ASTAR

TRIANGLE COMMUNITY ROAD PEL STUDY

PLANNING & ENVIRONMENTAL LINKAGES (PEL)

STUDY REPORT

April 2026

The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by DOT&PF pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated April 13, 2023, and executed by FHWA and DOT&PF.

TABLE OF CONTENTS

FIGURES

TABLES

APPENDICES

ACRONYMS & ABBREVIATIONS

ADA	Americans with Disabilities Act
ADF&G	Alaska Department of Fish and Game
AIK	Atqasuk Edward Burnell Sr. Memorial Airport
AIN	Wainwright Airport
AK	Alaska
ANILCA	Alaska National Interest Lands Conservation Act
AS	Alaska Statute
ASRC	Arctic Slope Regional Corporation
ASTAR	Arctic Strategic Transportation and Resources
BLM	Bureau of Land Management
BRIC	Building Resilient Infrastructure and Communities
BRW	Wiley Post–Will Rogers Memorial Airport
CBA	Cumulative Benefits Analysis
CE	Categorical Exclusion
CFR	Code of Federal Regulations
COA	Class of Action
CPAI	ConocoPhillips Alaska, Inc.
CWAT	Community Winter Access Trails
DNR	Alaska Department of Natural Resources
DOD	U.S. Department of Defense
DOT&PF	Alaska Department of Transportation and Public Facilities
EA	Environmental Assessment
EIS	Environmental Impact Statement
FAA	Federal Aviation Administration
FHWA	Federal Highway Administration
FR	Federal Register
IAP	Integrated Activity Plan
ICAS	Iñupiat Community of the Arctic Slope
LNG	Liquefied Natural Gas
LRTP	Long-Range Transportation Plan
MOU	Memorandum of Understanding
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NPR-A	National Petroleum Reserve–Alaska
NSB	North Slope Borough
NSP	North Slope Plan
NVB	Native Village of Barrow
NWATP	Northwest Alaska Transportation Plan
P&N	Purpose and Need

PAIP	Public and Agency Involvement Plan
PEL	Planning & Environmental Linkages
R2R	Roads to Resources
ROD	Record of Decision
ROW	Right-of-Way
SEO	Statewide Environmental Office
SHPO	State Historic Preservation Office
STIP	Statewide Transportation Improvement Program
UIC	Ukpeaġvik Iñupiat Corporation
USACE	United States Army Corps of Engineers
USC	United States Code
USDOT	United States Department of Transportation
USFWS	United States Fish and Wildlife Service
VOICE	Voice of the Arctic Iñupiat

EXECUTIVE SUMMARY

The Triangle Community Road Planning and Environmental Linkages Study is part of the Arctic Strategic Transportation and Resources program, an initiative sponsored by the Alaska Department of Natural Resources, the Alaska Department of Transportation and Public Facilities, and the North Slope Borough. The Arctic Strategic Transportation and Resources program was established to identify, evaluate, and advance infrastructure opportunities that improve quality of life, support economic development, and expand community resilience on Alaska's North Slope. Its mission centers on responsible infrastructure development that responds to local priorities, improves access and connectivity, and enhances long-term community well-being. The Triangle Community Road Planning and Environmental Linkages Study is the first major project advanced under the Arctic Strategic Transportation and Resources program, building on these foundational studies to determine whether a year-round surface transportation connection should proceed into the National Environmental Policy Act and design phases.

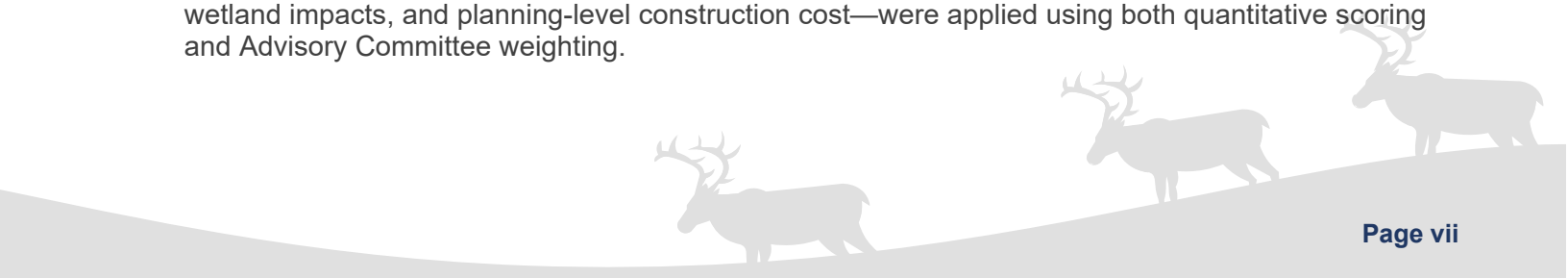
Purpose and Need

The Triangle Community Road Planning and Environmental Linkages Study evaluates the feasibility and desirability of an all-season gravel roadway connecting Utqiaġvik, Atqasuk, and Wainwright on Alaska's North Slope. The Purpose and Need Statement, developed through engagement with local communities, tribes, agencies, and the Advisory Committee, identifies core transportation deficiencies, including the absence of year-round, reliable, and cost-efficient surface transportation between the three communities. The lack of connectivity perpetuates high costs for goods and services, restricts access to education and health care, complicates emergency response and evacuation during coastal storm events, and limits subsistence access. The purpose of the Planning and Environmental Linkages Study is to evaluate whether an all-season road connection should advance into the National Environmental Policy Act process by determining its ability to reduce transportation costs, improve health and safety, strengthen cultural and community exchange, provide reliable subsistence access, and reduce reliance on air travel.

Alternatives

A comprehensive alternatives development and screening process was completed consistent with the Alaska Department of Transportation and Public Facilities' Planning and Environmental Linkages Guidebook and Statewide Environmental Office concurrence requirements. Initial modal alternatives included marine, aviation, ice road, and gravel road concepts. Marine and aviation improvements were dismissed because they fail to provide year-round, cost-efficient community access or accommodate timely evacuation during storm events. A seasonal ice road was dismissed because it does not meet the all-season reliability necessary to satisfy the Purpose and Need.

The study advanced six terrestrial road network alternatives, created by combining potential corridor segments identified in earlier Arctic Strategic Transportation and Resources analyses. All alternatives include two 10-foot lanes, consistent cross-sections, and engineered gravel construction raised at least five feet above the tundra. Environmental-based and engineering criteria—including protected species setbacks, geotechnical conditions, bridge and culvert requirements, subsistence interaction, wetland impacts, and planning-level construction cost—were applied using both quantitative scoring and Advisory Committee weighting.



Recommended Alternatives

The screening results demonstrate that Alternatives 1, 2, and 3 (Figure ES - 1, Figure ES - 2, Figure ES - 3) exhibit the lowest environmental and engineering impacts and are therefore recommended to advance to National Environmental Policy Act review. These alternatives have the shortest total road mileage, lowest predicted construction cost, fewer bridge and culvert requirements, fewer miles within high frost-heave/thaw-settle terrain, and reduced interactions with protected species and subsistence-use areas. Advisory Committee weighting strongly emphasized the importance of minimizing subsistence impacts and construction costs; Alternatives 1 through 3 consistently aligned with these priorities.

Figure ES - 1: Alternative 1

Figure ES - 2: Alternative 2

Figure ES - 3: Alternative 3

In contrast, Alternatives 4, 5, and 6 (Figure ES - 4, Figure ES - 5, Figure ES - 6) were dismissed due to higher environmental impacts, largely due to substantially greater roadway mileage, more extensive built infrastructure requirements, and much higher planning-level cost estimates.

Figure ES - 4: Alternative 4

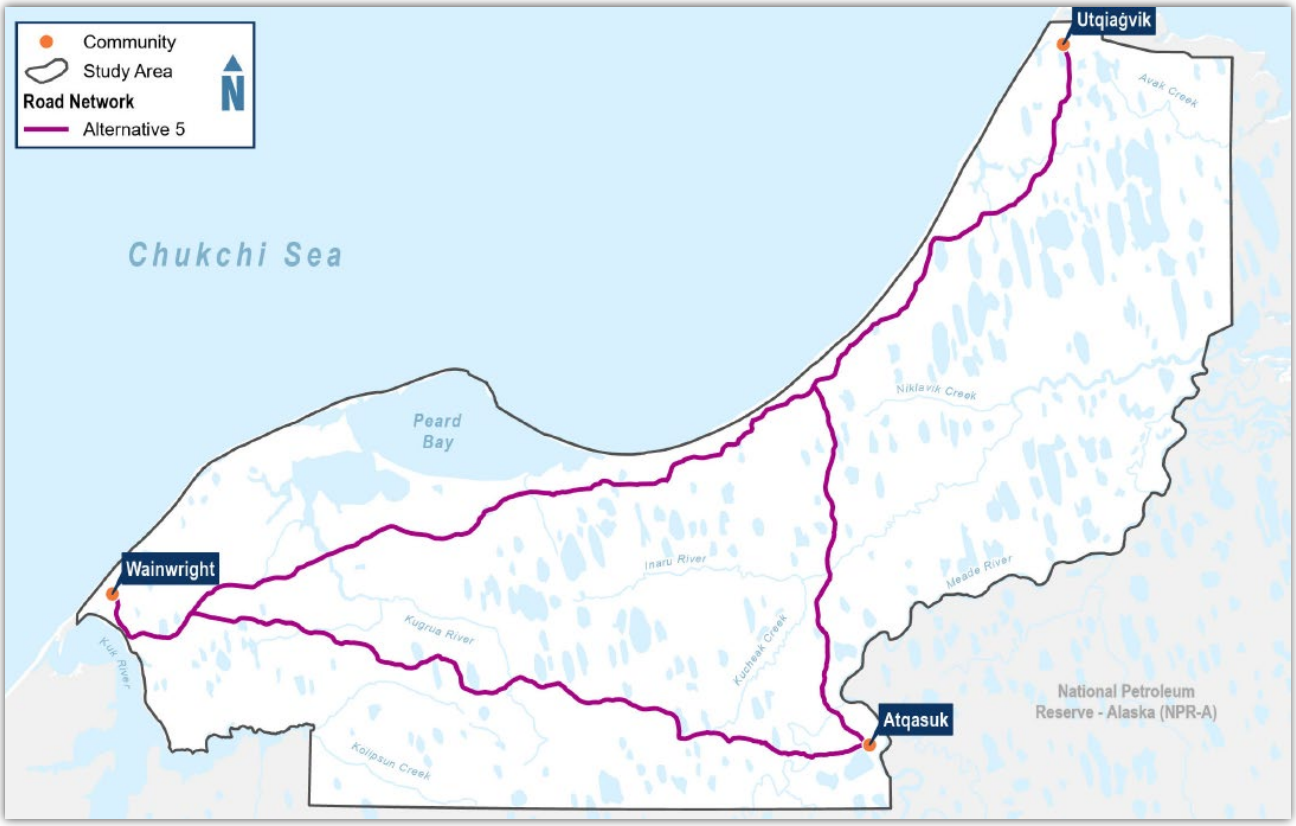


Figure ES - 5: Alternative 5

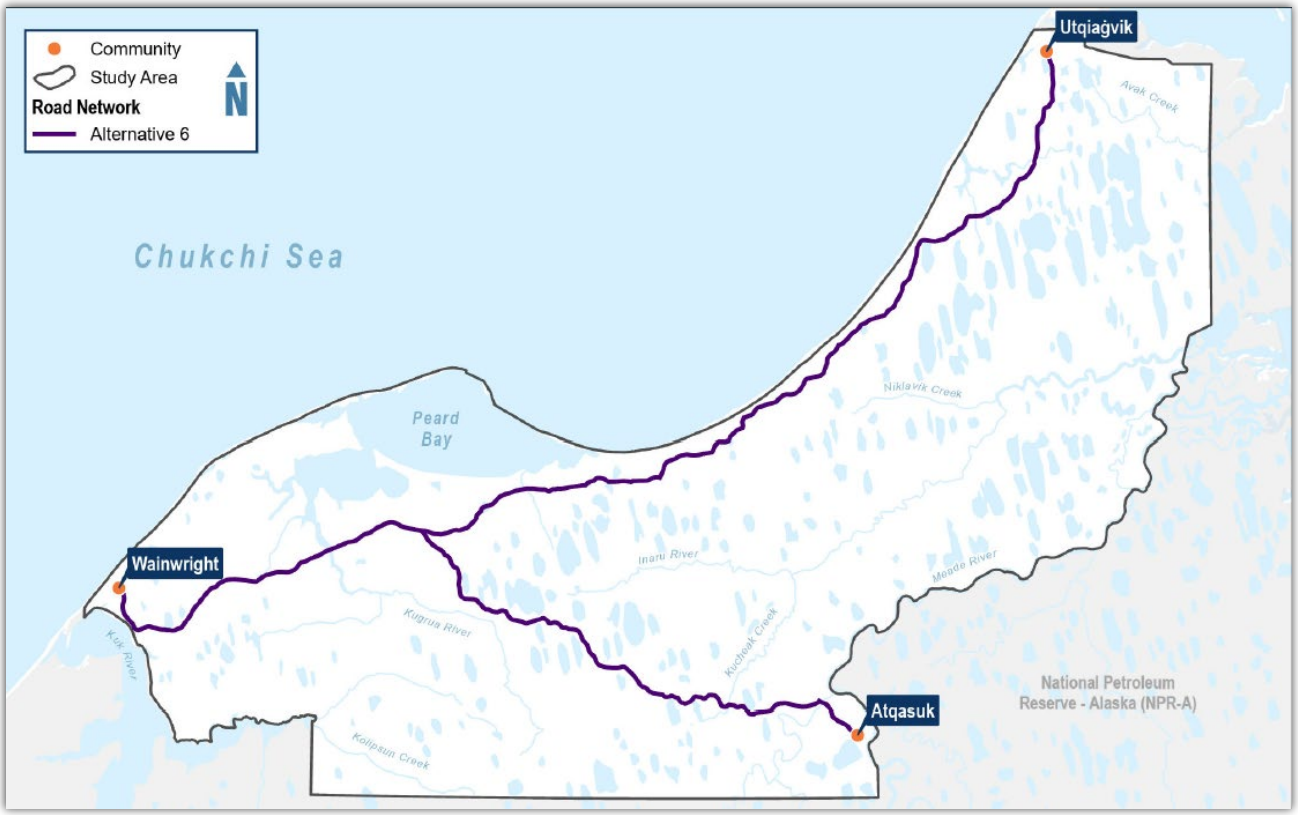


Figure ES - 6: Alternative 6

Next Steps

The study concludes the Planning and Environmental Linkages phase and provides planning products eligible for adoption or incorporation into a future National Environmental Policy Act environmental review, consistent with 23 U.S. Code 168. Next steps include:

- Confirming with North Slope communities and interested parties whether to advance a project into National Environmental Policy Act.
- Coordinating with the Department of Transportation and Public Facilities Statewide Environmental Office or applicable federal land management agency to determine the appropriate National Environmental Policy Act Class of Action (likely an Environmental Assessment or Environmental Impact Statement).
- Securing funding for design, necessary field investigations, and environmental permitting.
- Conducting detailed engineering design, environmental review, and right-of-way evaluation (if required).
- Advancing toward final design and construction pending funding availability and agency approval.

Concurrence Points

The Planning and Environmental Linkages study followed the Statewide Environmental Office Planning and Environmental Linkages Guidebook and achieved concurrence on the following points, confirming adequate documentation and methodological compliance:

1. Purpose and Need (concurred July 14, 2025)
2. Alternatives Development and Screening Methodology (concurred January 8, 2026)
3. Alternatives Screening Results (concurred January 26, 2026)
4. Draft Planning and Environmental Linkages Study (concurred April 1, 2026)

These concurrence points demonstrate that the study's planning products—including Purpose and Need, screening results, and recommended alternatives—are appropriate for integration into future National Environmental Policy Act documentation.

1.0 INTRODUCTION

The Arctic Strategic Transportation & Resources (ASTAR) program is sponsored by Alaska Department of Natural Resources (DNR), Alaska Department of Transportation and Public Facilities (DOT&PF), and the North Slope Borough (NSB). The mission of the ASTAR program is to identify, evaluate, and advance opportunities to enhance the quality of life and economic opportunities in North Slope communities through responsible infrastructure development. ASTAR's goal is to prioritize community needs and identify infrastructure opportunities that offer the most cumulative benefit and best enhance the quality of life for the region.

The ASTAR team has chosen a Planning and Environmental Linkage (PEL) study to evaluate an all-season road connecting the communities of Utqiaġvik, Atqasuk, and Wainwright (commonly referred to as the Triangle Community Road), as shown on Figure 1. The Triangle Community Road PEL study is the first project recommended as part of the ASTAR program.

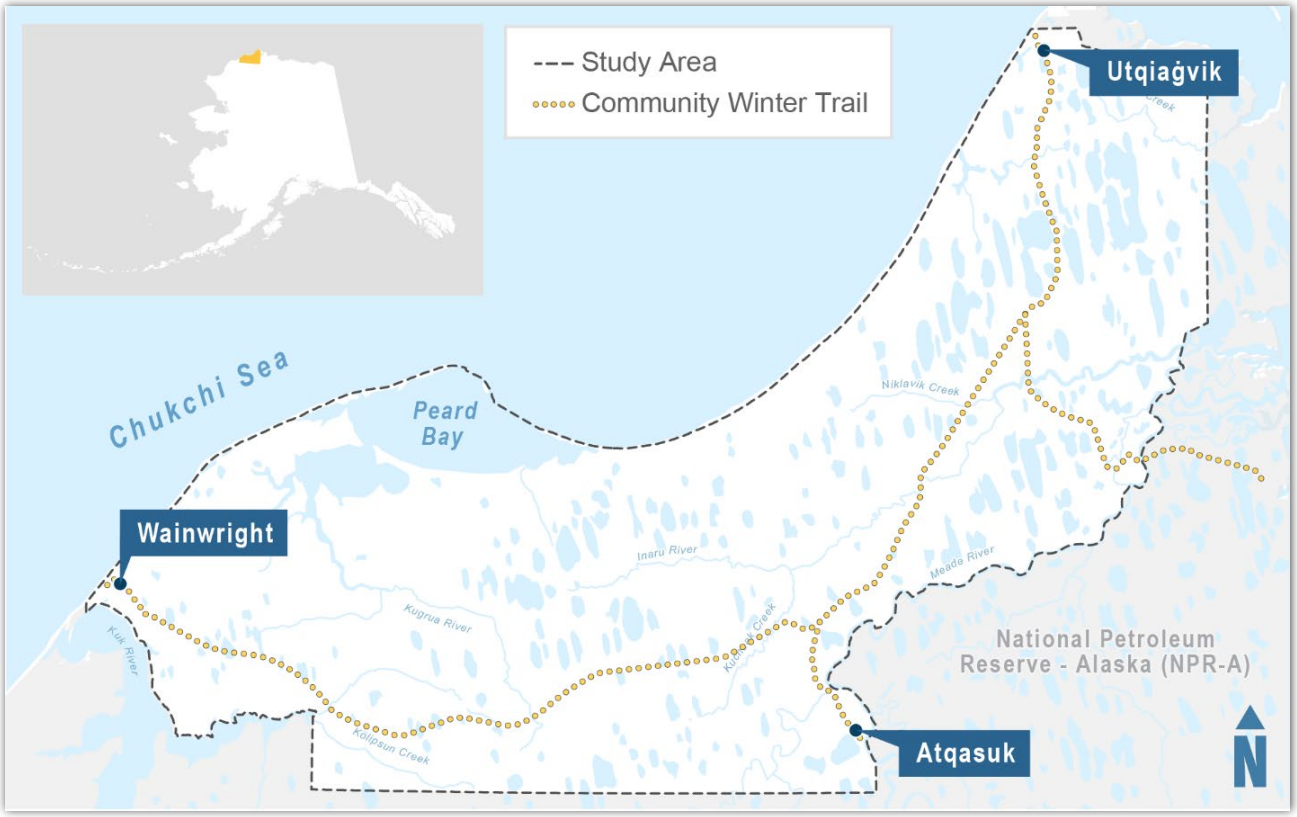


Figure 1: Location and Vicinity Report

Currently, there are no all-season roads between the communities of Utqiaġvik, Atqasuk, and Wainwright. This PEL study will build upon previous ASTAR work to identify and evaluate potential routes connecting these communities. This project is anticipated to improve cultural and community connectivity, lower the cost of goods and services, increase health and safety benefits, improve access to education, and advance workforce development opportunities. Additionally, the PEL study team will work with communities to identify and evaluate ways to increase subsistence opportunities and reduce subsistence impacts through project design.

This Planning and Environmental Linkages (PEL) study report serves as a framework for implementing future improvements through the construction of an all-season road between Utqiaġvik, Atqasuk, and Wainwright, Alaska.

1.1 Project History

In 2018, Alaska Department of Natural Resources (DNR) initiated several transportation and environmental studies through the ASTAR program, with the goal of identifying opportunities to enhance the quality of life and economic opportunities in NSB communities through responsible infrastructure development.

The ASTAR program identified an initial project to connect the communities of Utqiaġvik and Atqasuk, which was later expanded to include Wainwright, through an all-season gravel road. Termed the "Triangle Community Road", this project would broaden and diversify the region's transportation system and create economic, cultural, and subsistence opportunities for residents of these communities through the construction of approximately 130 miles of two-lane gravel road (depending on the final chosen corridor alignment) which could be used year-round.

The PEL process is a collaborative and integrated approach to transportation planning and project development. The Federal Highway Administration (FHWA) emphasizes the value of the PEL process for creating efficiency in transportation project development and supporting agencies to accelerate project delivery. The flexibility in the PEL process means it can be implemented in a way that meets each project's individual needs. The PEL process schedule is shown in Figure 2.

Figure 2: PEL Schedule

1.2 PEL Study Process and Objectives

The purpose of the PEL study is to evaluate an all-season roadway connection between Atqasuk, Utqiaġvik, and Wainwright. It also seeks to understand whether an all-season road connection between the communities is desired by stakeholders and the communities and should move forward to a NEPA and design phase.

A PEL processes' most pointed goals are to minimize duplication of efforts, streamline the National Environmental Policy Act (NEPA) process, and ultimately shorten the entire life cycle of a transportation project by combining the planning and environmental processes, and providing a focus on environmental resources and community concerns before the NEPA process even begins. The information from this PEL study report is intended to give all stakeholders the information necessary to determine if this project should move forward with the NEPA process. Figure 3 highlights PEL benefits.

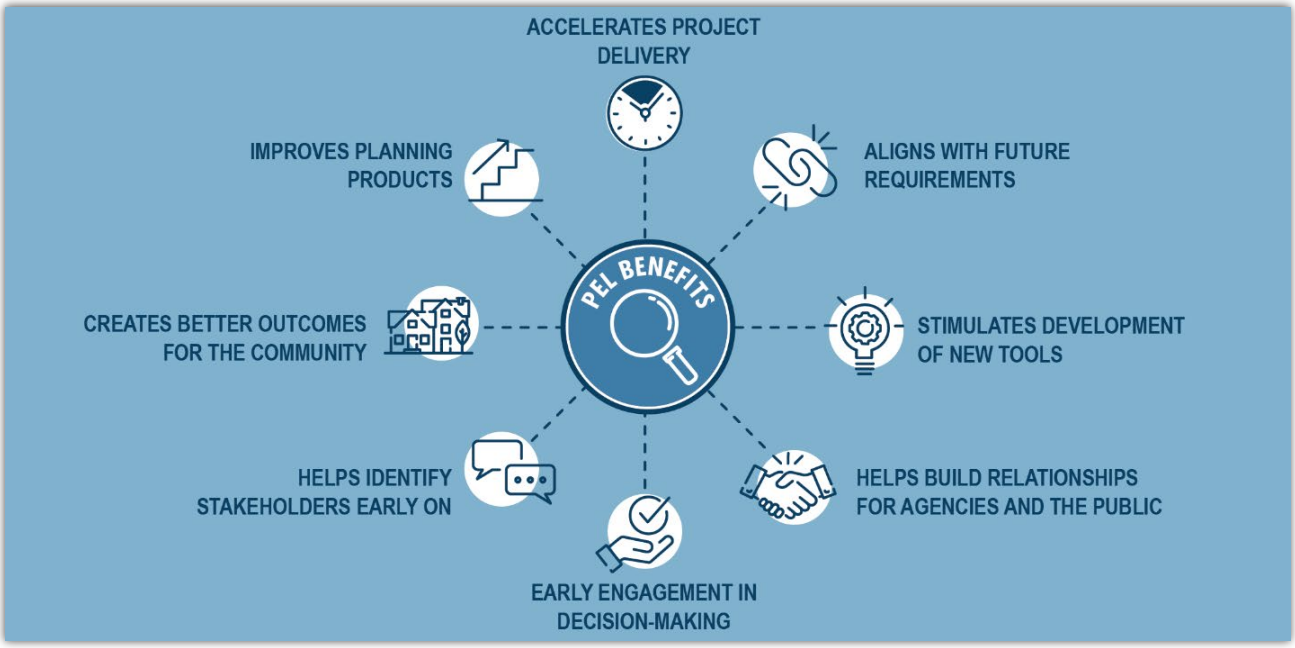


Figure 3: PEL Benefits

The transportation planning process typically looks at transportation networks at the broader system level and identifies transportation issues and needs to be addressed. Final Rule, 81 FR 34049 updates transportation planning legislation to further clarify and encourage the use of planning products in project development.

It notes the FHWA have long supported the use of planning products and decisions during the environmental review process through PEL, and that federal agencies are able to use and rely on planning analyses, studies, decisions, or other information for the project development and environmental review of transportation projects.

The final rule explicitly recognizes a variety of PEL methods that may be used to integrate planning with environmental reviews. For example, a PEL study evaluates a range of potential improvements that may work independently or in concert to improve transportation in a corridor or study area. Dependent on other project priorities, recommendations from the PEL study can then be incorporated into the Statewide Transportation Improvement Program (STIP), often as individual projects.

As each project moves forward for implementation, it enters the environmental review process required under NEPA. Findings from this study will be used to make preliminary determinations regarding the appropriate level of NEPA documentation required for future projects (i.e., categorical exclusion [CE], environmental assessment [EA], or environmental impact statement [EIS]).

Under a Memorandum of Understanding (MOU) between FHWA and DOT&PF, DOT&PF has assumed FHWA's environmental responsibilities for federal-aid projects in Alaska effective November 3, 2017, and renewed on April 13, 2023. Pursuant to 23 Code of Federal Regulations (CFR) 327(a)(2)(A), FHWA assigned, and DOT&PF assumed all the United States Department of Transportation Secretary's responsibilities for compliance with NEPA, 42 U.S.C 4321, et seq., with respect to highway projects. This included statutory provisions, regulations, policies, and guidance related to the implementation of NEPA for federal-aid highway projects. In 2016, the USDOT adopted regulations for PEL studies in USC 450.212 and 450.318. These are referred to as the 2016 Final Rule, and they allow for certain planning analyses and products developed in a PEL process to be incorporated into NEPA and project development processes. In 2021, DOT&PF adopted a PEL Guidebook to provide guidance on PEL studies completed in Alaska. The PEL study provides the basis for several NEPA elements as described in Figure 4. The PEL process is guided by the PEL Questionnaire, which is completed at the outset of a PEL study and updated throughout the PEL process. The updated PEL Questionnaire is included in **Appendix A.**

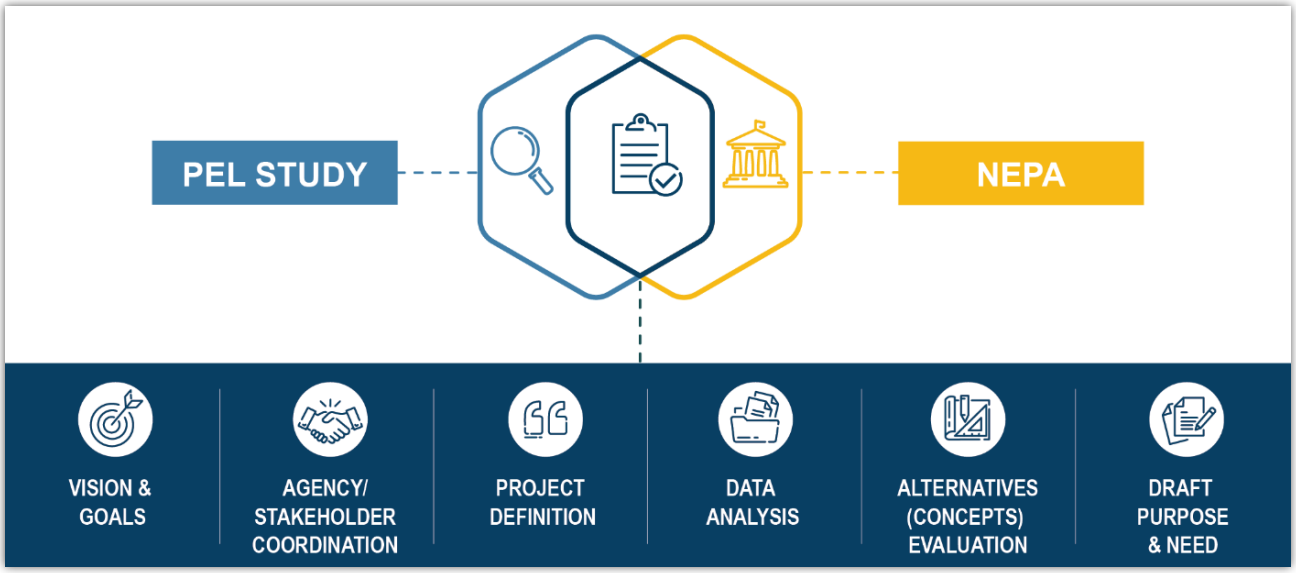


Figure 4: Overlap of PEL Study and NEPA Elements

The DOT&PF PEL Guidebook outlines the standard concurrence points during PEL study development. Owing to the flexibility of the PEL process not every PEL study will produce the same products or outcomes and the PEL project team must consult with the Statewide Environmental Office (SEO) at the beginning of the process to determine whether each of the standard SEO PEL concurrence points apply to a particular PEL study.

The PEL study team consulted with the SEO at the commencement of this PEL study and throughout the study process, and all concurrence points in Table 1 apply to this PEL study. Documentation of these concurrence points is included in **Appendix B**.

Table 1: SEO Written Concurrence Points During PEL Study

CONCURRENCE POINT	REVIEW	DATE OF CONCURRENCE
Purpose and Need	• Purpose and need statement has a rational basis • Uses up-to-date data • Includes analytical methods • Uses modeling techniques that are reliable, defensible, reasonably current, and meet data quality requirements	July 14, 2025
Alternatives Development and Screening Methodology	• Planned range of alternatives and the alternatives development process is reasonable, rational, and logical • Appropriate methodologies are identified • Level of detail planned for alternatives development and evaluation is appropriate • Stakeholder involvement plan is appropriate • Planned screening process, including screening criteria, is rational and logical	January 8, 2026
Alternatives Screening Results	• Results of alternatives development and screening • Conclusions are reasonable and logical • Sufficient documentation is provided to justify eliminating or advancing alternatives • No alternatives were eliminated that are necessary for compliance with future NEPA or for compliance with a permit or approval from another federal agency	January 26, 2026
Draft PEL Study	• Public and agency involvement is adequately documented • The ten conditions identified in 23 U.S.C 168 have been followed • Planning products and analyses are adequate for incorporation into future NEPA • Impacts and mitigation are appropriately documented • The basic description of the environmental setting is adequate • The implementation plan contains reasonable steps for the project to move forward into the NEPA process • The planning products are documented in such a form to be easily identifiable and available for review during the NEPA scoping process and can be appended to or referenced into a NEPA document	April 1, 2026

1.3 Study Area

The initial desktop analysis (completed in 2019) focused on potential alignments for an all-season access road connecting Atqasuk to Utqiaġvik. Recognizing additional benefits could be realized by connecting the community of Wainwright to Utqiaġvik, the ASTAR program funded a second desktop analysis in 2020 to analyze potential road alignments for that segment of the Triangle Community Road. The planning effort produced a variety of potential alignments, which were further refined to six options: three options connecting Utqiaġvik and Atqasuk (Corridor A, Corridor, B, and Corridor C) and three options connecting Wainwright (Corridor D, Corridor E, and Corridor F), as shown in Figure 5.

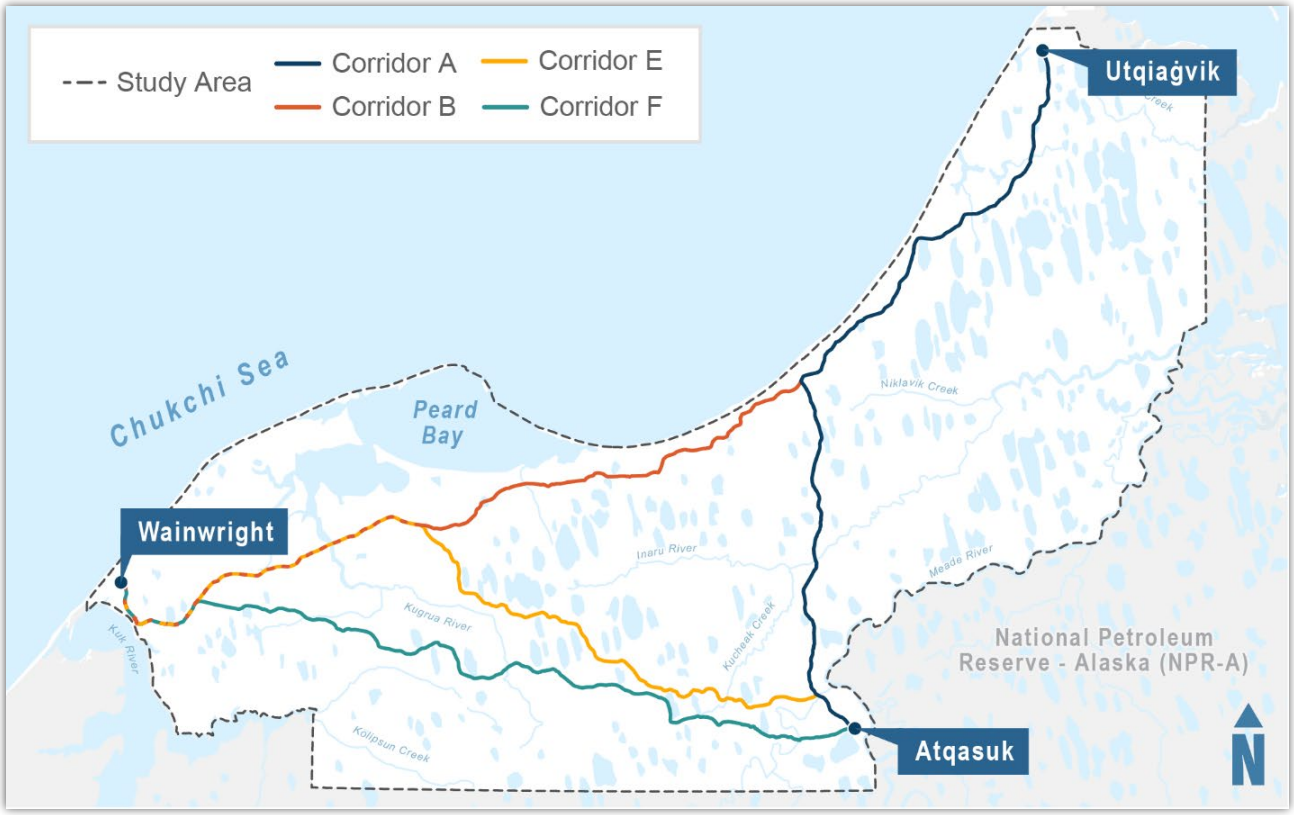


Figure 5: Triangle Road Corridors

1.4 Environmental Context

The environmental context in support of this project began in 2018 when DNR initiated environmental studies through the ASTAR program. A desktop analysis was completed to identify feasible routes for connecting Utqiaġvik, Atqasuk, and Wainwright, by using both spatial and non-spatial background data. Key features and issues were first identified (e.g., critical polar bear habitat; subsistence patterns) and then evaluated to determine their effects on routing and design and compare initial corridors between the Triangle communities.

The study area is on Alaska's North Slope within the Arctic Coastal Plain physiographic province. The terrain is characterized by relatively flat arctic tundra - marshes, ponds, and braided river systems. The ground surface elevation only varies between five to 100 feet above sea level. Given the consistency of the landscape, the environmental context is generally consistent across the study area. Environmental categories that do not vary greatly between community or deviate in resource type include the following:

- Land Ownership: With the exception of native holdings, the Bureau of Land Management (BLM) owns the vast majority of land in the study area. There are no identified parks, recreation areas, wildlife and waterfowl refuges, or historic sites within the project area.
- Cultural and Paleontological Resources: Historic properties such as historic structures, archaeological sites, historic and prehistoric districts, traditional cultural properties, or traditional land use areas are found throughout the study area.
- Water Quality: Water quality criteria has not been established for major receiving waters in the study area.
- Wetlands: Wetlands are ubiquitous within the study area.
- Endangered Species: Polar bear critical habitat areas and no-disturbance zones exist throughout the study area.

The following, specific, resources demonstrate greater potential to differ across the landscape:

- Protected Species: particularly lakes of size and/or depth to support endangered eiders, yellow-billed loons
- Geology/Geotechnical: Areas of high heave/thaw areas could significantly impact construction and maintenance costs.
- Subsistence Patterns: Subsistence resources such as fish, wildlife, and waterfowl and access to these resources vary geographically.

Mitigation for project impacts is a critical piece of timely project delivery and would be anticipated for any new infrastructure development within the North Slope Borough (NSB). To explore creating a foundation for a programmatic approach to mitigation, an agency meeting was held (described in detail in Section 2). Developing programmatic mitigation plans during planning has been identified as a method to make subsequent NEPA analysis both efficient and result in better environmental outcomes. Ideas were shared regarding mitigation options related to listed species, anadromous fish habitat, cultural resources, wetlands, and BLM-managed land. Mitigation ideas included the following:

- Consider required operating procedures that apply to the proposed project in the 2025 BLM Integrated Activity Plan (IAP).
- Incorporate USFWS guidance into culvert design and use culverts as a last resort design choice, as bridges avoid issues created by culverts (e.g., avoid placing riprap under ordinary high water).
- Construct the route more than one mile from the coast to reduce risk of negative impacts on polar bears during the life of the road.

- With increased human activity like hunting in the area, mitigate interactions with bears by informing travelers of the increased likelihood of bear encounters and how to remain safe.
- Consider that with migratory birds, some uplands may be beneficial. Consult with USFWS to identify least harmful alternative routes as USACE can make exceptions for impacts to special habitats which may preserve other high value habitats.
- Make sure construction activities occur before or after the nesting and breeding period of June 1 to July 31 each year.
- If barging is required for material transport, an incidental take authorization may be needed.
- Develop mitigation for impacts to cultural resources by type, with prescribed treatments based on the kinds of sites found in the area.

A comprehensive description of all existing conditions and potential impacts from the proposed project is detailed in the Environmental Setting Memorandum **(Appendix D)**.

2.0 AGENCY, STAKEHOLDER, AND PUBLIC INVOLVEMENT

2.1 Public Involvement Summary

A Public and Agency Involvement Plan (PAIP) was developed collaboratively to outline the strategies for communicating with agencies, tribes, organizations, local governments, communities, and the public. Communication methods were regularly evaluated for effectiveness, schedule alignment, and budget compliance, and adjusted as needed. Objectives included:

- Providing opportunities for stakeholders to stay informed and participate.
- Supporting local planning authorities in reviewing and approving recommendations in the Final PEL study report, as required under AS 35.30.010 Review and Approval by Local Planning Authorities.
- Assisting the project team in meeting Federal, State, DNR, DOT&PF, and local government public involvement requirements.
- Compliance with Title VI of the Civil Rights Act of 1964, Americans with Disabilities Act of 1990 (ADA), and Executive Orders 11990. 11988, and 13166.

The project website *www.TriangleCommunityRoad.com* was created and includes the project description and Figure, schedule, Frequently Asked Questions (FAQs), draft and final documents. The website also served as a resource for meetings, materials, meetings and comment summaries, and newsletters.

The email address *TriangleCommunityRoad@dowl.com* was created for inquiries and linked to a project team distribution list. Social media materials were provided to the DOT&PF, DNR, and NSB upon request for posting. Comments received via email, mail, phone, or written form were documented in a project comment database and distributed to the project team. Responses were provided after obtaining approval from DOT&PF, DNR, and NSB.

Outreach included distribution of two newsletters to update stakeholders on study progress and the availability of the draft PEL for review and comment. Electronic versions were emailed to the stakeholder list, and printable versions were shared with key stakeholders for distribution to those without internet access.

2.2 Agency and Stakeholder Involvement

Stakeholders were identified as individuals and organizations potentially affected by a potential future project, including government agencies, elected officials, tribal entities, businesses, non-profit organizations, communities, and the public.

Information was documented and maintained to guide meaningful communication and encourage active participation. The stakeholder register was updated throughout the study.

In addition, to provide key stakeholders with in-depth engagement opportunities, the study team established an Advisory Committee for ongoing input throughout the project. Members were invited from tribes, tribal organizations, and local elected officials. The committee included representatives from key stakeholder organizations in Table 2.

Table 2: Project Stakeholders

ORGANIZATION	STAKEHOLDER TYPE	ADVISORY COMMITTEE
Alaska Department of Natural Resources	State Agency/Project Team	
Alaska State Historic Preservation Office	State Agency	
Arctic Slope Regional Corporation	Tribal Organization	
Arctic Slope Telephone Association Cooperative	Local Utility	
ASRC Consulting & Environmental Services, LLC	Project Team	
Atqasuk Inupiat Corporation	Tribal Organization	
City of Atqasuk	Local Government	Yes
City of Utqiaġvik	Local Government	
City of Wainwright	Local Government	
DOT&PF	State Agency/Project Team	
DOWL	Project Team	
Eskimos Inc	Tribal Organization	
Iñupiat Community of the Arctic Slope	Tribal Organization	Yes
Native Village of Atqasuk	Tribal Organization	
Native Village of Barrow	Tribal Organization	Yes
North Slope Borough	Local Government/Project Team	Yes
Olgoonik Corporation	Tribal Organization	Yes
Ukpeagvik Inupiat Corporation	Tribal Organization	Yes
Village of Wainwright	Tribal Organization	

2.2.1 Public Meetings

Public meetings were planned to inform communities about the project and gather comments and concerns. Meetings were held in-person, virtually, or in hybrid format, following DOT&PF Statewide Environmental Office's (SEO) NEPA Assignment Program Guidance on Virtual Public Meetings. One round of meetings was planned in each community, with a final meeting in Utqiaġvik and virtual meeting opportunities when the draft PEL study report was available. The study team coordinated logistics, notified communities, prepared presentations and materials, posted meetings materials on the website, and developed summaries. The schedule and focus for open house meetings and supplemental listening sessions are summarized in Table 3 .

Table 3: Summary of Public Meetings

LOCATION & FORMAT	FOCUS	DATE
Utqiaġvik, AK In-Person	• Project Background – ASTAR Program • PEL Process • Project Schedule • Project Area and Existing Conditions • Purpose and Need Statement	March 28, 2024
Atqasuk, AK In-Person	• Project Background – ASTAR Program • PEL Process • Project Schedule • Project Area and Existing Conditions • Purpose and Need Statement	April 11, 2024
Utqiaġvik, AK In-Person	• ASTAR Program Update • PEL Process • Project Schedule • Purpose and Need • Preliminary Alternatives • Evaluating Alternatives	January 9, 2025
Wainwright, AK In-Person	• ASTAR Program Update • PEL Study Schedule • PEL Process Overview • Purpose and Need • Preliminary Alternatives • Evaluating Alternatives	March 6, 2025
Utqiaġvik, AK In-Person	• Recommended Alternatives • Draft PEL Study	April 9, 2026
Virtual Meetings	• Recommended Alternatives • Draft PEL Study	April 16, 2026 April 23, 2026

Utqiaġvik, AK – March 28, 2024

Study team members hosted an open house with 10 Utqiagvik community members at the Inupiat Heritage Center on March 28, 2024. The study team presented an overview of ASTAR, the PEL study process, and additional studies, highlighting benefits of the PEL process. Meeting participants focused on concerns about subsistence resource access and impacts, benefits and challenges of federal funding and public roads, climate change, concerns about federal control over community resources, and benefits of a road to assist communities during emergency response.

Atqasuk, AK – April 11, 2024

Study team members hosted an open house with 15 Atqasuk community members at the Community Center. The study team presented an overview of ASTAR, the PEL study process, and additional studies, highlighting benefits of the PEL process. Meeting participants shared suggestions and concerns, including roadway checkpoints between communities, potential impacts to caribou migration, concern with community impacts with illegal substances (including alcohol), questions about construction funding sources, and suggestions for additional studies on potential wildlife and water impacts.

Utqiaġvik, AK – January 9, 2025

Study team members hosted an open house on January 9, 2025, at the NSB Assembly Chambers in Utqiaġvik, with nine community members attending the meeting. The study team presented a project overview, PEL study schedule and process overview, purpose and need, preliminary alternatives, alternatives evaluation, and next steps. Community members shared comments and questions on aviation and airports, funding options, additional infrastructure that could be installed along with a roadway, concerns with federal administration, and subsistence and cultural impacts.

Figure 6: Utqiaġvik Open House

Wainwright, AK – March 6, 2025

Study team members hosted an open house on March 6 at the Community Center, with seven community members attending. The study team presented a project overview, PEL study schedule and process overview, purpose and need, preliminary alternatives, alternatives evaluation, and next steps. Community members commented on public safety, emergency response, concern with alcohol and drugs entering the community, additional infrastructure and public transit opportunities, potential subsistence impacts, and cultural collaboration on historic travel routes.

Utqiaġvik, AK – To be determined

Summary will be added following the meeting.

Virtual – To be determined

Summary will be added following the virtual meeting.

2.2.2 Advisory Committee Meetings

Three advisory committee meetings were held to provide input on PEL study elements, summarized in Table 4.

Table 4: Summary of Advisory Committee Meetings

WORKSHOP	FOCUS	WHEN
1	• Baseline data and existing conditions • Completed field work • Purpose and need • Preliminary alternatives • Alternatives evaluation	December 2, 2024
2	• Refined alternatives • Evaluation criteria • Alternatives evaluation process • Funding matrix	April 23, 2025
3	• Alternative screening results • Recommended alternative(s) • Draft PEL study	February 2, 2026

Advisory Committee Workshop No. 1

The study team met with members of the Advisory Committee on December 2, 2024, at the ASRC Office in Anchorage, Alaska and via Teams. The study team shared an overview of ASTAR, the project area, existing conditions, fieldwork completed, the ASTAR process, and how ASTAR work products can be incorporated into the PEL study process. The study team continued by sharing the PEL study indicative schedule and an overview of the PEL process, including information about the importance of the purpose and need of the study, themes for developing the purpose and need, preliminary alternatives developed from the ASTAR process, and how alternatives are evaluated.

During a moderated work session, advisory committee members shared comments on the draft purpose and need statement, including emotional wellbeing, community stability, health and wellness, freight movement, utility corridor, reducing reliance on air travel, increasing access to subsistence and food. Additional suggestions were to re-word the need statements to positive, data driven needs statements.

The moderated work session continued with discussions on preliminary alternatives and draft alternatives evaluation criteria. Advisory Committee members shared feedback on preliminary alternatives, including a road that should serve as a safe evacuation route, consider impacts of permafrost, noted locations of flooding risks, and suggestions to locate the road closer to gravel sources. Comments on the alternatives evaluation criteria included considering the degree to which each alternative met the criteria, reconsider the term “Cultural Connectivity” as North Slope communities were traditionally distinct and unique villages, and to add a criterion of infrastructure resiliency. Other opportunities noted included maintenance costs, future ownership and funding opportunities, climate change, and community access.

Advisory Committee Workshop No. 2

The study team met with members of the Advisory Committee on April 23, 2025, at the ASRC Office in Anchorage, Alaska and via Teams. The study team shared an overview of ASTAR, existing conditions, fieldwork completed, the ASTAR process, how ASTAR work products may be incorporated into the PEL study process, PEL study indicative schedule, revised purpose and need statement, revised alternative routes, funding strategies, screening criteria and methodology, material sourcing, and next steps.

Discussion on the revised alternative routes solicited comments on previous erosion studies, old Department of Defense (DOD) White Alice Communication Systems sites between Wainwright and Utqiaġvik, and caribou crossings.

Discussion continued with suggestions and comments on funding strategies, including the Office of Local Defense Community Cooperation Grant, funding from the Gas Act, Federal Highways Administration (FHWA) standards and requirements, DOD funding for Arctic Infrastructure, Building Resilient Infrastructure and Communities (BRIC) grant program, and a funding matrix to be included in this PEL study report.

When the discussion pivoted to screening criteria and methodology, Advisory Committee members discussed gathering input from agencies and organizations who have built roads near the study area, including agencies in the Advisory Committee workshops, caribou migration, and supporting freight delivery to communities without barge access. In regard to material sourcing, Advisory Committee members discussed caching materials near barge points to reduce terrain impacts. Additional concerns included by developing this road, community members may be encouraged to relocate to Utqiaġvik.

Advisory Committee Workshop No. 3

The study team met with the Advisory Committee on February 2, 2026, to present project updates, review screening results for transportation alternatives, and outline next steps in the PEL process. The meeting began with introductions and a review of the Advisory Committee’s role in providing local knowledge and feedback to support development of the Triangle Community Road project. The study team shared an overview of the PEL study Purpose and Need, project schedule, and cumulative benefits being considered.

A substantial portion of the meeting focused on the results of the alternatives screening process. Six terrestrial road network alternatives were evaluated; marine and air options were dismissed early for not meeting the Purpose and Need. Among the road options, Alternatives 1, 2, and 3 were recommended to advance to NEPA review based on the lowest overall impacts and shortest mileage, while Alternatives 4 through 6 were dismissed. Discussion among Advisory Committee members highlighted considerations such as gravel source access, road design flexibility, construction costs, and the potential for future community connections.

The team also reviewed key elements of the draft PEL study report, including concurrence milestones with the Statewide Environmental Office and plans for upcoming reviews. Advisory Committee members asked questions about report timelines, information accessibility, community feedback, and the relevance of the PEL study to future NEPA efforts. Community meeting feedback was reported as largely supportive, with recurring concerns around subsistence, public access, health and safety, and construction materials. The meeting concluded with next steps: incorporating community feedback, finalizing the PEL study report, and preparing agency partners to determine whether the project should advance.

2.2.3 Additional Stakeholder Meetings

The project team held numerous meetings with agencies, small groups, and stakeholders to gather specific feedback, summarized in Table 5.

Table 5: Summary of Additional Stakeholder Meetings

MEETING GROUP	DATE(S)
ASRC	February 19, 2024 March 19, 2024
City of Atqasuk and Native Village of Atqasuk	April 11, 2024
Bureau of Land Management (BLM) Arctic District Office	November 12, 2024
City of Atqasuk	February 26, 2024 August 19, 2024
City of Utqiaġvik	February 29, 2024
ICAS	February 20, 2024 February 29, 2024 March 28, 2024 January 10, 2025 January 2026 TBD
Inuvialuit Regional Corporation	February 20, 2024
NSB Planning Commission	January 25, 2024
Native Village of Barrow (NVB)	February 28, 2024 March 18, 2024
Programmatic Mitigation Meeting – BLM, Untied States Fish and Wildlife Service (USFWS), United States Army Corps of Engineers (USACE) State of Alaska Historic Preservation Office (SHPO), Alaska Department of Fish and Game (DF&G)	January 12, 2026
UIC	February 28, 2024

MEETING GROUP	DATE(S)
	June 25, 2025 December 9, 2025
Utqiaġvik Elders	March 29, 2024
Utqiaġvik Trilateral (City of Utqiaġvik, NVB, and UIC)	January 9, 2025 December 9, 2025 April 16, 2026
The Voice of the Arctic Iñupiat (VOICE)	February 20, 2024
Wainwright Steering Committee	February 9, 2024 September 18, 2024

Given the importance of the community considerations, Section 7.0 Key Community Considerations is dedicated to highlighting, emphasizing, and summarizing the key community considerations.

All meeting documents, outreach materials and summaries are included in **Appendix C**. Additionally, the results of a Voice of the Arctic Iñupiat (VOICE) student research project *The Economic and Cultural Implications of the Triangle Community Road PEL on Atqasuk, Utqiaġvik, and Wainwright* is included as **Appendix G**.

3.0 PURPOSE AND NEED

3.1 Overview

Statutory guidance for Purpose and Need (P&N) statement statements (FHWA TA 6640.8A) states that purpose and need statements must "identify and describe the proposed action and the transportation problem(s) or other needs which it is intended to address."

The P&N is an important framework for PEL studies to guide why a project is proposed, and what positive outcomes are intended. The project "Needs" document key problems to be addressed. The project "Purpose" describes the overall objectives and how alternatives would address the project "need" in terms understandable to the public.

The P&N was developed by engaging stakeholders through surveys, in-person meetings, and finally by obtaining concurrence from the SEO. In particular, the Advisory Committee provided early input and guidance on the project's P&N.

3.2 Purpose

The purpose of the PEL study is to evaluate an all-season roadway connection between the three communities and understand whether an all-season road connection between the communities is desired and should move forward to a NEPA and design phase. An all-season gravel road connection between the three communities would meet the following objectives:

- Lower the cost of energy, basic goods, utilities, and other services
- Improve health and wellness through improved access to health services
- Create opportunities to strengthen cultural exchange, share traditional knowledge, enhance community and family connectivity, and improve emotional well-being
- Provide an evacuation route to higher elevation areas, allowing efficient transportation away from the coast, in case of severe storm surges and/or coastal flooding
- Reduce fossil fuel use through reduction of reliance on air travel and advancing the opportunity for energy alternatives to diesel fuel

3.3 Need

The communities of Utqiaġvik, Atqasuk, and Wainwright are only accessible by air year-round or snowmachines/rolligons during winter as no permanent road exists between these communities, or to the Alaska road system. The lack of an all-season surface transportation connection between the communities continues the following undesirable conditions**:**

- Lack of year-round, reliable, and cost-efficient transport of goods and services
- Unrealized economic growth
- Uneconomical and unreliable access to family and friends between communities
- Difficult and costly access to subsistence resources
- Prolonged response times for medical emergencies
- Lack of evacuation route to allow efficient transportation of residents away from coastal communities that are threatened by increasingly substantial coastal storm surges and flooding.
- Limited / uneconomical access by Wainwright and Atqasuk residents to educational opportunities, training, and workforce development available in Utqiaġvik

4.0 ALTERNATIVES

4.1 Alternative Development and Screening Overview

The alternative screening process provides critical information about how well an alternative satisfies a proposed project's purpose and if it will meet the transportation needs of its users. If an alternative does not meet the project's purpose and needs (P&N), it will be eliminated. Also, the screening process will determine if an alternative follows adopted planning documents, is technically implementable and constructable from an engineering perspective, and is financially feasible, as well as reasonable under the National Environmental Policy Act (NEPA), practicable under the Clean Water Act, and prudent and feasible under Section 4(f) of the Department of Transportation Act of 1966.

The alternative screening process is designed to accommodate the development of new alternatives throughout the PEL process and will be applied to all alternatives to give confidence they are evaluated consistently.

The screening process is a decision-making framework to determine how well each alternative meets the P&N and the additional goals. NEPA requires that a reasonable range of alternatives be considered and reviewed objectively, and that the selection process and any alternatives eliminated be well documented. This screening process will meet these documentation requirements including the elimination of alternatives from further consideration during a future NEPA process and the identification of reasonable alternatives that will be evaluated during future project development under NEPA.

Under NEPA, reasonable alternatives are those that are practical and feasible from a technical, engineering, environmental, economic, and social standpoint, and which meet the P&N for the project. The screening process compares the advantages and disadvantages of a broad range of alternatives for advancement through stages of development into more refined alternatives and, ultimately, the recommended reasonable alternative(s).

The alternatives development and screening process uses the following steps:

1. Develop the purpose and need statement: The P&N statement states why the project is being proposed (the purpose) and describes the key problems to be addressed and underlying causes (the need). The P&N statement guides the development of alternatives and is the primary focus of the alternative screening criteria.
2. Source preliminary alternatives from previous ASTAR work and community meetings: Alternatives are drawn from previous planning efforts developed through ASTAR and suggested alternatives from early public involvement. These alternatives have been evaluated by the Advisory Committee to build consensus on what alternatives will advance through the screening and evaluation process.

3. Confirm possible alternatives: Early evaluation based on available data, professional judgment, and review against the P&N to eliminate alternatives that are not feasible based on location and buildability. Draft alternatives that have similar characteristics will be grouped as variants of a single alternative during this step. Alternatives remaining after the pre-screening will be considered “preliminary alternatives”.
4. Apply screening: Screening of the alternatives using a range of qualitative and quantitative criteria including engineering constraints, and environmental and social and economic impacts. The goal is to compare and rank the alternatives and to identify a recommended alternative(s).
5. Documentation: The screening results will be documented in the PEL study report and PEL Questionnaire.

The screening process is summarized in the following figure:

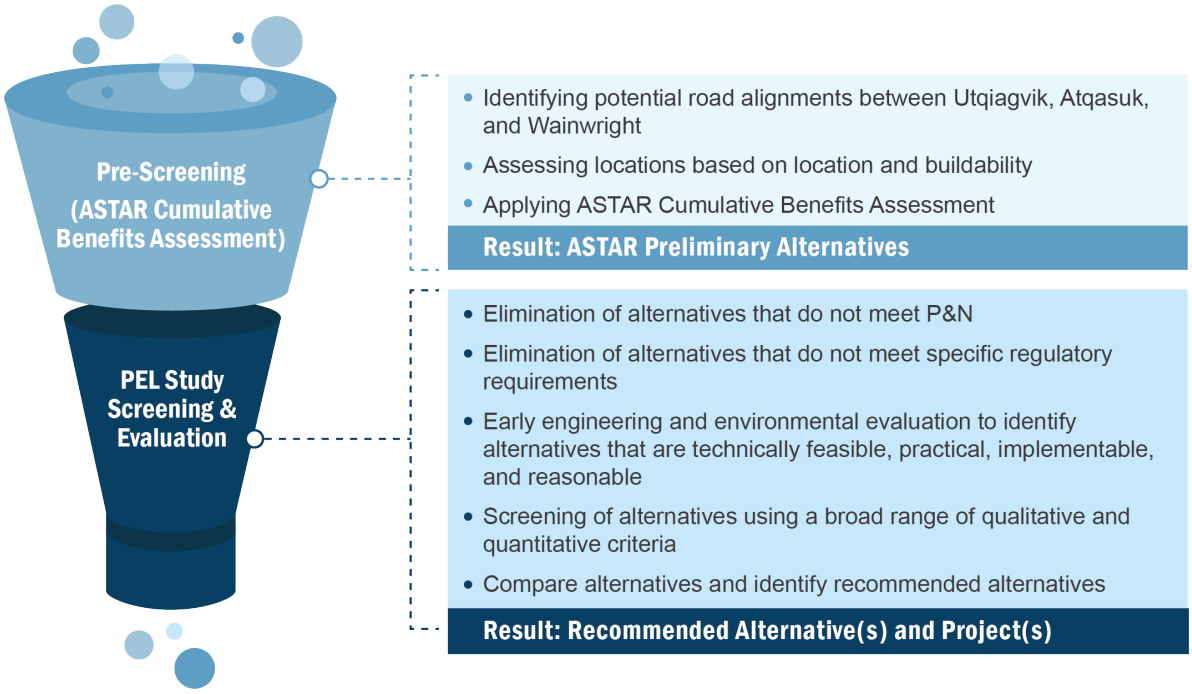


Figure 7: Iterative Step Alternative Process

4.2 Step 1: Pre-Screening

4.2.1 Alternatives Considered

A broad range of alternatives were considered when identifying transportation solutions that meet the P&N. Surface and non-surface transportation alternatives that connect all three communities were considered but dismissed due to deficiencies in meeting the P&N, as described below.

4.2.2 Marine

No major freight travels directly to Atqasuk via marine lines; however, barge freight from Utqiaġvik is hauled by land to Atqasuk. Improving existing barge landings or constructing new ports or docks would facilitate additional landing points for cargo and passengers but only for Wainwright and Utqiaġvik. So although new marine facilities would increase capacity, it would not meet the study's purpose and need. Additionally, marine facilities would be subject to interruptions from storms and ice formation, and the distance would equate to a journey lasting several hours.

4.2.3 Aviation

Utqiaġvik and Deadhorse (Prudhoe Bay) are the main hubs on the North Slope, with flights to and from Anchorage and Fairbanks. In addition to travel between communities, the North Slope requires transportation in support of the oil and gas industry. In addition to chartered Shared Services Aviation for ConocoPhillips Alaska, Inc. (CPAI), workers use commercial airlines for transportation to and from Deadhorse/Prudhoe Bay. Cargo is often delivered to the communities via air transportation. The following describes air facilities currently serving Utqiaġvik, Wainwright and Atqasuk:

- The Wiley Post-Will Rogers Memorial Airport in Barrow (BRW) is owned and managed by DOT&PF. It is the hub airport on the North Slope and provides access to Anchorage, villages, and facilitates borough-wide search and rescue activities. The airport has a 7,100-ft x 150-ft paved runway and two 75-foot-wide taxiways connect the approximately 620,000-square-foot apron to the runway. The airport can accommodate a Boeing 737 series aircraft, or similar.
- Wainwright Airport (AIN) is owned and operated by the NSB. Wainwright has no road access and the airport is the only year round access to the community. The airport has a 4,494-ft x 110-ft gravel runway with turnaround areas on both ends. A 80-ft by 570-ft taxiway connects from the runway to a 280-ft by 475-ft parking apron. The runway has medium intensity lighting and Precision Approach Path Indicators on both runway ends. The airport is unmanned and has no terminal. Wright Air Service offers air service with Cessna Grand Caravans six days a week.
- The Atqasuk Edward Burnell Sr. Memorial Airport (AIK) is owned and maintained by the NSB. Atqasuk has no road access and the airport is the only year-round access to the community. As a small village airport, it is unattended and consists of a 4,370-ft x 90-ft gravel-surfaced runway with turnaround areas on both ends. The runway has medium intensity lighting and visual approach slope indicators on both runway ends. Wright Air Service offers air service with Cessna Grand Caravans six days a week.

Improving existing air facilities to accommodate use during inclement weather would increase the reliability and frequency of moving cargo and passengers. This alternative would improve air service reliability but it would not meet the P&N due to increased cost for residents to fly to complete many activities of daily life, such as attending school or medical appointments. Also, reliability issues related to weather exclude this alternative from meeting the P&N. In addition, this alternative would not provide a timely and reliable evacuation route for Wainwright.

4.2.4 Terrestrial

Two reasonable and feasible terrestrial options exist, constructing a seasonal ice road between all three communities, or developing an all-season gravel road.

Ice Road: Constructing an annual ice road to connect the three communities would increase reliability for travel and provide evacuation options for Wainwright. However, these benefits would not be realized year-round and use would be limited to winter months when conditions support the ice road, and therefore this alternative does not meet the P&N.

Gravel Road: Creating a gravel road between the three communities would specifically meet the need for year-round, reliable, and cost-efficient transport of goods and services and therefore creates a differentiator for the gravel road alternative versus the non-surface transportation alternatives, and the ice road alternative. Additionally, the gravel road is unique in meeting the need for an all-season evacuation road and easier, more cost-effective year-round subsistence access. Potential all-season gravel road routes were first identified to align with likely river crossings and account for other natural features and constraints. Four corridors were identified that link Atqasuk, Wainwright and Utqiaġvik and are shown in Figure 8 below:

- Corridor A: Utqiaġvik to Atqasuk
- Corridor D: Coastal Route Extension
- Corridor E: Middle Route
- Corridor F: Southern Route

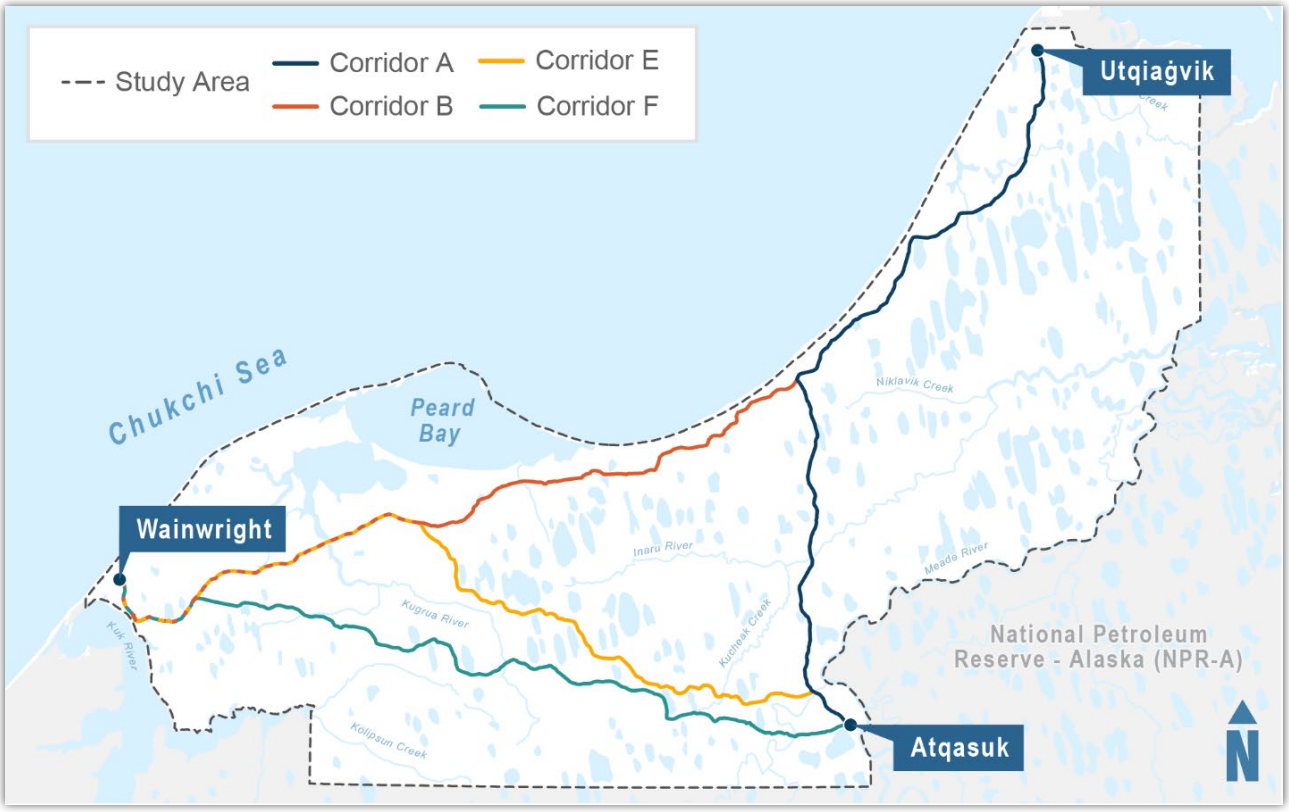


Figure 8: PEL Study Area Road Corridors

4.3 Step 2: PEL Screening and Evaluation

The corridors were not comparable as stand-alone road network alternatives and therefore they were further developed into six road network alternatives (henceforth referred to as alternatives) that were advanced into engineering constraints and environmental-based criteria screening.

4.3.1 Road Network Alternatives

A comparison of each alternative is summarized in Table 6 and shown in Figures 9 through 14.

Table 6: Road Network Alternatives

ROAD NETWORK ALTERNATIVE	DISTANCE BETWEEN COMMUNITIES (MILES)			TOTAL NETWORK (ROAD MILES)
	Utqiaġvik and Atqasuk	Utqiaġvik and Wainwright	Wainwright and Atqasuk	
1	67	135	69	**135**
2	67	101	95	**131**
3	67	132	73	**136**
4	67	101	73	**171**
5	67	101	69	**190**
6	116	101	73	**144**

Figure 9: Alternative 1

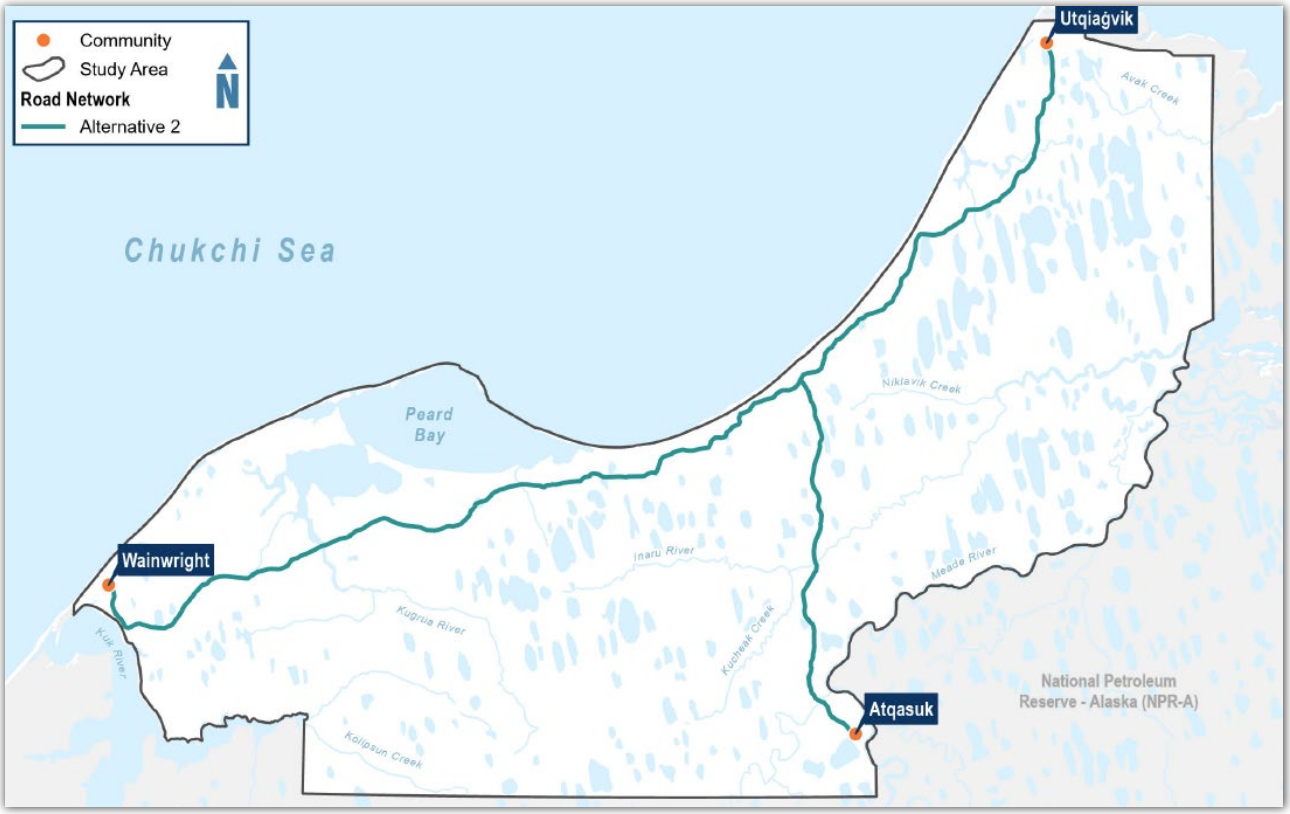


Figure 10: Alternative 2

Figure 11: Alternative 3

Figure 12: Alternative 4

Figure 13: Alternative 5

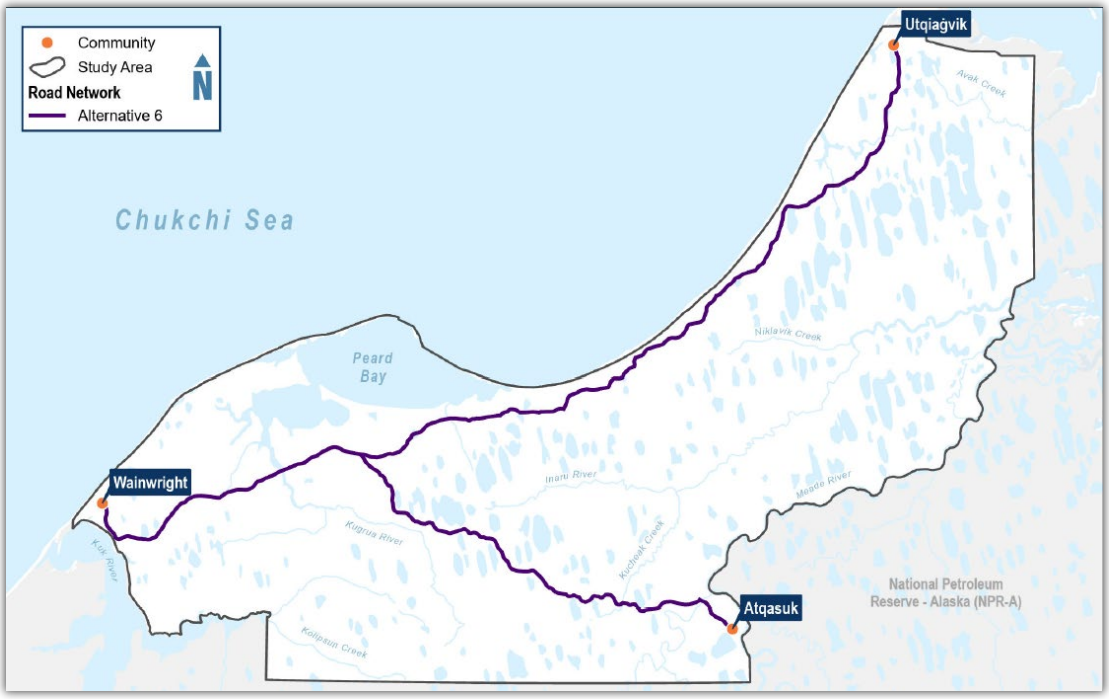


Figure 14: Alternative 6

4.3.2 Engineering Constraints and Environmental-Based Criteria

The engineering constraints and environmental-based criteria consider, at a high level, the costs of engineering constraints (e.g., material sources, stream crossings) and the potential impact of an alternative on a range of environmental resources.

4.3.3 Roadway Cross- Sections

Each two-lane roadway would be constructed atop the existing tundra. Starting with the existing tundra surface, contractors would establish a road base. Engineered gravel would be placed and then compacted in layers until the desired height of the new roadway surface is achieved, which is a minimum of five feet above the tundra. The finished travel surface would be a level roadway with two, 10-foot travel lanes side by side, flanked by approximately 2.3-foot shoulders. Outside of the shoulders reflective roadway delineator posts are set at 50-foot intervals, one foot outside the shoulder edge, to guide drivers and improve visibility. This stepwise build creates a stable, consistent roadway structure across the soft tundra. Although each alternative would be similarly designed for consistency in evaluating constraints and impacts associated with different routes, three typical sections were developed to conform to site conditions based on location within the study area, as described below and summarized in Table 7.

Table 7: Screening Criteria

TYPICAL NAME	ROAD PRISM WIDTH (FT)	HEIGHT (FT)	GEOTEXTILE
Typical A (Utqiaġvik)	44.6	5.3	Separation (Class 1) Stabilization (Class 1)
Typical B (Wainwright)	46	5.6	Separation (Class 1) Stabilization (Class 1)
Typical C (Atqasuk)	52.4	7.2	Separation (Class 1) Stabilization (Class 1) 2-inch thick polystyrene

Typical Section A (Utqiaġvik) would be used between Utqiaġvik and the first intersection with the road north from Atqasuk.

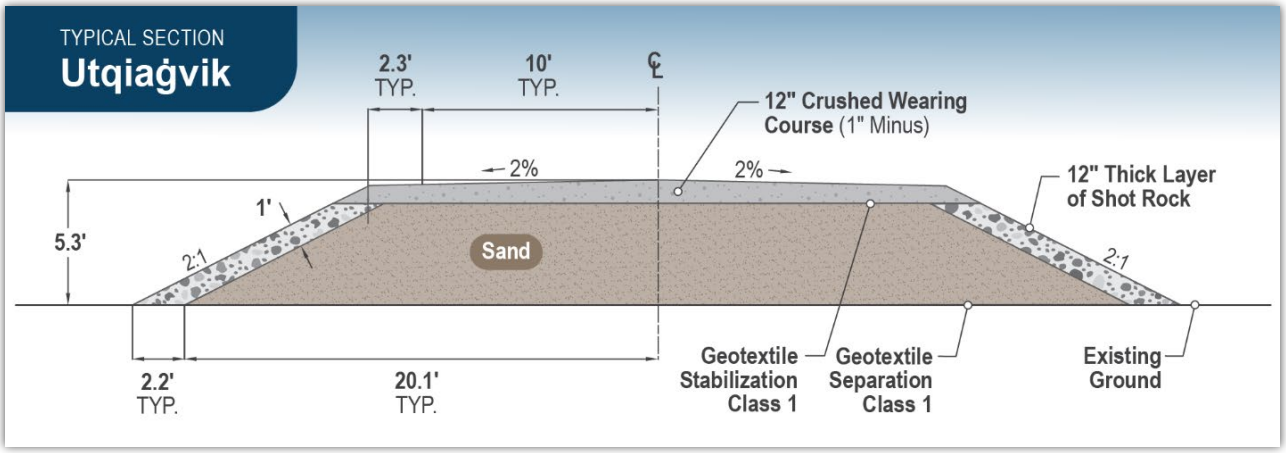


Figure 15: Roadway Typical Section A

Typical Section B would be used on segments that traverse the coastal area south of Typical A (toward Wainwright).

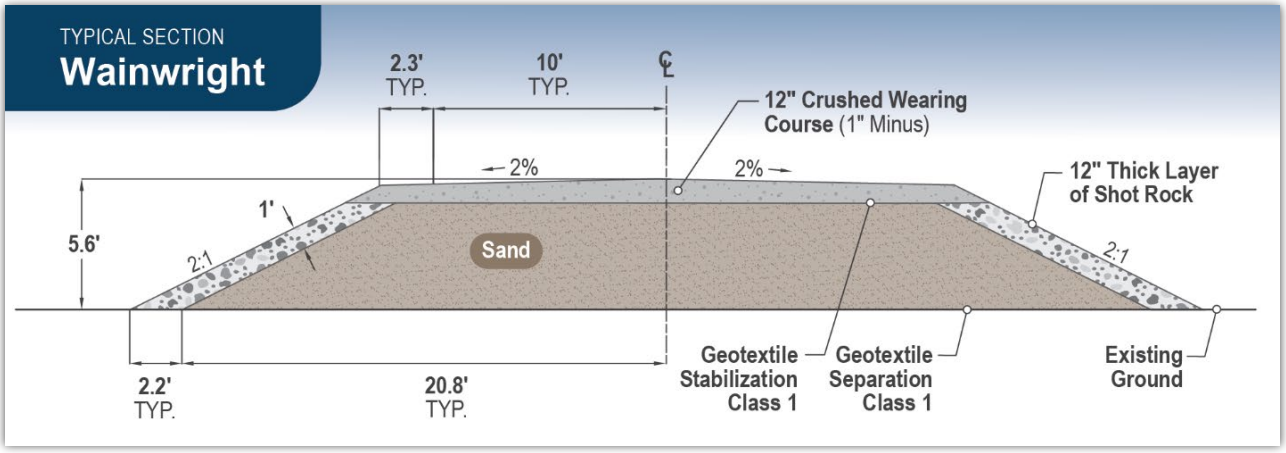


Figure 16: Roadway Typical Section B

Typical Section C (Atqasuk) would be used on all other segments.

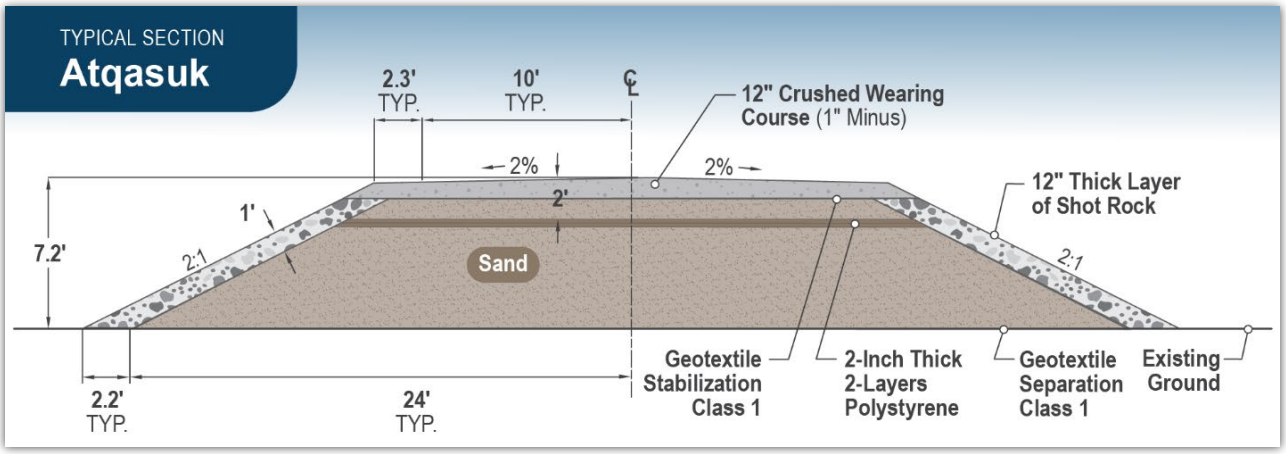


Figure 17: Roadway Typical Section C

The engineering constraints and environmental-based criteria screening process included the following steps:

- Identify if resources will be potentially affected by an alternative, and to what extent
- Evaluate the key engineering challenges in a comparative analysis, or ranking of complexity according to engineering constraints
- Evaluate the costs of each alternative, logistical considerations, and technical feasibility
- Determine whether any of the alternatives would have substantially greater costs (monetary or environmental) without having substantially greater benefits

Given the consistency of the study area terrain, many of the environmental resources will be similarly impacted by each of the alternatives. As the intent of the alternatives analysis is to rank and show differentiation between the alternatives, environmental categories that do not display meaningful differences between alternatives have been removed from focus in the screening.

For example, all alternatives are in close proximity to the same number of cultural resources. If this criterion was used to determine the 'recommended' road alternative, all the alternatives would score the same, which does not aid in decision-making. Instead, criteria which differentiate one alternative from another were selected. Environmental resource categories that did not provide substantive differentiation between the alternatives included:

- Land Ownership
- Hydrology
- Cultural and Paleontological Resources
- Avian Resources and Habitat
- Subsistence Patterns
- Threatened and Endangered Species
- Terrestrial Mammals
- Fish and Fish Habitat

The following criteria were selected as screening criteria as the differences in impacts between the alternatives will create meaningful separation when evaluating the alternatives against each other. These criteria are listed in Table 8, including the measures used to quantify impacts.

Table 8: Screening Criteria

CONSTRAINT	TO WHAT DEGREE DOES THE ALTERNATIVE…
Protected Species	Impact K-1 and K-2 BLM setbacks. K-2 deep lakes are of particular importance to waterfowl, eiders, and yellow-billed loons.
Geology/ Geotechnical	Consider geology and geotechnical considerations, such as road construction in high heave/thaw areas that could significantly impact construction and maintenance costs. Additionally, extended travel distances to gravel resources would significantly increase transportation times and fuel costs.
Vehicle Bridges	Require the construction of bridges or culverts, which represent the vast majority of built infrastructure beyond the road itself. Significant differences exist between the road alternatives in the number, length, and cost of road infrastructure.
Subsistence Patterns	Potentially impact subsistence resources. This evaluation would encompass components of many criteria such as fish, wildlife, and waterfowl.
Wetlands	Avoid or minimize impacts to wetlands and especially sensitive wetlands.
Construction Cost Estimate	Minimize construction cost. This calculation is not intended to be interpreted as a financial construction quote, only as a method for evaluating environmental impacts and understanding at a planning level the potential costs of a route alternative. Significant components of the ASTAR project are unknown (such as gravel resources) which would likely significantly impact the final cost of the project.

4.3.4 Scoring

Using the screening criteria selected above, environmental impacts and engineering constraints were quantified according to the measurements listed in Table 8 and ranked mathematically using standard deviations to represent the degree by which alternatives differ from each other. In this approach, a value of '1' corresponds to most favorable result and identifies the alternative(s) with the lowest impact.

Higher scores would be assigned to alternatives that, in comparison to the lowest impact alternative, had progressively higher impacts. Application of this scale can be generalized as follows in Table 9:

Table 9: Environmental-Based Criteria Screening

	SCORE	IMPACTS	IMPACTS SUMMARY
Greater Impacts ↓	1	Lowest	Lowest identified impacts for that criteria.
	2	Moderately high	Impacts are noticeably above average and start to stand out.
	3	High	These impacts are well above average and differ significantly from the lowest impact corridor.

To accomplish this quantitative comparison, standard deviations are used which demonstrate how far from the average a given impact is. For example, Corridor D has substantially fewer impacts on protected species than Corridor E and F. Considering these impacts, Corridor D would be assigned an impact of '1' while Corridor E and F would be given a score of '3' for the substantial increase in impacts to protected species they respectively encounter. By using a statistical approach, the PEL study team can interpret data so that patterns and trends become clear when evaluating alternatives.

4.3.5 Weighting

According to information provided by the Advisory Committee, the screening criteria for environmental impacts and engineering constraints are not equal in importance, with some impacts holding greater significance. To address this, and to make sure that each Advisory Committee member's environmental and engineering priorities were represented, a weighted screening criteria was established which further refines the base score (described above as a 1 to 3 scale) by a multiplier. The range of weighting multiplier is on a similar 1-3 scale so that abnormally high multipliers do not overpower minor impacts to maintain objectivity. Advisory Committee members were provided with environmental constraints to provide feedback regarding appropriate weighting criteria which were averaged to create a numerical weight to be applied to the category. Table 10 below represents the priority screening options given to the Advisory Committee.

Table 10: Environmental-Based Criteria Weight

	MULTIPLIER	PRIORITY	WEIGHT SUMMARY
Greater Importance ↓	1	Lowest	This criteria has a lower level of priority when compared to other criteria.
	2	Moderately high	This criteria is a higher priority consideration and should be given extra weighting.
	3	High	This criteria has the highest level of significance and these impacts are given the highest priority of consideration.

Below are the alternative screening criteria. The criteria are measured using the scale, shown in Table 11, to determine how the alternatives compare.

Table 11: Environmental-Based Criteria Matrix

CONSTRAINT	*TO WHAT DEGREE DOES THE ALTERNATIVE...*	MEASURE	WEIGHT
Protected Species	Impact K-1 and K-2 BLM setbacks. K-2 deep lakes are of particular importance to waterfowl, eiders, and yellow-billed loons.	1-3	1-3
Geology/ Geotechnical	Consider geology and geotechnical considerations, such as road construction in high heave/thaw areas that could significantly impact construction and maintenance costs. Additionally, extended travel distances to gravel resources would significantly increase transportation times and fuel costs.	1-3	1-3
Vehicle Bridges	Require the construction of bridges or culverts, which represent the vast majority of built infrastructure beyond the road itself. Significant differences exist between the road corridors in the number, length, and cost of road infrastructure.	1-3	1-3
Subsistence Patterns	Potentially impact subsistence resources. This evaluation would encompass components of many criteria such as fish, wildlife, and waterfowl.	1-3	1-3
Wetlands	Avoid or minimize impacts to wetlands and especially sensitive wetlands.	1-3	1-3
Construction Cost Estimate	Minimize construction cost. This calculation is not intended to be interpreted as a financial construction quote, only as a method for evaluating environmental impacts and understanding at a planning level the potential costs of a route alternative. Significant components of the ASTAR project are unknown (such as gravel resources) which would likely significantly impact the final cost of the project.	1-3	1-3

In this quantitative evaluation of the environmental impacts from the proposed corridors, the total of corresponding corridor with the lowest value would correspond to the corridor with the lowest environmental impacts; essentially, a low score is desirable while a high score is undesirable as the score represents the extent of environmental impacts and engineering constraints.

4.4 Results

Using the engineering constraints and environmental-based criteria, impacts from the six alternatives were calculated using the scoring method outlined above. The result of this analysis is summarized below.

4.4.1 Protected Species

All alternatives encroach within NPR-A Record of Decision (ROD) K-1, K-2, and K-5 setbacks (BLM 2013). K-1 setbacks have been established around the Inaru River, Meade River, and Kugrau River rivers. K-2 setbacks have been established for two lakes in the southern portion of the project area which intersect five of the alternatives, excluding Alternative 2. All alternatives include portions of the alignment which intersect K-5 setbacks south of Utqiaġvik. Alternatives which continue to Wainwright along the coast, such as alternative 2, 4, 5, and 6, had greater K-5 impacts as they approached Peard Bay. Alternative 1 and 3 both divert south towards Atqasuk and avoid further Peard Bay area K-5 setbacks. Protected species impacts are provided in Table 12, which showed that Alternative 2 had the fewest protected species impacts while Alternative 5 had the greatest.

Table 12: Protected Species Impacts

CONSTRAINT	ROAD NETWORK					
Protected Species	**1**	**2**	**3**	**4**	**5**	**6**
K-1 (Rivers) Setback Intersections	5	3	5	5	6	3
K-2 (Lakes) Setback Intersections	1	0	1	1	1	1
K-5 (Coastal) Setback Intersections	1	3	1	3	3	3

4.4.2 Geology/Geotechnical

Areas with high frost heave/thaw settle potential within the project area are common, however, there is considerable variability between the alternatives. Generally, alternatives with coastal alignments, and shorter overall road distance, had fewer miles within areas identified to have high frost heave/thaw potential. Frost heave/thaw potential was calculated using terrain unit descriptions and were primarily associated with thaw lake deposits (terrain unit Qt) and marine sand deposits (terrain unit Qms).

Geology and geotechnical impacts are provided in Table 13 with Alternative 2 having the fewest miles in areas with high frost heave and thaw settling potential while Alternative 5 had the greatest.

Table 13: Geology/Geotechnical Impacts

CONSTRAINT	ROAD NETWORK					
Geology/Geotechnical	**1**	**2**	**3**	**4**	**5**	**6**
High frost heave/thaw (road miles)	44	31	46	53	55	51

4.4.3 Vehicle Bridges

Built infrastructure impacts (such as water equalization pipes, culverts, and bridges) generally follows overall roadway mileage trends. Longer alternatives, such as Alternative 4, 5, and 6, generally have greater impacts than shorter alternatives, such as Alternative 1, 2, and 3. Vehicle bridge impacts are provided in Table 14.

Table 14: Vehicle Bridges Impacts

CONSTRAINT	ROAD NETWORK					
Vehicle Bridges	**1**	**2**	**3**	**4**	**5**	**6**
Equalization pipes (count)	505	458	576	700	697	679
Culverts (count)	49	56	60	80	82	79
Bridges (count)	16	12	14	18	21	17

4.4.4 Subsistence Patterns

Subsistence resources in the study area are widespread and include marine resources (whales, seals and walrus), caribou and other furbearers, fish, birds, and plants (such as salmonberries). Large subsistence fishing areas exist near Peard Bay, Utqiaġvik, Atqasuk, and Wainwright. Plant gathering and marine subsistence activities occur along the entire Chukchi Sea coastal area. Portions of the alignment which intersected subsistence resources were counted using information provided in the Arctic Slope Regional Corporation Road Network for Utqiaġvik, Atqasuk, and Wainwright Technical Memorandum 10 – Subsistence.

Subsistence platforms and cabins occur within the project area primarily along existing access routes; such as the Community Winter Access Trail and other seasonal trails. The greatest density of camps exists around Atqasuk near the Meade River. All alternatives come in close proximity to the same subsistence cabin north of Atqasuk.

Distinguishing factors between the six alternatives include impacts near Peard Bay (which Alternatives 1 and 3 avoid) and the Kugrua River subsistence fishing area (which Alternative 1 avoids). For these reasons, Alternative 1 had the lowest anticipated impacts on subsistence resources, while Alternative 5 had the most. Subsistence impacts are shown in Table 15 below.

Table 15: Subsistence Impacts

CONSTRAINT	ROAD NETWORK					
Subsistence Patterns	**1**	**2**	**3**	**4**	**5**	**6**
Proximity to subsistence resources (count)	4	6	5	6	7	6

4.4.5 Wetlands

Wetlands in the project area are widespread. Using the typical sections for the roadways, wetland impacts were quantified and provided in Table 16. As with other impacts, wetland impacts generally follow overall roadway lengths, with Alternative 2 having the fewest acres of wetlands impacted while Alternative 5 had the most.

Table 16: Wetland Impacts

CONSTRAINT	ROAD NETWORK					
Wetlands	**1**	**2**	**3**	**4**	**5**	**6**
Wetland (acres)	806	739	793	990	1,112	1,196

4.4.6 Construction Cost Estimate

Construction costs associated with the alternatives were calculated using the combined total of labor, materials, subcontractors, equipment, and room/lodging. The cost estimate for each alternative is provided in Table 17. Slight differences in the typical section exist and are described in greater detail in the PEL study report. Alternative 2 has the lowest overall cost of construction while Alternative 5 has the highest.

Table 17: Construction Costs

CONSTRAINT	ROAD NETWORK					
Construction Cost	**1**	**2**	**3**	**4**	**5**	**6**
Cost (million dollars)	$812	$782	$870	$1,029	$1,139	$993

Using the information provided above, as outlined in Table 12 through Table 17, and summarized in Table 18, the standard deviation was calculated within the constraint across all six alternatives.

Table 18: Alternative Summary and Standard Deviation

	ALTERNATIVES						
Constraint	**1**	**2**	**3**	**4**	**5**	**6**	**Standard Deviation**
Subsistence Patterns	4	6	5	6	7	6	**1**
Cost	$812	$782	$870	$1,029	$1,139	$993	**$139**
Protected Species	7	6	7	9	10	7	**1.5**
Geology/ Geotechnical	44	31	46	53	55	51	**8.9**
Vehicle Bridges							
Equalization pipes	505	458	576	700	697	679	**105.3**
Major culverts	49	56	60	80	82	79	**14.3**
Bridges	16	12	14	18	21	17	**3.2**
Wetlands (acres)	805	739	793	990	1,112	1,196	**188.4**

Using the standard deviation found in Table 18, the road network impacts can be assessed as outlined in Scoring Method section and further summarized in Table 19.

Table 19: Alternative Summary and Screening Scoring

	ROAD NETWORKS						Stdev	STANDARD DEVIATION SCORING CUTOFFS					ROAD NETWORK SCORING					
Scoring Criteria	**1**	**2**	**3**	**4**	**5**	**6**	**σ**	**1**	**2**	**3**	**4**	**5**	**1**	**2**	**3**	**4**	**5**	**6**
Subsistence Patterns	4	6	5	6	7	6	1.03	4.0	5.0	6.1	7.1	8.1	1.0	2.9	2.0	2.9	3.9	2.9
Cost (million dollars)	$812	$782	$870	$1,029	$1,139	$993	$139	$782	$921	$1,060	$1,198	$1,337	1.2	1.0	1.6	2.8	3.6	2.5
Protected Species	7	6	7	9	10	7	1.5	6.0	7.5	9.0	10.5	12.0	1.7	1.0	1.7	3.0	3.7	1.7
Geology/ Geotechnical	44	31	46	53	55	51	8.9	30.7	39.6	48.5	57.5	66.4	2.4	1.0	2.7	3.5	3.7	3.3
Vehicle Bridges																		
Equalization pipes	505	458	576	700	697	679	105.3	458.0	563.3	668.5	773.8	879.0	1.4	1.0	2.1	3.3	3.3	3.1
Major culverts	49	56	60	80	82	79	14.3	49.0	63.3	77.6	91.8	106.1	1.0	1.5	1.8	3.2	3.3	3.1
Bridges	16	12	14	18	21	17	3.2	12.0	15.2	18.3	21.5	24.6	2.3	1.0	1.6	2.9	3.8	2.7
Wetlands (acres)	806	739	793	990	1,112	1,196	188	739	928	1,116	1,305	1,493	1.4	1.0	1.3	2.3	3.0	3.4

Summarizing the scoring results from Table 20, Table 21 shows the average score for each constraint which simplifies the numeric result of screening into a single number for Vehicle Bridges (average score of equalization pipes, major culverts, and bridges). As shown, Alternative 2 had the lowest overall impacts compared to the other five alternatives.

Table 20: Alternatives Screening Results

	ALTERNATIVES					
Constraint	**1**	**2**	**3**	**4**	**5**	**6**
Subsistence Patterns	1.0	2.9	2.0	2.9	3.9	2.9
Cost	1.2	1.0	1.6	2.8	3.6	2.5
Protected Species	1.7	1.0	1.7	3.0	3.7	1.7
Geology/ Geotechnical	2.7	1.0	2.3	2.7	3.4	2.2
Vehicle Bridges (averaged)	1.6	1.2	1.8	3.1	3.5	3.0
Wetlands (acres)	1.6	1.0	2.2	3.3	3.3	3.3
Score (rounded):	**10**	**8**	**11**	**17**	**21**	**16**

Seven members of the Advisory Committee provided responses to the Priority Ranking Worksheets (Atqasuk City Council, Iñupiat Community of the Arctic Slope, Native Village of Barrow, North Slope Borough, Olgoonik Corporation, Ukpeagvik Inupiat Corporation, and the Wainwright Steering Committee). The responses from the Advisory Committee are summarized in Table 21 below and shown in order of highest to lowest (total) priority scoring.

Table 21: Advisory Committee Priority Ranking Responses

	WEIGHT RESPONSE						
Constraint	**NVB**	**ICAS**	**ASRC**	**Atqasuk**	**UIC**	**WSC**	**Average**
Subsistence Patterns	3	2	3	3	1	3	**2.57**
Construction Cost Estimate	1	3	3	2	3	3	**2.57**
Protected Species	3	3	2	3	2	2	**2.43**
Geology/ Geotechnical	2	2	2	2	3	3	**2.43**
Vehicle Bridges	2	3	2	1	3	2	**2.14**
Wetlands	-	2	2	2	-	1	**1.6**

Summarizing the Priority Ranking responses, respondents gave, on average, a total of 13 points spread across the six constraint topics. The highest scored constraint (Subsistence Patterns) aligns closely with feedback received from other public participation opportunities, such as community meetings in Atqasuk, Utqiaġvik, and Wainwright.

Using the alternative quantitative impacts (Table 20) and the qualitative weighting responses from the Advisory Committee (Table 21), the weighted adjusted scoring for the road alternatives are shown in Table 22 below.

Table 22: Alternatives Weighted Scoring

		ALTERNATIVE WEIGHTED SCORE					
Constraint	**Weight Multiplier**	**1**	**2**	**3**	**4**	**5**	**6**
Subsistence Patterns	**2.57**	2.6	7.6	5.1	7.6	10.0	7.6
Construction Cost Estimate	**2.57**	3.1	2.6	4.2	7.2	9.2	6.5
Protected Species	**2.43**	4.0	2.4	4.0	7.3	8.9	4.0
Geology/ Geotechnical	**2.43**	6.6	2.4	5.6	6.6	8.3	5.4
Vehicle Bridges	**2.14**	3.4	2.5	3.9	6.7	7.4	6.3
Wetlands	**1.6**	2.6	1.6	3.5	5.2	5.3	5.2
Weighted Score (rounded):		**22**	**19**	**25**	**39**	**49**	**35**

With the Advisory Committee weighted scoring applied to the screening results, Alternative 1, 2, and 3 generally scored the lowest among the six alternatives. Alternatives 4, 5, and 6 scored substantially higher than other networks as they are the three longest alternatives and have greater environmental impacts than the other options; specifically, these three alternatives scored the highest in the Construction Cost Estimate constraint which also had a high weighting multiplier applied to it.

4.4.7 Alternatives Recommended to Advance

Evaluating the engineering and environmental-based impacts of the six road alternatives, Alternative 2 had the fewest impacts while Alternative 5 had the most. As indicated by the weighted adjusted scoring and calculated in Table 23 below, Alternatives 1, 2, 3 scored within one standard deviation of each other while Alternative 4, 5, and 6 scored over two standard deviations.

Table 23: Weighted Adjusted Scoring

	ALTERNATIVE						
Constraint	**1**	**2**	**3**	**4**	**5**	**6**	**Standard Deviation**
Weighted Score	22	19	25	39	49	35	**11.6**
Standard Deviations	1.3	1.0	1.6	2.8	3.6	2.4	

It is recommended that Alternatives 1, 2, and 3 be advanced to the NEPA review and Alternatives 4, 5, and 6 be removed from future consideration, unless otherwise reintroduced through public participation or further qualitative interests present themselves.

5.0 PLANNING CONTEXT

The planning context for the study is a combination of state and local plans as well as relevant planning studies that examine different aspects of land use and transportation issues in the study area.

5.1 Alaska Statewide Transportation Improvement Program (STIP)

The DOT&PF invests in the state's highway and marine systems through various capital improvement projects as identified through a public process and memorialized in the Statewide Transportation Improvement Program (STIP). Investments focus on transportation infrastructure to meet the needs of all users. The Triangle Community Road PEL study was listed in the 2024-2027 STIP Amendment 2 as follows (Table 24):

Table 24: Project details in STIP 2024-2029 Amendment 2

STIP ID: 33973	**Arctic Strategic Transportation and Resources (ASTAR) PEL Triangle Community Road Corridor**
Strategic Investment Area: Economic Vitality	The purpose of this Planning and Environmental Linkages (PEL) study is to evaluate the feasibility of an all-season gravel road and utility corridor between Utqiagvik, Atqasuk, and Wainwright. This project has been fully obligated and is included in the 20274-2027 Statewide Transportation Improvement Program (STIP) to facilitate project close-out and advance construction conversion.
Landscape: Rural	
Place Name: North Slope Borough	

5.2 Let's Keep Moving 2036: Statewide Long-Range Transportation Plan

The approved Statewide Long-Range Transportation Plan (LRTP), Let's Keep Moving 2036, was adopted in December 2016 and provides future directions for highways, aviation, transit, rail, marine, bicycle. and pedestrian transportation. The LRTP does not list projects for transportation improvements. The LRTP sets out goals under the following policy areas:

- **New Facilities:** Develop new capacity and connections that cost-effectively address transportation system performance.
- **Modernization:** Make the existing transportation system better and safer through transportation system improvements that support productivity, improve reliability, and reduce safety risks to improve performance of the system.
- **System Preservation:** Manage Alaska's transportation system to meet infrastructure conditions, performance targets and acceptable levels of service for all modes of transportation.
- **System Management and Operations:** Manage and operate the system to improve operational efficiency and safety.
- **Economic Development:** Promote and support economic development by ensuring safe, efficient, and reliable access to local, national, and international markets for Alaskans, goods, and resources, and for freight-related activity critical to the State's economy.
- **Safety and Security:** Improve transportation system safety and security.

- **Livability, Community, and the Environment:** Incorporate livability, community, and environmental considerations in planning, delivering, operating, and maintaining Alaska's transportation system.
- **Transportation System Performance:** Ensure a broad understanding of the level, source, and use of transportation funds available to DOT&PF; provide and communicate the linkages between the LRTP, area transportation plans, asset management, other plans, program development, and transportation system performance.

The Triangle Community Road would support DOT&PF to develop new capacity and connections between the Triangle communities in a cost-effective manner. It would also support productivity, improve reliability, and reduce safety risks associated with access to the communities. The road would promote and support economic development, and improve livability for the communities by improving connection. These elements are a core part of the PEL study's P&N.

5.3 Alaska Moves 2050 Statewide Freight Plan

The Alaska Moves 2050 Statewide Freight Plan (2022) (freight plan) focuses on the statewide network of ports, highways, airports, rail, ferries, and pipelines that keep goods moving statewide, nationwide, and around the world. It details programs and key projects to promote safe, efficient, economical freight movement, making the most of the opportunities expected over the planning horizon and responding to challenges. The freight plan's goals are:

- **Safety:** Increase safety for all modes during movement of freight
- **Mobility and Access:** Move goods safely, reliably, and cost-effectively across Alaska
- **Economic Vitality:** Facilitate economic growth and lower the cost of goods and services
- **State of Good Repair:** Keep existing facilities and infrastructure in good repair
- **Resiliency:** Have a freight network that can recover quickly from disruptions
- **Sustainability:** Promote a sustainable, clean, equitable freight system
- **Strategic Partners:** Collaborate with other levels of government, industry partners, and the public
- **Stewardship of the Transportation System:** Find the best, most affordable ways to improve the freight network
- **Performance-Based Management:** Have stable, flexible, and long-term funding sources
- **Transportation Innovation:** Leverage innovations that benefit safety, efficient freight movement, and work force needs

The Statewide Freight Plan did not identify specific projects to support or increase freight movement in the study area.

5.4 Northwest Alaska Transportation Plan (2022)

The Northwest Alaska Transportation Plan (NWATP) covers a large area of the state and evaluates transportation modes in the region, examines vulnerabilities, opportunities, and gaps and proposes region specific solutions. This plan was developed collectively between tribal leaders, residents, business owners, agency staff and others who provided invaluable feedback concerning transportation needs within the region. The NWATP refers to the importance and opportunities of roads within the NSB and neighboring communities.

The recommendation most relevant to this study is the "Continue Community Winter Access Trails Program" action. The NWATP states that the CWAT program provides "opportunities for NSB residents to move goods and materials to, from, and within the region. Winter snow roads were constructed to Anaktuvuk Pass, Utqiagvik, and Nuiqsut to provide overland connections to the Dalton Highway." Long-term study of the CWAT program's benefits on the region could inform and justify an all-season trail connection in the future, such as the roadway facilities examined in this study.[1]

5.5 North Slope Borough Comprehensive Plan (2019)

The NSB Comprehensive Plan, Transportation chapter, highlights the remote nature of NSB communities and limited year-round transportation options available. The connections between communities are shown primarily through trails and ice roads, focusing on subsistence and recreation uses. CWAT facilities provide a lower-cost alternative to air transportation of freight and other goods that suggest long-term establishment of all-season ground transportation is desired.

The plan identifies the Arctic Strategic Transportation and Resources (ASTAR) initiative and its implementation as a key focus of future transportation planning and development. The plan notes that ASTAR responds to the regional need for all-season, all-weather transportation infrastructure on Alaska's North Slope. The NSB Comprehensive Plan was completed shortly after the initial ASTAR work began and therefore little else is mentioned about ASTAR's purpose, goals, or strategies and how they relate to NSB's own planning activities.

5.6 Barrow Comprehensive Plan (2025)

The 2025-2045 Barrow (Utqiaġvik) Comprehensive Plan focuses on intra-community roads, trails, marine transportation, and air transportation methods used in the area, but also notes challenges faced by village residents when it comes to long distance travel. Marine and air travel are commonplace but are also heavily impacted by environmental conditions. Most of the economic development is driven by the movement of goods in and around Barrow.

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[1] Alaska DOT&PF. 2022. Northwest Area Transportation Plan: Key Findings. Retrieved December 2025 from https://dot.alaska.gov/nreg/nwatp/files/nwatp-executive-summary.pdf

The plan cites the ASTAR project to connect the communities of Atqasuk, Utqiaġvik, and Wainwright via a network of overland two-lane gravel roads for year-round use. The plan suggests a connecting road between the three communities

> …offers the potential for increased economic opportunities, increased social and cultural connections with family and friends, lower costs for delivering goods and services, enhanced opportunities to access and participate in subsistence activities, improved access to health resources, access to education opportunities outside of one's own community, and greater opportunities for training and workforce development.[2]

5.7 Wainwright Comprehensive Plan (2024)

The Wainwright Comprehensive Plan outlines the community goals for the village of Wainwright, with attention to the local desire for an all-season transportation solution to create better connectivity between north slope communities and the Dalton Highway. The plan's goals specifically related to this study include:[3]

- Protect subsistence rights and activities
- Seek expansion and upgrade of infrastructure where needed
- Protect facilities in the event of an emergency or natural disaster
- Collaboratively plan for effective emergency preparedness

The transportation section of the plan notes that long-distance surface transportation is available only by boat, snow machine, or all-terrain vehicle, complemented by air transportation. The plan identifies the following current and future transportation projects:[4]

- CWAT roads between Wainwright, Utqiagvik, and Atqasuk
- ASTAR project recommendations of two-lane, all-season roads between Wainwright, Utqiagvik, and Atqasuk
- Additional possible roadway facilities based on ASTAR findings

5.8 Atqasuk Comprehensive Plan (2017)

The Atqasuk Comprehensive Plan was approved in 2017 after community participation, development, and goal setting. One of the shared community goals is expansion of current and future transportation systems, including the continued development of land transportation systems beyond 17(b) easement trails. The major issues identified in the plan include distance from other villages, climate, desire for year-round surface transportation, and a road connection to Utqiaġvik and/or Wainwright. Future transportation systems would broaden and diversify the region's network while also creating economic opportunities, lowering utility and cost of living prices, and providing members of the area with a more connected multi-village community network that has historically been defined as very remote.

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[2] *North Slope Borough. 2025. Utqiaġvik Comprehensive Plan: 2025-2025. Retrieved March 2026 from: https://www.north-slope.org/wp-content/uploads/2025/12/Utqiagvik-Comprehensive-Plan-2025-2045.pdf*

[3] *North Slope Borough. 2024. Wainwright Comprehensive Plan: 2024-2044. Retrieved December 2025 from: https://www.north-slope.org/wp-content/uploads/2024/08/AIN-Plannning-Commission-Draft-for-Resolution-07172024-For-Website-Reduced.pdf*

[4] *Ibid.*

Community workshops found that lack of alternatives to air transportation as well as road access to Wainwright and Barrow and primary transportation concerns residents. Plan goals related to this study therefore include:

- Protect subsistence resources and activities and the natural environment
- Maintain, protect, and expand community facilities and infrastructure
- Facilitate economic development

The transportation element of the plan notes that "a road connecting Atqasuk with Utqiaġvik could have a significant impact on Atqasuk residents, especially for resident access to lower prices and availability of supplies, groceries, flights, etc. in Utqiaġvik." It states that consideration of a road facility between the two communities is beyond the scope of the plan but a concept to return to at a future date.[5]

5.9 NPR-A Integrated Activity Plan and Environmental Impact Statement (2022; 2025)

The Department of the Interior issued a new Record of Decision (ROD) for the National Petroleum Reserve in Alaska (NPR-A) Integrated Activity Plan (IAP) [6]. This ROD aligns management of the 23-million-acre NPR-A consistent with the IAP as adopted in the 2020 NPR-A IAP ROD and implements a resource-development management approach. The 2025 decision contains lease stipulations and required operating procedures that should be considered when developing the Triangle Community Road PEL study, including

- River setbacks as applicable and listed in the Environmental Setting Memorandum (refer to **Appendix D**)
- Protection of deep-water lakes
- Protection of waterbodies and riparian areas
- Protection of fish and wildlife habitat on Kogru River, Dease Inlet, Admiralty Bay, Elson Lagoon, Peard Bay, Wainwright Inlet/Kuk River, and Kasegaluk Lagoon, and their associated islands
- Coastal area setbacks
- Protection of Goose molting areas

Additional limitations and protections may apply based on specifics of roadway alternatives.

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[5] North Slope Borough. 2017. Atqasuk Comprehensive Plan: 2017-2037. Retrieved December 2025 from: https://www.north-slope.org/wp-content/uploads/2022/02/FINAL_Atqasuk_Plan_Adopted.pdf

[6] https://eplanning.blm.gov/Project-Home/?id=5ceae1f2-a7f2-f011-8407-001dd80db62a

5.10 Arctic Strategic Transportation and Resources (ASTAR) Studies and Reports

The ASTAR initiative produced several background studies and reports that inform this study. The studies and reports as well as their relevant findings are summarized in Table 25 below.

Table 25. ASTAR Studies and Reports

DOCUMENT	FINDINGS
ASTAR Economics/ Socioeconomics Digital Library (2018)	The first published study initiated under the ASTAR project that identified infrastructure assistance programs, data sources, and relevant methodologies to aid in planning and developing infrastructure projects. The report identified potential funding sources, initial steps for a cumulative benefits analysis tool, methods for coordinating with NSB infrastructure planning processes.
ASTAR Transportation Study (2019)	The ASTAR transportation study examined how freight and passengers are transported to and from remote communities of the NSB. The study summarized the economic value of the existing transportation network, identified issues with the current network, and offered potential solutions and recommendations for improvements. It identified the communities of Utqiaġvik, Atqasuk, Wainwright, Point Lay, Point Hope, Nuiqsut, Kaktovik, and Anaktuvuk Pass as having unique transportation requirements due to their isolation from a contiguous road network and lack of significant marine infrastructure, noting that air transport is the only method providing year-round service to these communities. The study evaluated three primary projects to consider: • A road network connecting Utqiaġvik, Atqasuk, and Wainwright • A regional port • A road connecting the Northern Region network to Nuiqsut A road network connecting Atqasuk, Utqiaġvik, and Wainwright would provide the greatest benefits to the largest number of residents in the NSB. An approximately 100-mile road connecting Wainwright to Utqiaġvik with an approximately 30-mile connection to Atqasuk would likely bring the most benefit to the most communities out of all projects considered. Benefit categories evaluated for an all-season road connecting Northern Region communities included: • Support for cultural connectivity • Lower the costs of goods and services • Preserve or enhance subsistence traditions • Improve health and safety conditions • Improve access to education opportunities • Enhance workforce development • Promote natural resource development
ASTAR Cumulative Benefits Analysis (2018; 2020)	The Assessment of Potential Tools for Cumulative Benefits Analysis identified, summarized, and assessed possible tools and feasible options for cumulative benefits analysis specific to the ASTAR project. The study involved: 1. Convening a workshop for project kick-off 2. Performing a literature review to identify potential sources of information on decision-making processes or software tools to support benefits analysis 3. Compiling potentially relevant publications and media into a digital library and developing annotated bibliographies for each entry

DOCUMENT	FINDINGS
	4. Preparing a report to describe the work activities performed, the literature and media identified, and initial recommendations for tools to support ASTAR's cumulative benefits analysis (CBA) 5. Providing a summary presentation on findings to DNR representatives. Based on this comprehensive review of potential CBA tools, an ASTAR CBA Framework Methodology was developed (RDI 2020). This methodology described the ASTAR project framework in terms of a repeatable process that would help ASTAR identify the most beneficial infrastructure projects.
Atqasuk to Utqiaġvik All Season Access Road Report (2019)	The Atqasuk to Utqiaġvik All Season Access Road analyzed the potential benefits of the proposed road, as well as important engineering, environmental, regulatory, and stakeholder inputs that affect routing. The report also identified data gaps necessary to support future phases of the project. The proposed road was envisioned as a two-lane gravel road connecting the existing road networks between Atqasuk and Utqiaġvik. Three corridors were identified as preliminary route alternatives for the road: • Corridor A – Coastal Route • Corridor B – Central Route • Corridor C – Eastern Route Corridor A – Coastal Route was selected as the most favorable route for the Atqasuk to Utqiaġvik Road.
Road Network for Utqiaġvik, Atqasuk, and Wainwright Report (2020)	This report analyzes an all-season gravel access road network connecting the northern Alaskan communities of Utqiaġvik, Atqasuk, and Wainwright. Based on available data and the outcome of the route evaluation and comparison, Corridor D – Coastal Route Extension was the most favorable alternative for connecting to Wainwright, followed by Corridors E – Middle Route and F-Southern Route, in descending order. As indicated by the name – Coastal Route Extension – Corridor D is an extension of Corridor A analyzed in *Atqasuk to Utqiaġvik All Season Access Road.* Together, Corridors A and D have a total length of 101.9 miles between Utqiaġvik and Wainwright, with the spur to Atqasuk being another 23 miles.
ASTAR Strategic Plan (2020)	The ASTAR Strategic Plan provides summaries and excerpts of many of the documents and deliverables created for ASTAR. The team held three rounds of community engagement on the content and findings of strategic plan, refining and updating its content after each round.
ASTAR Terrain Unit and Geohazards Mapping (2020)	This report and mapping efforts developed terrain units and identified, mapped, and described geohazards for the study area. In addition, the report provides high-level analyses on the terrain unit mapping methodology, detailed descriptions of each unit (geologic and construction data), full list of geologic and terrain unit acronyms, figures, and additional mapping resources.
ASTAR Hydrology and Surficial Geology Section Projects (Project ID 1557)	The ASTAR project is a partnership between the Alaska Department of Natural Resources (DNR), Alaska DOT&PF, and the North Slope Borough (NSB). The overall mission and purpose is to identify, evaluate, and advance opportunities to enhance the quality of life and economic opportunities in NSB communities through infrastructure development. DGGS' role is to evaluate sand and gravel resources along a corridor approximately between Nuiqsut, Atqasuk and Barrow, AK. Project will result in the production of a terrain unit map and a database with information about location of geologic observations as well as the quality and types of geologic materials.
Phase I Reconnaissance Investigation Nanushuk Formation Bedrock Outcrops Triangle Community Road network for Utqiagvik, Atqasuk, and Wainwright, National	This report presents the results of a reconnaissance phase investigation of Cretaceous Nanushuk Formation (Knf) bedrock outcrops in the vicinity of the proposed Triangle Community Road network connecting Utqiaġvik, Atqasuk, and Wainwright. The purpose of the project was to evaluate bedrock outcrops as potential sources of rock and crushed aggregate for road embankment construction. Bulk samples were collected from the outcrops for initial laboratory testing of rock quality.

DOCUMENT	FINDINGS
Petroleum Reserve – Alaska (2024)	Based on the initial testing results, Nanushuk rock offers a suitable material source for the proposed Triangle Road, as well as a potential material source for projects in the communities of Utqiaġvik, Atqasuk, and Wainwright

6.0 TRANSPORTATION CONTEXT

This section provides an overview of the transportation context with a focus on current surface transportation and the possible future transportation context. The communities in study area for the Triangle Community Road PEL study (Atqasuk, Utqiagvik, and Wainwright) are not connected to one another or to other Alaskan communities and urban centers by year-round surface transportation. Instead, most surface transportation is within each community supplemented by seasonal ice roads and winter trails between communities. Transportation is also provided by aviation and marine modes, which are central to the movement of freight and other goods.

6.1 Surface Transportation

Surface transportation in the project area is limited to roads and trails within the three Alaska Native Villages and ice roads and Community Winter Access Trails (CWAT) between Villages. There are no all-season roads within the study area. The following sections show the current roads, trails, and airports for the study area and individual communities.

Existing road conditions are limited to those within Atqasuk, Utqiagvik, and Wainwright as shown in Figure 18 below. In all three communities, the roads are unpaved and vary in condition and degree of maintenance. Transportation planning documents for the NSB, Native Village of Barrow, Atqasuk, and Wainwright all identify within-community road networks, with a few rural, major collectors but primarily local road classifications. All public roads are maintained by the NSB, with watering in summer months to control dust, plowing snow onto roads in spring to prevent dust and potholes, and plowing in winter months to maintain road access.[7]

The three communities in the study area are connected in winter months through the Community CWAT program. The CWAT is a federally funded program administered through DOT&PF in partnership with local communities. The CWAT is maintained by the NSB and connects the three communities as shown in Figure 18 below as well as connecting to the Dalton Highway.[8]

Lastly, Alaskan communities develop and maintain seasonal ice roads throughout the state. The Safe Ice Roads for Alaska Program provides guidance on pre-season, pre-construction, construction, operations, and end of season management of ice road lifecycle for rivers and lakes. In the study area, it is not clear whether ice roads are developed regularly or where they are located, as their exact location and routes vary annually. The NSB suggests that an ice road is developed from Utqiagvik south to Atqasuk and east to Nuiqsut.[9] Previous studies, such as the ASTAR project identify ice roads as possibly needed for temporary construction of any future connector roads.

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[7] North Slope Borough. 2019. North Slope Borough Comprehensive Plan. Retrieved November 2025 from: https://www.north-slope.org/wp-content/uploads/2022/02/NSB_Comprehensive_Plan_2019-2039.pdf

[8] DOT&PF. 2025. Community Winter Trails Program. Retrieved November 2025 from: https://dot.alaska.gov/nreg/wintertrails/

[9] North Slope Borough. 2019. North Slope Borough Comprehensive Plan. Retrieved November 2025 from: https://www.north-slope.org/wp-content/uploads/2022/02/NSB_Comprehensive_Plan_2019-2039.pdf

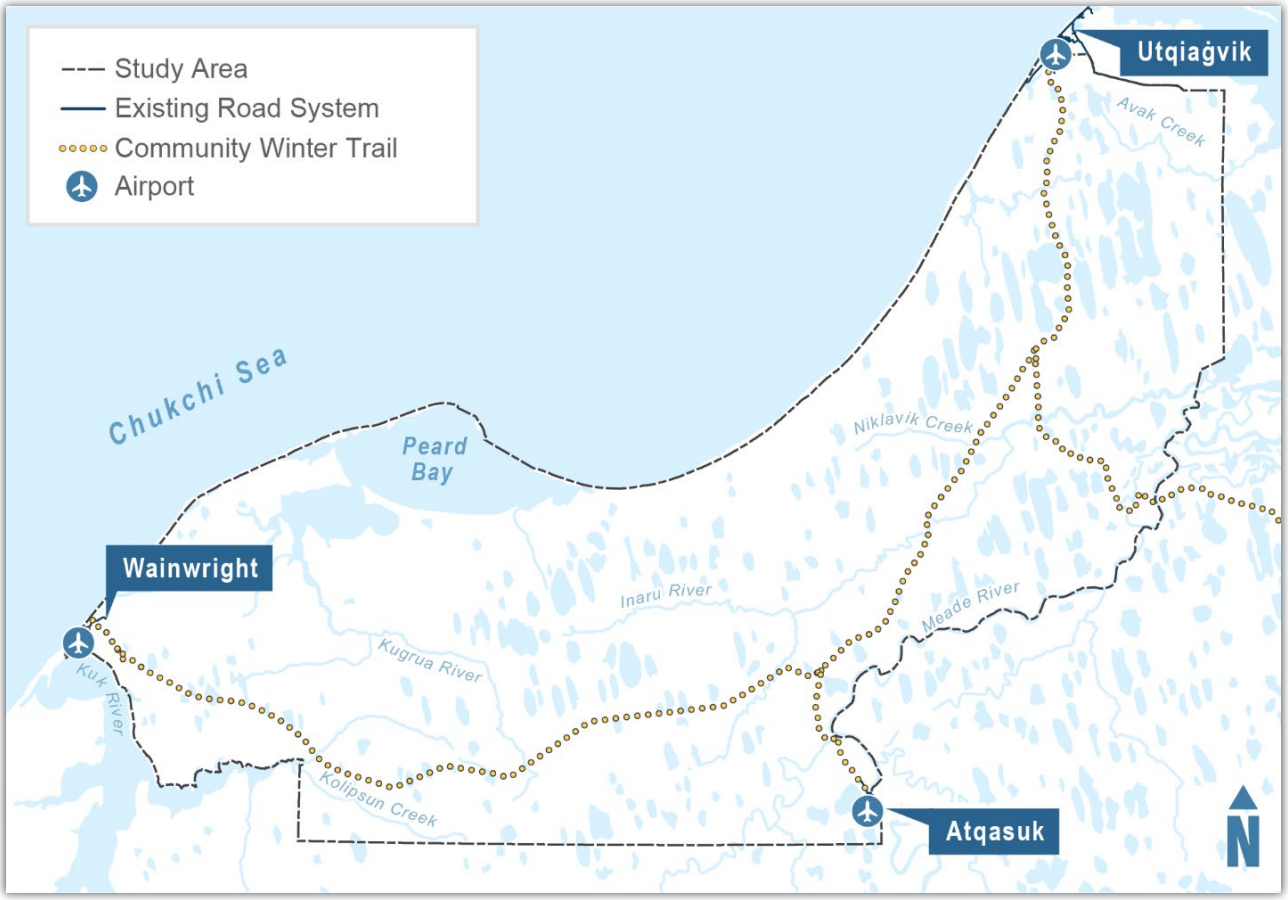

Figure 18: Transportation infrastructure in the study area.

6.1.1 Atqasuk

Atqasuk is a community of 276 residents[10] located inland from the Arctic Ocean on the Meade River about 60 miles southwest of Utqiagvik. Its transportation facilities include a network of unpaved roadways, the Atqasuk Edward Burnell Sr. Memorial Airport, and a CWAT route connecting to neighboring communities to the north. The NSB notes the winter route between Utqiaġvik and Atqasuk is used to transfer fuel, gravel material, and other materials to Atqasuk using rolligons (large, low-pressure tire vehicles).[11] Figure 19 below illustrates the road, CWAT, and airport network for Atqasuk.

Figure 19: Transportation infrastructure in Atqasuk.

[10] *U.S. Census Bureau. n.d. Decennial Census, DEC Redistricting Data (PL 94-171), Table P1. Retrieved March 27, 2026, from https://data.census.gov/table/DECENNIALPL2020.P1?q=Atqasuk+city,+Alaska.*

[11] *North Slope Borough. 2019. North Slope Borough Comprehensive Plan. Retrieved December 2025 from: https://www.north-slope.org/wp-content/uploads/2022/02/NSB_Comprehensive_Plan_2019-2039.pdf*

6.1.2 Utqiagvik

Utqiaġvik is the northernmost community in the United States with a population of 4,927,[12] located on the Chuckchi and Beaufort Sea coast. It is the largest village on the Arctic Slope with around 4,212 residents.[13] The transportation facilities in the community include a network of unpaved roads connecting the airport, the city center, Browerville, and north to Ilisagvik College, the Cathy Parker Field, and DOD activities in the area. The road network includes a few rural minor arterials connecting to the airport, two rural major collectors (Laura Madison Street and Stevenson Street), and otherwise all local roads.

Utqiaġvik is served by the Wiley Post-Will Rogers Memorial Airport with daily flights to Anchorage and Fairbanks as well as to other NSB communities of Atqasuk, Nuiqsut, Point Hope, Point Lay, and Wainwright. Utqiaġvik is connected to Atqasuk and other communities by a CWAT south of the airport. Figure 20 below illustrates the road, CWAT, and airport network for Utqiaġvik.

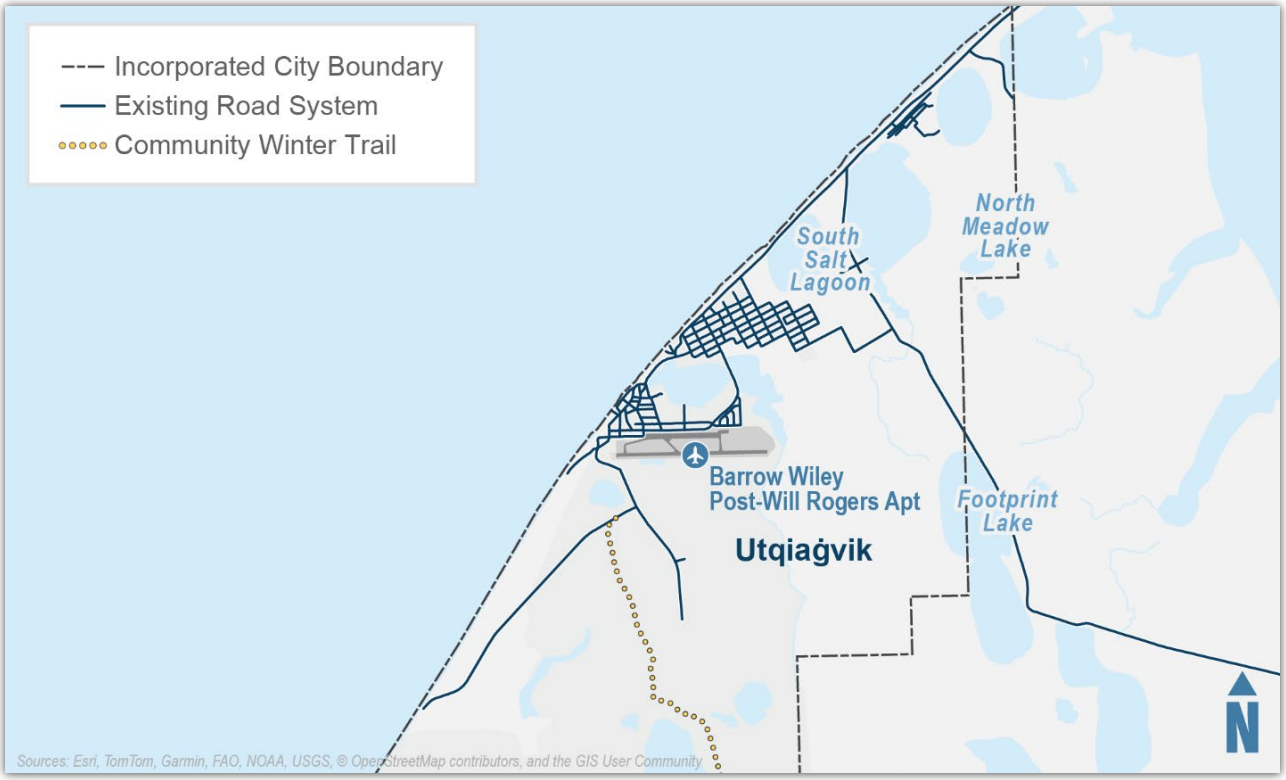

Figure 20: Transportation infrastructure in Utqiagvik

[12] *U.S. Census Bureau. n.d. Decennial Census, DEC Redistricting Data (PL 94-171), Table P1. Retrieved March 27, 2026, from https://data.census.gov/table/DECENNIALPL2020.P1?q=Utqia%C4%A1vik.*

[13] *Arctic Slope Native Association. 2025. Utqiaġvik: The northernmost community in the United States. Retrieved December 2025 from: https://arcticslope.org/about/communities/utqiagvik/*

6.1.3 Wainwright

Wainwright is a community of approximately 628 residents[14] located on a coastal bluff between the Wainwright Inlet and Chukchi Sea. The transportation facilities in Wainwright consist of a network of unpaved roads within the community and connecting to the airport to the east. The community is served by Wainwright Airport with service to Atqasuk and Utqiaġvik. Wainwright is connected to Atqasuk through a CWAT northwest of town. Figure 21 below illustrates the road, CWAT, and airport network for Wainwright.

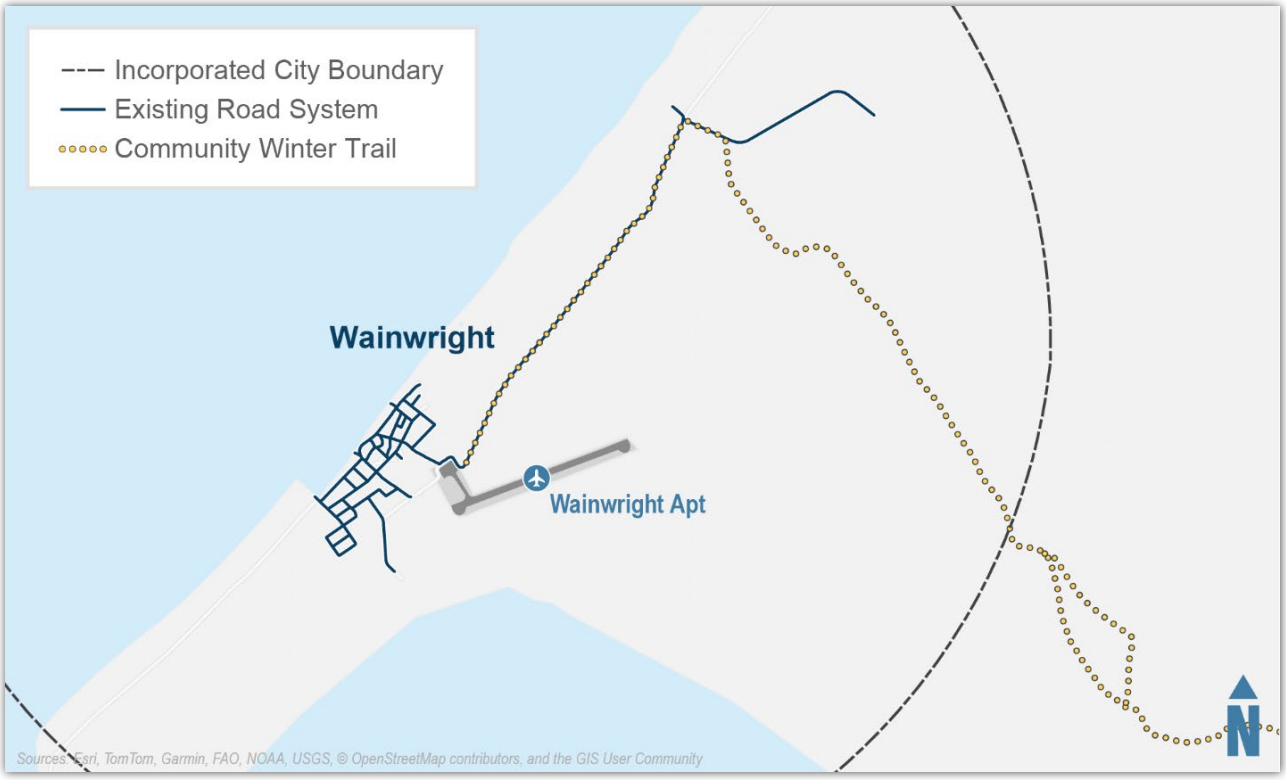

Figure 21: Transportation infrastructure in Wainwright

[14] *U.S. Census Bureau. n.d. Decennial Census, DEC Redistricting Data (PL 94-171), Table P1. Retrieved March 27, 2026, from https://data.census.gov/table/DECENNIALPL2020.P1?q=Wainwright+city,+Alaska.*

6.2 Future Transportation Context

Future development of transportation infrastructure is based on anticipated needs and local interests. The communities of Atqasuk, Utqiagvik, and Wainwright shared in previous planning studies and in the engagement activities for this study that future transportation infrastructure should focus on local use, prevent transportation of drugs and alcohol, and mitigate hunting and wildlife impacts. The hunting concern was a risk of greater roadway access increasing unauthorized hunting on local and native lands while the wildlife concern is maintaining migration routes for existing caribou herds.

Additionally, the PEL study Advisory Committee members emphasized a focus on the connections to and from Atqasuk and the Chukchi and Beaufort Seas. Atqasuk is the only community of the three without barge access, limiting import and export of essential materials and freight.

Regional influences outside of the three communities will also influence future transportation conditions. The National Petroleum Reserve Alaska (NPR-A) encompasses 23-million acres of land on the North Slope and surrounding all three communities. The only land route connecting the North Slope to southern Alaska is the Dalton Highway, which serves the Prudhoe Bay oil and gas development. Access roads from the Dalton Highway extend west towards Nuiqsut and to the boundary of the NPR-A area. Any future transportation infrastructure in the study area may be influenced (and used) by oil and gas extraction activities, as the current oil and gas leases show in Figure 22 below.

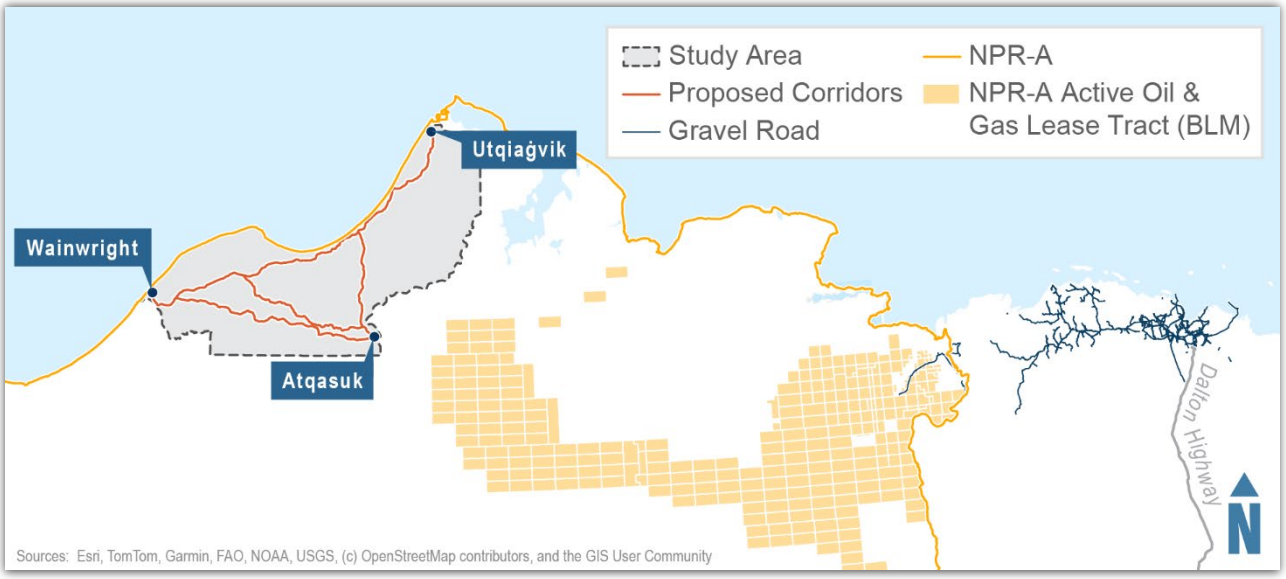

Figure 22: Oil and Gas Leases

The Presidential Executive Order "Unleashing Alaska's Extraordinary Resource Potential" (Executive Order 14153)[15] provides further guidance on potential future oil and gas activities in the study area. The Order removed restrictions on oil and gas exploration in the NPR-A established between 2020 and 2024, prioritizes the development of Liquified Natural Gas (LNG) extraction and export, and ends considerations for an Alaska Native indigenous sacred site in the Coastal Plain of the Arctic National Wildlife Refuge. The Order suggests further oil and gas exploration activities in the NPR-A can be expected, possibly within and adjacent to the study area, which transportation infrastructure could be used for.

Alaska statewide policy provides another influence on the future transportation system. The Roads to Resources Initiative (R2R)[16] works with state agencies, resource developers, and local and tribal entities to design and build projects that support development of natural resources in oil and gas, alternative energy, mining, timber, fisheries, and agriculture industries. While this program has yet to design or construct a R2R roadway in or near the study area, its Foothills West Transportation Access project proposes a new road spur from the Dalton Highway to Umiat south of the NPR-A boundary.[17] It is possible that the R2R program could inform future resource-oriented transportation infrastructure development in and near the study area similar to the Foothills West Transportation Access.

A further external influence is the risk of weather-related hazards. The NSB notes that a decline in sea ice allows for more and higher energy waves from more frequent storms to erode the coastline at a higher rate than in previous generations.[18] Increased erosion puts any current or proposed infrastructure along coastlines at risk of damage. Similarly, increased thawing of permafrost in and around the study area produces land subsidence and instability, which damages infrastructure, and increases sediment loads into area rivers, which furthers erosions issues.

The future transportation context for the study area is therefore informed by both the interests of those living in and travelling between their communities as well as the wider influence of government, private industry, and natural environment factors.

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[15] 90 FR 8347. https://www.federalregister.gov/d/2025-01955

[16] Alaska DOT&PF. 2025. Roads to Resources. Retrieved November 2025 from: https://dot.alaska.gov/roadstoresources/

[17] DOT&PF. 2025. Roads to Resources: Highlights. Retrieved November 2025 from: https://dot.alaska.gov/roadstoresources/highlights.shtml#northern

[18] North Slope Borough. 2019. North Slope Borough Comprehensive Plan. Retrieved November 2025 from: https://www.north-slope.org/wp-content/uploads/2022/02/NSB_Comprehensive_Plan_2019-2039.pdf

7.0 KEY COMMUNITY CONSIDERATIONS

The engagement activities outlined in Section 2.0 of this report identified four primary considerations from community and stakeholder groups:

- **Subsistence preservation through access and use of a proposed road:** Alaska Native communities have subsistence rights within federal lands under the Alaska National Interests Lands Conservation Act (ANILCA). Community members at multiple engagement events shared concerns over a new public roadway potentially increasing sport hunting in areas of traditional subsistence use and related cabins. Improvements can also provide better access for subsistence uses and private in-holdings by Alaska Natives. Community members recommended collaborating closely with Elders to navigate local access paths, trails, and lands. Lastly, if any road is privately funded, community members are interested in how access may be limited or controlled mitigate negative impacts.
- **Natural and cultural resource impacts:** Community members are concerned about how increasing flooding on NSB communities may impact a future roadway; how the roadway would cross area streams, rivers, and wetlands; whether it would impact caribou migration; and how to avoid cultural and archeological sites.
- **Public safety:** A new roadway could improve emergency access and evacuation between communities as well as improve search and rescue operations. Community members are concerned that it may also allow for drug and alcohol transportation between communities as well as strain law enforcement capacity.
- **Supporting infrastructure, including the opportunity for additional infrastructure and connections:** While not a part of the study alternatives, community members see future connections to Dalton Highway and the rest of Alaska as possibilities, exacerbating all other issues identified in this section. A future roadway could also allow for transit operations between the three communities as well as natural gas and electricity systems under or alongside the future Right of Way. Lastly, community members see a roadway providing backup capacity to existing transportation modes between the three communities such as the CWAT and airport operations.

8.0 RECOMMENDATIONS

The PEL process evaluated and refined roadway options between six alternatives, based on screening criteria outlined in earlier sections and Advisory Committee weighted scoring. The process resulted in three alternatives being recommended to advance to a future design and environmental review process as shown in the table below.

Table 26. Recommendations for Advancement to NEPA Review.

ALTERNATIVE	RECOMMENDATION
1	Advance to NEPA review
2	Advance to NEPA review
3	Advance to NEPA review
4	Remove from further consideration
5	Remove from further consideration
6	Remove from further consideration

The recommended alternatives reflect the key community concerns outlines in the previous section. Alternatives 1-3 scored the most favorably in all screening areas but especially in terms of protection of subsistence patterns, species protection, and wetland impacts. The results reflect community interests in protecting subsistence access and preservation of the natural environment. Additionally, alternatives 1-3 require the fewest bridges, culverts, and equalization pipes and fewest road miles subject to frost heave and thaw. These benefits reduce the development and maintenance costs of each alternative while also further reducing impacts to streams, wetlands, and other natural features.

9.0 NEXT STEPS

9.1 Conditions for Incorporation of Planning Analysis or Products into NEPA

23 USC 168 allows a lead federal agency or cooperating agency with responsibility under federal law to adopt or incorporate by reference planning analyses or planning products developed during a planning study into a subsequent environmental review process (NEPA or other environmental permit, approval, review, or study required for a project under any federal law other than NEPA). The law specifies that it applies to the following planning decisions or products relevant to this particular PEL study:

- Purpose and need
- Preliminary screening of alternatives and elimination of unreasonable alternatives
- Basic description of the environmental setting
- Decision with regard to the methodologies for analysis

Planning analyses that may be incorporated include regional development and growth analyses, local land use growth management and development, population and employment, potential effects, and mitigation needs.

Ten conditions must be met for the relevant agency to adopt or incorporate planning products and analyses into an environmental review process (including NEPA, review, or approval) (Table 27):

Table 27: Relevant Agency Conditions

CONDITIONS TO BE MET	EVIDENCE
1. The planning product was developed through a planning process conducted pursuant to applicable federal law.	The planning product was developed in accordance with the PEL process in accordance with 23 USC 168 and 23 USC 139(f)(4)(E).
2. The planning product was developed in consultation with appropriate federal and state resource agencies and Indian tribes.	An Advisory Committee comprising representatives of federal and state resource agencies and tribes was involved in and consulted with throughout the PEL process.
3. The planning process included broad multidisciplinary consideration of systems-level or corridor-wide transportation needs and potential effects, including effects on the human and natural environment.	The PEL process was conducted using a system-wide approach with focus on a study area and influences beyond to enable a comprehensive consideration of the human and natural environment.
4. During the planning process, public notice was provided that the planning products produced may be adopted during a subsequent environmental review process.	Public notice was provided during all engagement activities throughout the PEL process that products may be adopted during a subsequent review process.
5. After initiation of an environmental review process, prior to determining whether to use planning products, the lead agency must have made documentation and the intent to adopt this documentation available for review by the general public, agencies, and tribal governments, and considered any comments.	This evidence would occur at the time an environmental review process is initiated.
6. There is no significant new information or new circumstances that have a reasonable likelihood of affecting the continued validity or appropriateness of the planning product.	This evidence would occur at the time an environmental review process is initiated.
7. The planning product has a rational basis and is based on reliable and reasonably current data and reasonable and scientifically acceptable methodologies.	The PEL process was conducted based on best professional judgement on a rational basis and relied on reasonably current data and reasonable and scientifically acceptable methodologies.
8. The planning product is documented in sufficient detail to support the decision or results of the analysis and to meet requirements for use in the environmental review process.	This PEL study report and associated memoranda, included as appendices, serve as documentation of the planning process.
9. The planning product is appropriate for adoption or incorporation by reference and use in the environmental review process.	This PEL study was conducted in alignment with the PEL Guidebook and sought SEO Concurrence points to assist with assuring its appropriateness for incorporation by reference in an environmental review process.
10. The study was approved no later than five years prior to the date on which information is adopted in the NEPA review.	This evidence would occur at the time an environmental review process is initiated.

9.2 NEPA Preliminary Class of Action

The environmental review process for every federally funded transportation project begins with determination of the class of action (COA), or level of NEPA documentation required for the project. The COA is based upon the scale of the project, the level of public controversy, and the anticipated level of effects on social and environmental resources. Projects which are minor or routine, such as road resurfacing, and not anticipated to have significant effects may be addressed through a Categorical Exclusion provided there are no unusual circumstances including:

- Significant environmental impacts
- Substantial controversy on environmental grounds
- Significant impact on properties protected by Section 4(f) of the USDOT Act or Section 106 of the NHPA
- Inconsistencies with any Federal, State, or local law, requirement or administrative determination relating to the environmental aspects of the action.

Projects that have unknown impacts may or are likely to have significant effects, like new highway corridors, require a more detailed Environmental Assessment (EA) or Environmental Impact Statement (EIS) to document and publicly disclose the environmental effects. FHWA describes the following projects as those normally requiring an EIS level of review:

1. A new controlled access freeway.
2. A highway project of four or more lanes on a new location.
3. Construction or extension of a fixed transit facility (e.g., rapid rail, light rail, commuter rail, bus rapid transit) that would not be located primarily within an existing transportation right-of-way.
4. New construction or extension of a separate roadway for buses or high occupancy vehicles not located within an existing transportation right-of-way.
5. New construction or extension of a separate roadway for buses not located primarily within an existing transportation right-of-way.
6. New construction of major railroad lines or facilities (e.g., terminal passenger stations, freight transfer yards, or railroad equipment maintenance facilities) that would not be located within an existing transportation right-of-way.

As of November 2017, DOT&PF has assumed NEPA responsibilities for environmental review, consultation, or other actions required under any Federal environmental law with respect to one or more Federal Highway projects within Alaska.

This PEL study can be used as a basis for the DOT&PF SEO to confirm the class of action for a future NEPA review. The basis for evaluation of whether the proposed road network may, or is likely, to have significant effects[19] would be determined by the context and intensity of effects disclosed. The proposed road network alternatives fit the description of projects normally requiring an EIS, based on the evaluation of effects under this PEL study, the likely COA would be an EA or an EIS. However, further design refinement and impact investigations may change the COA during the NEPA process.

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[19] Under NEPA, "significant" refers to the potential for a federal action to have substantial impacts on the environment, considering both the context (location, affected interests, and timeframes) and intensity (severity of impacts).

9.3 Funding Strategy

A range of potential funding sources exist to fund future design and construction on whole or through phases development. The availability and applicability of funding sources depend on apportionments available, funding programs available, and whether the project meets the criteria of the specific program being considered. State and federal funding sources are also subject to change between administrations and transportation funding authorizations, which makes predicting reliable sources difficult. The study team has put together as comprehensive of a list of funding opportunities assuming reauthorization of a federal transportation funding bill like the Infrastructure Investment and Jobs Act. The table below outlines state, federal, and private funding sources that could be applied to any future design and construction opportunities.

Table 28: Summary of funding programs for study implementation.

FUNDING PROGRAM	SOURCE	AWARD VALUE	MATCH REQUIRED
FEDERAL			
Accelerated Innovation Deployment Demonstration	FHWA	Up to $1,000,000	80/20
Better Utilizing Investments to Leverage Development Grant Program	FHWA	Up to $25,000,000	80/20
Denali Commission	Denali Commission	Varies	Up to 100% federally funded
Innovative Readiness Training	Department of Defense	Varies	Varies
Rural and Tribal Assistance Pilot Program-Multi-Community	USDOT	$500,000-$2,250,000	None
Rural and Tribal Assistance Pilot Program-Single Project	USDOT	$200,000-$500,000	None
Rural Surface Transportation Grant Program	FHWA	Varies (Approximately $25,000,000)	80/20
Federal Lands Access Program	FHWA	Varies ($7,000,000 awarded annually)	None
STATE			
Alaska Community Development Block Grants	State of Alaska	Up to $850,000	None
Designated Legislative Grants	State of Alaska	Varies	None
NPR-A Impact Mitigation Grant Program	State of Alaska	Varies (Approximately $2,000,000	None

FUNDING PROGRAM	SOURCE	AWARD VALUE	MATCH REQUIRED
PRIVATE AND NONPROFIT			
AARP Flagship Grant(s)	AARP	$2,500-$25,000	None
Alaska Mental Health Trust	Alaska Mental Health Trust	Up to $50,000	None
Arctic Slope Community Foundation	Arctic Slope Foundation	Varies	None
Rasmuson Community Support Grants	Rasmuson Foundation	$35,000-$250,000	None
Rasmuson Legacy Grants	Rasmuson Foundation	At least $250,000	None
Seventh Generation Fund	Seventh Generation Fund	$500-$50,000	None
State Farm Company Grants Program	State Farm Company	Varies	None

The funding opportunities above are in addition to the allocated funding programs administered by DOT&PF as part of the development of the STIP. It is likely that any design and construction of a proposed roadway would need to be funded from more than one source. Implementation should therefore consider which aspects of design and construction (as well as the sub-tasks) could be funded and delivered through specific funding opportunities based on availability and eligibility.

9.4 Implementation

The next steps in implementation of the proposed study improvements are listed below:

1. Confirm with North Slope communities and stakeholders that a project should advance
2. Coordinate with DOT&PF SEO on COA
3. Secure funding for design and NEPA environmental process
4. Complete design and NEPA review/permitting
5. Complete field surveys
6. Acquire ROW if needed
7. Complete final design
8. Construct improvements

The DOT&PF's SEO has developed a PEL Questionnaire to support the SEO's review of the PEL study. This questionnaire has been used as guide throughout the planning process. The DOT&PF PEL Questionnaire is attached to this report as **Appendix A**.

APPENDIX A:
DOT&PF PEL QUESTIONNAIRE

APPENDIX B:
SEO CONCURRENCE POINT DOCUMENTATION

APPENDIX C:
PUBLIC AND AGENCY INVOLVEMENT SUMMARY

APPENDIX D:
ENVIRONMENTAL SETTING

APPENDIX E:
SCREENING CRITERIA METHODS MEMORANDUM

APPENDIX F:
SCREENING RESULTS MEMORANDUM

APPENDIX G:
ECONOMIC AND CULTURAL IMPLICATIONS STUDY