

TESTIMONY SUBMITTED TO THE

## Alaska Senate Resources Committee

Senate Bill 280 — CSSB 280(RES) Version L

### Dynamic Modeling of SB 280 Version L:

Short-Term Revenue Gains Risk Long-Run Losses for Alaska's Petroleum Revenues

Barbara Haney, PhD Economist • May 16, 2026 • *Submitted for Public Record*

## Executive Summary

Version L was advanced by the Senate Resources Committee on or about May 14, 2026. It adds a \$0.30-per-barrel Infrastructure Maintenance Surcharge and raises the minimum production tax floor from roughly 4% to 6% of gross value. That is a 50% increase in the floor. It also modifies the AVT structure for the proposed Alaska LNG project. Those are two very different policy objectives bundled into one bill, and neither has been dynamically modeled.

I built a dynamic revenue model using only public DOR data — nothing proprietary, nothing from industry. Here is what it shows:

- **Static (no behavioral response): Near-term gains of roughly \$150–\$250 million per year. That number is real. It is also the best-case scenario, and it requires oil companies to do nothing in response to a tax increase.**
- Dynamic (plausible investment response): Under a 10% production decline — consistent with what Alaska actually experienced under ACES — the state loses \$2.5–\$5.0 billion cumulative, or \$1.2–\$2.8 billion in net present value, over 2027–2055.
- Break-even: A cumulative production drop of just 7–9% wipes out every dollar of static gain. Below that threshold the state wins. Above it, the state loses. Alaska has crossed that threshold before.

### The Gap AOGA Already Identified

AOGA stated in its May 14, 2026 response that Version L has not been adequately modeled. They are correct. DOR's fiscal notes are static by design — they assume producers do nothing. That assumption is not defensible for a tax increase of this magnitude. This testimony provides the dynamic analysis that is missing from the legislative record.

The session ends May 20. There is still time to require proper analysis before a final vote. There is no good reason for the committee to decline that step.

## Background and Legislative Context

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SB 280 started as a simple, sensible bill. Governor Dunleavy asked the Legislature to replace property taxes on gasline infrastructure with a predictable AVT. The goal was to improve project economics for Alaska LNG. That is a legitimate objective.

Version L is a different bill. It adds oil-tax provisions that apply to existing and future North Slope production. That was not the original purpose of SB 280. Those provisions were attached to a gasline vehicle, and neither component has been modeled against the other.

DOR's fiscal notes are static. They assume production and investment stay flat regardless of what the tax does. DOR is not wrong to produce static notes — that is their standard methodology. But static analysis is not sufficient when the central question is whether higher taxes will cause producers to pull back. On the North Slope, they compete for capital against Guyana, the Permian, offshore Namibia, and Brazil. A tax increase does not happen in a vacuum.

## Model Methodology and Assumptions

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### Baseline Parameters

Everything in this model comes from public DOR data. I used nothing from industry and nothing proprietary. Anyone can replicate it. The model code and spreadsheets are attached as an addendum.

- Baseline production: DOR Spring 2026 Revenue Forecast — 459,200 barrels per day (bpd) in FY 2026; 518,500 bpd in FY 2027; ramping toward >650,000 bpd by FY 2034 as Willow and Pikka reach peak output; followed by a conservative 2.5–3.0% per annum natural-decline rate thereafter.
- Baseline state take: Approximately \$11–\$14 per barrel in unrestricted general fund (UGF) petroleum revenue — comprising royalties, production taxes, and other levies — at DOR's reference ANS West Coast price path of approximately \$75/bbl.
- Tax shock (Version L): Combined marginal burden increase of \$0.90–\$1.50 per barrel from the \$0.30 Infrastructure Maintenance Surcharge and the higher minimum production tax floor, consistent with legislative estimates of \$100–\$200+ million in annual static revenue at current production volumes.
- Investment-response lag: 5 years, reflecting already-sanctioned projects (Willow, Pikka) that are past the investment decision point and will proceed substantially as planned. Behavioral response accrues from incremental and follow-on projects, field reinvestment decisions, and exploration activity.
- Time horizon: 2027–2055 (30 years); 5% real discount rate for NPV — standard in public resource-revenue analysis.
- Scope: UGF petroleum revenues only. The model isolates the oil-tax provisions and does not attempt to model LNG project viability.

## Behavioral (Investment) Response Assumptions

Higher taxes raise the bar for capital investment on the North Slope. I use long-run supply elasticities of 0.3–0.6, which come from peer-reviewed econometric literature on how drilling and production respond to net-price and tax changes. That range is conservative. It is also consistent with what Alaska observed after the ACES tax increase — production declined relative to what it would have been. We have already run this experiment once.

### Why a 5-Year Lag?

Already-sanctioned mega-projects (Willow, Pikka) have committed capital and will not respond materially to this tax change. The behavioral impact falls on: (1) discretionary reinvestment in existing fields; (2) exploration and appraisal drilling; and (3) development of discovered but unsanctioned resources. These decisions have shorter cycles (1–3 years for field spending; 3–7 years for development). A 5-year composite lag is therefore conservative — it gives the static-gain period maximum credit before losses accumulate.

## Model Results

No-bill baseline cumulative UGF petroleum revenue: approximately \$115–\$125 billion undiscounted over 2027–2055. That is what the state collects if nothing changes. Here is what Version L does to that number:

Production Response (Cumulative Decline Post-2032)	Cumulative UGF Change 2027–2055 (\$B, undiscounted)	NPV @ 5% Discount (\$B)	Interpretation
0% — Static (no behavioral response)	+3.5 to +5.5	+2.0 to +3.2	Short-term gain; requires zero investment chilling
5% — Mild response	+0.5 to +2.0	+0.3 to +1.1	Fragile net positive; within uncertainty bands
<b>7–9% — Break-even threshold ★</b>	<b>~0</b>	<b>~0</b>	<b>Surcharge/floor revenue offset by forgone royalties</b>
<b>10% — Moderate (most plausible)</b>	<b>-2.5 to -5.0</b>	<b>-1.2 to -2.8</b>	<b>Net long-run loss; consistent with Alaska's post-ACES experience</b>
<b>15% — Strong (tax-hike precedent)</b>	<b>-7.0 to -11.0</b>	<b>-3.5 to -6.0</b>	<b>Material fiscal damage; compound investment withdrawal</b>

Table 1. Dynamic Revenue Scenarios, CSSB 280(RES) Version L Oil-Tax Provisions | 2027–2055

**The 7–9% Threshold Is Not a Stress Test. It Is a Historical Fact.**

Alaska’s production declined an estimated 8–15% relative to counterfactual projections after the ACES tax increase, depending on the methodology used. A 10% behavioral response is not a worst-case scenario. It is what actually happened. The committee should require evidence that Version L will not produce the same result — not assume it won’t.

## Sensitivity Analysis and Robustness

The direction of this finding does not change across reasonable parameter ranges. Table 2 shows why.

Parameter Variation	Effect on NPV Outcome	Policy Implication
Higher supply elasticity (0.6+)	Losses widen by 40–60% in moderate scenario	Caution warranted
Lower discount rate (3%)	NPV losses increase ~25%	Harms future generations more
Lower ANS price path (\$60/bbl)	Static gains shrink; break-even at ~5% decline	Price risk amplifies tax risk
LNG project delay/cancellation	AVT revenue disappears; oil-side losses unchanged	Compound downside scenario
Longer investment lag (8 yr)	Near-term gains persist longer; long-run losses unchanged	Does not rescue long-run case

Table 2. Sensitivity and Robustness Summary

Two things are worth stating plainly. First, the static scenario — the one where the state wins — requires producers to respond with exactly zero change in investment behavior. That has never happened after a tax increase on the North Slope. Second, lost production compounds. One barrel not produced this year is also not producing royalties or taxes in every subsequent year. That is how a modest investment chill becomes a multi-billion dollar revenue hole over thirty years.

## Policy Implications

### North Slope Investment Climate

North Slope projects have high fixed costs and long payback periods. Operators allocate capital across jurisdictions every year. Guyana, the Permian, offshore Namibia and Brazil are all competing for the same investment dollars. A mid-session tax change with no dynamic analysis attached does not just affect the math on a single project. It affects whether Alaska is seen as a predictable place to do business. That perception, once damaged, is slow to repair.

## Operator Investment Warnings Are Already on Record

This is not theoretical. Hilcorp's SVP Luke Saugier put it in writing to Railbelt utility executives in May 2024 when a similar S-corporation tax was moving through the Legislature:

*“Due to this new tax’s vague and uncertain language, as well as the provision not being sufficiently modeled, we are unsure what the impact will be on our ability to meet your gas supply needs as we will need to re-examine the investment we had planned for Cook Inlet. Unfortunately, it will also negatively impact our ongoing negotiations related to gas storage options, jack-up rig availability, new gas supply contracts, and could harm our ability to meet existing interruptible contracts.”*

— Luke Saugier, Senior Vice President, Hilcorp Alaska | Written communication to Railbelt utility executives, May 2024

At the time of that warning, Hilcorp had over \$1 billion in Cook Inlet investments planned over the next five years. Saugier was writing to the people responsible for keeping Southcentral Alaska heated. He was telling them directly that a tax bill the Legislature had not bothered to model might force Hilcorp to pull back on the investment required to keep the gas flowing.

That is not an industry talking point. That is a named executive, in writing, conditioning a billion dollars of energy infrastructure on a legislative outcome. If the Legislature will not do dynamic modeling when a producer says that out loud, when will it?

## Alaska LNG

The gasline has its own problems under Version L. DOR's static analysis shows the state gets a larger share if the project is built. That may be true. But Version L was never designed as a gasline bill. The oil-tax provisions were attached to a gasline vehicle. No one has modeled how the two interact, or what the combined uncertainty signal does to Glenfarne's investment calculus.

## The Structural Problem

Alaska depends on petroleum revenues for both the general fund and the Permanent Fund. That dependence creates a standing temptation to grab more from existing production today, even when doing so shrinks the production base that pays for everything tomorrow. We did this with ACES. We watched production fall. Then we passed SB 21 to fix it. Version L risks repeating that cycle — and this time we have less margin for error.

## Recommendations

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1. Direct DOR or an independent consultant to produce dynamic scoring before any final vote. It should include elasticity-based production response ranges, multiple ANS price paths (\$55, \$75, \$95/bbl), LNG viability scenarios, and an uncertainty range around the NPV estimate. This is not an unusual ask. It is standard practice for consequential fiscal legislation.
2. Do not pass Version L's oil-tax provisions without dynamic analysis showing a positive or break-even NPV under a realistic central-case behavioral response. If the analysis cannot demonstrate that, the provisions should not pass.
3. Separate the AVT gasoline provisions from the oil-tax provisions. They are different policies with different purposes. Bundling them risks defeating both if the bill fails or if the oil-tax provisions produce the investment withdrawal this model projects.
4. Delay final action until the analysis exists. The session ends May 20. That is not enough time to do this properly. Alaska has already paid billions to learn what happens when the Legislature raises North Slope taxes without understanding the consequences. We should not need to learn that lesson a third time.

## Conclusion

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This model uses only public DOR data. Every assumption is documented and replicable. The full code and spreadsheets are attached. Anyone who wants to challenge the numbers is welcome to run them.

What the model shows is straightforward. Version L's oil-tax provisions produce modest near-term gains that disappear once producers respond with a production decline of 7–9% or more. Alaska crossed that threshold under ACES. Under the moderate central-case scenario, the state loses between \$2.5 and \$5.0 billion cumulative, or \$1.2 to \$2.8 billion in net present value, over the 30-year horizon.

I am not arguing these provisions are necessarily wrong. I am arguing that no one in this building currently knows whether they are right, because the dynamic analysis does not exist. That gap needs to be filled before the vote — not after.

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*Model code, spreadsheets, and additional scenario outputs are provided in the attached Addendum (Technical Supplement to Testimony).*

## References

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The following public sources underlie this analysis. All are available in the public record.

- Alaska Department of Revenue. Spring 2026 Revenue Forecast. Division of Revenue, Tax Division, March 2026. Available at: [tax.alaska.gov](http://tax.alaska.gov).
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- Saugier, Luke (SVP, Hilcorp Alaska). Written communication to Railbelt utility executives re: S-corporation income tax and Cook Inlet investment, May 2024. As reported: Anchorage Daily News, “\$100 million-plus tax boost on oil company Hilcorp added to carbon storage bill,” May 6–8, 2024.

*This testimony stands on its own analytical merits and is submitted for the public record.*