



THE STATE
of **ALASKA**
GOVERNOR BILL WALKER

Department of Natural Resources

COMMISSIONER'S OFFICE

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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 Atqasuk - 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.