

02/09/2018

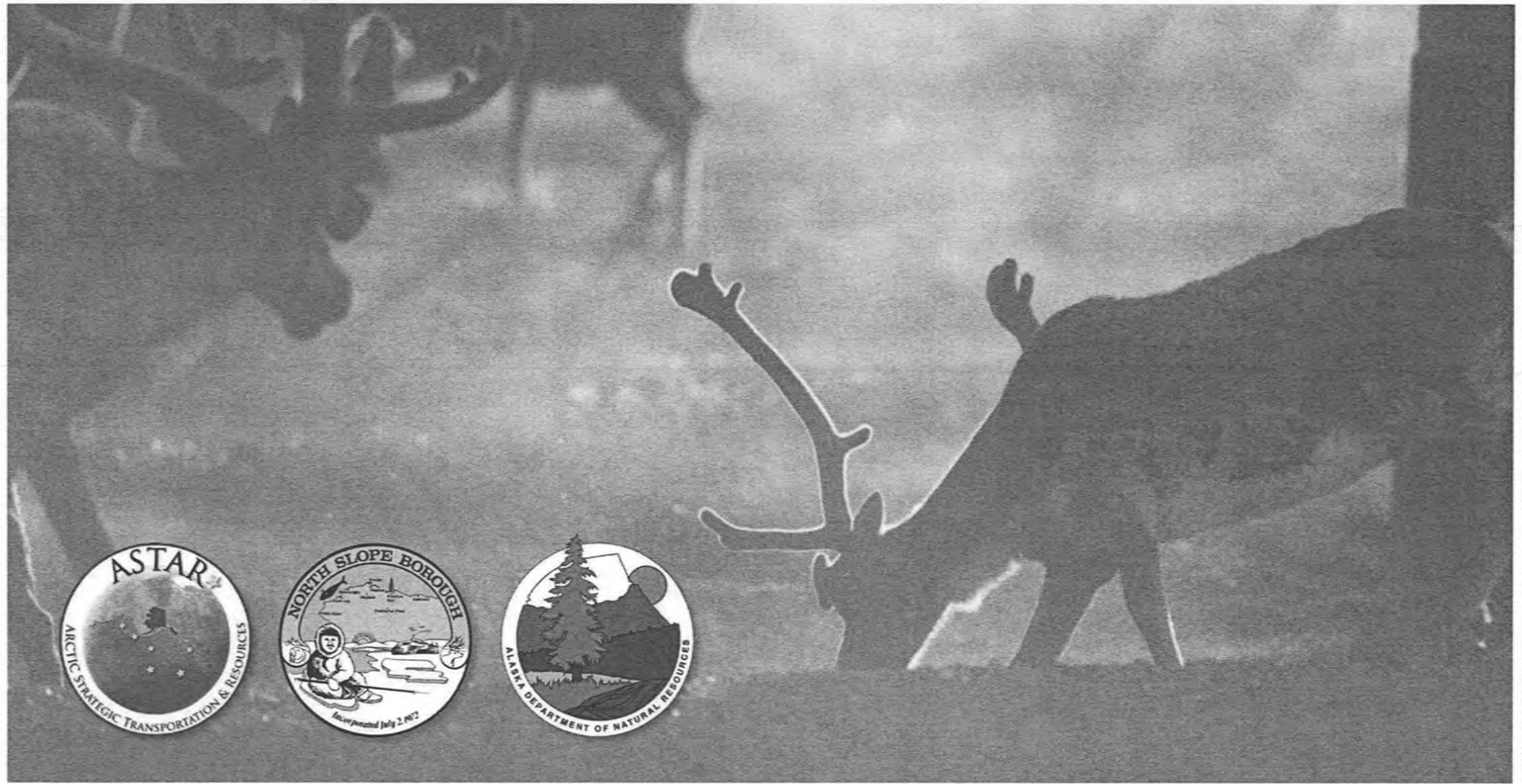
**Overview: Arctic
Strategic
Transportation
and Resources
(ASTAR)**

<TARGET><BILL></BILL><SUBJECT>02-09-2018 Overview Arctic
Strategic Transportation and Resources
(ASTAR)</SUBJECT><COMM>SRES30</COMM></TARGET>

ASTAR Project Update

Senate Resources Committee

Presentation by Heidi Hansen, Deputy Commissioner
Alaska Department of Natural Resources
February 9, 2018



ASTAR PROJECT

- OVERVIEW -

In partnership with the North Slope Borough and in collaboration with area communities and other key stakeholders, **Arctic Strategic Transportation and Resources project (ASTAR)** seeks to identify, evaluate, and advance community infrastructure and regional connectivity projects that offer the greatest benefits to the region.



ASTAR PROJECT

- PARTICIPATING STATE AGENCIES -

- Department of Natural Resources
 - Office of Project Management and Permitting
 - Division of Mining, Land and Water
 - Support Services Division
 - Division of State Parks and Outdoor Recreation
 - Division of Geological and Geophysical Surveys
 - Division of Oil and Gas
- Department of Health and Social Services
- Department of Commerce, Community, and Economic Development
- Department of Transportation and Public Facilities



ASTAR PROJECT

- DESIRED OUTCOMES -

- Increased cultural connectivity
- Reduction in cost of living in area communities
- Decreased rehabilitation costs for NPR-A legacy wells
- More efficient development of natural resources
- Increased economic activity providing job opportunities for the region

Unlike previous infrastructure projects in the region, ASTAR's review will encompass **the entire North Slope region**, including the NPR-A, ANWR and other federal lands and waters.



ASTAR PROJECT

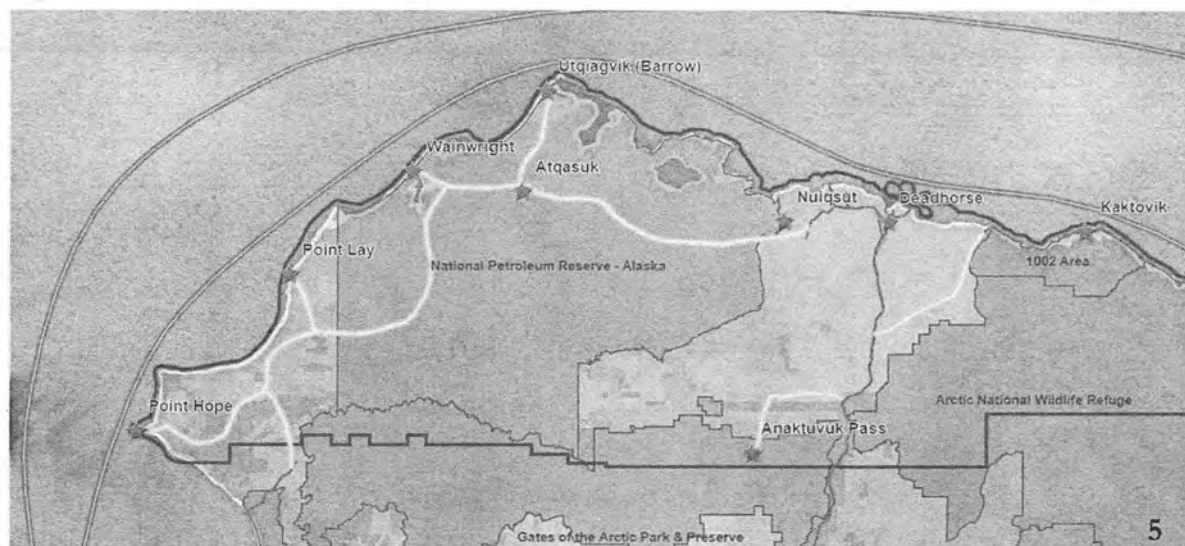
- CUMULATIVE BENEFITS -

ASTAR seeks to advance projects providing the greatest cumulative benefits to North Slope people and communities.

- By identifying tangible cumulative benefits for specific infrastructure projects, ASTAR will inform state and local discussions with federal agencies regarding their land management activities in the region.

Projects advanced by ASTAR will be assessed for:

- Funding sources
- Project sponsors
- Obstacles and challenges
- Permitting and data gaps



ASTAR PROJECT

- PROOF OF CONCEPT -

- The ASTAR team is coordinating with the North Slope Borough on a pilot project for community snow roads connecting North Slope communities to the state road system.
- The Borough has submitted applications for state and federal permits for the proposed Community Winter Access Trails project connecting Utqiagvik, Atqasuk, Wainwright, Nuiqsut and Anaktuvuk Pass to the state road system using improved snow trails.
- This “**proof of concept**” project for ASTAR will provide:
 - Valuable data collection opportunities
 - Regulatory experience for future projects
 - A foundation for assessing the value and impact of delivering goods and services via a corridor and road network in the region
- State and federal permitting processes are currently underway.

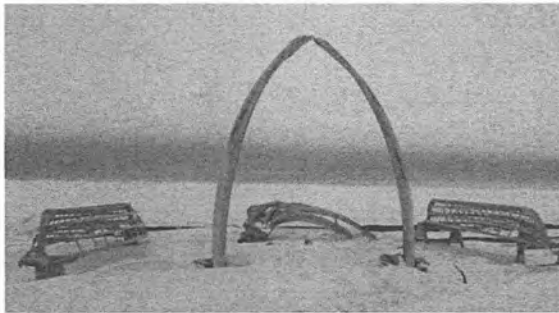
ASTAR PROJECT

- 2018 WORK HIGHLIGHTS -

Contracts:

ASTAR is using Alaska-based contractors hired to provide:

- Project management support
 - Data analyses, management and GIS analyses and integration
 - Stakeholder outreach and coordination
 - Economics and socioeconomic
-
- After competitive bidding and the required protest period, ASRC Energy Services Alaska, Inc. and Resource Data, Inc. were selected. Contract negotiations are underway.



ASTAR PROJECT

- 2018 WORK HIGHLIGHTS -

Construction Materials Survey:

One of the crucial pieces of planning for infrastructure is understanding materials sources in the region.

- Information on construction materials is scarce, and in general, construction materials are difficult to locate west of the Colville River.
- The survey will be a state-led program including regional and local partnerships with entities having complementary data or interests. DNR's Division of Geological and Geophysical Surveys will lead this effort.
- Work will include office data compilation, limited field investigations in 2018 and 2019, and subsequent publication of all maps and reports.



ASTAR PROJECT

- BUDGET -

Fiscal Year	FY2018	FY2019	FY2020
DNR Personal Services	948,306	875,540	789,000
DNR Travel	199,140	26,000	15,000
RSAs - Multiple Departments	110,500	110,500	110,500
Contractual Services	1,273,750	1,950,000	834,000
Other Services	10,000	7,500	7,500
Computers and Supplies	14,000	14,000	14,000
Fiscal Year Totals:	\$2,555,696	\$2,980,540	\$1,764,000
FY2017 – FY2020 Multi-Year Operating:	\$7,300,236		



THE STATE
of ALASKA
GOVERNOR BILL WALKER

Department of Natural Resources

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February 21st, 2018

Chair Giessel:

During the Senate Resources Committee hearing on February 9, 2018, committee members asked for more information about a variety of topics. This letter is intended to answer those requests.

1. How many miles of road do you envision in the ASTAR project?

Proposed and potential ASTAR project road miles, types (ice, snow or gravel) and locations remain to be determined. Following community and stakeholder engagement we will have a better sense of what may be contemplated. ASTAR is an incremental process and we are still in the early phases of community and stakeholder engagement to prepare for subsequent analysis.

The North Slope Borough Community Winter Access Trails (CWAT) project is looking at developing improved snow trails (no ice roads) from:

- Drill Site 2P on the existing infrastructure network to Utqiagvik - 235 miles
- Utqiagvik to Atkasuk - 68 miles
- Dalton Highway Corridor to Anuktuvuk Pass - 102 miles

2. What is the cost of ice vs. snow road (per mile)?

There are several variables that make estimating the cost per mile for improved snow trails and ice roads challenging. Uncertainty associated with cost include, but are not limited to location, ground surface and terrain, access to water, weather, substrate, road use, vehicle use and length of road as well as length of use. Some areas may be prohibitive for one type of route versus another. For these reasons, improved snow trail construction cost estimates are highly variable. One subjective cost estimate is \$5,000 per mile.

Regarding ice roads specifically, media reports indicate that ice roads built in 2017 west of the Colville River and near the community of Nuiqsut cost about \$400,000 per mile.¹

3. Is there a plan in place to finance these developments? How are we going to pay for them?

Finding and assessing potential sources of funding for infrastructure is part of this project. While ASTAR money will not build the projects, proposed projects that achieve a pre-advanced stage through cumulative benefits analyses will be assessed for funding that may be most appropriate for project implementation. The ASTAR effort includes looking at local, state and Federal sources as well as potential private investment options and opportunities.

¹ *Waiting for winter: ice roads mean the North Slope can get to work*, by Elizabeth Harball, Alaska's Energy Desk, Anchorage. February 17, 2017. Accessed on 2/14/2018.
<https://www.alaskapublic.org/2017/02/17/ice-roads-mean-the-north-slope-can-get-to-work/>

4. Is ASTAR part of the Department of Transportation (DOT) Northwest Alaska Transportation Plan?

ASTAR is separate from the Northwest Alaska Transportation Plan currently under update by DOT&PF. The purpose of ASTAR is to identify, evaluate, and advance opportunities to enhance the quality of life and economic opportunities in North Slope communities through responsible infrastructure development enabling resource development opportunities. DNR, with the North Slope Borough, is working with other agencies in the region, including DOT&PF, to enhance overall project outcomes, and avoid duplicative efforts. ASTAR leadership meets regularly with DOT&PF to ensure coordination.

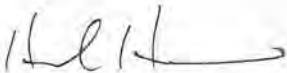
5. What is the estimated cost of gravel roads?

As with improved snow trails and ice roads, estimating costs for constructing gravel roads in the North Slope is challenging. There are several variables that can affect construction costs and little comparable data for similar projects. Cost estimates often use different assumptions and levels of cost estimating for engineering, design, operations, etc.

One cost estimate for gravel roads in the North Slope region is from a DOT Resource Transportation Analysis where estimates of \$1-2 M per a mile were used.² More recent anecdotal estimates (Ambler Road) and costs (Mustang Road) for the other regional road projects in the vicinity also indicate ~\$2M per mile for gravel road construction.

Please feel free to contact me at 269-8431 if you have any further questions.

Respectfully,



Heidi Hansen
Deputy Commissioner
Department of Natural Resources

² Resource Transportation Analysis, Phase II-Dalton Highway to Nuiqsut and NPR-A Access, 2003, Table 2-4 Estimated corridor costs, p 2-36.