakeholders envision the byway in the next 10-15 years and establishes their preferences for present and future planning. The goals and objectives outlined herein will assist stakeholders in reaching and sustaining that vision. The goals and objectives are not listed in order of importance or priority.

Dalton Highway Scenic Byway Advisory Team Mission Statement

The mission of the Dalton Highway Scenic Byway Advisory Team is to act as a collective voice for all byway stakeholders in order to address concerns relating to current and future uses, management actions, and developments within the Dalton Highway corridor and to preserve, protect, and enhance the byway's intrinsic qualities—including those associated with its utilitarian purpose—for the benefit of current and future travelers. The Dalton Highway Scenic Byway Advisory Team will work with communities, industries, and local, state, and federal government agencies to meet the goals and objectives outlined in the Corridor Partnership Plan.

Dalton Highway Scenic Byway Vision Statement

The Dalton Highway Scenic Byway's natural and wild character instills in travelers a sense of innate adventure and appreciation for not only the unspoiled environment but also for the people, industries, and wildlife that make this corridor exclusive among America's highways. Dalton Highway travelers are supported by communities and agencies that value environmental and cultural stewardship and traveler safety, as evidenced by quality information resources, properly maintained facilities, and a natural and uncluttered viewshed.

While addressing travelers' basic needs, the Dalton Highway Scenic Byway will continue to be a non-commercialized driving experience, where land managers critically weigh the benefits and detriments to proposed and existing developments in order to: minimize disturbance to the natural viewshed; reduce stress on the public safety and emergency response infrastructure; and reduce negative impacts to the byway's intrinsic qualities.



Heading north toward Coldfoot, Dalton Highway

Goals and Objectives

LAW ENFORCEMENT AND SAFETY

GOAL 1: Support efforts to enforce laws and regulations governing safety, access, and resource use along the corridor

- **Objective A:** Encourage interagency cooperation, legislation, and funding that supports increased law enforcement presence along the corridor
- **Objective B:** Encourage interagency cooperation that increases the enforcement of hunting, fishing, and trapping regulations along the corridor to protect the health of wildlife populations and prevent overharvest
- **Objective C:** Support the continued restriction and regulation of hunting and ORV use within the five-mile Dalton Highway Corridor Management Area
- **Objective D:** Encourage the continuation of Dalton Highway hunter check stations during the peak hunting season in an effort to decrease the number of violations by providing hunter information and education

GOAL 2: Support improvements to traveler safety

- **Objective A:** Encourage interagency cooperation and legislation that supports safety improvements along the corridor
- **Objective B:** Encourage the development of a corridor public safety and emergency response plan
- **Objective C:** Encourage the development of a community-based emergency response unit and support efforts to acquire training, supplies, and equipment
- **Objective D:** Support education programs that outline appropriate and courteous driving behavior
- **Objective E:** Work with telephone companies to provide cell coverage in the area by collocating towers and using existing technology; encourage the use of CB radios and/or satellite phones in all vehicles traveling the byway
- **Objective F:** Support improvements to pedestrian safety in congested areas, such as the Yukon Crossing and the area surrounding Coldfoot and the Arctic Interagency Visitor Center



Wide load taking both lanes, Dalton Highway

EDUCATION

GOAL 3: Support programs, projects, and publications that educate travelers about the byway's intrinsic qualities, industries, and research institutions

- **Objective A:** Support programs, projects, and publications that educate travelers about the natural and cultural environment, including the fragile arctic ecosystem, invasive plants, and many others
- **Objective B:** Support programs, projects, and publications that educate hunters, anglers, tour operators, and other recreationists about land ownership and land use regulations bordering and accessed from the byway
- **Objective C:** Support programs, projects, and publications that educate travelers about the byway's industrial qualities, including: the Prudhoe Bay oilfields, the Trans-Alaska Pipeline (including its access points and pump stations), mining activities, and the trucking industry

GOAL 4: Preserve the historic, cultural, and archaeological qualities of the corridor for future generations

- **Objective A:** Include traditional Native place names in publications and interpretive programs
- **Objective B:** Support programs, projects, and publications that educate travelers about the importance of subsistence activities, traditions, and resources to Interior and North Slope residents
- **Objective C:** Educate travelers about ways to minimize their impact on culturally important lands bordering and accessed from the byway

VISITOR SERVICES

GOAL 5: Support sustainable tourism that does not diminish the byway's intrinsic qualities

- **Objective A:** Support tourism that does not diminish the wilderness experience or negatively impact the byway's natural and scenic qualities
- **Objective B:** Support tourism that does not strain the public safety infrastructure or interfere with the daily operations of the Haul Road
- **Objective C:** Support tourism that increases business opportunities and improves the quality of life for rural Alaskans
- **Objective D:** Support tourism that does not interfere with the goals outlined herein

GOAL 6: Restrict development for visitor services to existing sites and support actions to reduce or reverse negative impacts to natural and cultural resources and travelers' health and safety

- **Objective A:** Support the continued restriction of commercial and agency development to Deadhorse and designated development nodes: Yukon Crossing, Coldfoot, and Happy Valley; support removal of Chandalar Shelf as a designated development node
- **Objective B:** Improve existing pullouts to better accommodate the average 10% annual increase in travelers without negatively impacting the byway's intrinsic qualities
- **Objective C:** If an undeveloped area exhibits a pattern of heavy use, and if that use is negatively impacting the byway's intrinsic qualities, implement use-appropriate changes that encourage a leave-no-trace ethic; project proposals should receive input and support from the local byway organization
- **Objective D:** Develop community and stakeholder partnerships to keep byway facilities clean and to support trash clean-up events

GOAL 7: Support the implementation of periodic, detailed visitor use surveys to assess byway travelers' needs, demographics, reasons for traveling, etc., and to ultimately improve their experience

- **Objective A:** Define specific survey objectives, who is responsible for administering the surveys, members of the survey/evaluation team, how the data will be collected, used, and distributed, evaluation criteria, and who is responsible for implementation of approved ideas



Coldfoot fueling station



Happy Valley development node, milepost 334



Chandalar Shelf, milepost 237
Photo courtesy of Wikimedia Commons

SIGNAGE

GOAL 8: Limit signage as to not hamper the viewshed or the byway's natural character while still principally providing for travelers' safety

- **Objective A:** Discourage directional signage that is unnecessary for traveler safety; encourage placing necessary signage in locations that do not obstruct the viewshed
- **Objective B:** Encourage the consolidation of necessary signage to reduce the overall number of signs and sign posts; provide appropriate locations and safe turnouts for travelers to read signs pertaining to safety and regulations
- **Objective C:** Support minimal interpretive signage that enhances the traveler's experience but does not detract from the corridor's intrinsic qualities
- **Objective D:** Support a design standard for all directional and interpretive signage
- **Objective E:** Encourage the removal of "State Scenic Byway" signs that are placed along the roadway, except for those posted at the byway's start and end points

OTHER

GOAL 9: Develop an active byway organization that is educated about and involved in byway issues

- **Objective A:** Stay informed about future projects and how those projects could support or undermine the byway organization's goals
- **Objective B:** Work collectively to ensure the vision, goals, and objectives outlined in this plan are being met and the intrinsic qualities maintained and enhanced
- **Objective C:** Encourage the Alaska Department of Transportation and Public Facilities (AKDOT&PF) and land and resource managers to give briefings at stakeholder meetings



Highway signs heading south from Deadhorse

7. ROUTE DESCRIPTION

The Dalton Highway Scenic Byway is for the adventurous and well-prepared. It is one of only two roads in North America—the only road in the United States—that cross and travel north of the Arctic Circle. For many recreational travelers, the Arctic Circle is the destination point; for others there are nearly 300 more miles to travel before reaching the byway’s terminus in Deadhorse.

The Dalton Highway is a lifeline for industry. Its utilitarian roots and primary purpose as a haul road for transporting supplies, goods, and people to and from northern oilfields makes for not only an interesting story but also a unique drive. While traveling through the relatively unaltered landscape, travelers parallel a steel pipe cradling Alaska’s “black gold” as it flows south. It is difficult to mention the Dalton Highway without thinking of the Trans-Alaska Pipeline—after all, it is the reason the road was constructed in 1974.

The Dalton Highway was not intended to be a public road, but by 1994 its entire length was open for public travel. The decision to open the road caused much angst for some but created opportunities for others. Stakeholders continue to struggle with the challenges of maintaining the intrinsic qualities of a byway that, although industrial, traverses some of America’s most pristine country.

Beginning approximately 70 miles north of Fairbanks, Alaska, the byway rolls north through the boreal forest and Yukon-Tanana uplands. High knolls allow views of distant peaks, meandering creeks, muskeg-bogs, and patches of scorched ground—evidence of recent forest fires. Travelers cross the Yukon River at mile 56; stretching nearly 2,000 miles from British Columbia, Canada to the Bering Sea, the Yukon River is the fifth-longest river in North America and a historical transportation corridor.

At milepost 98 the byway crests a hill and deposits travelers at Finger Mountain wayside, where granite tors extrude from the tundra and the vast expanse of northern Alaska is clearly evident. The Yukon Flats National Wildlife Refuge lies to the east and the Kanuti National Wildlife Refuge to the west.

The Arctic Circle wayside at milepost 115 is a popular destination point for many travelers wishing to get their photographs taken and to say they have straddled the latitudinal line. From here, the highway continues north through rolling terrain, passing landmarks like the north and south forks of Bonanza Creek, Gobbler’s Knob (MP 132), Grayling Lake (MP 150), and the South Fork Koyukuk River (MP 156) before leveling out at Coldfoot (MP 175).



Trans-Alaska Pipeline between pump stations 2 and 3



Finger Mountain wayside, milepost 98



Arctic Circle wayside, milepost 115

A historic mining town turned pipeline construction camp, the town of Coldfoot now serves as a refueling stop for food, gas, sleep, and information. Coldfoot is the last place to purchase food and fuel before reaching Deadhorse, still 240 miles away. The Arctic Interagency Visitor Center (AIVC) is also located here; open late May through early September, the AIVC is a modern visitor facility, equipped with interpretive displays, walking trails, and importantly, travel information. Approximately 14 miles north the byway crosses the Middle Fork Koyukuk River and passes the turnoff to Wiseman. This historic trading community was established in 1907 and is home today to around 20 year-round residents. Wiseman continues to offer services in the form of public telephone, lodging, a general store, and a chapel.

From here the byway continues north through the southern Brooks Range. Sukakpak Mountain (MP 203.1) is a dominant feature along this stretch of the highway, a massive marble rock rising from the earth. A steep climb leads to the summit of Chandalar Shelf (approximately MP 237) and views of the Dietrich River Valley, Table Mountain, and the Endicott Mountains.

The ascent and descent of Atigun Pass (MP 244) is the most harrowing section of the 400-mile trip. A 12% grade on the southern side can be considered white-knuckle driving when conditions are poor. Atigun Pass (4,739ft.) also serves as the Continental Divide—rivers south of here flow to the Pacific Ocean or Bering Sea, while those to the north flow to the Arctic Ocean.

After crossing the pass, travelers descend into the treeless Atigun River Valley, where the byway traverses alluvial fan deposits and passes rock glaciers. Pump Station 4 sits in a picturesque location at milepost 269 and is the only pump station north of Fairbanks built on an unrefrigerated foundation.¹

As travelers pass Galbraith Lake (MP 275) they exit the Brooks Range and enter the North Slope. Characterized by rolling terrain and low-lying vegetation, this area evokes a sense of northern Alaska's true expanse. Permafrost—permanently frozen subsoil—underlies much of this region; in fact, permafrost is present throughout 82% of Alaska.² Toolik Field Station, a world-renowned arctic ecosystem and climate research center, is located at milepost 284. The station is operated and administered by the Institute of Arctic Biology at the University of Alaska Fairbanks. Access to the station is restricted.



Coldfoot Camp, Café



Arctic Interagency Visitor Center, Coldfoot
Photo by Steve Hillebrand/USFWS



Reakoff cabin, Wiseman
Photo by Steve Hillebrand/USFWS



Pump Station 4, near Galbraith Lake (milepost 275)

1. U.S. Department of the Interior, Bureau of Land Management and the Alaska Natural History Association, *Riches from the Earth*, 82.
2. U.S. Department of the Interior, Bureau of Land Management and the Alaska Natural History Association, *Riches from the Earth*, 19.

From here the byway traverses a landscape cloaked with low-lying plants that withstand extreme temperatures and varying degrees of light. During winter, these plants see no light at all. But during summer and fall, the tundra is awash with color and life. Caribou and other wildlife are dependent on this fragile vegetation for survival, and this landscape also provides an important habitat for migratory birds from around the globe.

The Sagavanirktok River, locally known as the “Sag,” is first visible around milepost 300 and parallels the byway northward before emptying into the Arctic Ocean. Happy Valley, one of four designated development nodes, is located at milepost 334; although there are no services at this time, there is an active airstrip. At milepost 348 travelers can take a short walk to the Sag River Overlook; this wayside offers interpretive information and views of the river’s braided channel and the Phillip Smith Mountains.

The Last Chance wayside at milepost 355 is, as its name implies, the last rest stop before Deadhorse. From here the byway enters the Arctic Coastal Plain; widespread permafrost has an interesting visual effect on the landscape, creating polygonal ground and numerous thaw lakes. Although visible from the road, these features are best seen from the air.

The Franklin Bluffs are visible approximately 40 miles outside of Deadhorse; their brightly colored orange, tan, and yellow cliffs are a dominant feature of this landscape. Waterfowl can be seen in this area, along with arctic fox, caribou, musk oxen, and wolves.

The byway’s terminus is at Deadhorse, gateway to the Prudhoe Bay oilfields. From here a traveler’s options are limited. Deadhorse offers modest accommodations but is not designed for tourism; access to the Arctic Ocean is restricted and those wishing to do so must go with a tour group. Mostly dependent on whether they arrived by tour bus, a personal or commercial vehicle, or bicycle, travelers will either board a plane to Fairbanks or turn around and travel from north to south.

Driving the Dalton Highway Scenic Byway requires preparation and organization. Because the byway is remote and has limited services, travelers must be self-sufficient and gather as much information as they can about conditions, services, and waysides before they embark. A one-way drive takes an average of three days for recreational travelers, dependent on what activities are planned and what stops are taken along the way. Logistics aside, driving the Dalton Highway is a one-of-a-kind, humbling, and memorable experience.



Franklin Bluffs, milepost 383



End of the road—security checkpoint, Deadhorse



Lake Colleen, Deadhorse



Scenic views to the east, north of Atigun Pass

Dalton Highway - Deadhorse to MP 215

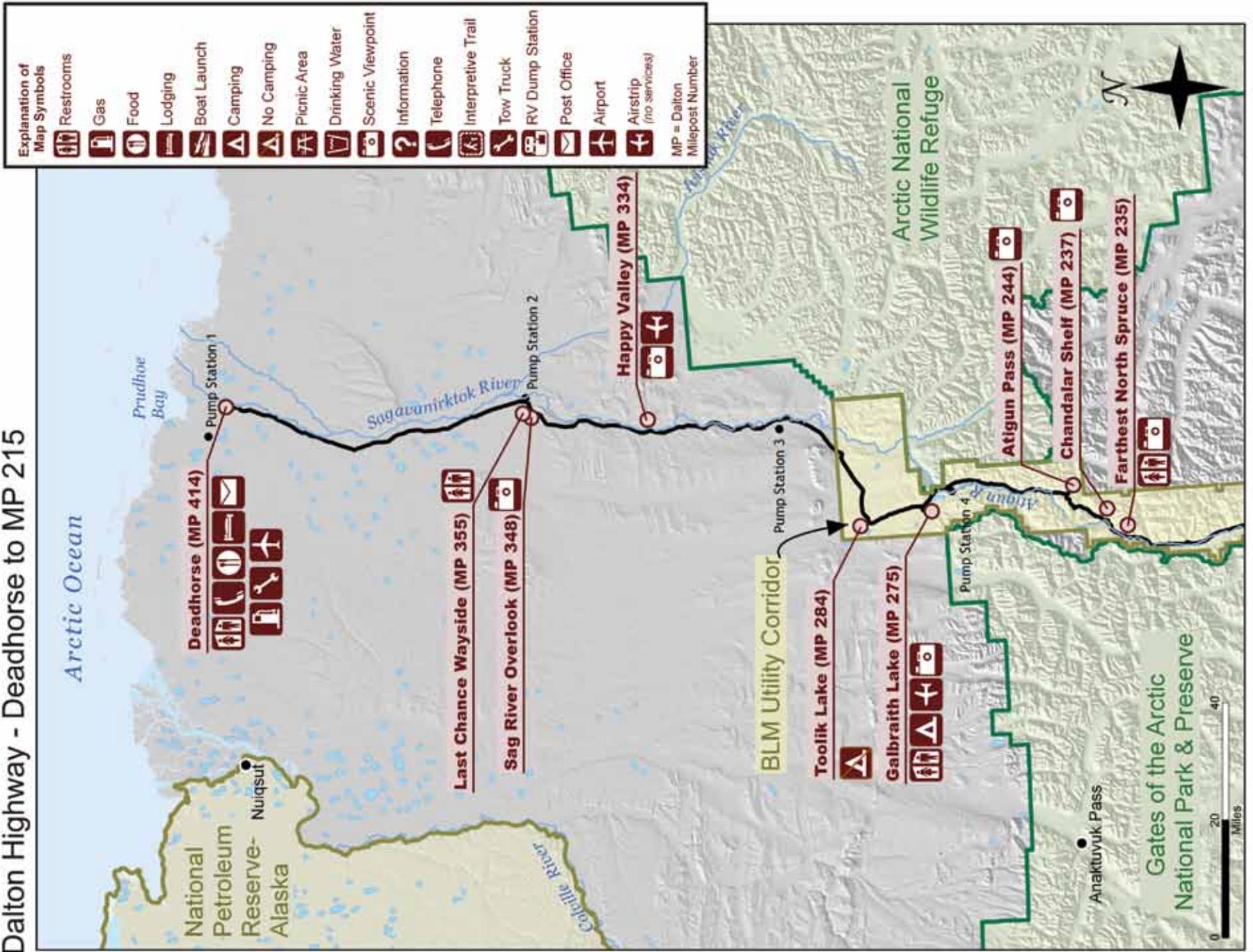
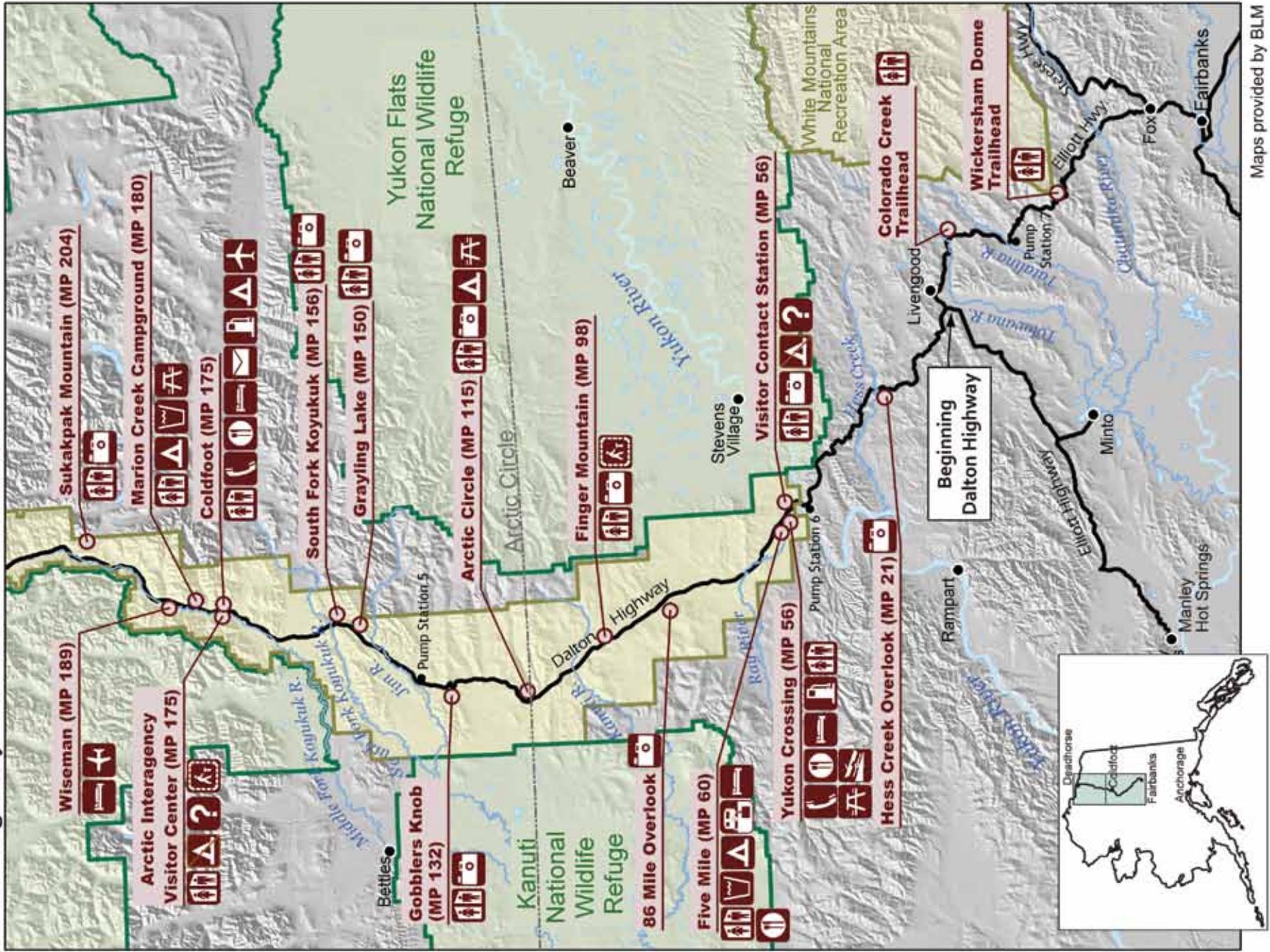


Figure 2. Dalton Highway map, Deadhorse to Milepost 215

Dalton Highway - MP 215 to Fairbanks



Maps provided by BLM

Figure 3. Dalton Highway map, Milepost 215 to Fairbanks

8. INTRINSIC QUALITY ASSESSMENT

The Federal Highway Administration defines intrinsic qualities as “scenic, historic, recreational, cultural, archaeological, or natural features that are considered representative, unique, irreplaceable, or distinctly characteristic of an area.”¹

The following is a general description of the Dalton Highway Scenic Byway’s intrinsic qualities.

SCENIC QUALITIES

*Scenic quality is the heightened visual experience derived from the view of natural and manmade elements of the visual environment of the scenic byway corridor. The characteristics of the landscape are strikingly distinct and offer a pleasing and most memorable visual experience. All elements of the landscape—landform, water, vegetation, and manmade development—contribute to the quality of the corridor’s visual environment. Everything present is in harmony and shares in the intrinsic qualities.*²

It is difficult to imagine a 400-mile utility road whose entire length is a scenic corridor—a two-lane road inching through an expanse of dramatic wildness. But the Dalton Highway is just that. From the boreal forest to the Arctic Coastal Plain, the traveler experiences a diversity of scenery entirely unique among America’s highways (for a route description, see section 7).

Diversity of Landscapes

The byway traverses four distinct natural zones: the boreal forest of the Yukon-Tanana uplands, the Brooks Range Province, the North Slope Province, and the Arctic Coastal Plain. The scenic assets in each zone—when viewed individually and in succession—create an exceptional visual experience.

The Boreal Forest—Livengood to Coldfoot (MP 0-175)

For its first 175 miles, the byway dips up and down through the hills and forests of the Yukon-Tanana uplands. The knolls and valley bottoms offer views of spruce and birch forests, bogs, creeks, and scars of recent fires. Lightning-caused wildfires scorch this region during dry, windy summers, but the burns are quickly bandaged with a new succession of plants. Scenic highlights include the Yukon River, numerous views of the Yukon Flats National Wildlife Refuge and Kanuti National Wildlife Refuge, the granite tors of Finger Mountain, and glacially carved Grayling Lake.

1. Office of the Federal Register, *National Scenic Byways Program* [FHWA Docket No. 95-15], 26759.
2. Office of the Federal Register, 26761.

“The Dalton’s physical and perceptual qualities are not experienced in isolation, of course, but in the context of each other. Together, they imbue the route with its special character, its mystique. Visitors experience a sense of adventure and exploration when they discover, not far down the road, that ‘Wow, this is really different from anywhere I’ve ever been before.’”

—Roger Kaye, Arctic National Wildlife Refuge



Dalton Highway crossing the Kanuti River—
Trans-Alaska Pipeline dips underground
Photo by Steve Hillebrand/USFWS



Views of the Yukon Flats National Wildlife Refuge
from the Dalton Highway
Photo by Jim Akaran/USFWS

The Brooks Range—Coldfoot to Galbraith Lake (MP 175-275)

Views of the Middle Fork Koyukuk River escort travelers into the Brooks Range, whose craggy peaks (many of which are unnamed), wildlife, and river valleys lure thousands of visitors annually to Alaska's arctic. Travelers along this section also experience views of the Gates of the Arctic National Park and Preserve to the west and the Arctic National Wildlife Refuge to the east—two of the nation's preeminent wilderness areas. Many of the byway's most recognizable features are within the Brooks Range Province, including the massive walls of Sukakpak Mountain, the sudden absence of trees beginning near milepost 235, the harrowing ascent to Atigun Pass, the rewarding views of the Atigun River Valley, and the aquamarine waters of Galbraith Lake.

The North Slope—Galbraith Lake to Last Chance Wayside (MP 275-355)

When heading south, travelers see the Endicott and Philip Smith mountains long before reaching Atigun Pass. Driving north, however, is likened to entering a smooth, wide channel after navigating river rapids. The decent from Atigun Pass leads travelers out of the mountains and into the sheer expanse of the North Slope, its ground covered by low-lying, hardy vegetation. It is here that the Dalton's uninhabited miles, remoteness, length, and the utter vastness of the surroundings strike travelers with a heavy sense of separation from civilization.

Slope Mountain, sweeping views, and the Sagavanirktok River are key scenic features along this section of the North Slope.

The Arctic Coastal Plain—Last Chance Wayside to Deadhorse (MP 355-414)

Permafrost lies just below the surface of the Arctic Coastal Plain, sealing the ground and creating an interesting visual effect. From the byway, travelers can see waterfowl and other migratory birds frequenting vast wetlands and thaw lakes, part of a network of ice-wedge polygons (see "Natural Qualities" section for a description). The copper-hued cliffs of the Franklin Bluffs are visible from milepost 364 north—if lucky, musk oxen, wolves, and caribou can be seen near here.

The Trans-Alaska Pipeline is buried from milepost 363 to 405, allowing for an uninterrupted visual experience. Day and night during summer offer the same views, as the sun does not set between May 10th and August 2nd.³ Winter is exponentially different—two months of pure darkness combined with occasional blizzard conditions can limit the viewshed to a couple feet.

3. Alaska Natural History Association, *The Dalton Highway Visitor Guide*, 15.

“Magenta expanses of fireweed heal the scars of the lightning fires that periodically rage across the land and set off fresh cycles of plant succession.”

—Kauffman, "Alaska's Brooks Range: The Ultimate Mountains," 18.



Fireweed at Mackey Hill, Dalton Highway, milepost 87
BLM photo by Craig McCaa



Slope Mountain



Truck on pipeline access road, north of Atigun Pass

The Trans-Alaska Pipeline

In juxtaposition with the scenic qualities offered by the natural environment are those offered by a metal pipe. As the byway dips, climbs, and winds through the foothills, mountains, and arctic tundra, the Trans-Alaska Pipeline dips, climbs, and winds alongside (and sometimes beneath), carrying oil south from the continent's largest oil complex. As one stakeholder described, the road and pipeline that are seemingly incongruent with the wilderness they traverse express, in their design and management, their respect for the natural environment.

The Alyeska Pipeline Service Company pump stations also provide scenic relief by simply being present—a blip of civilization amidst the sprawling wild—and along with the pipeline, remind travelers about the purpose of the byway and hopefully instill in them a sense of respect for not only the people who work there but also for the work they do.

NATURAL QUALITIES

Natural quality applies to those features in the visual environment that are in a relatively undisturbed state. These features predate the arrival of human populations and may include geological formations, fossils, landform, water bodies, vegetation, and wildlife. There may be evidence of human activity, but the natural features reveal minimal disturbances.⁴

Most of the Dalton Highway's length is bordered by natural qualities. These qualities in turn enhance the scenic quality of the corridor. While there are numerous natural, undisturbed features along the byway, a few of the more recognizable or dramatic features are described here.

The Yukon River

Crossing the Yukon River at milepost 56 is the first major highlight for travelers; for some travelers from Fairbanks, this is their destination point. Flowing nearly 2,000 miles from British Columbia, Canada to the Bering Sea on the west coast of Alaska, the Yukon River is the fifth longest river in North America and drains an area larger than the state of Texas.⁵



Pump Station 2



Yukon River Bridge, milepost 56

4. Office of the Federal Register, 26761.

5. U.S. Department of the Interior, Bureau of Land Management, Dalton Highway wayside interpretive panel, "The Mighty Yukon."

Finger Mountain

The panoramic views at the Finger Mountain wayside (MP 98) are enough to motivate travelers to stop and linger. But what sets this site apart from other scenic viewpoints are the rock pinnacles jutting from the tundra. Called granite tors, these rocks are remnants of 110-million-year-old bedrock hills that sustained severe frost wedging during freeze-thaw cycles. The most prominent tor is Finger Rock on the east side of the highway, which, as its name suggests, resembles a pointed index finger. Before the advent of modern navigation equipment, airplane pilots relied on Finger Rock as a wayfinding tool.⁶

The Brooks Range

The Brooks Range—named after Alaskan geologist Alfred H. Brooks—extends over 700 miles from Canada in the east to the Chukchi Sea off the western coast of Alaska. Home to Gates of the Arctic National Park and Preserve and portions of the Arctic National Wildlife Refuge, the Brooks Range was formed millions of years ago by compressional plate tectonics.⁷ Sands, mud, and shells of ancient sea creatures were folded, faulted, slivered, and pushed to near Himalayan heights, then intruded by molten rock to become the complex assemblage of rock sequences that is the Brooks Range.⁸ Between three million and ten thousand years ago, after the mountain building period, glaciers flowed from high peaks and carved the range into the landscape features we see today—features such as u-shaped valleys, cirques, tarns, moraines, and lakes. Much of the land between the Alaska Range and Brooks Range (including the first 120 miles of the Dalton Highway) and land north of the Brooks Range remained ice-free during this extended period of glaciation.⁹

Sukakpak Mountain

Sukakpak Mountain (MP 203.1) is one of the most recognized Brooks Range peaks viewable from the byway. An Inupiaq Eskimo word for “marten deadfall,” Sukakpak Mountain—when viewed from the north—resembles a balanced log used to trap martens.¹⁰ The peak is a massive marble rock with deep sea origins; sediments deposited on the ocean floor 380 million years ago turned to limestone and were subjected to intense heat and pressure. This heat and pressure caused the

6. U.S. Department of the Interior, Bureau of Land Management and the Alaska Natural History Association, *Riches from the Earth*, 40.

7. U.S. Department of the Interior, Bureau of Land Management and the Alaska Natural History Association, *Riches from the Earth*, 70, 86.

8. Kauffman, *Alaska's Brooks Range*, 16.

9. U.S. Department of the Interior, Bureau of Land Management and the Alaska Natural History Association, *Riches from the Earth*, 16.

10. Orth, *Dictionary of Alaska Place Names*, 1084.

“As you view the changing scenery, try to imagine the tremendous geologic forces that created and destroyed tropical oceans and mountains, and formed the Brooks Range and the giant oilfields of the North Slope. Picture the vast glaciers that carved the valleys through which caribou migrate. Imagine the geologic changes that transformed a land where dinosaurs once roamed to a land where caribou now roam.”

—U.S. Department of the Interior, Bureau of Land Management and the Alaska Natural History Association, *Riches from the Earth*, 9.

Sukakpak Mountain, 1913
Photo by A.G. Maddren,
U.S. Geological Survey



Sukakpak Mountain, milepost 203
BLM photo by Lisa Shon Jodwalis

limestone to metamorphose into marble, and was then pushed to Earth's surface by tectonic forces. Ice mounds—called palsas—dot the ground at the mountain's base.

Atigun Pass

Ascending and descending Atigun Pass is a feat for Dalton Highway travelers. Atigun Pass (4,739ft.) is one of the main central Brooks Range passes that bridges the Yukon River watershed and the Arctic Coastal Plain. Dalton Highway travelers not only cross the Arctic Circle at milepost 115 but also the Continental Divide at Atigun Pass. Rivers to the south of the pass flow to the Pacific Ocean or Bering Sea, while those to the north flow to the Arctic Ocean. From Atigun Pass north, permafrost thickens and is present almost everywhere.¹¹

The Arctic

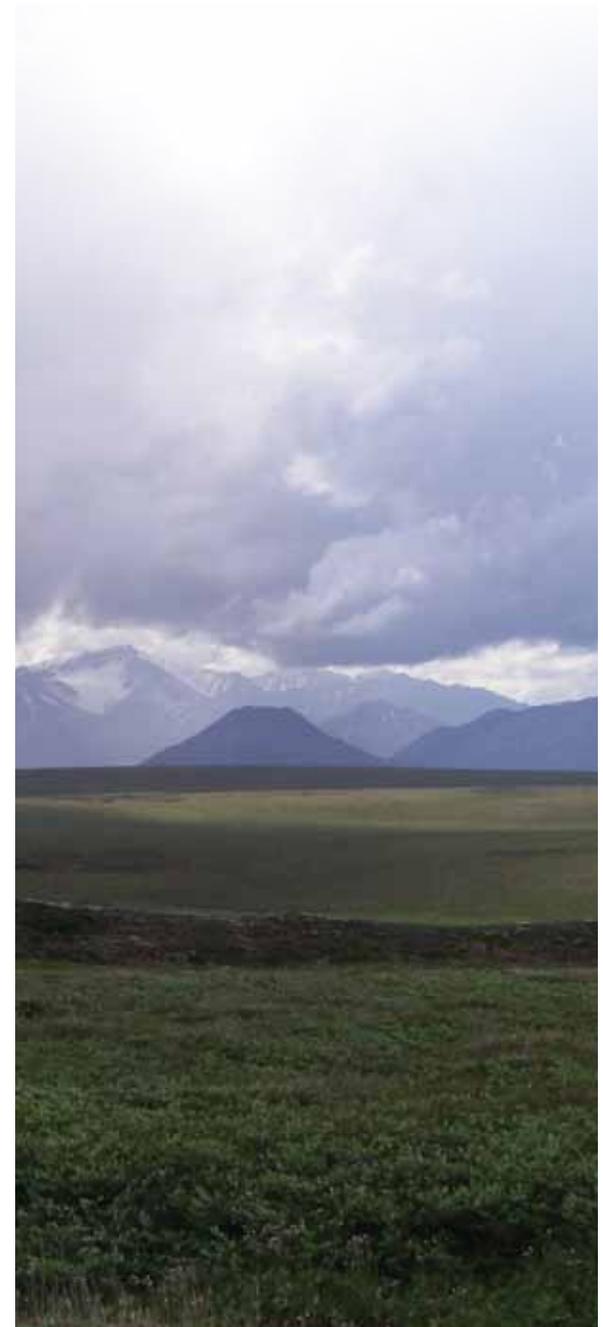
Vegetation

While vegetation in the southern half of the corridor is characteristic of the interior—black spruce, paper birch, thickets of willow and alder, and soggy bogs—the arctic slopes are cloaked by tough, low-lying plants that are able to withstand the extreme climate, but are also slow to regenerate if damaged. John M. Kauffman, author of “Alaska’s Brooks Range: The Ultimate Mountains,” says:

“Much has been written about the fragility of the tundra, its tearing so slow to heal. Actually, its plants are among the toughest on Earth, designed to withstand some of the most rigorous living conditions imaginable. Tundra life means bitter cold, gales that abrade and desiccate, smothering snow, shipping earth, a short, almost perpetual flood of light, and then long months of darkness.”¹²

11. U.S. Department of the Interior, Bureau of Land Management and the Alaska Natural History Association, *Riches from the Earth*, 72-73.

12. Kauffman, 20.



Weather near Toolik Lake

Frozen Ground

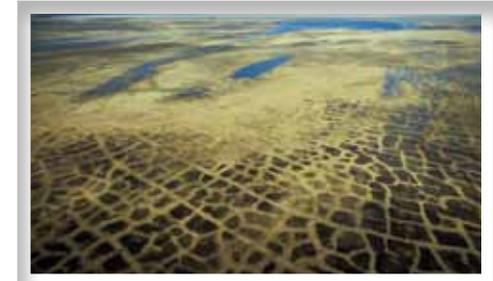
Permafrost—permanently frozen subsoil—in the arctic can be thousands of feet deep and lie just below the surface. Permafrost and its associated ground ice not only affect the visual characteristics along the byway but also pose challenges to road and pipeline construction. The following is an overview of ice-created features that can be seen from the byway.

Aufeis, or overflow, can be seen on the alluvial fan west of Galbraith Lake (MP 272). When ice forms on stream channels during winter, water flowing underneath is restricted, which builds pressure; eventually the ice cracks, allowing water to flow to the surface, spread out, and freeze. The overflow creates successive layers of ice that grow thicker through winter. It is possible to see aufeis in August.¹³

Ice-wedge polygons can be six to one hundred feet in diameter. This patterned ground is evident on the Arctic Coastal Plain north of milepost 355 and is clearly evident from the air. Ice wedges form from the repetitive freeze-thaw cycles during winter and summer. Cracks that form in the ground after rapid cooling in winter fill with water in summer. As the season changes, this water freezes and the cracks expand. The ice wedge expands year after year and the ground above and to its sides is pushed into ridges.¹⁴

Palsas (ice-core mounds/lenses) are thought to form when groundwater moving through the soil that lies above permafrost freezes, causing the ground to heave. There are excellent examples of palsas at the base of Sukakpak Mountain (MP 203.1).¹⁵

Pingos (Eskimo for “small hill”) are conical ice-cored mounds, 50 to 1,450 feet wide and 10 to 230 feet high, that form when water is trapped between permafrost, pushing the overlying soil up. Pingos can be seen to the west at milepost 32.7, on the hill across from the Dietrich River at milepost 220.4, and in numerous locations between mileposts 377 and 397.¹⁶



Ice wedge polygon formations on the North Slope. BLM photo



Ice mound on the Arctic Slope
Photo by M.C. Lachenbruch, U.S. Geological Survey

13. U.S. Department of the Interior, Bureau of Land Management and the Alaska Natural History Association, *Riches from the Earth*, 47, 90.

14. U.S. Department of the Interior, Bureau of Land Management and the Alaska Natural History Association, *Riches from the Earth*, 104

15. Alaska Natural History Association, *The Dalton Highway Visitor Guide*, 15.

16. U.S. Department of the Interior, Bureau of Land Management and the Alaska Natural History Association, *Riches from the Earth*, 31.

Wildlife

The byway's diversity of landscapes and ecological zones harbor a variety of wildlife, a main attraction for many travelers. Although the byway traverses hundreds of miles of wilderness, arctic wildlife populations require more square miles of habitat for survival than those living in more temperate climates, making wildlife sightings near the highway sometimes rare. However, moose, caribou, brown and black bears, and Dall's sheep are big-game species travelers might see as well as small-game species and furbearers such as red fox, arctic fox, grouse, and snowshoe hares. Wolves, musk oxen, wolverine, coyote, marten, and beaver are a few of the more elusive—but present—species inhabiting the corridor. The byway corridor is also a hot-spot for birds, including raptors—like peregrine falcons and golden eagles—numerous ducks, loons, shorebirds, jaegers, tundra swans, eiders, and more.



King eider. Photo by Laura L. Whitehouse/USFWS



Arctic fox. Photo by Brian Anderson/USFWS



Musk Oxen. Photo courtesy of USFWS

“The noblest signatures...are made by the saucer-sized paws of wolves. Not worrisome, these, but so essentially symbolic of the wilds that one catches breath in seeing them.”

—Kauffman, *Alaska's Brooks Range: The Ultimate Mountains*, 24-25.



Wolf track. Photo by Danielle Jerry/USFWS

HISTORIC QUALITIES

Historic quality encompasses legacies of the past distinctly associated with physical elements of the landscape, whether natural or manmade, that are of such historic significance that they educate the viewer and stir an appreciation for the past. The historic elements reflect the actions of people and may include buildings, settlement patterns, and other examples of human activity. Historic features can be inventoried, mapped, and interpreted. They possess integrity of location, design, setting, material, workmanship, feeling, and association.¹⁷

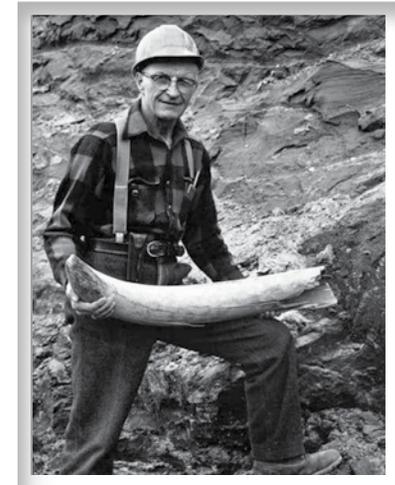
Paleontology

Thousands of years ago, arid grasslands blanketed northern Alaska.¹⁸ These grasslands provided habitat for large mammals such as bison, horse, mammoth, and sabertooth cats.¹⁹ Diminishing habitat and increased predation by man led these and other animals to extinction. Paleontologists—and unsuspecting miners—have found carcasses of bison, mammoth, and horses in northern Alaska that were buried 70,000 to 10,000 years ago;²⁰ in 1979, miner Walter Roman discovered “Blue Babe,” a 36,000 year-old, Ice Age bison near Livengood (near the start of the byway). When found, Blue Babe was still frozen and remarkably intact.

Other paleontological sites along the corridor include the quarter-size fossils of extinct marine invertebrates, like brachiopods and trilobites, and the house-size fossils of dinosaurs; at milepost 352, byway travelers can see a sandstone outcrop from the same formation as that located 90 air miles northwest that contains bones of six different dinosaurs.²¹

First People

Inupiaq Eskimos. People have inhabited Alaska for at least 11,000 years—its northern residents blocked from migrating south by a mass of glacial ice.²² Referred to as Paleoindians, these people are believed to have developed technology specific to harvesting large mammals like bison and caribou.²³



Construction foreman Pete Peterson holding a mastodon tusk near Five Mile Camp during construction of the Trans-Alaska Pipeline, April 28, 1974
Steve McCutcheon, Steve McCutcheon Trans-Alaska Pipeline System Construction Collection, Anchorage Museum, AMRC-b90-14-3-701

17. Office of the Federal Register, 26761.

18. U.S. Department of the Interior, Bureau of Land Management, Dalton Highway wayside interpretive panel, “Relics of the Past.”

19. U.S. Department of the Interior, Bureau of Land Management, Dalton Highway wayside interpretive panel, “More Than Gold in the Hills.”

20. U.S. Department of the Interior, Bureau of Land Management and the Alaska Natural History Association, *Riches from the Earth*, 19, 25.

21. U.S. Department of the Interior, Bureau of Land Management and the Alaska Natural History Association, *Riches from the Earth*, 65, 101.

22. State of Alaska, Department of Natural Resources, Cultural Resources Survey: *Dalton Highway mile 9.0 to mile 28.8*, 6-7.

23. U.S. Department of the Interior, Bureau of Land Management, *The Mesa Site*, 5.

Eleven hundred to 500 years before present (BP), “Late Prehistoric Eskimos” in northern Alaska subsisted on caribou and other large terrestrial mammals and overwintered in semi-subterranean houses. Modern Nunamiut, or inland Inupiaq Eskimos, may be descendants of this cultural group.²⁴

Inupiaq Eskimos originally occupied coastal lands and were primarily dependent on the sea. One group, however, moved into the central Brooks Range; called the Nunamiut, these bands lived a mobile lifestyle, traveling mountain passes and river valleys in search of caribou—their main source of food, clothing, and shelter.²⁵ Before the age of firearms, Nunamiut funneled caribou herds through vast corralling structures into a pond or stone pen where they could be speared or shot with arrows. Stone “inuksuks” resembling people were built to help direct herds toward the corrals. Hikers have been known to find these stone guards in the Brooks Range today.²⁶

Some of the most significant ‘early man’ sites in Alaska appear to be located in the Atigun Valley-Galbraith Lake area. Thousands of years ago, inland people were attracted to this area by seasonal caribou migrations; hunters herded caribou traveling down Atigun Valley into Galbraith Lake, where they easily speared the animals from kayaks.²⁷ Upon studying Atigun Valley in 1966, Professor Herbert Alexander from the University of Pennsylvania wrote:

‘Even before our tents were set up we discovered that we were not the first people to stay here. Our camp was set among the broken bones, cut willows, and tent rings—circles of stones that once held down the edges of caribou skin tents—of an Eskimo site. We know from historical data that possible [recent] occupation of this valley was no later than 1920...’²⁸

As many as 1,000 Nunamiut may have lived in the Brooks Range by the late 1800s; however, the caribou population’s cyclical decline in the 1920s forced inland Eskimos back to the coast where resources were more plentiful.²⁹ By this time Euro-Americans and coastal Eskimos had already made contact, which drastically altered the traditional Native lifestyle.³⁰

Nunamiut families began returning inland in the mid 1930s when coastal conditions became impoverished and caribou populations improved. Between 1947 and 1951 families living northwest of Bettles moved to Anaktuvuk Pass, which was closer to the supply towns of Bettles and Wiseman,

24. U.S. Department of the Interior, Bureau of Land Management, *The Mesa Site*, 6.

25. Kauffman, 35; Brown, *History of the Central Brooks Range*, 10.

26. Kauffman, 39-40.

27. North Slope Borough, *Resource Inventory, Galbraith Lake*, 3, 15.

28. North Slope Borough, *Resource Inventory, Galbraith Lake*, 8.

29. Kauffman, 35.

30. U.S. Department of the Interior, Bureau of Land Management, *The Mesa Site*, 7.



Camp and northern front of the Anaktuvuk Plateau along the Canning River. Anglo-American Polar Expedition, Northern Alaska, c. 1910
Photo by E.K. Leffingwell, U.S. Geological Survey



Hunting caribou in Anaktuvuk Pass, 1962
Ward Wells, Ward W. Wells Collection, Anchorage Museum
AMRC-wws-3421-73



Young boy in front of sod house, Anaktuvuk Pass, 1957
Photo courtesy of USFWS

and by 1960, most of the remaining nomadic families had joined them.³¹ For perhaps thousands of years, people have used Anaktuvuk Pass to access the Arctic Slope—it is one of only three main Brooks Range passes that provides this access.³²

Today, Anaktuvuk Pass (located approximately 60 air miles west of the Dalton Highway) is a fully modern village with traditional values and practices; nearly 90% of the population is Inupiaq Eskimo.

Athabaskan Indians. The byway corridor is home to another distinctive Native Alaskan group, the Athabaskan Indians of interior Alaska. Concentrated along the Yukon River and its tributaries, Athabascans in this region have lived here for thousands of years, subsisting on fish and large game such as caribou and moose. Prior to Euro-American settlement, trade and some conflict existed between Inupiat and Athabaskan groups; however, by the time white men arrived, Athabascans had moved south from the Brooks Range.³³

Because of their geographic location, Athabascans were affected by the mining boom of the late 1800s and early 1900s and many aspects of their traditional lifestyle were lost. The towns and camps introduced Natives to a different way of life and some saw opportunities for employment and trade. Athabascans living in camps or involved with traders were known for their kindness and generosity, and who more than once rescued ill-prepared prospectors from hardship. During this period, interior Athabascans developed the semi-subsistence lifestyle still practiced today in Yukon River communities like the Koyukon Athabaskan villages of Rampart and Stevens Village.³⁴

Early Explorers

The first Brooks Range explorations were primarily conducted by military parties. One of the earliest recorded explorations was by a Russian lieutenant named Zagoskin who, in 1843, explored the Koyukuk River for 56 miles above its confluence with the Yukon River.³⁵ American expeditions followed in the late 1800s, including Lt. Henry T. Allen's expedition on the Koyukuk River in 1883 and rival expeditions led by Lt. J.C. Cantwell and Lt. George M. Stoney who pushed across the arctic divide in 1884 to 1886.³⁶

31. North Slope Borough, Resource Inventory, *Galbraith Lake*, 5-6.

32. Nielson, *An analysis of historic preservation along the Alaska pipeline haul road and utility corridor*, 10.

33. Kauffman, 35-36.

34. U.S. Department of the Interior, Bureau of Land Management, *The Search for Gold along the Koyukuk River*, 9.

35. North Slope Borough, Resource Inventory, *Galbraith Lake*, 3.

36. Kauffman, 48, 53.

“Although economic growth and associated developments are, indeed, important to Alaska’s present and future stability, it does not follow that these particular manifestations of ‘progress’ should, or need be, attained at the expense of cultural, historic, or environmental values—whether these values happen to be Euro-North American or aboriginal Inupiat Alaskan Eskimo in nature.”

—Nielson, *An analysis of historic preservation along the Alaska pipeline haul road and utility corridor*, 5.



Building a birch bark canoe, Steven's Village, 1896 to 1913
Lawyer and Cora Rivenburg Photograph Album, UAF-1994-70-112, Archives, Alaska and Polar Regions Collections, Rasmuson Library, University of Alaska Fairbanks

In 1901 Frank Schrader and W.J. Peters of the United States Geological Survey (USGS) were the first to systematically study the geography and geology of the Brooks Range and North Slope, made the first recorded crossing of the Brooks Range, and were the first known white men to explore Atigun Pass.³⁷ Other notable explorers include Ernest de Koren Leffingwell who, in the early 1920s, was the first scientist to closely study permafrost and identify the sandstone formation that is the main reservoir for Prudhoe Bay oil.³⁸

By the late 1920s most Brooks Range drainages had been explored. The airplane also made its debut during this period and in 1927, Carl Ben Eielson pioneered a flight route from Fairbanks to Point Barrow, which followed Anaktuvuk Pass through the Brooks Range.³⁹ The arctic became accessible to a new variety of explorers, academics, and recreationists with the advent of aircraft.

One of the arctic's strongest advocates was Bob Marshall, a conservationist who has been referred to as the John Muir of the arctic. In 1929 Marshall made his first of many trips to the arctic whereby he mapped 12,000 square miles, climbed 26 major peaks, explored numerous waterways, and named the symbolic "Gates of the Arctic." He was a founder of the Wilderness Society and perhaps best known locally for "Arctic Village," his 1933 book about the community of Wiseman. Marshall once expressed that *Alaska is unique among all recreational areas belonging to the U.S. because Alaska is yet largely a wilderness. In the name of a balanced use of American resources, let's keep northern Alaska largely a wilderness.*⁴⁰

Trans-Alaska Pipeline

Alaska's economy changed forever when, in 1968, North America's largest oil field was discovered at Prudhoe Bay. The discovery well was considered by some to be a last exploration attempt after years of unproductive test wells. By 1993 Prudhoe Bay and the surrounding fields accounted for almost 25% of the United States' oil production.⁴¹

In 1970 a consortium of eight major oil companies formed the Alyeska Pipeline Service Company with the purpose of designing, building, and operating a pipeline. Congress approved construction of the pipeline in 1973 and the first oil entered the completed pipe in June of 1977.⁴²

37. U.S. Department of the Interior, Bureau of Land Management and the Alaska Natural History Association, *Riches from the Earth*, 116.

38. Kauffman, 62-63.

39. North Slope Borough, Resource Inventory, *Galbraith Lake*, 5-7.

40. Kauffman, 69-74.

41. U.S. Department of the Interior, Bureau of Land Management and the Alaska Natural History Association, *Riches from the Earth*, 114, 116.

42. U.S. Department of the Interior, Bureau of Land Management and the Alaska Natural History Association, *Riches from the Earth*, 11.



U.S. Geological Survey party dragging boat over tundra from landing strip on a lake to the headwaters of the Sagavanirktok River, 1946
Photo by J.C. Reed, U.S. Geological Survey



Low divide and Mosquito Mountains from divide between head of Granite Creek, Chandalar River and South Fork of Koyukuk, looking west, c. 1900. Photo by F.C. Schrader, U.S. Geological Survey

The Trans-Alaska Pipeline spans 800 miles and crosses more than 500 rivers and streams and three mountain ranges: the Brooks Range, Alaska Range, and Chugach Mountains.⁴³ More than 15 billion barrels of oil have flowed through the pipeline since 1977 (1 barrel (bbl) is equivalent to 42 gallons) and Alaska today supplies nearly 17% of the United States' domestic crude oil production.⁴⁴

The Haul Road

Construction on the Haul Road, as the byway was originally called, began in 1974 and was completed in five months, its main purposes to support pipeline construction and maintenance and to provide access to northern oil fields. The Yukon River posed its own challenges to highway and pipeline construction; before the bridge was built, trucks and supplies were transported across the river by hovercraft in summer or driven across the ice in winter. Bridge construction began during the winter of 1974 and the bridge officially opened in October 1975.

The Alaska Department of Transportation and Public Facilities took over maintenance and operation of the highway from Alyeska in 1978 and the highway opened to public travel to Disaster Creek (MP 211) in 1981 (although it had been open to tour buses since 1978). That same year, the Alaska State Legislature renamed the Haul Road as the Dalton Highway, after arctic engineer James Dalton.

After much debate, the entire length of the Dalton Highway was opened to public travel in December of 1994. Today, the main purpose of the highway remains the same—to support the Trans-Alaska Pipeline and northern oilfields. In addition, the Dalton Highway has developed as a transportation corridor for residents of Stevens Village, Rampart, Bettles, Wiseman, Coldfoot, Anaktuvuk Pass, Deadhorse, and Nuiqsut. Recreation enthusiasts and tour operators also benefit from the opening.

Mining the Koyukuk

Army Officer Lt. Henry T. Allen explored the Koyukuk River in the late 1800s as part of a 1,500-mile trek acknowledged as the most significant journey of exploration in North America since Lewis and Clark.⁴⁵ Allen's survey inspired prospectors to explore the area in the 1880s; some were lucky enough to find gold on the Middle Fork Koyukuk River, with the first paying strikes occurring at Tramway Bar



Building the TAPS Haul Road. *BLM Photo*



Yukon River Bridge construction. *BLM Photo*



Panning for gold on Myrtle Creek, c. 1900
Photo by F.C. Schrader, U.S. Geological Survey

43. Alyeska Pipeline Service Company, *The Facts. Trans Alaska Pipeline System 2007*, 4.

44. Alyeska Pipeline Service Company, Home Page, "About Us."

45. Kauffman, 53.

in 1893. When word drifted down to struggling Klondike miners in 1898, the rush to the Koyukuk began.⁴⁶

The Koyukuk Gold Rush is one of the oldest and most remote mining booms in Alaska and witnessed peaks and valleys of success. Amidst the hardships, Koyukuk miners, their families, and other area residents were a friendly, compassionate group. Historian William E. Brown described that *“the community...meant more to most of these people than the driblets of gold that allowed them to stay on as members of the community.”*⁴⁷ The landscape south of the Brooks Range still holds remnants of the pre-mechanized drift-mining operations that characterized the first 40 years of gold mining in the area. Related sites such as trading posts, one-winter settlements associated with the 1899-1900 stampede, and early diggings sites also exist.

Today the Koyukuk Mining District is one of the largest in the Yukon River region and continues to attract lifelong and recreational miners.⁴⁸

Coldfoot. In 1902, the Northern Commercial Company established a small store on Slate Creek upon receiving pressure from miners about poor food, supplies, and infrequent mail service. The town later earned the name “Coldfoot” after prospectors traveling through the region turned around because they got “cold feet.”⁴⁹

In 1907, a Coldfoot resident sent the following letter to the *Alaska-Yukon Magazine* describing the town:

*“Coldfoot is a clean, healthy, and quiet town. There is neither jail nor church in Coldfoot. We have one store and one roadhouse. The post office and recorder’s office are the same building. Fashions do not change with the seasons in Coldfoot, but there is many a brave heart beneath a blue jumper.”*⁵⁰

As with many gold rush towns, the boom at Coldfoot was short lived. A large strike at Nolan Creek, near present-day Wiseman, lured miners north, leaving Coldfoot nearly abandoned by 1912.

“Koyukuk miners rarely struck the kind of pay dirt they initially sought. Instead they discovered the gold of friendship, surely a fortune in its own right.”

—U.S. Department of the Interior, Bureau of Land Management, *The Search for Gold along the Koyukuk River*, 3.



Horses towing freight scows between Bettles and Nolan, Middle Fork of Koyukuk River, 1911
Photo by A.G. Maddren, U.S. Geological Survey



Coldfoot, January 1902. Photo courtesy of George Lounsbury

46. U.S. Department of the Interior, Bureau of Land Management, *The Search for Gold along the Koyukuk River*, 4.

47. U.S. Department of the Interior Bureau of Land Management, *The Search for Gold along the Koyukuk River*, 3, 12.

48. Lampright, *Gold placer deposits in north east Alaska (Dalton Highway)*:..., 25.

49. U.S. Department of the Interior, Bureau of Land Management, *The Search for Gold along the Koyukuk River*, 10.

50. U.S. Department of the Interior, Bureau of Land Management, *The Search for Gold along the Koyukuk River*, 11.

Sixty years passed before Coldfoot boomed again as a pipeline construction camp. During the 1970s Coldfoot Camp fed and housed hundreds of workers; however when construction was complete, the buildings were removed and the population at Coldfoot disappeared temporarily once again.

Wiseman. In 1906 the richest gold strike in the area occurred approximately 12 miles north of Coldfoot at Nolan Creek. As word spread, miners migrated north and established the town of Wiseman along the banks of the Middle Fork Koyukuk River. Cabins, a schoolhouse, and the post office were sledged upriver from Coldfoot to support the new boom town.⁵¹

Although no mining occurred in the village, Wiseman attracted miners from outlying creeks, as well as indigenous nomadic people, explorers, and others wishing to offer or receive services.

Wiseman experienced its heyday from 1911 to 1915; the town had two stores, a few roadhouses, and, by 1912, a telephone system that connected it with the communities of Nolan Creek and Hammond River. These modern communications allowed the neighboring camps to organize dances, alert one another of emergencies, and send notice when supplies arrived.⁵² Economic success did not last long; World War I, mined-out claims, and other hardships drove many residents away.



Historical buildings in Wiseman, 2008

“Sites of historic, cultural, subsistence or religious significance continue to be of importance today as reminders of the past, stabilizing influences for the present and promises for the future.”

—Nielson, *An analysis of historic preservation alternatives along the Alaska pipeline haul road and utility corridor*, 6.



Unidentified man on Wiseman Creek bridge
Photo courtesy of George Lounsbury



Wiseman Roadhouse, with proprietor Martin Slisco on left
Photo courtesy of George Lounsbury

51. U.S. Department of the Interior, Bureau of Land Management, *The Search for Gold along the Koyukuk River*, 11.

52. Brown, 101, 103.

CULTURAL QUALITIES

*Cultural quality is evidence and expressions of the customs or traditions of a distinct group of people. Cultural features include, but are not limited to, crafts, music, dance, rituals, festivals, speech, food, special events, vernacular, architecture, etc. The cultural qualities of the corridor could highlight one or more significant communities and/or ethnic traditions.*⁵³

Stevens Village

Located approximately 20 miles upriver from the Dalton Highway at the Yukon River crossing, Stevens Village is one of the oldest villages in interior Alaska. According to Native tradition, Stevens Village was founded by three brothers—Old Jacob, Gochonayeeya, and Old Stephan—and was first called Dinyeet, meaning “in the canyon, in the high places.” When Old Stephan became chief in 1902 the village became known as Stevens Village.⁵⁴

Over 95% of the population (approximately 60) is Koyukon Athabascan and the village includes the Stevens Village IRA* Council, a federally recognized council that governs the tribe.

Winters in Stevens Village are long and harsh—extended temperatures of -50 to -60°F are common—but summers are warm and an important time for residents to harvest salmon, whitefish, moose, bear, waterfowl, and small game. Stevens Village supports recreation and tourism that preserves the village’s traditional and wilderness values and that is non-consumptive.⁵⁵

Residents of Stevens Village travel the Yukon River using boats in summer and snowmachines in winter to reach the Dalton Highway, which provides access to Fairbanks for groceries, supplies, medical care, and more. Tribal members who do not live in the village use the highway to access the Yukon River to travel to Stevens Village for visits, potlatches, burials, and hunting and fishing. The highway is a benefit to residents, but also causes concerns for safety of travelers and impacts to natural resources.



Fish drying racks on the Yukon River
Photo ©Alaska Division of Tourism

53. Office of the Federal Register; 26761.

54. Stevens Village Council, *A Comprehensive Land Use Plan for the Traditional Lands of Stevens Village*, 4.

* Some Native village names include the acronym “IRA,” which means the village organized itself under the 1934 Indian Reorganization Act.

55 . Stevens Village Council, 25.

Rampart

Located approximately 50 miles downriver from the Dalton Highway at the Yukon River crossing, Rampart was established in 1897 as a supply station for Yukon area miners. At its height, Rampart had nearly 10,000 residents, a library, fire department, hotels, saloons, and more. By 1903 Athabaskan Natives were the only residents who remained. Today around 20 people call Rampart home; the mostly Koyukon Athabaskan residents depend heavily on subsistence resources such as salmon, moose, caribou, waterfowl, and small game.⁵⁶

Bettles

The town of Bettles, also known as Bettles Field, is located on the southeast bank of the Koyukuk River, approximately 25 miles due west of the Dalton Highway. Besides air travel, the Koyukuk River provides access to Bettles and Evansville during summer months, while a 30-mile winter trail provides limited access to these communities from the Dalton Highway during winter.

Residents are Alaska Native and non-Native and the main industries are linked to air transportation, tourism and visitor services, and government.⁵⁷ The National Park Service and U.S. Fish and Wildlife Service have shared administrative offices and visitor facilities in Bettles; the town is located just south of the Gates of the Arctic National Park and Preserve and just north of the Kanuti National Wildlife Refuge.

Coldfoot

Close to the byway's midpoint at milepost 175, Coldfoot is a welcome sight to travelers hankering for modern conveniences. Tourists, locals, and truckers all benefit from the services—such as gas, food, a post office, airstrip, and lodging—offered at this historic mining settlement, turned pipeline construction camp, turned vital truck stop. The Arctic Interagency Visitor Center is also located here, which is cooperatively managed by the Bureau of Land Management, the U.S. Fish and Wildlife Service, and the National Park Service.

In 1981, Dick Mackey—1978 Iditarod Sled Dog Race champion—started a hamburger stand in Coldfoot to serve Haul Road truckers. Originally operated out of an old school bus, the stand was

⁵⁶. State of Alaska, *Community Database Online*, Rampart.

⁵⁷. State of Alaska, *Community Database Online*, Bettles.



Kanuti River and Bettles Winter Road
Photo by Steve Hillebrand/USFWS



Dick Mackey's Coldfoot services. BLM Photo



Coldfoot Camp, 2003
©Community Photo Library, Alaska Department of Commerce,
Division of Community and Regional Affairs

eventually expanded to a year-round truck stop with the help of its loyal trucker patrons. The truckers also helped raise the stop's center pole; their engraved names are still visible on the pole, which is located near the café's cash register. Today the pole is used as a message board for truckers, miners, and leisure travelers.

Wiseman

Located approximately 14 miles north of Coldfoot, the village of Wiseman is the only residential community along the 414-mile byway. Its approximately 20 year-round residents rely on local renewable resources to sustain their lifestyle; hunting, trapping, fishing, cutting wood to build and heat homes, and harvesting wild and home-grown plants are all essential activities for survival in this rustic community.

Today's residents possess the hardy skills of original settlers and are possibly more self-reliant due to fewer community services (like a post office) and places for social gatherings. The Trans-Alaska Pipeline and Dalton Highway did enhance the supply route to Wiseman, making modern conveniences possible—like telephone and internet—and changing the type and number of visitors to the village who are still seeking services.

Besides the scenery, Wiseman's historic buildings and tours are highlights for visitors. Guided cultural tours of the village are offered locally and services include three lodging facilities, two general stores, and the only prayer chapel found along the Dalton Highway.

Anaktuvuk Pass

Located within the boundaries of Gates of the Arctic National Park and Preserve, and about 60 air miles west of the Dalton Highway, Anaktuvuk Pass is one of the most scenic and remote communities in the North Slope Borough. Although not visible from the byway, Anaktuvuk Pass can be accessed by plane from Fairbanks and Coldfoot year round.

Anaktuvuk Pass is home to about 300 people, nearly 90% of whom are Nunamiut Eskimo. Traditional practices associated with a lifestyle dependent on the bi-annual migration of caribou are mixed with modern conveniences such as cable television, long-distance telephone service, Internet, a state of the art health clinic, school, and more.



Wiseman Trading Company Building, established 1910, Wiseman
©Community Photo Library, Alaska Department of Commerce, Division of Community and Regional Affairs

Jack Reakoff leading a natural history tour in Wiseman to explain the difference between caribou and moose hooves. Many visitors to Wiseman enjoy learning about the natural history of the animals and their subsistence importance to the people who live in rural Alaska. Photo by Steve Hillebrand/USFWS



Simon Paneak Memorial Museum, Anaktuvuk Pass
©Community Photo Library, Alaska Department of Commerce, Division of Community and Regional Affairs



Anaktuvuk Pass, 2008
©Community Photo Library, Alaska Department of Commerce, Division of Community and Regional Affairs

In summer, daily flights from Fairbanks carry tourists to Anaktuvuk Pass who are eager to experience life in this remote village. Some travelers backpack to the village from the Dalton Highway. Visitors learn about Nunamiut culture through guided tours of the town, its school, and the Simon Paneak Memorial Museum. The museum displays exhibits on traditional tools, clothing, housing, and Native crafts.

Nuiqsut

Nuiqsut, located approximately 60 air miles west of Deadhorse and about 15 miles south of the Beaufort Sea, is accessible by an ice road during winter from the Dalton Highway. The ice road provides restricted access to Nuiqsut from Deadhorse via the Colville River and existing oilfield roads on the North Slope.⁵⁸

Approximately 90% of residents are Alaska Native or part Native; the majority of residents are Inupiaq Eskimos who practice a traditional subsistence lifestyle. The local economy is based primarily on subsistence fishing, whaling, and hunting, with the Kuukpik Native Corporation, North Slope Borough, and local school providing additional employment.⁵⁹

Deadhorse/Prudhoe Bay

Deadhorse has a sole purpose—to support oilfield and pipeline operations. Its layout and buildings are functional, but the area does not have many accommodations for tourists. However, the Arctic Caribou Inn, which operates as a remote-site camp for oil workers, doubles as a tour facility in the summer months. A two-hour tour offers wildlife viewing opportunities, a visit to the oil fields, and access to the Arctic Ocean. Heritage tours with an Inupiat guide are also offered.

This northern town's name is a common source of confusion—is it Deadhorse or Prudhoe Bay? Officially, it's Prudhoe Bay, which bears the zip code; however, the community surrounding the airport, hotels, general store, etc. is commonly referred to as Deadhorse.

There are several theories circulating regarding how Deadhorse got its name. The most reliable seems to be that of Bruce A. Campbell, who was involved with the Haul Road's construction. Trucks adorned with the "Dead Horse Haulers" logo—a defunct trucking company—were being used for the airport runway's construction. When SOCAL (Standard Oil Company of California) engineer Joe Dremer saw the truck with the logo, he reportedly said, *'Dead Horse, that's a [darn] good name for this place.'* The name stuck. Pilots adopted the name and eventually the local area

58. ASCG Incorporated, *North Slope Borough Comprehensive Transportation Plan*, 46.

59. North Slope Borough, "Nuiqsut," *Villages Page*.

"The only certainty is that the land and its people will remain, as they always have, after the allure of oil has faded."

—Nielson, *An analysis of historic preservation alternatives along the Alaska pipeline haul road and utility corridor*, 10.



On the approach—Deadhorse from the air



Tundra swans in front of oil field facility, Prudhoe Bay
©Community Photo Library, Alaska Department of Commerce, Division of Community and Regional Affairs

earned it as well. At some point, the two words welded to one—Deadhorse.⁶⁰

Prudhoe Bay became the official name for the area in 1982. Deborah Bernard from the Prudhoe Bay General Store says for “Prudhoe Bay to be known as Deadhorse is a bit like New York City being simply known as ‘The Bronx.’”⁶¹

ARCHAEOLOGICAL QUALITIES

*Archaeological quality involves those characteristics of the scenic byways corridor that are physical evidence of historic or prehistoric human life or activities that are visible and capable of being inventoried and interpreted. The scenic byway corridor’s archaeological interest, as identified through ruins, artifacts, structural remains, and other physical evidence have scientific significance that educate the viewer and stir an appreciation for the past.*⁶²

Many archaeological sites exist within the corridor, ranging from historic to more than 10,000 years old. Due to the cultural importance of these sites, and their sensitivity to impact, the locations of those sites will not be mentioned in this plan.

“For at least 10,000 years, human hunters have seasonally posted themselves in the valleys and passes to intercept migrating caribou. At hundreds of lookout sites, the evidence of their vigils can be found—cores and flakes of stone, finely knapped projectile points and blades. They worked as they watched and waited—hammering, chipping, flaking with bone, antler and stone—repairing weapons, making spare points, constantly attending to their tool kits.”

—Brown, *The History of the Central Brooks Range*, 1.



Winter scene near Anaktuvuk Pass
©Tom Dew NPS, Alaska Division of Tourism

60. Campbell, “How Deadhorse Got its Name,” 1-6.

61. Bernard, “How Deadhorse Got its Name,” 2.

62. Office of the Federal Register, 26761.

RECREATIONAL QUALITIES

*Recreational quality involves outdoor recreational activities directly associated with and dependent upon natural and cultural elements of the corridor's landscape. The recreational activities provide opportunities for active and passive recreational experiences. They include, but are not limited to, downhill skiing, rafting, boating, fishing, and hiking. Driving the road itself may qualify as a pleasurable recreational experience. The recreational activities may be seasonal, but the quality and importance of the recreational activities as seasonal operations must be well recognized.*⁶³

Recreation along the byway requires advanced planning and preparedness. The byway's remote location, paired with dynamic weather and challenging terrain, cautions users to be well-educated about their trip. However, recreation along the byway and inside its bordering natural areas can be a capstone experience.

National Parks and Refuges

The byway's undeveloped landscape, pristine viewsheds, wildlife sightings, and often rough road surface give travelers a sense of exploration. Over half of the byway is bounded by protected areas—the Kanuti National Wildlife Refuge and Yukon Flats National Wildlife Refuge on the southern end, and the Gates of the Arctic National Park and Preserve and the Arctic National Wildlife Refuge to the north. These natural, protected areas not only offer visual qualities but also remote recreational opportunities, including backpacking, flight seeing, and river travel. Proper planning and self reliance is required for these trips; visitors are encouraged to check with the United States Fish and Wildlife Service and/or the National Park Service about permitting requirements and regulations before visiting.

Backpacking, Hiking, and Camping

There are no developed trails or trailheads along the byway, aside from short interpretive trails at the Finger Mountain wayside and the Arctic Interagency Visitor Center. Day hikes to month-long backpacking expeditions are all off-trail, where hikers must choose their own path. Leave no trace principles are strongly encouraged for all recreational activities.

⁶³. Office of the Federal Register, 26761.



Tent camping at Galbraith Lake, milepost 275



Float plane and moose in Kanuti National Wildlife Refuge
Photo by Philip Martin/USFWS

There are four campgrounds along the Dalton Highway, only one of which is developed (Marion Creek Campground, MP 180). Travelers can also camp at pull-outs along the byway, but must use caution to avoid heavily trafficked areas and dangerous curves; travelers must also adhere to regulations involving critical habitat areas and pipeline right-of-ways.

Biking the Dalton Highway

Every year, steel-legged cyclists burdened with supplies peddle the 414-mile byway—sometimes round trip. Bicycling the Dalton Highway is for the physically fit and well prepared—grueling climbs, steep descents, inclement weather, and industrial traffic all add challenge to the feat. The Bureau of Land Management produces an informational leaflet to help cyclists plan their trip.⁶⁴

Fishing and Hunting

Fishing for all species—except salmon—is permitted within the corridor; however, some species, like lake trout, are catch and release only. Since fish grow and reproduce slowly in higher latitudes, they are susceptible to overharvest. The Alaska Department of Fish and Game (ADF&G) recommends all anglers practice catch and release techniques and use barbless hooks.⁶⁵

The ADF&G maintains strict regulations for hunting along the Dalton Highway—hunters must contact the department for current regulations and to obtain licenses and certifications. The Dalton Highway Corridor Management Area (DHCMA) extends from the Yukon River to the Arctic Ocean and includes all lands five miles from each side of the Dalton Highway and the drivable surface. Big game, small game, and fur animals may only be taken by bow and arrow within the DHCMA (with the exception of federal subsistence license holders who are authorized to use firearms in the DHCMA⁶⁶). The use of motorized vehicles, both on and off road, is prohibited by state statute within the DHCMA, excluding the Dalton Highway and a few other roads and trails. However, a snowmachine may be used for subsistence harvest by those living within the DHCMA or by any user to transport hunters across the DHCMA from land outside the DHCMA to access land on the other side of the DHCMA.⁶⁷

Campgrounds along the Dalton Highway			
NAME	LOCATION	SERVICES	NOTES
Five Mile (undeveloped)	4 miles (6.4km) north of the Yukon River at MP 60	Potable water, dump station	Best sites are on high ground near north entrance
Arctic Circle (undeveloped)	MP 115, up the hill behind viewing deck and picnic area	Outhouse, trash containers, NO WATER	No camping at viewing deck or picnic area
Marion Creek (27 sites, some for RVs)	5 miles (8km) north of Coldfoot at MP 180	Potable water, outhouse, trash containers	Wheelchair accessible. A two-mile hike upstream leads to a 20-foot waterfall.
Galbraith Lake (undeveloped)	MP 275, follow signs to airstrip, then continue past buildings 2.5 miles (4km) on unimproved road	Outhouse, trash containers, NO WATER	Spectacular views of the lake and Brooks Range. Good hiking nearby; wildflowers abound midsummer

Table 1. Campgrounds along the Dalton Highway
From Alaska Natural History Association, *The Dalton Highway Visitor Guide*



Sport fish camp along pipeline access road, Dalton Highway
Photo by Steve Hillebrand/USFWS

64. U.S. Department of the Interior, Bureau of Land Management, Fairbanks District Office, *Bicycling the Dalton Highway*.

65. State of Alaska, Department of Fish and Game, Sport Fish Division, Region III, *Sport Fishing along the Dalton Highway*, 2, 3, 5.

66. Federal Subsistence Board, Office of Subsistence Management, *Subsistence Management for the Harvest of Wildlife on Federal Public Lands in Alaska*, 112.

67. State of Alaska, 2008-2009 Alaska Hunting Regulations, 109, and Federal Subsistence Board, Office of Subsistence Management, *Subsistence Management for the Harvest of Wildlife on Federal Public Lands in Alaska*, 112.

Recreational Gold Panning

The Bureau of Land Management produces a recreational mineral collection brochure that lists creeks and rivers open for recreational gold panning along the roadway.⁶⁸ The brochure is distributed at the Alaska Public Lands Information Center (APLIC) in Fairbanks, the Yukon Crossing Visitor Contact Station, and the Arctic Interagency Visitor Center in Coldfoot.

Others

Wildlife viewing, canoeing, and rafting are a few other recreational activities travelers can enjoy along the Dalton Highway. Birding along the byway is also a popular activity, with 158 species recorded and a diversity of habitats. A “Birds along the Dalton Highway” checklist is available at the APLIC in Fairbanks, the Yukon Crossing Visitor Contact Station, and the Arctic Interagency Visitor Center in Coldfoot.⁶⁹

Driving the byway is a recreational activity itself. Unless a truck driver, pipeline or road worker, federal or state employee, or one of only a handful of byway residents, most people are traveling the byway for leisure.



BLM Visitor Contact Station at the Yukon River Crossing, milepost 56—Trans-Alaska Pipeline and Yukon River Bridge in background

68. U.S. Department of the Interior, Bureau of Land Management, Northern Field Office, *Dalton Highway—Recreational Mineral Collection*.

69. U.S. Department of the Interior, Bureau of Land Management, “Dalton Highway, Outdoor Recreation,” *BLM Alaska website*.



Passenger/recreational vehicles are encouraged to pull over for commercial traffic, like for this piloted rig heading north

9. ROAD AND TRANSPORTATION SYSTEM

Transportation System Overview

The Dalton Highway opened in 1974 to support construction and maintenance of the Trans-Alaska Pipeline and to provide access to northern oil fields. Until 1994, the highway was closed to public travel at Disaster Creek, just north of Coldfoot. The entire length of the highway was opened to public travel in 1994.

The Dalton Highway runs 414 miles from its junction with the Elliot Highway to its terminus in Deadhorse. The highway was built at 28 feet wide, including its shoulders, and does not have separated pedestrian pathways. Some sections of the road are narrower today due to erosion and new sections are being built at 32 feet wide. As of 2009, one hundred and twenty-nine miles of the highway are paved or “high float,” which is similar to pavement.¹

Driving conditions can be difficult—steep grades, inclement weather, and long distances between services add to the challenge. First-time travelers must be especially cautious and well prepared because of their unfamiliarity with the highway, its lack of services, and its remote setting.

Land Status

The Dalton Highway is owned and maintained by the State of Alaska, Department of Transportation and Public Facilities (AKDOT&PF), which assumed operations and maintenance of the highway from the Alyeska Pipeline Service Company in 1974. The State of Alaska owns land bordering the Dalton Highway on its southern and northern ends, from Fairbanks to the Yukon River (milepost 56) and from Slope Mountain (milepost 301) to Deadhorse in the north. The middle section, from milepost 56 to 300, is a congressionally designated Utility Corridor managed by the Bureau of Land Management (the Utility Corridor was designated by Congress (Public Land Order 5150) in 1971 to provide a route to transport energy resources). The northern 179 miles of the Dalton Highway are within the North Slope Borough, but are managed by the State of Alaska. Other lands in the area are managed by federal agencies and Native corporations (see Figures 4 and 5).



Commercial traffic north of Livengood, October 2009

1. Meadow Bailey (AKDOT&PF), email message to Kathlene Rowell (AKDNR), April 12, 2009.

Dalton Highway Land Status - Deadhorse to MP 215

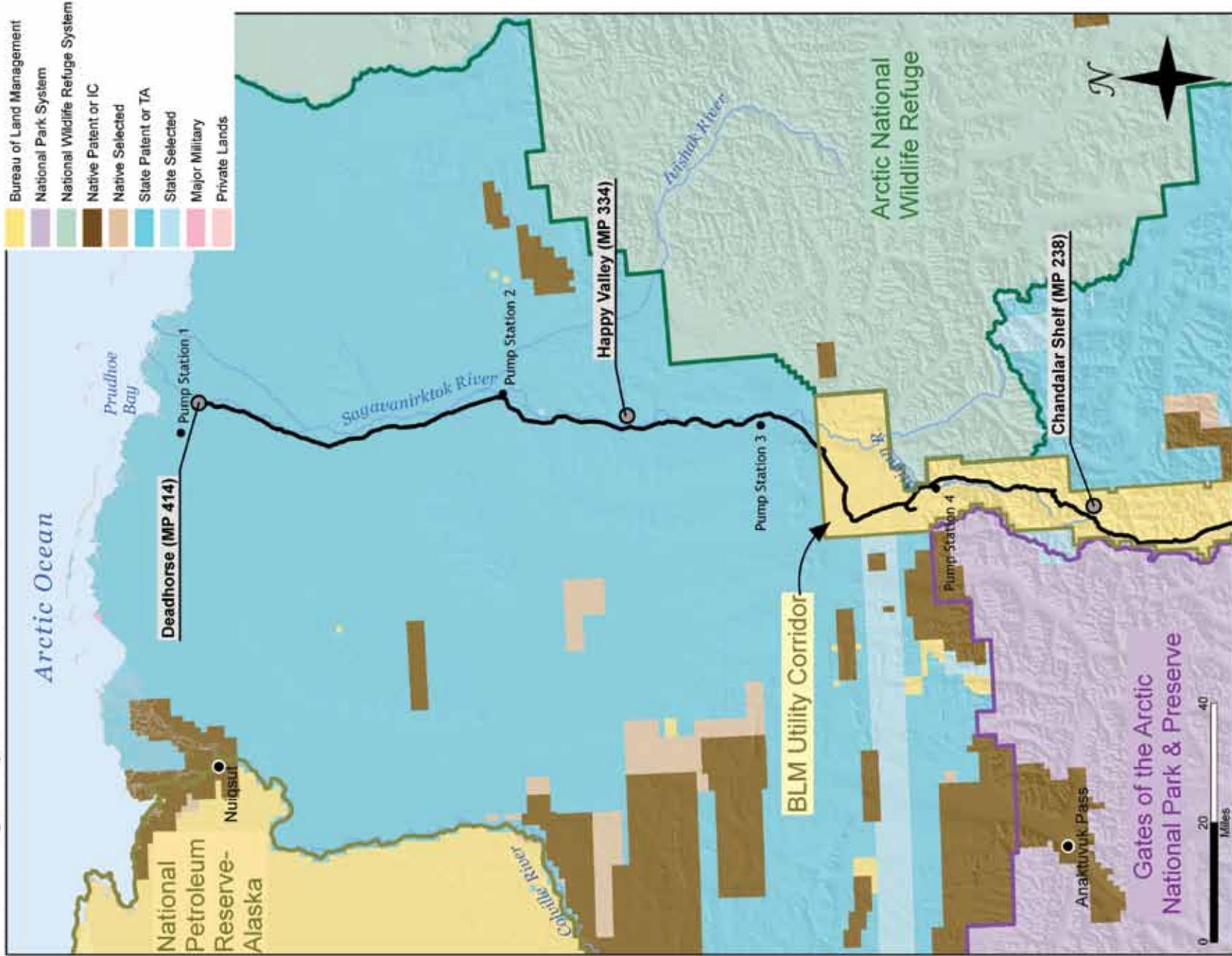
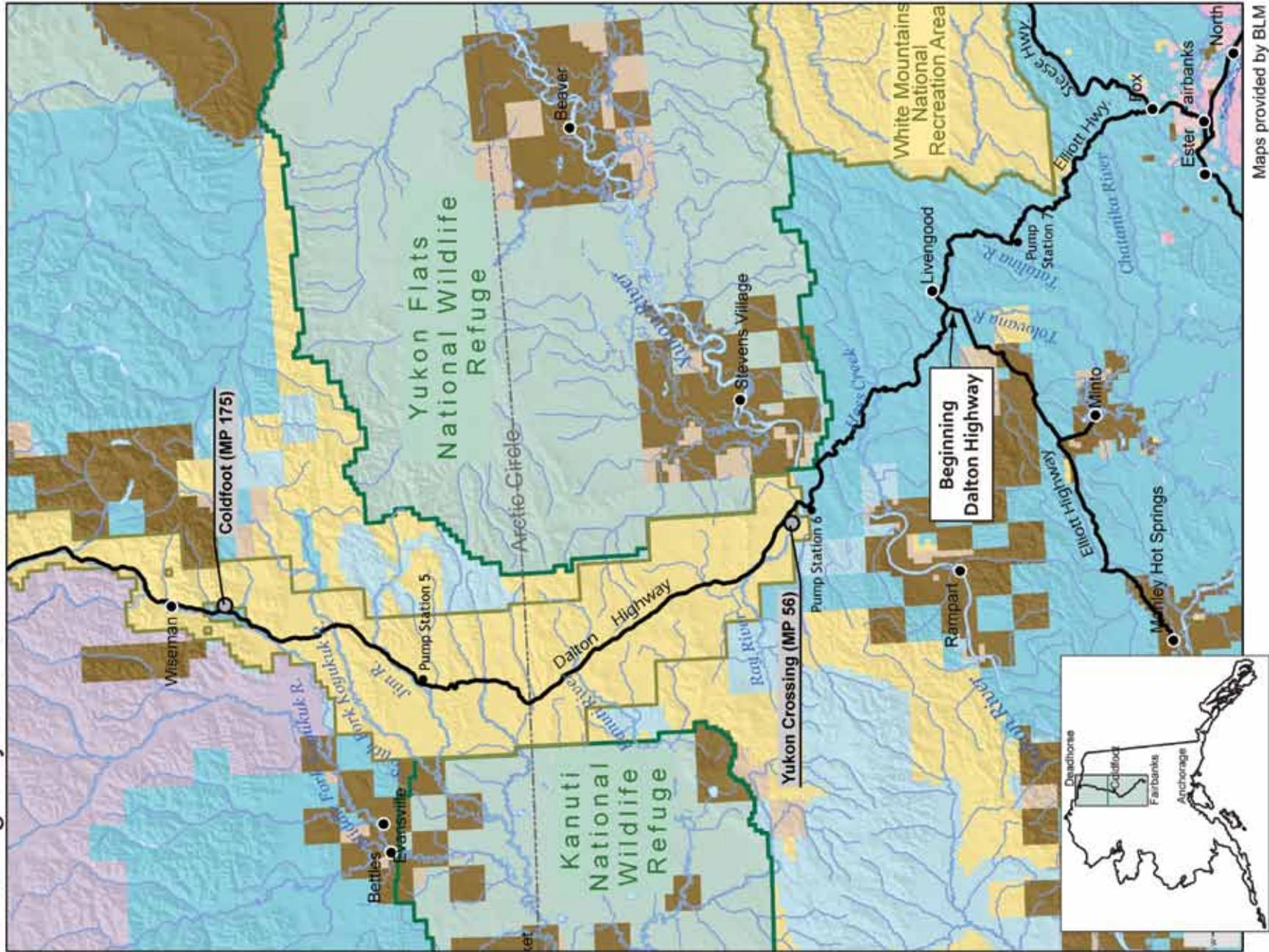


Figure 4. Land status—North

Dalton Highway Land Status - MP 215 to Fairbanks



Maps provided by BLM

Figure 5. Land status—South

Traffic Volumes

According to the AKDOT&PF, the annual average daily traffic (AADT)—the estimated number of vehicles traveling over a given road segment during one 24-hour period—has been variable in the last five years, with a general increase in traffic since 2005. The decrease in traffic from 2004 to 2005 may have been a result of severe wildfires burning in interior and northern Alaska.²

MILE	FEATURE	Average Daily Traffic (ADT)					
		2003	2004	2005	2006	2007	2008
0	BEGINING OF ROUTE	200	200	185	210	280	290
24.34	HESS CREEK	199	224	169	205	265	280
55.59	YUKON RIVER	270	270	170	175	245	245
253.73	ATIGUN RIVER #1	237	238	167	175	185	190

Table 2. Annual Average Daily Traffic, Dalton Highway, 2003-2008
Source: SOA, DOT&PF, Traffic Volume Published Reports

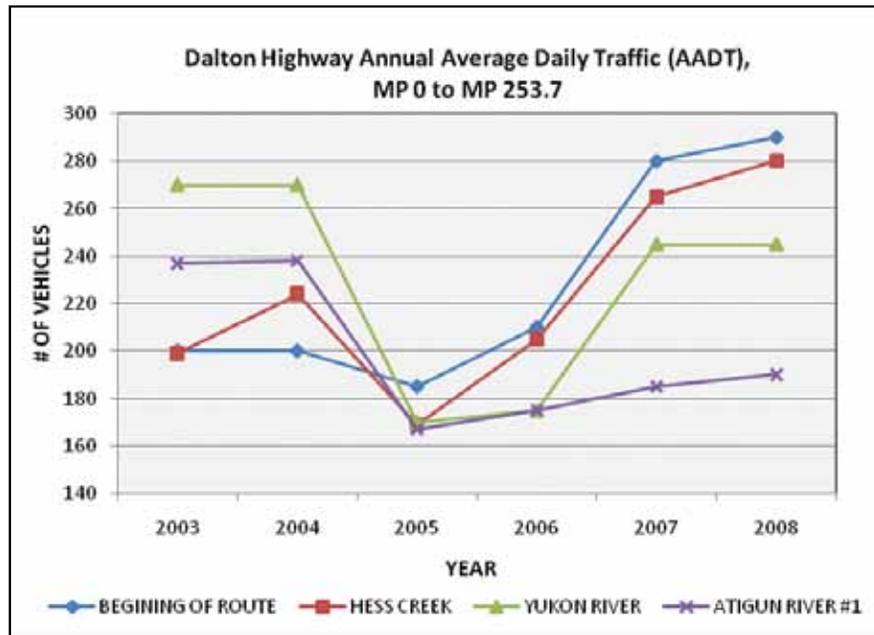


Figure 6. Graph showing Annual Average Daily Traffic, Dalton Highway 2003-2008
Source: SOA, DOT&PF, Traffic Volume Published Reports

² State of Alaska, Department of Transportation and Public Facilities, *Traffic Volume Published Reports*.

Public Safety Infrastructure and Accident Report

Public Safety Infrastructure

The Dalton Highway crosses several federal, state, municipal, and private areas of jurisdiction, each of which are responsible for providing differing levels of security, emergency response, search and rescue, aid to motorists, and criminal investigation. For example, much of the area between milepost 0 and 247 falls within the jurisdiction of the “D” Detachment of the Alaska State Troopers, headquartered in Fairbanks. The State of Alaska has jurisdiction over the entire length of the highway but the “D” detachment’s northern boundary ends at milepost 247 and therefore the Alaska State Troopers do not normally respond north of milepost 247 unless the North Slope Borough makes a formal request. The area north of Atigun Pass, starting at milepost 247 through the end of the highway at milepost 414, is also within the jurisdiction of the North Slope Borough Police Department, who typically respond to incidents within those mile markers. There are no Alaska State Trooper posts along the Dalton Highway; however, there is a one-person post of the Alaska Wildlife Troopers based at Coldfoot, milepost 175.

Most calls for police assistance, motor vehicle crash investigation, search and rescue, or aid to motorists for incidents taking place south of Atigun Pass (within the jurisdiction of the Alaska State Troopers), are handled by troopers based in Fairbanks, which routinely results in response times of several hours and occasionally even longer depending upon road or weather conditions. There is no dependable medical evacuation capability for all sections of the Dalton Highway corridor. There are some private and public air evacuation assets available in both Anchorage and Fairbanks but they are limited by availability, distance, weather, adequate runways, and landing zones.

In emergency situations, the Alaska Wildlife Trooper in Coldfoot can provide some assistance; however, the primary mission of the Alaska Wildlife Troopers is the enforcement of wildlife regulations and due to this, they often travel into sparsely inhabited lands away from the Dalton Highway and are therefore not able to respond quickly to emergencies that occur on or near the Dalton Highway.

First responders are oftentimes other drivers or Alyeska Pipeline Service Company personnel who would then have to initiate the response.



Heading south over Atigun Pass in bad weather



August snowstorm on Dalton Highway
Photo by Steve Hillebrand/USFWS

Accident Report

A total of 41 reported accidents occurred along the Dalton Highway between 2002 and 2006, the most recent year for published data. Fourteen of those accidents involved minor injuries, five involved major injuries, and three involved fatalities; each of the accidents involving fatalities were single vehicle, single passenger accidents.

The majority of crashes occurred when roads were icy or had a sand, mud, dirt, oil, or gravel surface. Half of the crashes occurred during daylight hours, while a quarter of the crashes occurred when it was dark and the vehicle was traveling on a non-lighted section of the road. Half of the crashes occurred between milepost 0 and milepost 50; only three crashes occurred north of milepost 200. Light trucks (four tires) were the most common type of vehicle involved in crashes, with a passenger car being the second most common vehicle involved in crashes.³

	Property Damage Only Crashes	Crashes with Major Injuries	Crashes with Minor Injuries	Crashes with Fatalities	TOTAL
2002	3	3	4	0	10
2003	3	0	2	0	5
2004	3	0	4	2	9
2005	4	1	2	0	7
2006	6	1	2	1	10
TOTAL	19	5	14	3	41

	2002	2003	2004	2005	2006	TOTAL
Ice	2	2	3	3	5	15
Wet	0	0	0	0	1	1
Dry	1	2	2	2	1	8
Sand, Mud, Dirt, Oil, Gravel	7	1	3	2	3	16
Unknown	0	0	1	0	0	1
TOTAL	10	5	9	7	10	41



Rollover at milepost 4.5, Dalton Highway
Photo by Lisa Shon Jodwalis/BLM

Table 3. Crashes on the Dalton Highway, MP 0.0 to MP 415.13, 2002-2006

Source: State of Alaska, DOT&PF Highway Analysis System (HAS) Data Port

Table 4. Crashes on the Dalton Highway by Road Surface Condition, MP 0.0 to MP 415.13, 2002-2006

Source: State of Alaska, DOT&PF Highway Analysis System (HAS) Data Port

3. Colleen Ackiss (AKDOT&PF) and Joanna Bradford (AKDOT&PF), email messages sent to Kathlene Rowell (AKDNR), from DOT&PF Highway Analysis System (HAS) Data Port, July 11, 2008, and September 16, 2008.

	2002	2003	2004	2005	2006	TOTAL
Daylight	4	4	7	4	2	21
Twilight	2	0	0	2	1	5
Dark—Roadway Not Lighted	2	1	2	0	5	10
Dark—Lighted Roadway	0	0	0	1	0	1
Other	1	0	0	0	1	2
Unknown	1	0	0	0	1	2
TOTAL	10	5	9	7	10	41

Table 5. Crashes on the Dalton Highway by Light Condition, MP 0.0 to MP 415.13, 2002-2006
Source: State of Alaska, DOT&PF Highway Analysis System (HAS) Data Port

Table 6. Crashes on the Dalton Highway by Vehicle Type, MP 0.0 to MP 415.13, 2002-2006
Source: State of Alaska, DOT&PF Highway Analysis System (HAS) Data Port

Vehicle Type	2002		2003		2004		2005		2006		TOTAL
	Veh 1	Veh 2	Veh 1	Veh 2	Veh 1	Veh 2	Veh 1	Veh 2	Veh 1	Veh 2	
Passenger Car	4		2				1	1	1		9
Pedalcycle								1			1
Light Truck (4-tires)	2		2		3		4		6	1	18
Tractor/Semi-Trailer Cargo Tank					4						4
Tractor/Semi-Trailer Flatbed	3										3
Tractor/Semi-Trailer Unk Body Type									1		1
Truck/Trailer							1				1
Single-Unit (2-Axles)					1						1
Single-Unit (3+Axels) Garbage/Refuse			1								1
Off Highway Vehicle	1										1
Other					1	2	1	1	1		6
Unknown									1		1
TOTAL	10	0	5	0	9	2	7	3	10	1	47

Milepost	2002	2003	2004	2005	2006	TOTAL
0.0 – 25	3		4	3	2	12
25.1 - 50	4	1	2	1	1	9
50.1 - 75			2			2
75.1 - 100					1	1
100.1 - 125		1		1	2	4
125.1 - 150	2		1		2	5
150.1 - 175		1			1	2
175.1 - 200	1	1		1		3
200.1 - 225	<i>No accidents in this zone</i>					0
225.1 - 250					1	1
250.1 - 275	<i>No accidents in this zone</i>					0
275.1 - 300		1				1
300.1 - 325	<i>No accidents in this zone</i>					0
325.1 - 350	<i>No accidents in this zone</i>					0
350.10 - 375				1		1
375.1 - 400	<i>No accidents in this zone</i>					0
400.1 - 425	<i>No accidents in this zone</i>					0
TOTAL	10	5	9	7	10	41

Table 7. Crashes on the Dalton Highway by Milepost, MP 0.0 to MP 415.13, 2002-2006
Source: State of Alaska, DOT&PF Highway Analysis System (HAS) Data Port

Commercial Traffic

Hundreds of loaded commercial trucks travel the Dalton Highway each month, transporting supplies for highway maintenance camps, Alyeska Pipeline pump stations, and North Slope oilfields (see Figure 7). Surprisingly, the number of loaded trucks traveling the Haul Road is fewer during the summer than it is during other seasons, which is a testament to the hard-working group of truckers whose experience, knowledge, and guts allow them to travel the road during the oftentimes unforgiving winter.

The road might not exist if it weren't for this critical need to transport supplies for the oil and gas industry, and it is therefore maintained to support this purpose. Heavy loads and year-round use batter the road surface, requiring constant maintenance.

Commercial trucks have the unofficial “right-of-way” on the Dalton Highway. Recreational travelers are encouraged to slow down and pull to the side of the road when a commercial truck approaches from either direction. It is also strongly encouraged that recreational travelers carry a CB radio and travel with their headlights on at all times.

Bicycle and Pedestrian Traffic

Bicycling the Dalton Highway is a popular activity for adventure cyclists during summer months. Most will travel one-way and then return to their origination point by ground transportation or air. Bicyclists ride on the road shoulder; there are no separated bike paths. The Bureau of Land Management produces an informational leaflet to help cyclists plan their trip.

There are no separated pedestrian pathways on the Dalton Highway. The areas around Yukon Crossing and Coldfoot are the most likely places pedestrians would be walking alongside or crossing the Dalton Highway.

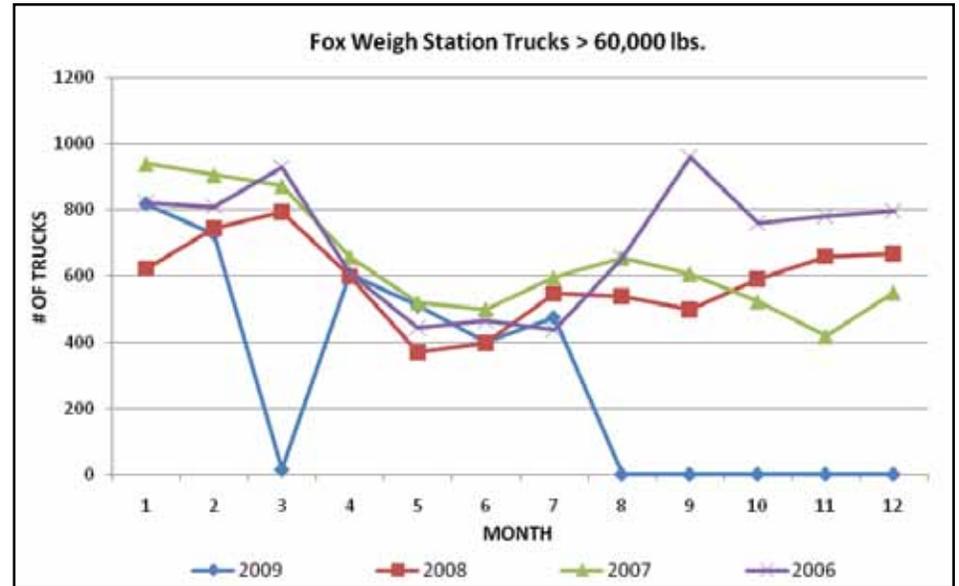


Figure 7. Number of loaded trucks crossing the Fox Weigh Station, north of Fairbanks, 2006-2009
Source: State of Alaska, DOT&PF Division of Measurement Standards and Commercial Vehicle Enforcement.
Courtesy of Aves Thompson, Alaska Trucking Association



Passenger vehicles and motorcycles—looking north from Sagavanirktok River wayside, milepost 348

Ice Roads and River Access

Ice Road to Nuiqsut

Nuiqsut, located approximately 60 air miles west of Deadhorse and about 15 miles south of the Beaufort Sea, is accessible—to authorized personnel only—by an ice road during winter from Deadhorse. The ice road connects Nuiqsut to Deadhorse via the Colville River and existing oilfield roads on the North Slope.⁴ However, ice roads are expensive to construct and only provide seasonal, restricted access; there are proposals for permanent road connections from Nuiqsut and Anaktuvuk Pass to the Dalton Highway, but neither proposal is being actively pursued at this time.⁵

Bettles Winter Road

The Bettles Winter Road is a 30-mile winter trail that provides Bettles and Evansville residents with access to the Dalton Highway during winter months as weather and conditions permit. The route begins at the Dalton Highway at milepost 135.7 and heads west over rivers and through the boreal forest.⁶ The condition of this road is subject to frequent change due to icing and freeze/thaw events. Traveling the road requires extreme caution and experience with winter driving conditions.

The Yukon River—Rampart and Stevens Village

The Yukon River at milepost 56 provides residents of Rampart (west of the bridge) and Stevens Village (east of the bridge) access to the Dalton Highway year round.



Winter road to Bettles, 2005
Photo by Bill Raften/USFWS

4. ASCG Incorporated, *North Slope Borough Comprehensive Transportation Plan*, 46.

5. ASCG Incorporated, *North Slope Borough Comprehensive Transportation Plan*, 46.

6. State of Alaska, *Community Database Online*, Bettles.

Projects Potentially Affecting the Roadway

Upon forming a working Dalton Byway group, members will need to stay informed about potential and approved projects that could affect travel on the roadway. Making improvements to the roadway for safety and out of necessity for the transportation of goods is inevitable. The working byway group should encourage representatives from the AKDOT&PF and other stakeholders involved with industrial development to be members of the group so they can keep the group informed of upcoming initiatives.

Large gas pipeline

When and if a gas pipeline is built to transport North Slope natural gas to local and international markets, it is estimated that work needed to improve state highway infrastructure—including roads, bridges, and other highway facilities—will cost \$2 billion. Construction of a natural gas pipeline will have a greater impact on roads than that from construction of the oil pipeline: it is likely that the gas pipeline will be buried (meaning more earth moving), it will be three-quarters of an inch thicker than the oil pipeline (meaning loads to transport sections of pipe will be heavier), and there will be other large pieces of equipment to transport.⁷

Half of the \$2 billion estimated for road improvements would be needed for 36 projects on the Dalton Highway, which are first on the AKDOT&PF's priority list because of the \$75 million needed for big bridge crossings.⁸ Gas pipeline development would bring hundreds of workers to the Dalton Highway corridor and an intense amount of industrial traffic.

Enstar "bullet line" gas pipeline

In addition to the large gas pipeline, Enstar Natural Gas Company is proposing a 20-inch-diameter, 690-mile-long bullet line stretching from the North Slope to south central Alaska, with the primary purpose of supplying in-state markets. The line would follow the Dalton Highway south to Fairbanks and then the Parks Highway to Wasilla.⁹

7. Nelson, "Road work needed in advance of gas line," *Petroleum News*.

8. Nelson.

9. Associated Press, "Enstar looks to Brooks Range foothills for gas."

Road Improvements

The AKDOT&PF conducts regular maintenance and improvement projects on the Dalton Highway, including grading, bridge repairs, and culvert replacement. Upcoming projects include widening lanes on some sections to include four-foot shoulders, new guardrails, and improved bridge decking and stream crossings.

The “Alaska Statewide Long-Range Transportation Policy Plan,” published in 2008 by AKDOT&PF, characterizes the Dalton Highway as primarily an industrial-use highway, with some local traffic and summer tourism. The plan further explains:

“The Dalton sees consistent and relatively high-volume heavy truck traffic and the effects of thawing permafrost. This level of industrial use in a difficult environment, along with the growing likelihood that a gas pipeline will be constructed along the corridor, makes the reconstruction of many segments of these highways [including the Steese and Elliot highways] important. Much has been rebuilt in the past ten years, but a number of segments remain, totaling...one hundred miles of the Dalton Highway, and several bridges including the Yukon River crossing. The total cost of these improvements to Alaska’s ‘backbone routes’ is roughly \$1.5 billion.”¹⁰

Road improvement projects can cause delays for travelers, but ultimately make the road safer. The semi-trucks themselves and trucks carrying and hauling heavy equipment take their toll on the roadway, necessitating upgrades and repairs.

Paved roads not only make the road surface smooth, but can also increase travel speeds and make the route more attractive to recreational travelers. There is some concern that paving the Dalton Highway will make it more attractive to tourists, therefore straining the visitor services and public safety infrastructure and negatively impacting the cultural and natural environment.

Foothills West Transportation Access

The Alaska Department of Transportation & Public Facilities (AKDOT&PF) is proposing to build an all-season road from the Dalton Highway to Umiat in order to access energy and mineral resources located in the northwestern foothills of the Brooks Range. The road would provide both exploration



Road construction north of Livengood

¹⁰. State of Alaska, Department of Transportation and Public Facilities, *Let's Get Moving 2030*, 20.

and development opportunities for the area as well as facilitate a more economically feasible National Petroleum Reserve Alaska (NPRA) development. This project is in the early planning stage; design development and environmental activities are anticipated through 2011. Once these activities are completed, and funding is obtained, a construction project could begin. For more details visit the project website at www.foothillsroad.alaska.gov.¹¹

Western Alaska Access Planning Study

The Alaska Department of Transportation and Public Facilities (AKDOT&PF) is exploring the potential for constructing a highway between the contiguous Alaska Highway system and the isolated highway system on the Seward Peninsula. The study is evaluating the economic benefits and costs of the highway, identifying a possible route and costs, and identifying actions needed to implement construction. The highway would facilitate resource and community development in the region. The study encompasses the area west of the Dalton Highway, north of the Yukon and lower Tanana river basins, and south of the Brooks Range.¹²

The study is ongoing. Regular updates are posted at www.westernakaccess.com.

11. Meadow Bailey (AKDOT&PF), email message to Kathlene Rowell (AKDNR), August 31, 2009.

12. Meadow Bailey (AKDOT&PF), email message to Kathlene Rowell (AKDNR), February 5, 2010.

10. BYWAY VISITATION

The “Byway Visitation” section presents an overview of Alaska visitors, rural-Alaska visitors, and Dalton Highway visitors, including visitor statistics, characteristics, and reasons for visiting. The section also addresses the challenges associated with tourism along the Dalton Highway and stakeholders’ desires to support tourism that does not diminish the wilderness experience or impact the byway’s intrinsic qualities.

Traveler Profiles & Visitor Statistics

Out-of-State Visitors

An estimated 1.7 million out-of-state visitors came to Alaska between May and September of 2007, a 5.1% increase over summer 2006. The majority of visitors were traveling for vacation and pleasure (1.4 million).¹

According to the Alaska Travel Industry Association (ATIA), it is estimated each visitor to Alaska in 2007 spent an average of \$934, contributing \$1.5 billion to our economy (this figure does not include travel to/from Alaska and lodging). The majority of that spending went toward tours, activities, and entertainment (\$307 million), while spending for gifts and souvenirs (\$289 million) and tour packages (\$245 million) were a close second and third.²

In 2007, the average visitor to Alaska was 51.6 years old and the average party size was 2.4 people. One in three visitors was a repeat traveler and 70% of visitors were very satisfied with their experience.³

A 2007 survey of Dalton Highway travelers showed that 77% of respondents were from outside of Alaska and seven percent were international travelers.⁴

Alaska Residents Traveling In-State

In 2007 the ATIA initiated a new study to identify the current Alaska resident in-state pleasure travel market and define the market in terms of demographics, media, and promotion potential.⁵ The state



Motorhome on Dalton Highway
©Alaska Division of Community and Business Development



Group tour participants enjoying a break at the Galbraith Lake wayside

1. McDowell Group, Inc., “Alaska Visitor Statistics Program V Interim Visitor Volume Report, Summer 2007.”

2. Alaska Travel Industry Association, “Alaska’s Visitor Industry: 2007 Report.”

3. Alaska Travel Industry Association, “Alaska’s Visitor Industry: 2007 Report.”

4. University of Alaska Fairbanks, Department of Resources Management, “Benefits-Based Management Study for the Dalton, Taylor, and Denali Highways,” 40.

5. GMA Research Corp., “2007 Alaska Resident In-State Pleasure Travel Study,” 1.

was broken down into nine geographic regions, with the Interior and Fairbanks regions being most relevant to Dalton Highway travel.

Of the 1,100 statewide respondents, 62% took at least one day trip where they traveled 50 miles or more within Alaska during the past year. Forty percent of Interior respondents and 64% of Fairbanks respondents took a qualifying trip (see Table 8 for regional demographics). The top reasons for traveling were: visiting friends and family (40%), fishing (30%), shopping (26%), sightseeing (24%), fun/pleasure (21%), other outdoor activities (20%), dining out (12%), road trip (11%), and movie/festival/fair (11%). Interior residents were significantly less likely to travel by private vehicle for overnight trips (17%), compared to Fairbanks residents (87%).⁶

Major obstacles to in-state travel were time and cost of travel; not surprisingly, the primary factors that would motivate residents to travel were having more money, more time, and cheaper prices.⁷

Rural Alaska/North Slope Borough Visitors

Approximately 20,000-25,000 visitors travel to the North Slope annually and are commonly adventure travelers or part of a package tour. Many package-tour visitors are attracted to the landscape and climate, local Native culture, and soft adventure activities; tours may include a ‘Top of the World’ tour to Barrow, a Prudhoe Bay oilfields tour, and/or a trip to Anaktuvuk Pass. The majority of adventure travelers come from Fairbanks and generally travel to the Brooks Range, Gates of the Arctic National Park and Preserve, and the Arctic National Wildlife Refuge.⁸

In 1997, the Alaska Regional Development Organizations (ARDORs) concluded that one of the greatest barriers to development and travel in rural Alaska was a lack of public infrastructure; however, this is not to say that rural Alaska lacks tourism potential. *The Rural Alaska Tourism Infrastructure Needs Assessment: North Slope Borough*, produced by the State of Alaska, Department of Commerce, Community and Economic Development, attributed the North Slope Borough with the following tourism assets: exotic location, northern lights, contrast of petroleum industry with arctic wilderness, wildlife, scenery, national parks and wildlife refuges, and a distinct Inupiaq Eskimo culture.⁹

	INTERIOR	FAIRBANKS
Age (mean in years)	47.6	44.7
Education (College graduate or more)	20%	34%
Household Size (mean # of people)	3.6	3.0
Children in Household	64%	49%
Employed Adults	97%	88%
Caucasian	33%	83%
Household Income (mean in thousands)	\$57.3	\$71.8
Alaska Residency (mean in years)	38.0	23.7

Table 8. Interior and Fairbanks Region - Resident Demographics, 2007. From GMA Research Corp., 2007 Alaska Resident In-State Pleasure Travel Study.



Wood mask created in Anaktuvuk Pass by Elijah Kakinya. University of Alaska Museum of the North, UA91-4-6, photo by Barry McWayne

6. GMA Research Corp., “2007 Alaska Resident In-State Pleasure Travel Study,” 2,5,10.

7. GMA Research Corp., “2007 Alaska Resident In-State Pleasure Travel Study,” 4.

8. State of Alaska, Department of Commerce Community and Economic Development, Divisions of Trade & Development and Tourism, *Rural Alaska Tourism Infrastructure Needs Assessment: North Slope Borough*, 4-5.

9. State of Alaska, Department of Commerce Community and Economic Development, Divisions of Trade & Development and Tourism, *Rural Alaska Tourism Infrastructure Needs Assessment: North Slope Borough*, 1, 3.

Dalton Highway Travelers

Benefits-Based Management Study, 2007

During the summer of 2007, a benefits-based management study was conducted along the Dalton Highway to measure the recreation activities, settings, experiences, and benefits associated with summer visitors to the Dalton Highway.¹⁰ The Dalton Highway was divided into the following sampling zones: Zone 1—Yukon River to Arctic Circle; Zone 2—Arctic Circle Wayside to Coldfoot; Zone 3—Coldfoot to Atigun Pass; Zone 4—Atigun Pass to Toolik Lake Viewpoint; Zone 5—Galbraith Lake; Zone 6—Toolik Lake Viewpoint to Deadhorse.

Primary Destination. Two hundred and sixty-four visitors completed surveys, an 84% response rate. Thirty percent and 31% of respondents listed Zone 1 and Zone 6 respectively as their primary destination zones. Zone 2 was chosen third (16%) as the primary destination point.¹¹

Desires. Seventy-seven percent of respondents listed driving and sightseeing as their primary Dalton Highway activities. Hiking, photography, and wildlife viewing were also listed by many as their primary activities. Exploring, nature, escaping usual life, and escaping crowds were the top four motivations listed by respondents. Visitors were looking for personal benefits related to nature and the outdoors, personal freedom, and improved mental health.¹²

Visitor Services. Visitors were asked to rate the amount they witnessed, their preferred amount, and the quality of the following facilities and services: developed campgrounds, visitor centers, hiking trails, restrooms, trail signage, ranger presence, information boards, and tour group opportunities. The majority of visitors said the number of facilities and services either met or exceeded their expectations, with one exception: twenty-nine percent said “ranger presence” was less than they expected. Most respondents felt that the number of facilities/services should be left the way they are, although almost 20% said they would like to see more campgrounds. Those who considered Zone 6—Toolik Lake Viewpoint to Deadhorse—their most satisfying zone said they would have preferred more restrooms.¹³



BLM Visitor Contact Station at the Yukon River Crossing, milepost 56—Trans-Alaska Pipeline in background



Motorcyclists at the Arctic Circle wayside, milepost 115

10. University of Alaska Fairbanks, Department of Resources Management, 13.

11. University of Alaska Fairbanks, Department of Resources Management, 29, 47.

12. University of Alaska Fairbanks, Department of Resources Management, 46, 54, 57.

13. University of Alaska Fairbanks, Department of Resources Management, 65-68.

Visitor Characteristics. Although most visitors said they were interested in visiting again, the scores were lower when asked if they were likely to visit again.¹⁴

The majority of respondents (85%) were first-time visitors to the Dalton Highway and 35% of respondents said the Dalton Highway itself was their main reason for the trip. Other characteristics include:

- 54% of respondents were male
- Most travelers were between the ages of 50 and 70, with visitors in their 40s the second largest group
- 77% of respondents were from outside of Alaska
- 7% of respondents were international travelers
- Most people traveled alone or in groups of two to four
- Most visitors spent two nights or less along the highway
- 3% of respondents said they were delayed from traveling past Zone 1—weather and road conditions were the main reasons cited
- Over 90% of visitors were white or Caucasian; 50% had a college education; over 30% had graduate-level education¹⁵

Trip Planning Resources. Figure eight shows the sources that respondents said were most useful to them for trip planning.

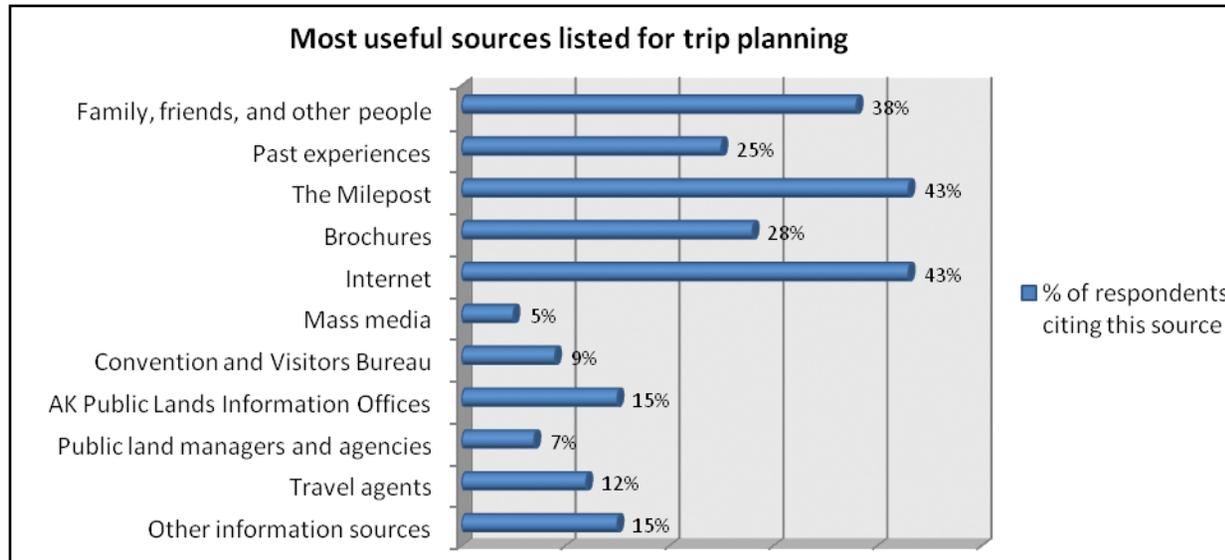


Figure 8. Most useful sources listed for trip planning.
Source: University of Alaska Fairbanks, Department of Resource Management, "Benefits-Based Management Study for the Dalton, Taylor, and Denali Highways," 76.

14. University of Alaska Fairbanks, Department of Resources Management, 73.

15. University of Alaska Fairbanks, Department of Resources Management, 40, 74-80.

Arctic Interagency Visitor Center (2005) and Dalton Highway (2007) Surveys

A visitor satisfaction survey was conducted at the Arctic Interagency Visitor Center (AIVC) during the fiscal year 2005. The survey collected visitor satisfaction data regarding visitor information, developed facilities, managing recreation use, resource management, BLM staff and customer service, and educational and interpretive materials. This was a random sample survey with a 94% response rate.

The AIVC received a 99% overall satisfaction rating.¹⁶

A similar study was conducted for the Dalton Highway during the fiscal year 2007 and data was collected for the same purposes. This was also a random sample survey with a 99% response rate.

The Dalton Highway received an 86% overall satisfaction rating.¹⁷

Table 9 (page 71) compares satisfaction ratings for the two sites. In general, participants were more satisfied with their specific experience at the AIVC than they were with the Dalton Highway experience as a whole.



Entrance, Arctic Interagency Visitor Center, Coldfoot



Central exhibit at the Arctic Interagency Visitor Center, Coldfoot

16. U.S. Department of the Interior, Bureau of Land Management, *Arctic Interagency Visitor Center Visitor Survey*.

17. U.S. Department of the Interior, Bureau of Land Management, *Dalton Highway Visitor Survey*.

Percent Satisfied		
	AIVC	DH
Everything considered: quality of BLM visitor information	99%	76%
• Providing useful maps and brochures	99%	80%
• Providing adequate signs on site for direction and orientation	96%	77%
• Ensuring public awareness of rules and regulations	96%	72%
Everything considered: overall condition of developed facilities	98%	80%
• Maintaining roads for motorized vehicles	84%	61%
• Maintaining a clean site	99%	89%
• Maintaining trails for non-motorized use	87%	72%
• Maintaining cleanliness of restrooms and other physical facilities	99%	84%
Everything considered: visitor and recreation management	98%	76%
• Managing the appropriate use of vehicles	93%	83%
• Managing the number of people	98%	87%
• Keeping noise at appropriate levels	98%	84%
• Providing sufficient law enforcement presence to prevent crime	94%	63%
Everything considered: BLM protection of natural and cultural resources	95%	82%
• Adequately protecting the natural resources	94%	85%
• Ensuring that visitor activities do not infringe on resource protection	94%	79%
• Adequately protecting the cultural resources	94%	89%
Everything considered: interpretive and educational program	98%	77%
• Providing quality educational and interpretive material about the resources at this site	99%	81%
• Providing stewardship information on how to protect the cultural and natural resources	95%	69%
• Providing a sufficient quantity of educational and interpretive materials about the resources at this site	99%	77%
• Providing information about resource preservation and management in this area	95%	73%
• Should the BLM provide more educational and interpretive material? AIVC: 59% Y, 41% N/ DH: 69% Y, 31% N		
Demographics		
Group composition - Number of adults (18 and over)	91%	97%
Gender - AIVC: 55% Male, 45% Female / DH: 61% Male, 39% Female		

Table 9. AIVC and Dalton Highway survey response comparison. Source: U.S. Department of the Interior, Bureau of Land Management, *Arctic Interagency Visitor Center and Dalton Highway Visitor Survey.*

Dalton Highway Visitor Survey, 1995

Gregory A. Robbe, a graduate student from the University of Alaska Fairbanks conducted a Dalton Highway visitor survey during four, one-week periods in the summer of 1995, approximately one year after the highway was opened for public travel. The purpose of the survey was to provide the Bureau of Land Management (BLM) with information to assist in updating the *Recreation Area Management Plan* and to provide the Alaska Department of Transportation and Public Facilities (AKDOT&PF) with information about current road conditions, visitor demographics, and types of vehicles used. Four hundred eighty-one surveys were taken, and 376 were returned.¹⁸

When compared to today, the results show that traveler characteristics and desired experiences did not drastically change during the 12-year period between studies. When comparing Robbe’s results regarding resources used for trip planning to the 2007 results from the benefits-based management study (Figure 8, page 69), it is evident that current travelers are using the Internet and *The Milepost* as their primary sources of information, opposed to maps used by 1995 travelers.

In 1995, the average Dalton Highway visitor was a 50-year-old male traveling with a partner (most likely a spouse) in a passenger vehicle with Lower 48 plates. This traveler most likely learned about the Dalton Highway from a map and preferred “developed” camping facilities (those including toilets, designated tent sites, picnic tables, and potable water), although was more likely to sleep in a tent or their car than in an RV. The traveler was most interested in looking at the scenery from their vehicle or a scenic pullout.¹⁹

The traveler did not expect paved highways and fast food; however, they did expect visitor services such as toilets every two hours of travel. The traveler was generally satisfied with the experience and planned to share their stories about the scenic and natural qualities with others.²⁰

The author’s conclusion echoed the sentiment of current stakeholders:

“While the survey described an average visitor that wanted a bit more services, those services were not to come at the detriment of what makes the Dalton Highway so unique—its ability to show you what the real wild Alaska looks like. Great care must accompany each and every decision concerning the addition of services or visitor facilities along the Dalton Highway, so as to preserve the spirit of the greatest drive in Alaska.”²¹



Princess tour bus at the Finger Mountain wayside, milepost 98

18. University of Alaska Fairbanks, School of Agriculture and Land Resources Management, Agriculture and Forestry Experiment Station, “1995 Dalton Highway Visitor Survey Results Report,” 5, 7.

19. University of Alaska Fairbanks, School of Agriculture and Land Resources Management, Agriculture and Forestry Experiment Station, 73-74.

20. University of Alaska Fairbanks, School of Agriculture and Land Resources Management, Agriculture and Forestry Experiment Station, 74.

21. University of Alaska Fairbanks, School of Agriculture and Land Resources Management, Agriculture and Forestry Experiment Station, 82.

Yukon Crossing, Marion Creek Campground, and the Arctic Interagency Visitor Center

The Bureau of Land Management has been tracking visitation at the Yukon Crossing Visitor Contact Station, the Marion Creek Campground, and the Coldfoot/Arctic Interagency Visitor Center since the facilities opened in 1992, 1994, and 1989 respectively. The numbers reflect those who visited the facilities; these figures do not necessarily represent the number of people who traveled the highway (see the “Road and Transportation” section for traffic counts). The original Coldfoot Visitor Center opened in 1989; the Arctic Interagency Visitor Center (AIVC) replaced the Coldfoot Visitor Center in 2003. The leap in AIVC visitor numbers in 2003 probably reflects that more travelers stopped to experience the new visitor center. The dip in numbers at the AIVC from 2004 to 2005 is attributed to severe wildfires burning in interior and northern Alaska. The Yukon Crossing Visitor Contact Station was closed for the season in 2006.

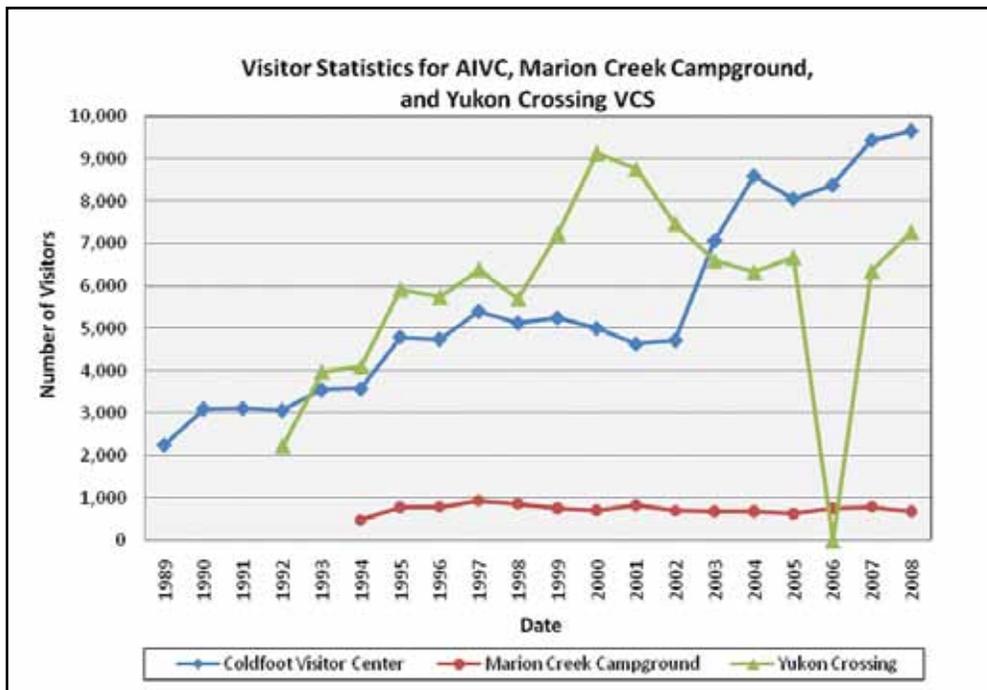


Figure 9. Visitor Statistics for AIVC, Marion Creek Campground, and Yukon Crossing Visitor Contact Station. Data from the Bureau of Land Management

Byway Visitation Challenges and Opportunities

As mentioned in the “Corridor Issues and Concerns” section, some people feel that the number of visitor services (outhouses, litter receptacles, dump stations, food, lodging, etc.) along the byway would not accommodate an increase in the number of people traveling the byway. The main concern is that marketing the Dalton Highway as a scenic byway and destination point would break the visitor service infrastructure and negatively impact the natural and cultural environment, businesses, and communities. Some are concerned that travelers will not adhere to the preservation ethic held by residents along the corridor—that travelers will not have the knowledge needed to have low-to-no-impact experiences. They believe that an increase in traffic will invariably increase habitat destruction and activities that are unenforceable because of the byway’s remoteness.

However, data shows that current and past travelers enjoyed their experience on the Dalton Highway and were generally pleased with the amount of visitor services and opportunities. The benefits-based management study conducted in 2007 shows that the majority of respondents listed exploring, nature, escaping usual life, and escaping crowds as their primary motivations for traveling the Dalton Highway, and they were looking for personal benefits related to nature and the outdoors, personal freedom, and improved mental health. One can infer that travelers looking for those types of experiences would have an inherent preservation ethic.

By ensuring—through this document, partnerships, and other means—that their concerns and voices are heard, byway stakeholders can continue to welcome visitors to the Dalton Highway without threat of natural and cultural destruction.

The Dalton Highway’s purpose as an industrial road presents its own challenges to recreational travel. Commercial and industrial traffic, un-paved roads, industrial projects—such as the Trans-Alaska Pipeline and proposed natural gas pipelines—all have the potential to impact travel. Stakeholders will need to stay informed about current events in order to ensure their vision for the byway is maintained.

“There is no silence, the great natural silence, aura of many mutterings, rustlings, and aerie songs. A rock falls. Waters murmur, lap and splash. Wind soughs across a sea of tiny leaves. A wolf may howl, a ground squirrel chirp. Raven and falcon croak and cry, and ptarmigan cluck amid the willows. The rumble of thunder may echo the softer thunder of ten thousand rumbling caribou... But such sounds are merely orchestrations of a wild Quiet, a quiet Wild. It commands respectful, careful listening, just as the light commands a respectful, grateful gaze.”

—Kauffman, *Alaska’s Brooks Range: The Ultimate Mountains*, 13.

11. SIGNAGE AND INTERPRETATION

This section presents an overview of existing Dalton Highway signage and interpretation and discusses their associated challenges and opportunities.

Existing Signage

In general, signage along the Dalton Highway is sufficient, but the number, location, and types of signs are being updated. When the Alaska Department of Transportation and Public Facilities (AKDOT&PF) implements a road improvement or construction project along the Dalton Highway, they ensure that signage is in compliance with the Alaska Traffic Manual and act accordingly.¹

There are few directional signs, since there are no access points along the Dalton Highway; the majority of signs mark geographical features (river crossings, passes, etc.), are warning signs (such as depicting a steep grade or rock fall), or destination markers. Other types of signs include parking and photo opportunity signs.²

The AKDOT&PF has received comments from recreational travelers that they would like to see more destination signs and turnouts. Destination signs assist travelers in knowing how far they have to travel before reaching the next rest station, town, service, etc.³

Existing Interpretive Sites

The Bureau of Land Management (BLM) created and manages the majority of existing interpretive waysides along the byway. The interpretive panels emphasize cultural significance and the special adaptations plants and wildlife have to survive in the arctic environment. Existing interpretive sites along the byway are listed below.

Hess Creek Overlook (MP 20.6). This pullout overlooks Hess Creek as it meanders west toward the Yukon River. Two interpretive panels located here discuss boreal forests and forest fire succession.



Sign directing travelers to turnout for Wiseman
©Community Photo Library, Alaska Department of Commerce,
Division of Community and Regional Affairs



Signs heading north out of Coldfoot
©Community Photo Library, Alaska Department of Commerce,
Division of Community and Regional Affairs

1. Colleen Ackiss (AKDOT&PF), personal communication, June 29, 2009.

2. Colleen Ackiss, June 29, 2009.

3. Colleen Ackiss, June 29, 2009.

Yukon Crossing Visitor Contact Station (MP 56.1). Located on the banks of the Yukon River, the BLM Visitor Contact Station is staffed during summer by volunteers who provide travel information to visitors. Interpretive displays include one orientation panel and topics covering Athabaskan Indians, the Yukon River Bridge, the Yukon River as an international transportation route, and the Yukon River itself.

5-Mile Campground (MP 60.3). This undeveloped campground is located near the Hot Spot Café, a popular place to relax and dine along the byway. A kiosk houses an orientation panel and topics covering pipeline construction crews, boreal forest wildlife, and forest fires.

86-Mile Overlook (MP 86.6). Located approximately one mile west of the byway up a dirt road, this overlook offers views of the Yukon Flats National Wildlife Refuge to the east. Three interpretive panels discuss forest fires, waterways, and avian habitat.

Finger Mountain Wayside (MP 98.2). The half-mile interpretive trail at this wayside is bordered by low-profile interpretive signage highlighting trailside flora and fauna. Larger displays at the trailhead and top of the trail cover a variety of topics.

Arctic Circle Wayside (MP 115.5). This wayside is a popular destination for byway travelers. The viewing deck offers sweeping views and the Arctic Circle sign itself has been the backdrop of many photographs. Interpretive panels in the kiosk and at the viewing deck discuss how seasons affect life in the arctic.

Gobblers Knob (MP 132.1). The viewing deck at Gobblers Knob has two interpretive panels that discuss the physical features of the landscape and highway construction.

Jim River Bridge No. 3 (MP 144.1). A parking area at the south end of the bridge has one interpretive panel. The panel discusses the salmon life cycle, grayling, and fish food.

Grayling Lake Wayside (MP 150.2). The interpretive panel here discusses historical uses of the area and identifies artifacts found that help archaeologists understand those uses.



Visitors enjoying views and exhibits at Yukon River Bridge wayside, milepost 56



Finger Mountain wayside, milepost 98



Arctic Circle wayside, milepost 115



Grayling Lake wayside, milepost 150

Arctic Interagency Visitor Center (MP 175.0). The Bureau of Land Management, U.S. Fish and Wildlife Service, and National Park Service cooperatively manage the Arctic Interagency Visitor Center in Coldfoot. The center boasts interpretive displays, a sitting area, gift shop, theatre, and more. There is also an interpretive trail that passes the historic Coldfoot Cemetery, stops at the Trans-Alaska Pipeline, and weaves through the boreal forest.

Marion Creek Campground (MP 179.7). This BLM campground has 27 developed sites and a kiosk to orient visitors. The kiosk includes campground information such as orientation and bear safety. One low-profile panel shows visitors how to identify signs of wildlife.

Wiseman (MP 188.6). Interpretive opportunities in Wiseman, located three miles off the Dalton Highway via a state-maintained road, include guided tours of the town and its historic buildings.

Farthest North Spruce Tree Wayside (MP 235.3). There are two interpretive panels here that discuss the transition between the boreal forest and arctic tundra.

Galbraith Lake (MP 274.7). Interpretive panels at the Galbraith Lake wayside, located 4.2 miles down a dirt/gravel road, orient visitors to the area and discuss: the formation of the Brooks Range; historic uses of the area; archaeological finds; the Arctic National Wildlife Refuge and Gates of the Arctic National Park and Preserve; butterflies; and tundra flowers.

Sag River Overlook (MP 347.8). This viewing deck offers expansive views of the landscape, including the Sagavanirktok River. Interpretive panels showcase migratory birds, tussocks, and braided rivers.

Last Chance Wayside (MP 354.6). With approximately 50 miles to drive before reaching Deadhorse, this is a traveler's "last chance" for a bathroom break and to dispose of trash. A kiosk houses an orientation panel and information about leave no trace principles.



Dall's sheep display at the Arctic Interagency Visitor Center, Coldfoot.
Photo by Steve Hillebrand/USFWS



Galbraith Lake wayside, milepost 275



Last Chance wayside



Sag River overlook

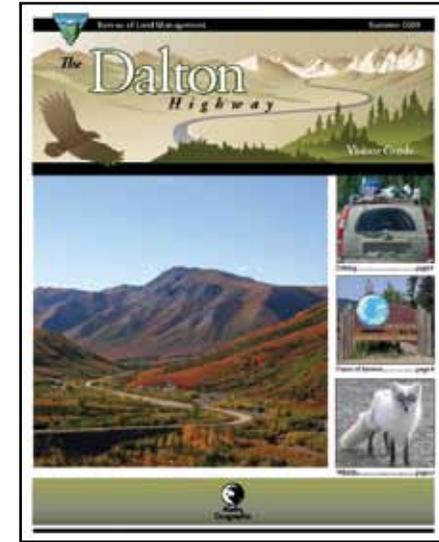
Other Existing Interpretive Services

BLM Alaska, Dalton Highway Website. Part of the Bureau of Land Management’s Alaska website, the Dalton Highway website provides travelers with critical information needed to plan a successful trip. The “Know Before You Go” and “Prepare for the Drive” sections are two of the most useful links for potential travelers. Links to recreational opportunities, frequently asked questions, and the “Dalton Highway Visitor Guide” are also helpful. The site is located at <http://www.blm.gov/ak/dalton>.

Dalton Highway Visitor Guide. Produced annually by the Bureau of Land Management, the “Dalton Highway Visitor Guide” is a must-have dashboard companion for recreational travelers. The guide includes trip planning tips, historical accounts, mile-by-mile points of interest and services, and more. The guide also tells travelers what to expect and cautions them about the byway’s limited services and dual-duty as an industrial haul road. The guide is distributed at numerous locations throughout the state and also online from the BLM Alaska, Dalton Highway website.

The Dalton Highway Project Jukebox. “The Dalton Highway: A Multi-Media History of Alaska’s Arctic Road,” is a multi-media website that “brings the history of the Dalton Highway to life with oral histories, photographs, documents, and personal biographies.”⁴ Project Jukebox is a cooperative effort between the University of Alaska Fairbanks and the Alaska Geographic Association. The site is located at http://uaf-db.uaf.edu/jukebox/haul_road_07/index.htm.

Dalton Highway Rack Card. The Bureau of Land Management produces a rack card titled “Driving the Dalton Highway.” The rack card emphasizes the rules of the road and special warnings for travelers. It is widely distributed at businesses and visitor centers along the highway, as well as the Alaska Public Lands Information Center and Fairbanks Convention and Visitors Bureau in Fairbanks.



Summer 2009 Dalton Highway Visitor Guide

4. University of Alaska Fairbanks, Rasmussen Library, Oral History Program, “Dalton Highway Project Jukebox.”

Existing and Potential Interpretive Themes

The Bureau of Land Management (BLM) produced an interpretive plan for the Dalton Highway Recreation Management Area (DHRMA) that outlines the overall interpretive themes and interpretive management objectives for Dalton Highway interpretive materials and programs. The themes are evident in existing byway exhibits and should therefore continue as the dominant themes for all byway interpretation.

Interpretive Themes:

1. Visitors to the DHRMA require orientation on the topics of recreational opportunities, health and safety, and resource protection.
2. Many geologic processes have occurred to create the scenery and topography exhibited in the DHRMA.
3. The DHRMA offers unique opportunities to learn about arctic phenomena and natural history in the arctic and subarctic environment.
4. The pre-historic, historic, and continuing human presence in the northern regions of Alaska, including cultural and commercial utilization of natural resources, exemplifies the ongoing interrelationships between humans and the natural environment.
5. The findings of paleontological research begin to piece together prehistoric conditions that helped shape the present environment in the DHRMA.

Interpretive Management Objectives:

1. Implement a visitor services and recreation program that recognizes that interpretation and the visitor's desire to know about the natural and cultural resources are important components of the overall visitor experience
2. Provide interpretation and information programs that accurately address the visitors' desire to know about the Arctic's cultural and natural resources
3. The quality and relevance of the interpretive and informational services produce a respect for and ownership of the land resources in the DHRMA
4. As much as possible, concentrate interpretive and information services at key interpretive areas to avoid a "billboarding" effect, and to maintain the undisturbed qualities of the land resources in the DHRMA



Gobblers Knob wayside, milepost 132

Signage and Interpretation Challenges and Opportunities

There are concerns that an abundance of directional signs and interpretive panels create a cumulative, negative effect on the visual and physical environment. While some applaud the efforts of the Bureau of Land Management for their interpretive planning and installation, others (and some of the same) feel that interpretive signage should be kept at existing development nodes and waysides and not expanded into other areas.

The general feeling is that new interpretive projects should not have a physical footprint. Potential projects could include digital media presentations, podcasts, and self-guided driving and walking brochures.

There is also concern over the number of directional signs. In particular, one recommendation is that the State Scenic Byway signs be removed. Other directional signs should be well-planned and placed only where necessary for traveler safety, and to meet standards outlined in the Alaska Traffic Manual.

Some people feel that individual interpretive panels or products may contain messages that could potentially lead to resource degradation. In such cases, content should be reviewed by stakeholders and subject matter experts, and if necessary, revised.



Snowy owl atop a State Scenic Byway sign.
Photo courtesy of Brahm Lower

12. RECOMMENDATIONS AND IMPLEMENTATION

Ongoing Public Participation—the Byway Group

Upon completion of the Corridor Partnership Plan, the Advisory Team should establish a working byway group. This group, comprised of volunteers, will be responsible for addressing the plan’s stated goals and objectives. The byway group should prioritize projects and initiatives in order to most effectively reach their goals and generate a plan for success.

The byway group will continue to meet regularly—a schedule determined by them—to assess the ongoing needs of the byway community. These regularly scheduled meetings will help the group stay focused and moving toward accomplishing their stated objectives. The group should nominate a president, vice-president, treasurer, and secretary who will be responsible for meeting schedules, agendas, communicating with stakeholders, etc.

The byway group should also be the main thoroughfare for public and non-profit organizations wishing to apply for grant funding for Dalton Highway-related projects through the National Scenic Byways Program. The byway group would decide, through an organized procedure, whether or not proposed projects are supported by the CPP and are aligned with the plan’s goals and objectives. Project proposals should include a letter of support from the byway group before being submitted to the State Scenic Byways coordinator for review.

Should the byway group choose to apply for National Scenic Byway or All-American Road status, the nomination application should include a clear letter of support from the byway group and its stakeholders; however, due to the number of concerns outlined herein, the Advisory Team does not support applying for National Scenic Byway designation at this time. Should the sentiment change, the Corridor Partnership Plan will need to be updated to reflect that support.

Recommendations

The Dalton Highway Advisory Team is not making specific project recommendations at this time. Upon completion of the Corridor Partnership Plan, the working byway group should meet to discuss the byway’s goals and objectives and develop a list of possible projects; the “Possible Solutions” listed in the “Corridor Issues and Concerns” section should also be considered. Recommending specific projects or actions will require the byway group to have detailed discussions weighing the advantages and disadvantages of each option.

13. CONCLUSION

Unlike many corridor partnership plans whose tone and goals are directed toward tourism and marketing, the Dalton Highway Scenic Byway Corridor Partnership Plan is directed toward discussing the primary concerns and challenges with living and operating in, and managing, this unique corridor. The Advisory Team feels that the primary concerns and challenges outlined in this document prevent them from marketing the byway for increased recreational travel, and chooses, rather, to focus their efforts on resolving those concerns. The Advisory Team intends to use the Corridor Partnership Plan as a tool to resolve existing land-use and resource-use conflicts within the corridor, public safety and emergency response concerns, and other issues outlined herein.

Change is inevitable, especially along a roadway whose primary purpose is to serve the state's oil and gas needs and whose miles wind through a scenic landscape that is very attractive to recreational travelers. The goals and objectives outlined herein were crafted to assist stakeholders in reaching and sustaining their vision—for the Dalton Highway to be “a non-commercialized driving experience, where land managers critically weigh the benefits and detriments to proposed and existing developments in order to: minimize disturbance to the natural viewshed; reduce stress on the public safety and emergency response infrastructure; and reduce negative impacts to the byway's intrinsic qualities.”

Without the formation and dedication of an organized, active, and goal-oriented byway organization—one that is informed about potential issues affecting the corridor and motivated to tackle solutions—the goals and objectives outlined herein are simply words.



Dietrich River Valley, south of Atigun Pass (milepost 244)

14. BIBLIOGRAPHY

- Alaska Natural History Association. *The Dalton Highway Visitor Guide*. In cooperation with the Bureau of Land Management (BLM). Anchorage: Alaska Natural History Association, 2008.
- Alaska Travel Industry Association. "Alaska's Visitor Industry: 2007 Report." Anchorage, 2007.
- Alyeska Pipeline Service Company. Home page. <http://www.alyeska-pipe.com>.
- Alyeska Pipeline Service Company. *The Facts. Trans Alaska Pipeline System 2007*. Alyeska Pipeline Service Company, 2007. Accessed from Alyeska Pipeline Service Company home page. <http://www.alyeska-pipe.com/Pipelinefacts/FINALfacts%202007.pdf>.
- America's Byways Resource Center. "CMPs: The Big Questions." PowerPoint Presentation, America's Byways Resource Center. <http://www.bywaysresourcecenter.org/topics/corridor-management/planning/tools/1264/>.
- America's Byways Resource Center. "Understanding Intrinsic Qualities." Handout. America's Byways Resource Center. <http://www.bywaysresourcecenter.org/topics/corridor-management/planning/tools/1264/>.
- ASCG Incorporated. *North Slope Borough Comprehensive Transportation Plan*. Prepared for the North Slope Borough. August 2005.
- Associated Press. "Enstar looks to Brooks range foothills for gas." *Anchorage Daily News*, May 30, 2008. Accessed from <http://www.adn.com/>.
- Bernard, Deborah. "How Deadhorse Got its Name." Prudhoe Bay General Store newsletter, 2008. Accessed from Colville Inc. website. <http://www.colvilleinc.com/store.html>.
- Brown, William E. *The History of the Central Brooks Range: Gaunt Beauty, Tenuous Life*. Fairbanks: University of Alaska Press, 2007.
- Campbell, Bruce A. "How Deadhorse Got its Name." Personal letter, March 5, 1999. Accessed from Dalton Highway Project Jukebox website. http://uaf-db.uaf.edu/jukebox/haul_road_07/htm/docs.htm.
- Dalton Highway Advisory and Planning Board. *Dalton Highway Master Plan*. March 1998.
- Federal Subsistence Board. Office of Subsistence Management. *Subsistence Management Regulations for the Harvest of Wildlife on Federal Public Lands in Alaska: Effective July 1, 2008—June 30, 2010*. Anchorage: Federal Subsistence Management Program, <http://alaska.fws.gov/asm/index.cfml>.
- GMA Research Corporation. "2007 Alaska Resident In-State Pleasure Travel Study: Defining the Alaska Resident In-State Pleasure Travel Market." Market Research for the Alaska Travel and Tourism Industry, prepared by GMA Research Corporation, Bellevue, WA, 2007.

- GMA Research Corporation. "Images of Alaska 2006: The Potential to Attract Visitors to Alaska." Market Research for the Alaska Travel and Tourism Industry, prepared by GMA Research Corporation, Bellevue, WA, 2007.
- Kauffman, John. *Alaska's Brooks Range: the ultimate mountains*. Seattle: The Mountaineers, 1992.
- Lampright, Richard L. *Gold placer deposits in north east Alaska (Dalton Highway): an inventory of the gold placer mines, prospects, and deposits located within the Beaver, Bettles, Chandalar, Tanana, and Wiseman quadrangles*. Anchorage: Iron Fire Publications, 1997.
- Land Design North. *TRAAK Corridor Assessments—Part 1: National Highway System*. Prepared for the State of Alaska, Department of Transportation and Public Facilities and the TRAAK Citizens Advisory Board. State of Alaska Department of Transportation and Public Facilities, 1998.
- McDowell Group, Inc. "Alaska Visitor Statistics Program V Interim Visitor Volume Report, Fall/Winter 2007-2008." Report prepared for the State of Alaska, Department of Commerce, Community, and Economic Development, Office of Economic Development, July 2008.
- McDowell Group, Inc. "Alaska Visitor Statistics Program V Interim Visitor Volume Report, Summer 2007." Report prepared for the State of Alaska, Department of Commerce, Community, and Economic Development, Office of Economic Development, December 2007.
- McGrath, Allen, and Hugh Fleischer. "Should the North Slope Haul Road eventually be open to everyone as part of the Alaska Highway System?" By Doug McConnell. *Alaskan Advocates*, Alaska Public Forum and KAKM Television, September 26, 1976.
- Nelson, Kristin. "Road work needed in advance of gas line." *Petroleum News*, June 29, 2008, Vol.13, No.26.
- Nielson, Jonathan M. *An analysis of historic preservation alternatives along the Alaska pipeline haul road and utility corridor*. Barrow: North Slope Borough, March 1979.
- North Slope Borough, Commission on Inupiat History, Language and Culture. *Anaktuvuk Pass: Land of the Nunamiut*. Barrow: North Slope Borough, 1990.
- North Slope Borough. "Nuiqsut." *Villages page*. <http://www.north-slope.org/villages/nuiqsut/>.
- North Slope Borough. *North Slope Borough Comprehensive Policy Plan, Haul Road area*. Barrow: North Slope Borough, June 1980.
- North Slope Borough. *Resource Inventory, Galbraith Lake, North Slope Borough*. Barrow: North Slope Borough, May 1979.
- Office of the Federal Register, National Archives and Records Administration. *National Scenic Byways Program [FHWA Docket No. 95-15]*, Federal Register vol. 60, no. 96, May 1995.
- Orth, Donald J. *Dictionary of Alaska Place Names*. Geological Survey Professional Paper 567. Washington, DC.: U.S. Government Printing Office, 1967.

- Quadra Engineering, Inc. *Dalton Highway Airports Land Use Plans*. Juneau: State of Alaska, Department of Transportation and Public Facilities, June 1987.
- State of Alaska. Department of Commerce, Community and Economic Development. Division of Community and Regional Affairs. *Community Database Online*. http://www.dced.state.ak.us/dca/commdb/CF_COMDB.htm.
- State of Alaska. Department of Commerce, Community and Economic Development. Divisions of Trade & Development and Tourism. *Rural Alaska Tourism Infrastructure Needs Assessment: North Slope Borough*. Conducted by the Alaska Department of Commerce and Economic Development, Divisions of Trade & Development and Tourism, in partnership with the Alaska Regional Development Organizations. June 1997.
- State of Alaska. Department of Fish and Game. *2008-2009 Alaska Hunting Regulations: Governing general, subsistence, and commercial uses of Alaska's wildlife*. <http://www.wildlife.alaska.gov/index.cfm?adfg=regulations.hunting>.
- State of Alaska. Department of Fish and Game. *Analysis of Information Collected at the Dalton Highway Hunter Check Station, 1 August—27 September, 1998*. By Walter T. Smith. January 1999.
- State of Alaska. Department of Fish and Game. ANILCA program. *Report on dual state and federal management of fish and wildlife harvests; examples of problems and related issues*. June 1993.
- State of Alaska. Department of Fish and Game. Sport Fish Division. Region III. *Sport Fishing along the Dalton Highway*. Fairbanks, n.d.
- State of Alaska. Department of Natural Resources. Division of Geological and Geophysical Surveys. *Cultural Resources Survey: Dalton Highway mile 9.0 to mile 28.8*. By David J. McMahan and Charles E. Holmes. Alaska Division of Geological and Geophysical Surveys, November 12, 1985.
- State of Alaska. Department of Transportation and Public Facilities. Alaska Highway Data. *Traffic Volume Published Reports*. http://www.dot.state.ak.us/stwdplng/highwaydata/traffic.shtml#traffic_data.
- State of Alaska. Department of Transportation and Public Facilities. Northern Region. Alaska Highway Data. *General Log—CDS Route Numbers as of 27 October 2008*. <http://www.dot.state.ak.us/stwdplng/highwaydata/genlogs.shtml>.
- State of Alaska. Department of Transportation and Public Facilities. *Let's Get Moving 2030—Alaska Statewide Long-Range Transportation Policy Plan*. February 2008. <http://www.dot.state.ak.us/stwdplng/areaplans/>.
- Stevens Village Council. *A Comprehensive Land Use Plan for the Traditional Lands of Stevens Village*. February 1991.
- University of Alaska Fairbanks. Department of Resources Management. “Benefits-Based Management Study for the Dalton, Taylor and Denali Highways.” Project report by Jennifer A. Stegmann, Peter J. Fix, and Tara L. Teel and prepared for the U.S. Department of the Interior, Bureau of Land Management, Fairbanks, AK, August 2008.

University of Alaska Fairbanks, Rasmussen Library, Oral History Program. "Dalton Highway Project Jukebox."
http://uaf-db.uaf.edu/jukebox/haul_road_07/index.htm.

University of Alaska Fairbanks. School of Agriculture and Land Resources Management. Agriculture and Forestry Experiment Station. "1995 Dalton Highway Visitor Survey Results Report." Report prepared for the U.S. Bureau of Land Management and the Alaska Department of Transportation and Public Facilities, Fairbanks, AK, March 20, 1996.

URS Corporation. *North Slope Borough Comprehensive Plan: Issues, Goals, and Objectives/Policies*. Prepared for North Slope Borough, October 2005.

U.S. Department of the Interior. Bureau of Land Management. *Arctic Interagency Visitor Center Survey*, prepared by the University of Idaho, Park Studies Unit. Report #ARIN05, Bureau of Land Management. 2005.

U.S. Department of the Interior. Bureau of Land Management. "Dalton Highway." *BLM Alaska website*.
http://www.blm.gov/ak/st/en/prog/recreation/dalton_hwy.html.

U.S. Department of the Interior. Bureau of Land Management. *Dalton Highway Visitor Survey*, prepared by the University of Idaho, Park Studies Unit. Report #DAHI907, Bureau of Land Management. 2007.

U.S. Department of the Interior. Bureau of Land Management. Dalton Highway wayside interpretive panels. [Fairbanks?]: Bureau of Land Management, n.d.

U.S. Department of the Interior. Bureau of Land Management. *Environmental Assessment: proposed leasing for commercial public services Yukon Crossing and Coldfoot*. Fairbanks: Bureau of Land Management Alaska, Fairbanks District Office, 1981.

U.S. Department of the Interior. Bureau of Land Management. *Recreation Management Plan for the Dalton Highway Recreation Management Area, Alaska*. Fairbanks: Bureau of Land Management, Arctic District Office, November 1991.

U.S. Department of the Interior. Bureau of Land Management. *Survey of cliff-nesting raptors, Dalton Highway Management Unit, Alaska, 1999-2002*, by Tim Craig and Cindy Hamfler. Open File Report 89, U.S. Department of the Interior, Bureau of Land Management, Alaska State Office. September 2003.

U.S. Department of the Interior. Bureau of Land Management. *The Mesa Site: Paleoindians above the Arctic Circle*, by Michael Kunz, Michael Bever, and Constance Adkins. Open File Report 86, U.S. Department of the Interior, Bureau of Land Management, Alaska State Office. April 2003.

U.S. Department of the Interior. Bureau of Land Management. *The Search for Gold along the Koyukuk River*, by Kris Capps and Pam Tacquard. "Adventures in the Past" series, no.4, Bureau of Land Management. [Washington, D.C.?], 1999.

U.S. Department of the Interior. Bureau of Land Management. Fairbanks District Office. *Bicycling the Dalton Highway*. Fairbanks: Bureau of Land Management, n.d.

U.S. Department of the Interior. Bureau of Land Management. Northern Field Office. *Dalton Highway—Recreational Mineral Collection*. Fairbanks: Bureau of Land Management, n.d.

U.S. Department of the Interior. Bureau of Land Management and the Alaska Natural History Association. *Riches from the Earth: A Geologic Tour Along the Dalton Highway, Alaska*. Anchorage: Alaska Natural History Association, 1993.

