

## Environmental Studies Program: Studies Development Plan | FY 2026–2027

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| Field                      | Study Information  |
| Title                      | Addressing Oil and Gas Economic Impact Modeling Needs (NT-26-02)   |
| Administered by            | Office of Environmental Programs   |
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| Procurement Type(s)        | Contract   |
| Conducting Organization(s) | TBD  |
| Total BOEM Cost            | TBD  |
| Performance Period         | FY 2026–2028   |
| Final Report Due           | TBD  |
| Date Revised               | April 2025   |
| Problem                    | BOEM often needs to estimate the economic impacts (e.g., jobs supported) of oil and gas activities in the Gulf of America, the Cook Inlet, and other National Program areas.   |
| Intervention               | BOEM has developed two models (the Cumulative Impacts Model and the Lifecycle Impacts Model) to estimate the economic impacts of all oil and gas activities or a particular subset of leases. This study would update these tools with more recent data and improved methodologies and expand their use to other National Program areas. |
| Comparison                 | The study would use economic modeling to estimate the economic impacts (jobs, labor income, value added, and output) for certain oil and gas activity scenarios.   |
| Outcome                    | The study will update to the existing CIM/LCIM for the Gulf of America and develop a new employment / fiscal effects estimator tool for Cook Inlet and other National Program areas as needed. This would result in more accurate economic impact estimates to inform decision-making.   |
| Context                    | All planning areas   |

**BOEM Information Need(s):** BOEM needs up-to-date information regarding the economic impacts of oil and gas activities in the Gulf of America (GOA), Cook Inlet, and potentially other National Program areas. This information is required for regional environmental impact statements, National Program analyses, and analyses of the economic consequences of policy options.

**Background:** BOEM, through research contracts, developed a modeling framework to estimate the economic impacts of offshore oil and gas activities in the GOA. The current economic impact models, the Cumulative Impacts Model (CIM) and the Lifecycle Impacts Model (LCIM), were developed by Price et al. (2020). The CIM estimates the economic impacts of all offshore oil and gas activities in a past or future year. The LCIM estimates the economic impacts associated with an individual lease, a lease sale, or a National Program of lease sales. The CIM and LCIM produce estimates of direct, indirect, and induced economic activity (measured in terms of employment, labor income, output, and value added) associated with a scenario of offshore oil and gas activities. These models incorporate “multipliers” from

IMPLAN, a common input-output modeling framework and data source. These multipliers estimate how initial changes in economic activity circulate through the economy.

Objective(s): To update the data and methodologies within BOEM's economic impact models for GOA oil and gas activities and to develop new models for the Cook Inlet and other National Program areas as needed.

Methods: The contractor will incorporate the following into the CIM and LCIM:

- Update IMPLAN Multipliers: The CIM and LCIM currently use multipliers that represent how the economy functioned in 2019. However, the economy continually evolves, and it is recommended that IMPLAN multipliers be updated every few years to reflect these changes. For example, some industries have become less labor-intensive over time as technology and productivity improve. The COVID-19 pandemic likely accelerated some changes to certain industries that would be captured with updated IMPLAN data. New IMPLAN data typically become available about one year after the end of a particular calendar year, and the contractor would incorporate the most recent IMPLAN data available at the time of contract award.
- Update Cost Data: The costs of oil and/or gas activities (e.g., drilling a well, installing a platform) are key determinants of the CIM-LCIM results. The contractor will review these costs to determine whether some of these costs warrant updates. For example, the contractor will examine whether improvements can be made to the methodologies for estimating the costs of deepwater platform construction and installation because these costs can be quite large, can substantially vary among projects, and are often spread over multiple years. The contractor will also explore whether the CIM-LCIM's methods for computing operations and maintenance (O&M) costs can be improved. For example, the contractor will explore whether incorporating a per-BOE (barrel of oil equivalent) measure of O&M costs would be appropriate. Finally, the Energy Information Administration will finalize a major update to its National Energy Modeling System (NEMS) in 2025 (EIA 2024). The CIM and LCIM incorporate elements of NEMS when estimating costs and the contractor will explore whether any of the revisions to NEMS warrant inclusion in the CIM and LCIM.

The contractor will produce a study report that describes all updates made to the CIM and LCIM.

Specific Research Question(s):

- What are the economic impacts of oil and gas activities in the GOA, the Cook Inlet, and potentially other National Program areas?
- How can methodological improvements and updated data be incorporated into the CIM and LCIM to maximize the accuracy of economic impact estimates for offshore oil and gas activities?

References:

[EIA] Energy Information Administration. 2024. Annual energy outlook 2025 modeling updates presentation. Washington (DC): Energy Information Administration.  
[https://www.eia.gov/outlooks/aeo/workinggroup/modeling/AEO2025\\_Modeling\\_Update\\_Presentation.pdf](https://www.eia.gov/outlooks/aeo/workinggroup/modeling/AEO2025_Modeling_Update_Presentation.pdf).

Price JC, Ewen MD, Isom J, Ebersole J, Lehr J. 2020. Cumulative impacts model and lifecycle impacts model for assessing economic and fiscal impacts of offshore oil and gas activities. New Orleans

(LA): U.S. Department of the Interior, Bureau of Ocean Energy Management. Report No.: BOEM 2020-032.