

## Paper #7-8

# ROADS TO RESOURCES PROGRAM – STATE OF ALASKA

Prepared for the  
Technology & Operations Subgroup

On March 27, 2015, the National Petroleum Council (NPC) in approving its report, *Arctic Potential: Realizing the Promise of U.S. Arctic Oil and Gas Resources*, also approved the making available of certain materials used in the study process, including detailed, specific subject matter papers prepared or used by the study's Technology & Operations Subgroup. These Topic Papers were working documents that were part of the analyses that led to development of the summary results presented in the report's Executive Summary and Chapters.

**These Topic Papers represent the views and conclusions of the authors. The National Petroleum Council has not endorsed or approved the statements and conclusions contained in these documents, but approved the publication of these materials as part of the study process.**

The NPC believes that these papers will be of interest to the readers of the report and will help them better understand the results. These materials are being made available in the interest of transparency.

The attached paper is one of 46 such working documents used in the study analyses. Appendix D of the final NPC report provides a complete list of the 46 Topic Papers. The full papers can be viewed and downloaded from the report section of the NPC website ([www.npc.org](http://www.npc.org)).

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# Topic Paper

(Prepared for the National Petroleum Council Study on Research to Facilitate Prudent Arctic Development)

**7-8**

## **Roads to Resources Program – State of Alaska**

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### **SUMMARY**

Alaska’s Roads to Resources (R2R) program is a successful initiative to drive road improvements to resource centers. As OCS energy exploration and development operations prove successful, R2R can be leveraged to provide a tertiary “ground transportation” element to existing transportation modes to support commercial development while improving the overall quality of life for the communities. Significant consideration must be applied to understand impacts to migratory wildlife and ultimately, subsistence lifestyles.

### **PURPOSE**

To provide information on the State of Alaska’s program on Roads to Resources.

### **BACKGROUND**

The Roads to Resource Program Initiative (R2R) works with state agencies, resource developers, and other interested parties, including local governments, and Native corporations, to design and build projects that support development of natural resources in the oil and gas, alternative energy, mining, timber, fisheries, and agriculture industries. In addition to traditionally-funded public projects, R2R anticipates and analyzes prospects for Public-Private Partnerships (P3) to fund projects that will generate enough revenue to pay off planning and construction costs.

Key program efforts include:

- Identify resource development projects that require construction of transportation access. R2R considers not only road access, but also marine, rail, and aviation related transportation improvements.
- Work in support of the Department of Natural Resources and resource industries in assessing, designing, and permitting transportation improvements necessary for economic viability in developing a resource.
- Select projects based on a broad range of technical and social criteria including state and regional economic benefit through creation of local jobs, improved transportation access

and reduced cost of living for rural Alaskan communities, and evaluation of impacts to cultural, subsistence, and environmental resources.

- Develop project recommendations that are then presented to the administration and legislature for financial support.
- Work with resource developers, the Alaska Industrial Development and Export Authority (AIDEA), Native corporations, contractors, and other interested financial entities to facilitate preparation of agreements to develop transportation projects for resource access. Startup investment by the State in a Road to Resource project can be reimbursed by the beneficiaries as part of industry user or toll fees.
- Provide reconnaissance level technical and financial support for access options analysis, initial baseline field studies, conceptual options design and cost analysis, and agency and public meetings to identify development-related issues and solutions, with the intent to reach consensus on a preferred alternative.
- Facilitate National Environmental Policy Act (NEPA) permitting process as either an applicant or a technical assistance provider to the applicant.

## DISCUSSION

The State of Alaska's Road to Resources program has achieved its intended purpose and is positioned for future opportunities as Alaska's rich natural resources continue to be explored, developed and harvested in a manner that best serves all stakeholders. Specific highlights include:

Statewide:

- **Industrial Highway User Fee Study** – The department is reviewing options and practices for documenting road and bridge wear and damage associated with over-weight truck combinations that are expected to be seeking permission to carry large loads of mineral concentrate and other resource products to market. The study will also examine options for setting and collecting fees for overweight trucks.
- **Alaska State Rail Plan** – This plan will examine rail extension options that could benefit, or even make possible, resource development opportunities. There is a special webpage for the rail plan on the DOT&PF homepage. Visit the Rail Plan website.<sup>1</sup>
- **Trans-Border Transportation Task Force** – The Task Force brings together Alaska transportation officials and Yukon provincial transportation staff twice annually to discuss topics of mutual interest. Topics include mine related traffic on highways that cross the border; the challenges associated with building on permafrost; funding issues associated with MAP-21; and administrative concerns such as training and procurement.

Northern Region:

- **Foothills West Transportation Access** - This project will provide access to known gas and oil reserves on the north side of the Brooks Range, about 100 miles west of the Dalton Highway. A Notice of Intent to initiate an EIS was issued on May 20, 2011.

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<sup>1</sup> <http://dot.alaska.gov/railplan/index.shtml>

Since, numerous baseline investigations were conducted to evaluate three alternative routes. Linc Energy, Inc., an oil and gas development company that is making a substantial investment into oil exploration at Umiat, has begun their own baseline and preliminary environmental work that overlaps project fieldwork that the State of Alaska's Department of Transportation & Public Facilities (DOT&PF) has been conducting over the past few years. While not definitive, it appears Linc Energy is preparing plans to develop Umiat oil, along with a pipeline and a potential road that may access the Dalton Highway similar to the alternatives being studied for the Foothills EIS. DOT&PF is currently re-evaluating plans for future EIS work to ensure that the Linc Energy and DOT&PF EIS work does not conflict, and efforts are not duplicated.

It is important to note that DOT&PF (State) and Linc Energy (Industry) are not the only stakeholders interested in this effort. The Arctic Slope Regional Corporation (ASRC), a large regional Native corporation, is also very interested in this opportunity. Keen on ensuring that Traditional Knowledge is leveraged to consider potential influences that this effort could impose on migration patterns of caribou, ASRC is a powerful ally to assist with planning. Moreover, there is the long-term potential of Chukchi Sea development and pipeline routes that should also be coordinated with local stakeholders before a specific route is determined. Going local first with a development idea always works best. That means the North Slope Borough, the villages of Nuiqsut and Anaktuvuk Pass, and ASRC should be consulted first before going forward with a State or industry-preferred alternative for North Slope Roads to Resources.

- **Ambler Mining District Access** – This project is to provide an all-season transportation access road to promote exploration, development, and production of known mineral resources in the Ambler mineral belt. Reconnaissance level engineering evaluations are completed and baseline field studies are largely complete. Many meetings have been held in the communities along the likely routes to discuss the effect of improved transportation access and measures to mitigate impacts on cultural and subsistence values. This will be an example of private funding where AIDEA will raise the money from the bond market to build the road. For that reason, project management was shifted to AIDEA during the first half of 2013.
- **Road to Tanana** – This project is to provide improved road access to known mineral developments in the Manley region mineral belt to support mining opportunity expansion and resource exploration, plus provide an all-season road to the Yukon River near the community of Tanana. The road will improve access to Tanana by connecting to the Elliot Highway near Fairbanks. The project will support regional and community sustainability by reducing the cost of living and providing greater opportunities for employment and commerce to the Tanana to Manley region. In 2013, the project was refined into a Corps of Engineers permit application and a Corps permit has now been issued. Construction began in late 2013.
- **Dalton Highway Traffic Forecast** – This is an effort to look into the future to see what to expect for the Dalton Highway in light of anticipated new activity on the North Slope from shale petroleum and other exploration and production activity. In addition,

substantial new traffic is expected as a result of new mine development in the Ambler Mining District and construction and operation of a North Slope LNG plant that is expected to begin shipment of LNG by truck in late 2015.

#### Central Region:

- **West Susitna Surface Access Reconnaissance Study** – This is a study to determine what resource developments on the west side of the Susitna River might benefit from surface access – most likely an industrial haul road – and where to route the access, including potential river crossing sites. An initial report is expected in early FY14. Early indications point to resource opportunities that would benefit from surface access, so a follow-up study is anticipated that will refine the economic parameters and lead to a go/no-go decision. For more information, visit the West Susitna site.
- **Mat-Su Borough, Little Susitna River Access** – A \$400,000 project to extend a road to the east bank of the Little Susitna River that will enable winter roads on the west side for timber extraction

#### Southeast Region:

- **Kake – Petersburg Road** – Wholly funded in the FY13 state budget, this project will upgrade 23 miles of existing logging and build 22 miles of new road to provide surface access between the two cities. Western Federal Lands Division, a sub-agency of the FHWA, will prepare the environmental documents and provide project leadership.
- **LiDAR for SE Region Corridors** – This was a \$5,000,000 capital budget item for aerial topographic mapping of transportation corridors in Southeast Alaska. The project began in early FY13 with the selection of corridors and some initial flying. The route from the current highway terminus in Sitka to Katlian Bay was flown in the fall of 2012 and substantial flying is planned for the summers of subsequent years.
- **Bostwick Rd. to Vallendar Bay** – Funded at \$5,000,000, this project has been re-routed and the work will be done by DNR's Forestry Division, Ketchikan office.
- **Mill Access Road Upgrade** – this \$2,500,000 project will upgrade three miles of single lane road on Gravina Island between Lewis Reef road and the site previously occupied by the Seley Sawmill. Bridge evaluation and preliminary work is underway.
- **Ketchikan to Shelter Cove Road** – This project, funded from two voter-approved GO Bonds, will be ready for construction soon. There will be a preliminary re-surfacing of an existing road segment and a reconnaissance report has been published. ROW transactions are underway along with environmental work and permitting.
- **Sitka, Road Extension to Katlian Bay** – This project was funded at \$14,000,000 in the 2012 GO Bond. A reconnaissance site visit occurred in the fall of 2012 and LiDAR was flown at that time as well.

## RECOMMENDATIONS

The totality of the areas that this program has supported is significant. The costs to tie all of these remote locations to major transportation hubs are also significant. In that regard, Federal consideration to future funding initiatives to support this proven program would enhance and

expedite improvements while having the two fold benefit of providing employment opportunities for Alaskans while supporting the delivery of materials and subsequently, the delivery of resources to the Nation.

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