

Appendix C: Economic Impact Modeling

To complement this CEDS update, the project team is preparing economic impact models for proposed priority projects. The analysis uses the IMPLAN™ input-output tool.¹ Based on estimated direct spending for each project, the model assesses the project's likely impacts on the region, including indirect and induced impacts on jobs, income, and business sales/output. The model uses estimated project spending on labor, materials, and services by economic sector, based on published information and subject matter experts. The results help policymakers, investors, and funders understand the estimated economic impact of proposed projects.

Three projects were analyzed in fall 2021:

1. An economic impact analysis of implementing **phase 2 of the Interior Gas Utility's natural gas buildout**. Phase 2 serves the North Pole area.
2. An economic impact analysis of constructing a water main line extension **connecting Pearl Creek Elementary School to the College Utilities Corporation's water distribution system** and adding a dedicated reservoir at the site.
3. An economic impact analysis of **demolishing the Polaris Building**.

The economic impact analysis summaries are available on the FNSB CEDS website: <https://fnsbceds.com/>.

Following finalization and adoption of the 2022-2026 CEDS, the project team will prepare economic impact modeling for a subset of additional priority projects in the CEDS. The following are some criteria that the project team and FNSB Economic Development Commission will use for selecting projects:

- Does the project represent a one-time capital investment?
- Is there sufficient information about the project to input into the model, such as project costs?
- Does the project have high regional impact, demand, and support?
- Does the project create new jobs and/or grow regional wealth?
- Will the project address a time sensitive need?
- Does the project have likely funding and partners for implementation, including public and private sector?
- Is the project innovative and spark regional innovation?
- Does the project take advantage of existing strengths/opportunities?

Potential projects for consideration include a cold storage and food processing facility, natural gas liquefaction expansion, KC-135 basing at Eielson Air Force Base, and a new North Pole health clinic.

¹ About IMPLAN: Input-Output (I-O) analysis is an economic tool used to measure the effects of an economic activity on a region and is typically used to evaluate the benefits of a project or policy. The analysis is based on a model of the inter-industry transactions within a community, a region, or a state. The I-O model is a matrix that tracks the flow of money among the industries within a specified economic region. The model can measure how many times a dollar is re-spent in, or "ripples through", the economic region before it leaks out.

The I-O model yields multipliers that are used to calculate the indirect and induced effects on jobs, income, and business sales/output generated per dollar of spending on various types of goods and services in the study area. To evaluate the economic effects to the state or a particular region, only the "local" (i.e., within the state or within the region) expenditures are used in the model; the rest are considered leakages. More leakages mean smaller multipliers, and the larger the local expenditures, the greater the multiplier effects. The multipliers for any given industry in any given location are unique, based on industry composition and geographic area.