



Economic Impacts of Alaska Fiscal Options 2026

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Disclaimer

Report Funding

- ISER's preparation of this report was supported with funding from the Office of Governor, State of Alaska.

Study Independence

- As with all ISER research, this report and its conclusions are solely the work of the individual authors and should be attributed to them, not to ISER, the University of Alaska Anchorage, or the research sponsors. The funding agency did not influence the conclusions of the report. The fiscal options and methodology were drawn heavily from previous ISER work. Deviations in fiscal options considered and methods of analysis were determined by ISER researchers. Conclusions and inference drawn from this work were also solely determined by ISER researchers.

Results and conclusions of this study should not be taken as ISER endorsement of any particular set of options. While we believe our results provide important supporting information for decision makers, our results are not sufficient to be solely determinative about which options the state should engage. Economic impacts, tax efficiency, and the distribution of fiscal burden across incomes are just one facet of this discussion. There are important additional considerations including the feasibility and cost of implementation, geographic differences in impacts, value judgements about how to weigh tradeoffs, and moral considerations.

Study Authors and Research Assistance

- Brett Watson directed this project and led analysis of incidence. Brock Wilson assisted with analysis of incidence and distributional aspects. Mike Jones led review and analysis of business tax changes. Noah Burke led analysis of federal income tax changes and distributional aspects of household income reduction. Spencer Perry led analysis of dynamic effects. Burke also provided excellent research assistance for each aspect of the project. Short run economic impact modeling was performed with support from McKinley Research Group.
- Technical questions about the analysis should be directed to the lead authors at bwjordan2@alaska.edu.



Acknowledgements

We thank Alaska Department of Revenue for providing us with their licenced access to the REMI model, and for their technical assistance and collaboration on its use. Particularly Daniel Stickel, Parrish Ballard, Gabriel Cohen, and David Herbert. All errors are our own.



Purpose of this Document

- This report documents the current state of ISER's analysis of fiscal options for the State of Alaska. It is designed to provide timely and actionable information.
- Most of the details necessary to understand our key assumptions are presented in this document.
- It is ISER's intention to release a longer report manuscript and associated short policy briefs as products of this analysis. The longer report will provide level of detail sufficient for replication.
- This work provides an opportunity to consider tax and spending options with differing levels of economic distortion and growth implications for Alaska's economy





Executive Summary



Background & Purpose

- Background
 - The State of Alaska faces budget challenges as a result of falling oil prices and production
 - Options to raise revenue or reduce expenditures will have economic impacts in the short and long run
 - In 2016, ISER published a study evaluating the short run impacts of various options to address the budget deficit
- Purpose
 - Update the 2016 ISER analysis. Expand to include additional options and incorporate long run effects.
 - The purpose of this study is NOT to make any specific recommendations.
 - Economic impacts evaluated herein are just one of many considerations for policy makers



Major Economic Change Since 2016 ISER Study

Economic Contributors

- Alaska's economy has diversified
- Visitor industry has grown
- Composition of non-resident workforce

Petroleum Industry

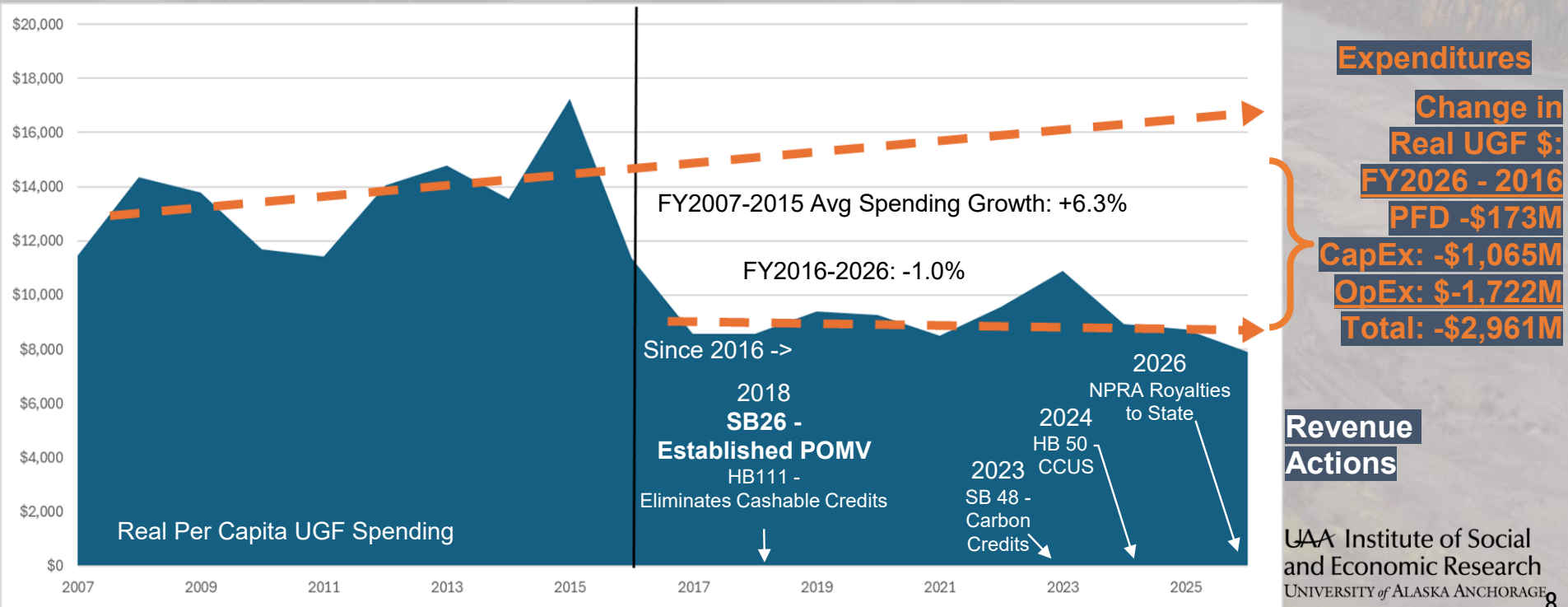
- Changing geography
- New production

Policy

- Federal: 2017 Tax Cuts & Jobs Act (TCJA)
- State Policy...



Major Fiscal Changes Since 2016 ISER Study



Options Considered & Outcomes Evaluated

11 fiscal options + 3 Variations

- 3 were changes to state government spending
- 6 were options that changed household income (PFD and broad-based taxes)
- 2 were business tax changes

3 Variations on above (1) seasonal sales tax (2) Income Tax w/ PFD Credit (3) Corp. Tax w/ Incentives

Outcomes

- Income distribution: Understanding how lower and higher income Alaskans could be affected
- Who pays? Residents, non-resident workers, visitors, or the federal government?
- Impacts: Short and long term economic effects.



The Fiscal Options Considered

3 cuts to state spending



- A state workforce reduction of 1,300 positions
- A \$100M “clean” capital budget reduction
- A broad \$100M “clean” cut

6 revenue options that reduce household income*



- A \$600 Permanent Fund Dividend Reduction
- Broad 3% sales tax with fewer exclusions
- Narrower 4% sales tax with more exclusions
- A 2% flat income tax
- A progressive income tax (10% Federal tax surcharge)
- 20 Mill Statewide property tax

2 business taxes



- Increase government take from petroleum industry by \$100M
- Additional broader corporate taxes of \$100M

By assumption scenarios are:

- > independent (“a la carte”)
- > symmetric in increases or decreases
- > linear in outcomes
- > not ‘budget neutral’ (ie, only offset deficit)

**\$600 PFD reduction and any of the broad based taxes as stated rates would raise \$300-400M but estimates in this analysis are rescaled to \$100M. A \$159/person PFD reduction would raise \$100M.*



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Results - Impacts

All options have impact on the economy.

Can *generally** group option impacts into 3 “buckets”

- **Smaller** impacts: **Business tax changes**
- **Moderate** impacts: **PFD and broad based taxes**
- **Larger** impacts: **State spending changes**

* Corporate tax changes, state capital spending, and property taxes are notable exceptions, depending on timeframe and outcome.



IMPLAN Model: Short Run Effects Adjusted to \$100M in Deficit Reduction and Residency			
Fiscal Option	Total Jobs	Total Income (\$M's)	Key Assumptions / Drivers
Workforce reduction	-974	-\$101	Assumes 100% resident impact.
"Clean" capital budget cut	-697	-\$60	If cuts affect federal matching dollars, impacts will be considerably larger. Assumes 100% resident impact.
A broad spending cut	-1,076	-\$112	Assumes 100% resident impact.
Permanent Fund Dividend Reduction	-375	-\$111	Consumption propensity, no behavioral effects (eg assumes PFD income spent identically to all other income).
Broad sales tax with fewer exclusions	-313	-\$96	Assumes no substitution/savings. Consumption propensity.
Narrower sales tax with more exclusions	-290	-\$92	
A flat income tax	-309	-\$100	Assumes no labor reduction. Consumption propensity.
A progressive income tax	-291	-\$102	
State Property Tax with local credit	-365	-\$110	Consumption propensity. Assumes landlords and renters split tax incidence. Residential property only.
Increase oil government take	-44	-\$4	No dynamic investment effects. In reality, firms will change <u>expectations</u> of future tax changes. Assumes fully resident incidence.
Increase in corporate taxes	-141	-\$11	

REMI Model: Dynamic Modeling Results

Impact of \$100M Change

		Employment		Income (2025 \$Ms)		Total Output (2025 \$Ms)	
	Year:	2027	2050	2027	2050	2027	2050
Policy							
Workforce cut		-1560	-1534	-125	-212	-320	-375
Investment cut		-669	-208	-53	-29	-155	-55
Broad spending cut		-1280	-1028	-108	-170	-264	-245
PFD cut		-890	-334	-156	-105	-171	-78
Broad sales tax		-533	-319	-89	-78	-112	-101
Narrow sales tax		-551	-330	-89	-78	-112	-104
Income tax		-870	-401	-154	-120	-172	-97
Property Tax		-323	-81	-63	-37	-83	-66
Oil production tax		-18	-40	-2	-7	-12	-41
Broad corporate tax		-399	-295	-61	-60	-90	-106
Corporate tax by labor share		-550	-382	-82	-79	-116	-118
Property Tax + Broad Corp. Tax Cut		76	215	-2	23	7	40

Results - Who Pays?

How are higher and lower income households affected?

- We did not evaluate impacts of state spending changes or business taxes on high versus low income households
 - Changes to income-targeted programs (eg SNAP, Medicaid) will have differential effects based on income.
- PFD is most regressive change of evaluated options. Progressive income tax is the most progressive. Sales, flat income, and property taxes fall in-between.

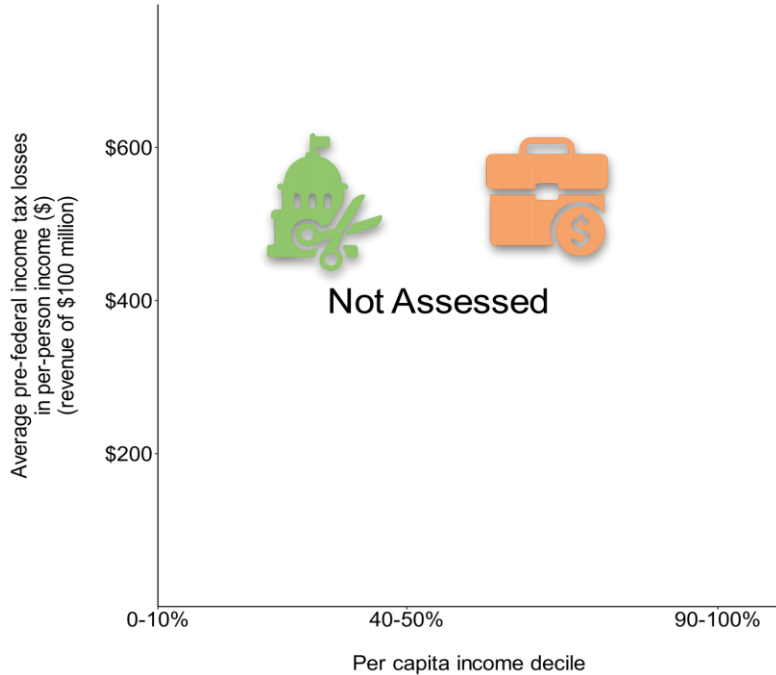
Residents are assumed to bear full impact of state spending cuts.

Business tax changes were not evaluated for who pays.

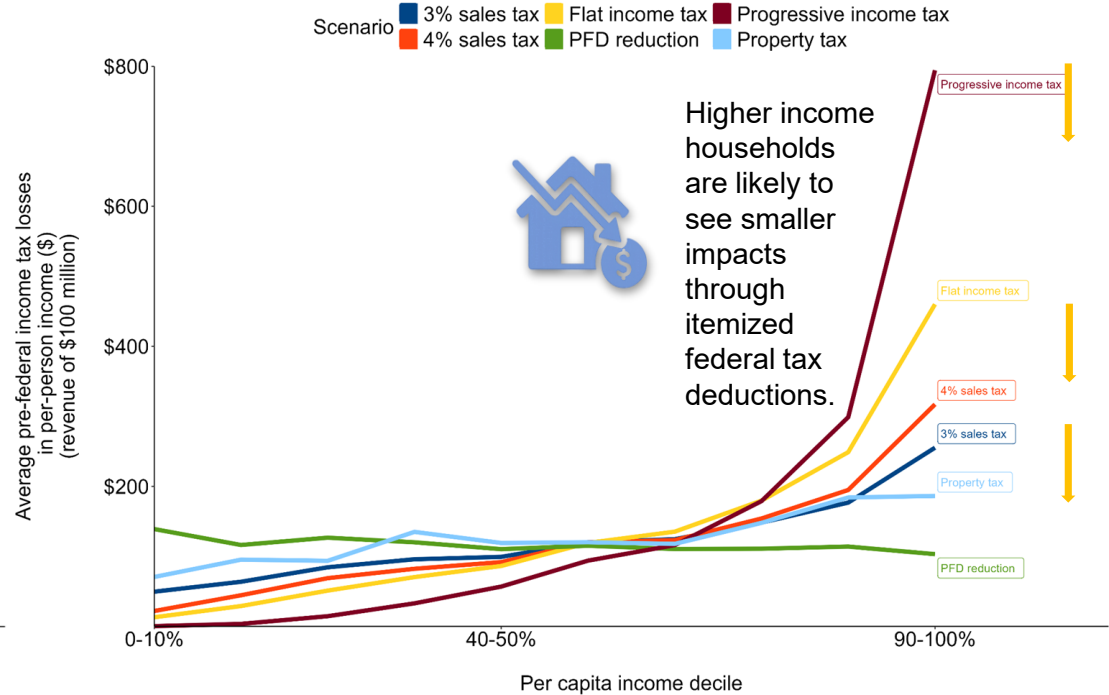


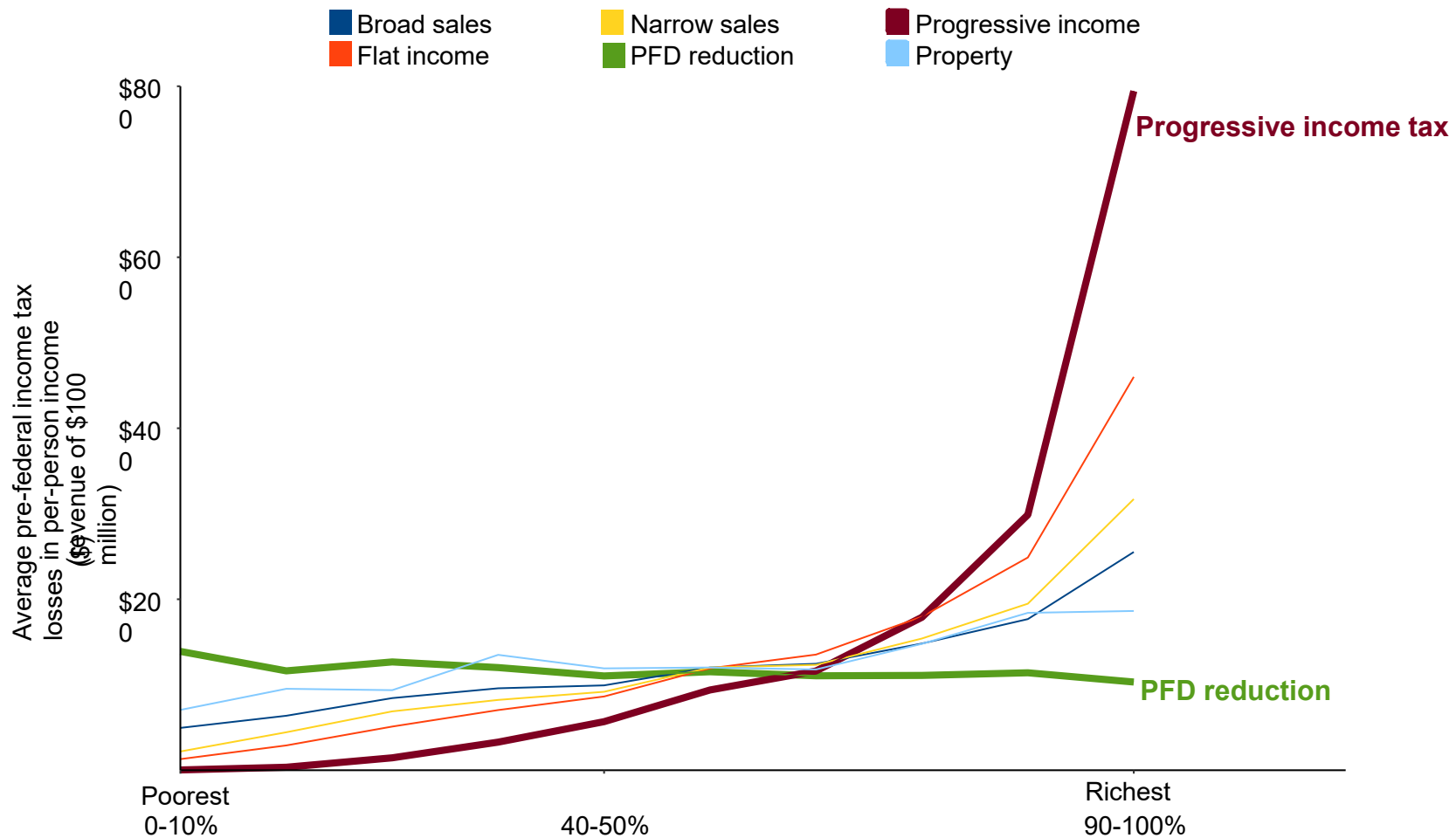
Average Per Capita Disposable Income Reduction per \$100 Million in Deficit Reduction (\$s)

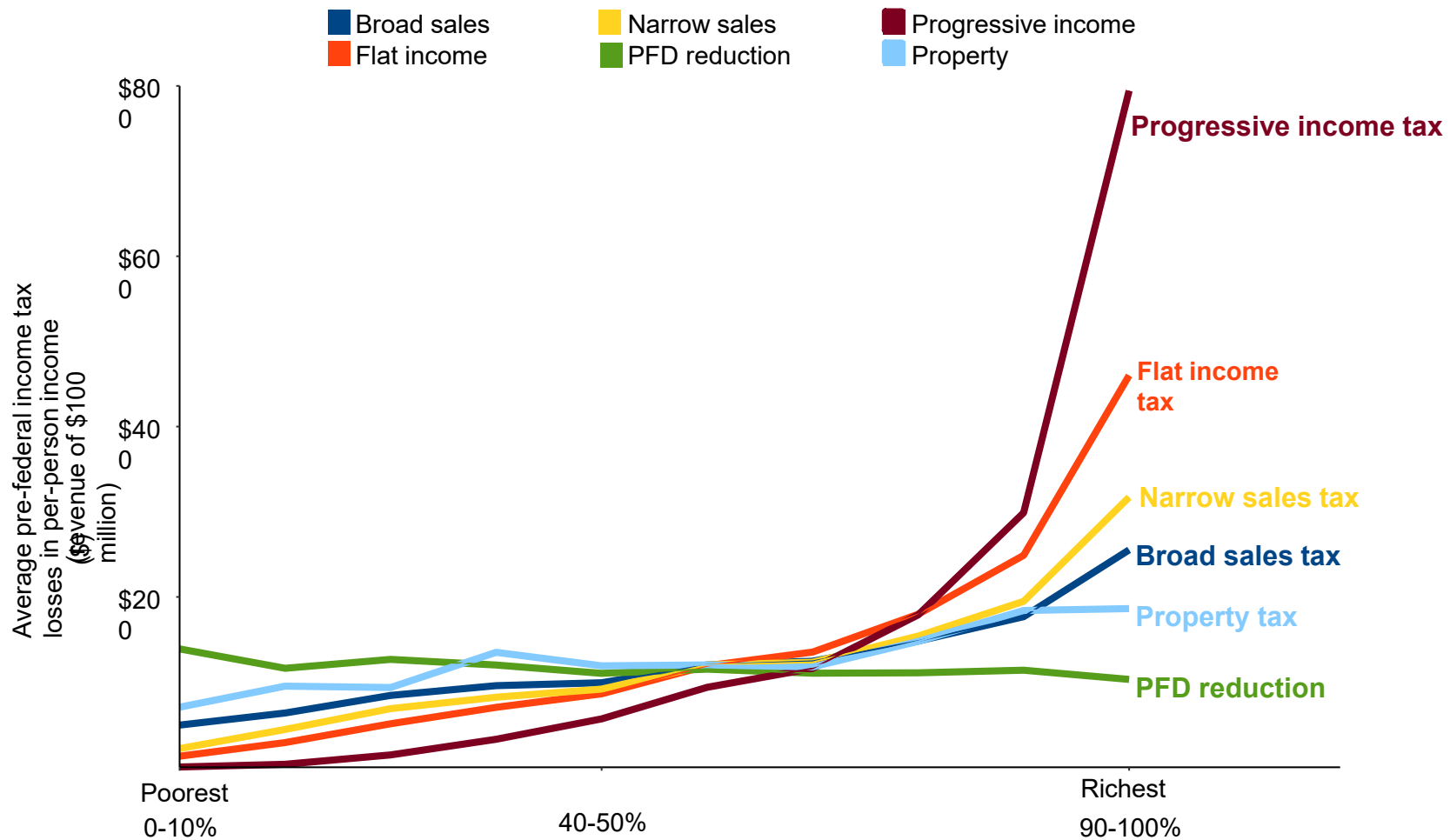
Business tax change & state spending cut



Household income cut

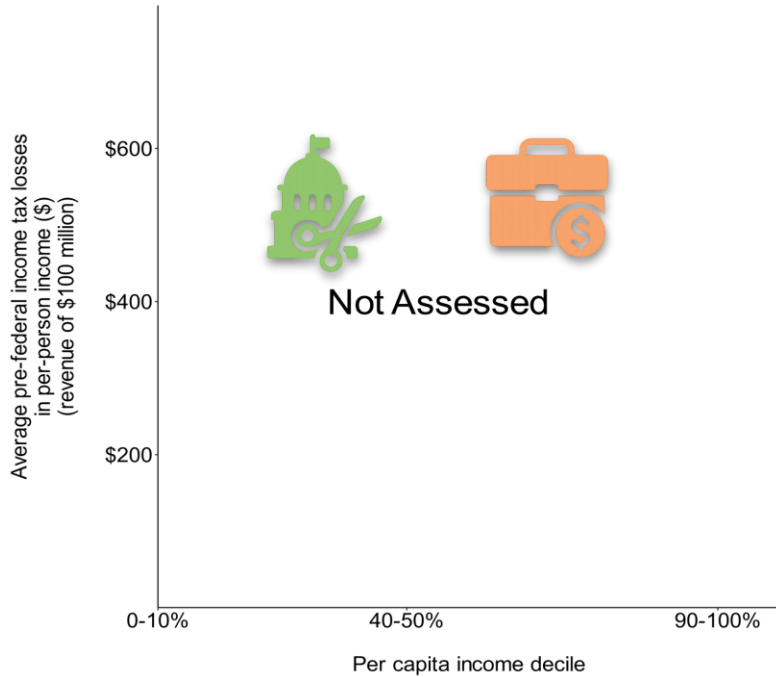




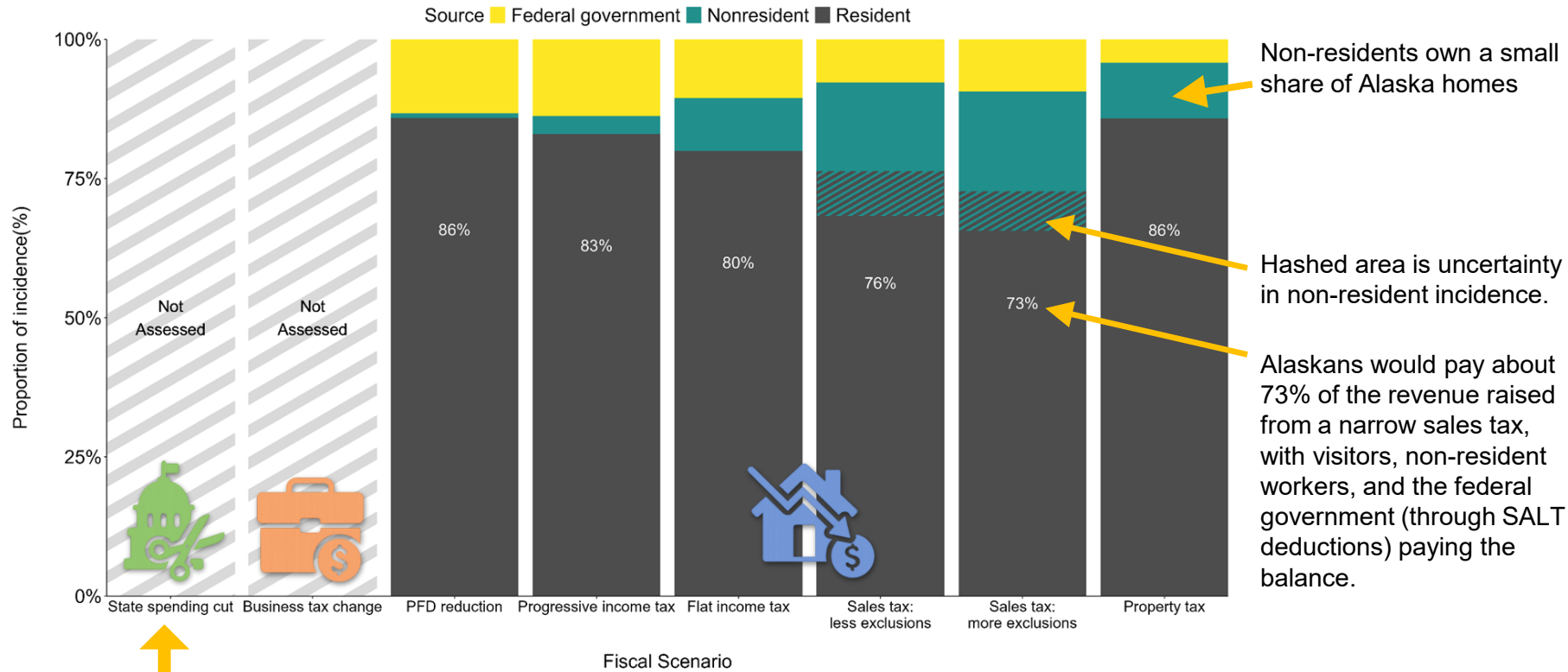


Average Per Capita Disposable Income Reduction per \$100 Million in Deficit Reduction (\$s)

Business tax change & state spending cut



Who would pay? Allocation of Incidence



Non-resident incidence was not empirically assessed for these options. State spending cuts were assumed to fall 100% on Alaskans, but the true number is likely to be somewhat lower.

Other Impacts: Regional Variation

Geographic differences in impacts were not assessed.

Impacts will differ by:

- Pre-existing local taxes,
- distribution of income across space
- local costs of goods and services



Other Impacts: Tax Revenue Volatility

This analysis focuses on identifying the *expected* revenue from a given tax vehicle

However it is also informative to consider the *volatility* in that revenue source

Generally, from the experience of other states:

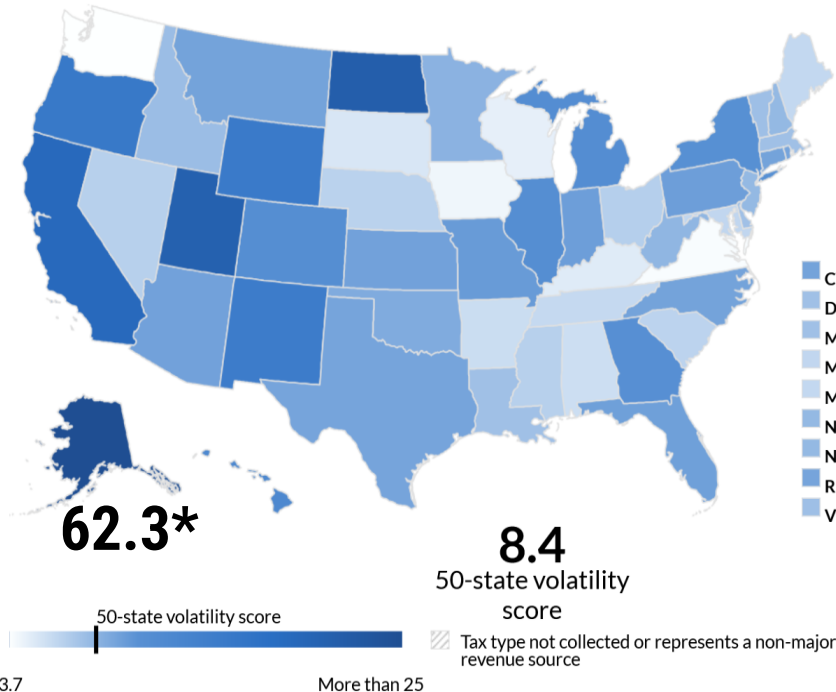
- Severance taxes are the most volatile, but few states rely on them to the degree that Alaska does
- corporate income taxes are next most volatile
- Property taxes are the least volatile
- Income and sales taxes are in between with income taxes being more volatile than sales taxes



Alaska has Highest Tax Revenue Volatility

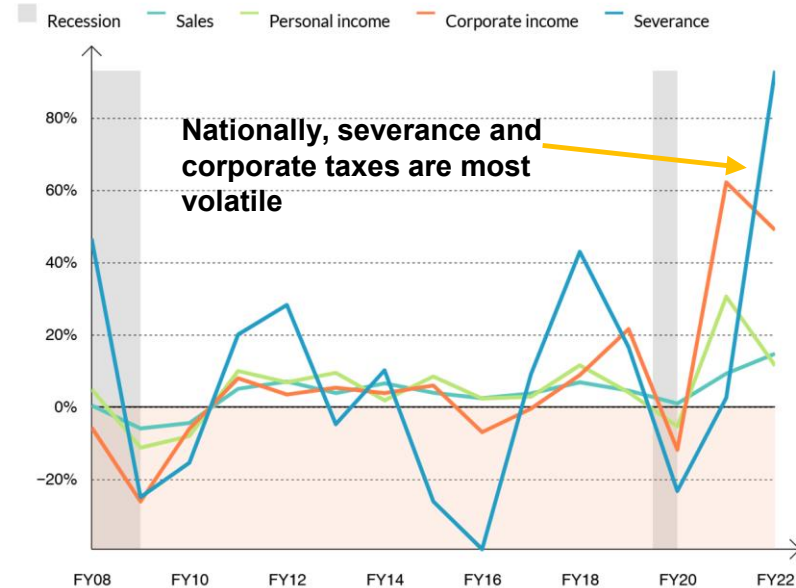
Tax Revenue Volatility by State

Volatility scores based on collections during 5 years ending fiscal year 2022, adjusted for tax policy changes



Year-Over-Year Percent Change of Major Tax Revenue Sources

50 states, 15 years ending fiscal year 2022



Sources: The Pew Charitable Trusts

*Only includes traditional revenue.

What is the Impact of No Action?

Commodity markets are outside our control; lower than expected oil prices could force state to take action.

- FY27 Budget FC of \$62/bbl
- For every \$1/bbl change, revenue changes by ~\$34m

Fiscal uncertainty is a deterrent to investment.

Current sources of revenue (Petroleum and POMV) are not explicitly tied to state economic activity - “Alaska disconnect”

State bond rating/borrowing cost.

If a new growth industry emerges in the state no mechanisms tying consumption of public goods to public revenue





1.Scenarios



The Fiscal Options Considered

3 cuts to state spending



- A state workforce reduction of 1,300 positions
- A \$100M “clean” capital budget reduction
- A broad \$100M cut

6 revenue options that reduce household income*



- A \$600 Permanent Fund Dividend Reduction
- Broad 3% sales tax with fewer exclusions
- Narrower 4% sales tax with more exclusions
- A 2% flat income tax
- A progressive income tax (10% Federal tax surcharge)
- 20 Mill Statewide property tax

2 business taxes



- Increase government take from oil industry by \$100M
- Additional broader corporate taxes of \$100M

By assumption scenarios are:

- > independent (“a la carte”)
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The Fiscal Options Considered

3 cuts to state spending



- A state workforce reduction of 1,300 positions
- A \$100M “clean” capital budget reduction
- A broad \$100M cut

5 revenue options that reduce household income*

- A 600% increase in the Federal District Property Tax
- A 10% increase in the Alaska Permanent Fund Dividend
- A 10% increase in the Alaska State Income Tax
- A 10% increase in the Alaska State Sales Tax
- A progressive income tax (10% Federal tax surcharge)

Note: Regardless of the size of PFD reduction or specific tax type or rate, all effects are rescaled to raise \$100M

2 business taxes



- Additional oil industry taxes of \$100M
- Additional broader corporate taxes of \$100M



The Key Methods Used

- We use standard commercial software to evaluate economic impacts
 - IMpact analysis for PLANning (**IMPLAN**) for short run effects, Regional Economic Models, Inc. (**REMI**) for long run effects
 - **IMPLAN** is an input–output modeling system that estimates how spending flows through an economy to generate direct, indirect, and induced effects.
 - **REMI** is a dynamic econometric forecasting model that integrates input–output, computable general equilibrium, and econometric techniques to simulate policy and economic change over time.
- Analysis combines federal and state datasets to form impact scenarios



How are scenarios modeled? - IMPLAN



3 cuts to state spending

- In IMPLAN, we model:
 - A state workforce reduction of 1,300 positions from employment and payroll of state government employment. **Note, that rescaling this cut to \$100M shrinks the workforce reduction.**
 - A \$100M “clean” capital budget reduction: Reduce spending by \$60 million in industries: *construction in new commercial structures*; \$40 million in construction in *other non-residential structures*. **“Clean cut” assumes no federal matching dollars affected**
 - A broad \$100M “clean” cut: remove spending from *other state government enterprises*



How are scenarios modeled? - IMPLAN



6 revenue options that reduce household income

- In IMPLAN, we remove income from Alaskan residents equal to their burden under each of these five fiscal options
 - Removing income from households reduces their spending, savings, and federal tax payments
 - Households at different levels of income spend differently in the economy - wealthy households save more and spend a smaller portion of their income. We model this difference.
 - Reduced income (Direct Effect) -> Less spending -> “ripples through” the economy via multiplier effects (Indirect + Induced Effects)
- Dividend reductions & income taxes reduce household incomes
 - Dividend reductions remove income from qualified Alaskans
 - A **flat tax** of 2% is levied on all qualifying income earned in Alaska
 - A **progressive tax** is modeled by estimating each Alaskan household’s federal income tax liability and assuming a 10% surcharge on this amount.
- Sales taxes & Property Taxes
 - Reduce household incomes by an amount equally to the tax they pay
 - A broader sales tax, with fewer exclusions (healthcare, education and components of shelter) would have a lower tax rate (3%)
 - A narrower sales tax, with more exclusions (healthcare, education + all shelter and food at home) would have a higher tax rate (4%)
 - A 20 mill Statewide property tax modelled on residential property.



How are scenarios modeled? - IMPLAN



2 business taxes

- Increase government take from oil industry* by \$100M: Removed \$100M from fixed other property type income.
- Additional broader corporate taxes of \$100M, we will remove Remove \$100M from business income.
 - Allocate \$100M reduction across industries according to their average FY23 and FY24 liabilities from Alaska's Corporate Income Tax
 - Reduced business income (Direct Effect) -> Less spending -> "ripples through" the economy via multiplier effects (Indirect + Induced Effects)

**This option is sometimes called "oil and gas taxes" in this document, but it should not be confused with any specific form of change. This is a generic increase in government take from the industry.*



How are scenarios modeled? - Variations

- We model 3 variations of the previously described scenarios
 - Modify the 2% flat income tax with an option for Alaskans to use their PFDs as a cashable tax credit
 - Add higher summer-seasonal rates and lower winter rates to the narrow/broad sales taxes
 - Modify the broad corporate tax change to provide a tax incentive based on employment



Outcomes Evaluated - What we measured

- Outcomes of interest:
 - **Income Distribution:** Understanding how lower and higher income Alaskans could be affected
 - **Incidence:** Understanding how Alaskans vrs non-residents (eg visitors, commuters) are impacted by these options
 - **Impacts:** Short and long term economic outcomes (jobs and income)
- Outcomes outside the scope of this analysis
 - Providing a “fiscal note” of budget impacts
 - The options described on last slides would have significantly different budget impacts; all are rescaled to show impacts of \$100M of deficit reduction
 - Actual proposals would involve level of detail that abstract models cannot capture
 - Regional impacts
- Our analysis provides insight on
 - Ordering options in terms of impacts and incidence
 - What has changed since ISER last evaluated state fiscal options





2. Limitations



General Limitations

- Data concerns
- Short run, IMPLAN, static, IO model limits.
 - Behavioral responses are unaccounted
 - IMPLAN/IO assumes no supply constraints, fixed prices/wages, and zero substitution, so it excludes behavioral responses (price changes, wage adjustments, migration). Treat results as immediate “ripple” effects from less money circulating
 - Scope exclusions (not modeled). Many indirect/long-run effects—like tax-driven shifts to online/out-of-state purchases, regional price differences, or industry investment responses—are flagged but outside the modeled estimates.
- Long run, REMI, dynamic model limits
 - REMI uses nationally estimated relationship between variables (but local data)
 - Alaska’s unique economic features captured in data, but not Structural relationships.



Limitations - Income Tax

- Vintage & scope of tax data. Revenues are built from IRS SOI 2023 tables; today's liability patterns could differ.
- Return $\neq$ household. IRS SOI is organized by tax returns, not households; non-filers are missing; married-filing-separately and multi-earner households complicate mapping.
- Scaling fix. When imposing the federal tax structure on ACS households, computed federal taxes were too high.
- Federal taxes are modelled using TAXSIM35 with the TICJ.
- Nonresident treatment is simplified for TAXSIM 35.
- Does not reflect 2025 OBBBA.
- For Static, short-run multipliers: Economic effects use an IO model (IMPLAN): fixed prices, no supply constraints, zero substitution—tending to overstate impacts and omit behavioral responses (labor supply, avoidance, migration).
- Distributional mapping relies on ACS. Translating IRS SOI rates onto ACS PUMS households requires assumptions about filing status and dependents—another source of mapping error.
- Calibrated nonresident revenue shares. Resident/nonresident splits are estimates, mis-measurement here shifts who pays.



Limitations - Sales Tax

- Tax-base built from CES, with Alaska data limits. The sales-tax base is constructed from Consumer Expenditure Survey categories (e.g., services incl. telecom, insurance; rent; utilities). But Alaska's CES sample is small and geographic coverage is unclear, so projections rely on fitted equations and exclude loan principal/interest—introducing measurement error in the taxable base.
- Nonresident spending is estimated using surveys of visitor spending and assumptions about non-resident worker spending. Visitor spending and volume are likely estimated with some error. Limited data on non-resident expenditure requires assumptions about behavior.
- Base design is stylized. Results hinge on two hypothetical bases—4% excluding food/shelter/health/education vs 3% excluding only health/education. A real statute could choose different exemptions, altering regressivity, nonresident shares, and revenues; comparisons to other models (e.g., DOR) are difficult without identical base definitions.
- For Short Run Impacts: Behavioral responses are not captured by short-run multipliers. The IO framework used for impacts excludes shifts like buying online/out-of-state, price changes, or migration. The report flags that sales taxes might push purchases away from local retailers—effects the short-run model doesn't capture.
- Administrative costs not modeled. The study notes sales taxes likely carry higher admin/enforcement costs than income taxes, but those costs aren't deducted from net revenue or impacts.
- Regional differences. Where prices are higher, a given basket yields higher sales-tax payments; this cross-region burden variation is acknowledged but not quantified in the baseline estimates. Many local gov't use sales taxes which add additional burden in those jurisdictions - not modeled here.



Limitations - Oil Tax

- We modeled increased oil tax in a generic fashion: a \$100M reduction in “fixed other property type income” in IMPLAN and as a \$100M increase in production costs in REMI.
- Details of oil tax changes are extremely important in determining their ultimate effects. For example:
- Extreme forecast sensitivity. Revenues hinge on price, production, lease expenditures, and transportation costs—all uncertain and volatile; DOR flags oil prices as “inherently volatile.”
- Policy is a moving target. Frequent law/reg changes complicate back-testing and forward projections.
- Complex, non-linear mechanics. Alaska’s system (SB21) blends net tax vs. 4% gross minimum, sliding per-taxable-barrel credits, and GVPP/PTV “order of operations.” Small input changes can flip between regimes.
- Confidentiality limits precision. Statute prohibits disclosure of taxpayer specifics; but aggregate data mask important firm-specific features.
- Project/field heterogeneity. Robust evaluation needs project-level cash-flow modeling (GVR eligibility, costs, timing). Aggregate models mask differences across fields and phases.
- Midstream & netback assumptions. Pipeline/transport tariffs and allowable downstream cost deductions shape GVPP/PTV; mis-estimation here skews tax due.
- Given important gaps in information available and time constraints for analysis, we abstracted the very important above complexities. Our analysis models the effect of a generic policy which reduces oil producer profitability and models how this change affects their spending.
- Behavioral responses. Investment, timing of spending, and production profiles respond to fiscal changes and EXPECTED fiscal changes; simple short-run multipliers don’t capture this. (Standard economic impact guidance warns about these dynamics.)
- Interactions with other fiscal levers. Royalty, property tax, and corporate income tax co-move with production and prices; focusing on production tax alone can misstate total petroleum take and budget risk.





3. Results





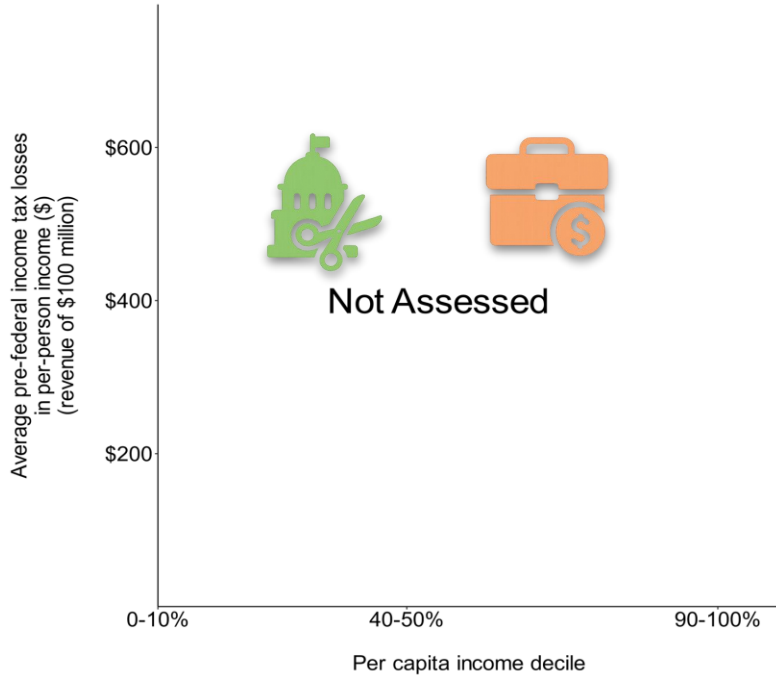
3.1 Income Distributional Effects of Fiscal Options

Low and High Income Alaskans' 'Burden'

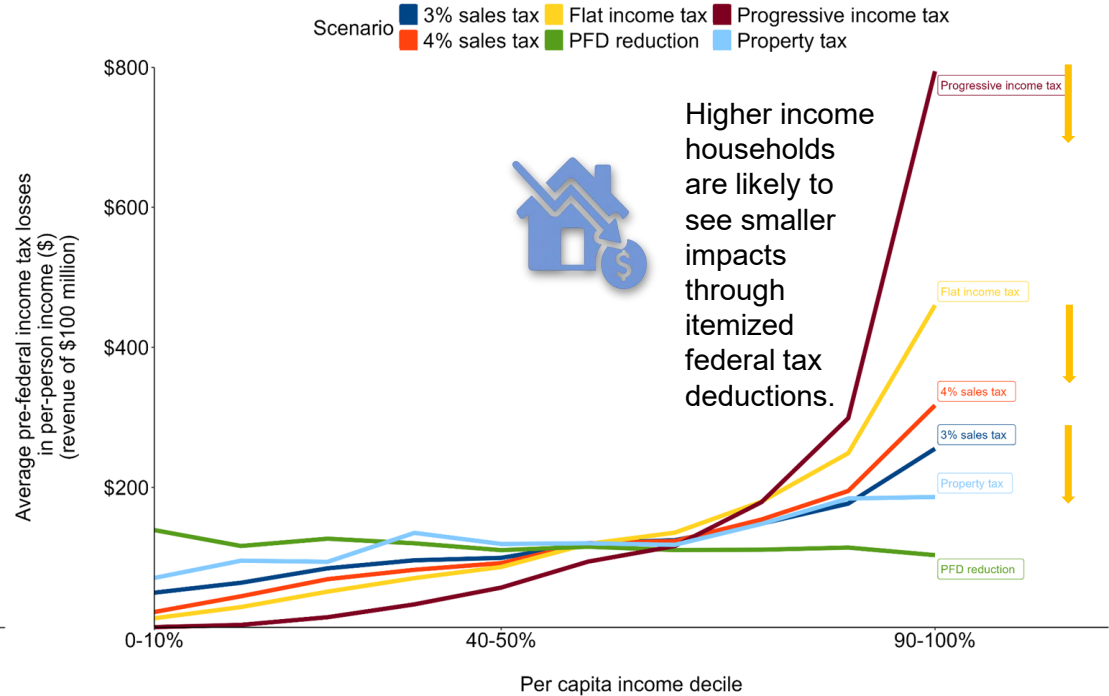


Average Per Capita Disposable Income Reduction per \$100 Million in Deficit Reduction (\$s)

Business tax change & state spending cut

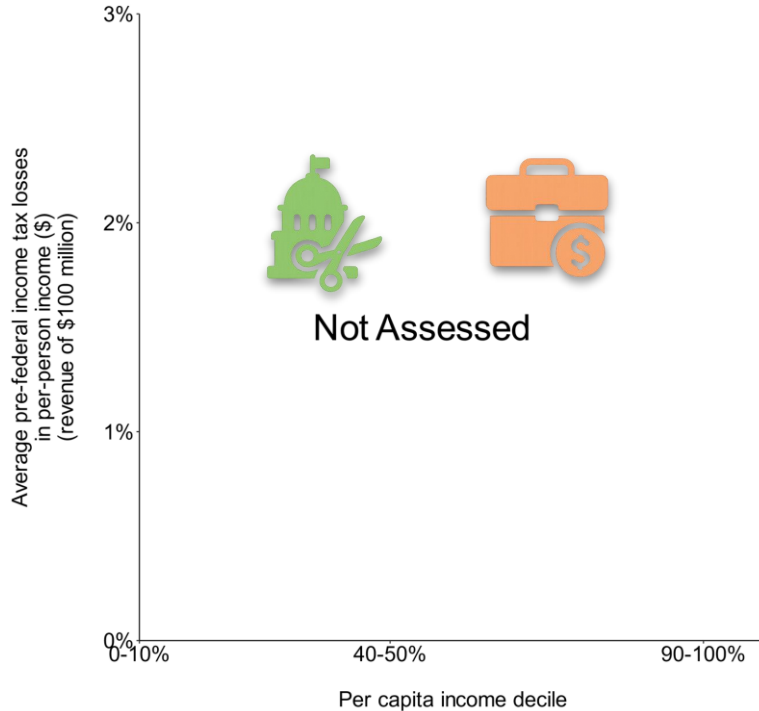


Household income cut

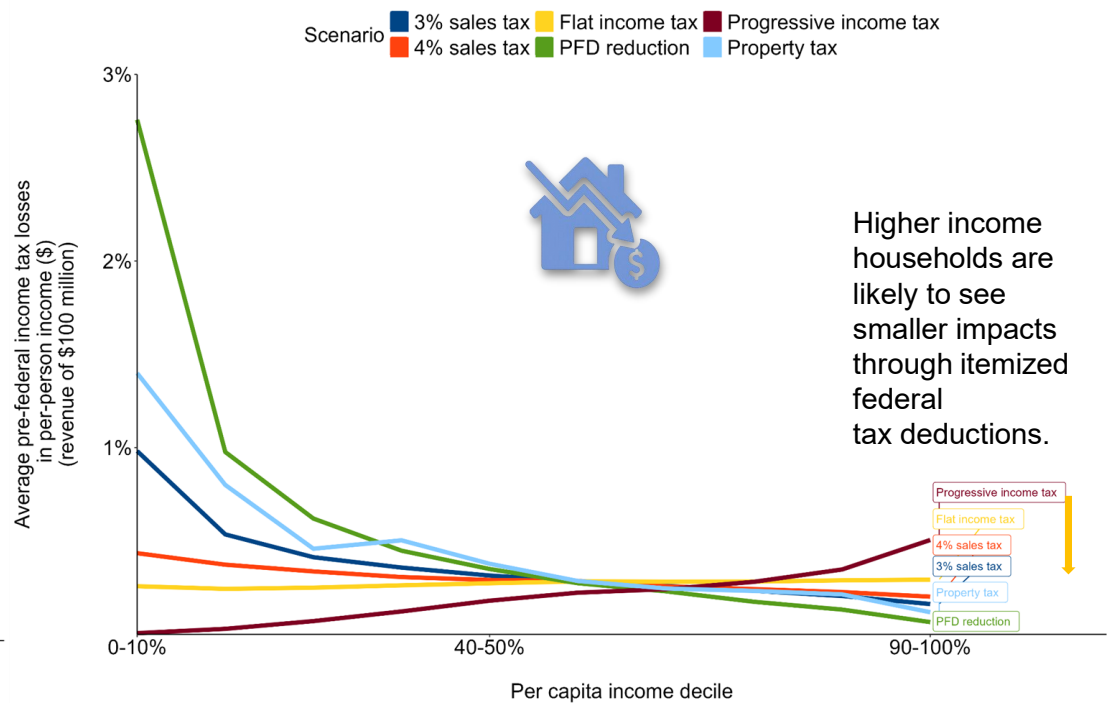


Average Per Capita Disposable Income Reduction per \$100 Million in Deficit Reduction (%)

Business tax change & state spending cut



Household income cut



Income Distributional Effects

Reducing **Permanent Fund Dividends** would cost the poorest households the most of the options evaluated, in both dollars and in percentage of income.

- Reducing the PFD by \$159 per person (across 628,000 recipients) and diverting the revenue to state government would raise \$100 million. But only the poorest households would actually lose the full amount. Most households would get a portion of the lost income back in reduced federal income taxes, but poorest households have low income tax liability. The higher the household's per-capita income, the more the federal taxes would be reduced and the PFD loss offset. Per-person disposable income of the richest ten percent of households would fall on average \$103. The dollar losses for the poorest households amount to 2.8 percent of their per-person disposable income—compared with 0.06 percent for the wealthiest households.

The wealthiest households would pay five to fourteen times as much in **sales taxes** as the poorest—but the poorest would lose more as a percentage of their income, particularly under a broader-based tax.

- For a sales tax that raised \$100 million in revenue, the wealthiest ten percent of households would pay about \$255 to \$317 per person and the poorest about \$22 to \$50 per person, depending on whether it was the 3% tax including food and shelter or the 4% tax excluding food and shelter. Those dollar amounts represent about 0.2 to 0.3 percent of the per-capita disposable income of the wealthiest households, but 0.4 percent to 1 percent of the poorest. The two types of expenditures excluded in the 4% tax—food at home and shelter—vary much less with income than do expenditures for other goods and services. Shelter category includes rent but excludes mortgages (higher income households own homes), so excluding shelter makes the tax more progressive.

The **income tax** options would cost the wealthiest households 35 to 2,000 times as much in dollars as the poorest.

- These are the only options that would cost the wealthiest households a higher percentage of their incomes. A flat-rate income tax that raised \$100 million would cost the wealthiest households about \$460 per person, and a federal income tax surcharge about \$787 per person. The flat-rate income tax is progressive at lower income scales, due to the fixed exemptions and deductions for the tax base: federal taxable income. The 10 percent income tax surcharge is more progressive, following the progressive structure of the federal income tax. Even with the progressive rates, the income tax surcharge would reduce per-capita disposable income of the richest ten percent of households by about 0.5 percent per \$100 million raised.



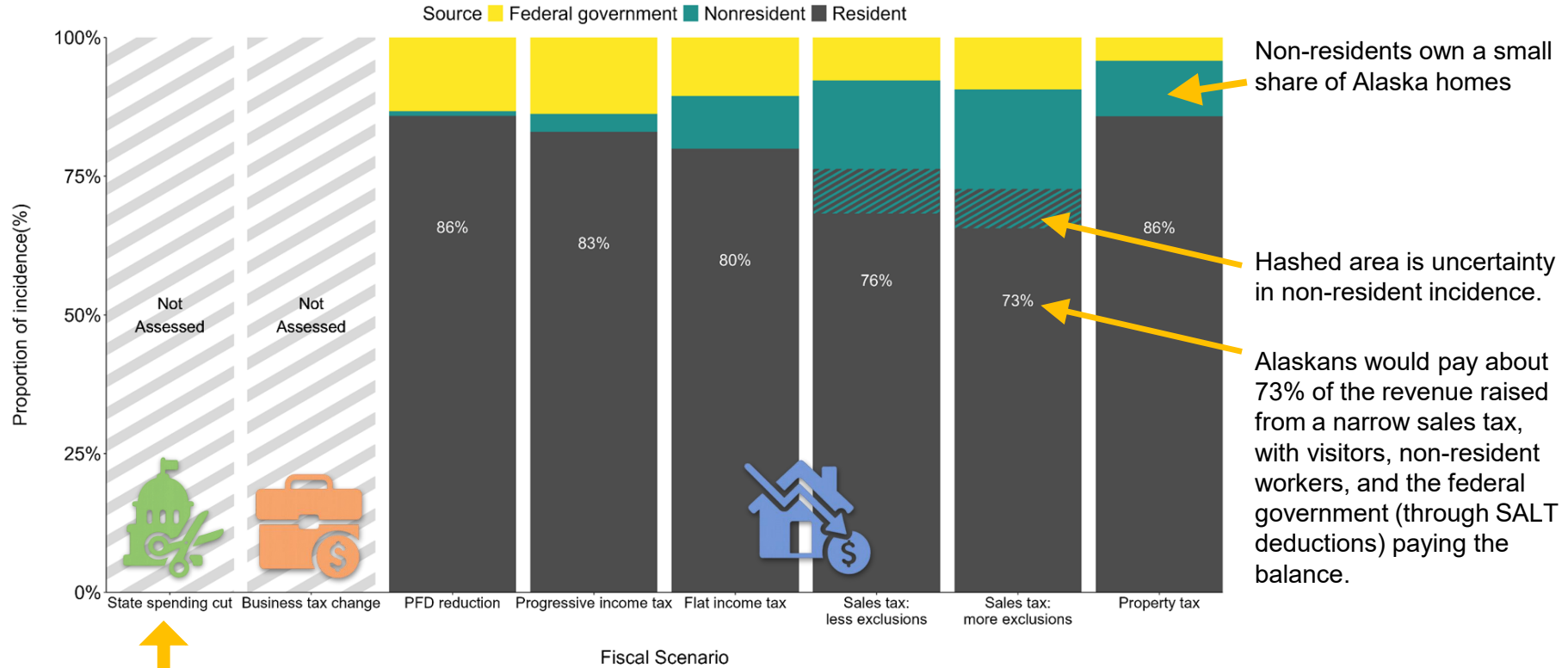


3.2 Incidence of Fiscal Options

Residents versus Non-residents



Who would pay? Allocation of Incidence



Non-resident incidence was not empirically assessed. State spending cuts were assumed to fall 100% on Alaskans, but the true number is likely to be somewhat lower.

Incidence of Fiscal Options

- Only the options which reduced household income in Alaska were formally estimated.
- Incidence of **state spending cuts** were assumed to fall 100% on Alaska households, but some fraction of capital budget spending goes to non-resident construction workers & out-of-state capital rental payments, some fraction of agency spending goes to out-of-state vendors/contractors, etc
- **Business tax** incidence was not evaluated, but reduced business profitability would be shared between resident and non-resident owners, customers, and production factor owners. State taxes on businesses affect businesses' federal tax liability.
- **Sales tax** with more exclusions was found to have the smallest shared paid by Alaskans. The more exclusive sales tax carves out spending typical of residents, while leaving most visitor spending in the tax base
- **PFD reductions** would be partially offset (15%) by reduced federal tax liability (14%, the average effective Marginal Federal Income tax Alaskan's Pay), but non-residents only "contribute" a small fraction (1%) - the portion of PFD recipients that out-migrate each year



Incidence of Fiscal Options - Continued

- Alaska residents would pay 80% and 84% of a flat and progressive **income tax**, respectively.
 - Non-resident workers' incomes are lower on average than resident worker wages. Seasonal workers in tourism or seafood processing are only earning income in Alaska for a few months a year, and hourly wages in these industries are lower than the statewide average. Flat taxes would hit these workers more than a progressive tax so they pick up a larger share of the tax incidence in the flat v progressive tax.
 - A Progressive tax would hit higher income AK households who are more likely to deduct State and Local Taxes (SALT) from federal income taxes, so the federal gov't picks up a larger share of the progressive tax incidence.
- Alaskan's would pay and 86% share of a residential **property tax**
 - Tax is slightly more regressive than income tax; low income households will not/cannot deduct against their federal tax liability, so Federal government incidence is lower than for any other option
 - Our methodology did not allow use to consider commercial property. This properties might be more likely to be owned by non-residents, shifting the incidence and economic impact away from Alaska residents.
 - We assumed a 50% tax pass through from landlords to renters, but modifying this rate did not change results significantly.





3.3 Impacts of Fiscal Options

Direct and Spillover Job and Wage Effects



	Short Run Effects Adjusted to \$100M in Deficit Reduction and Residency			Long Run Effects
Fiscal Option	Total Jobs	Total Labor Income (\$M's)	Key Assumptions / Drivers	
Workforce reduction	-974	-\$101	Assumes 100% resident impact.	Larger negative than short run potentially due to out-migration. Could be offset slightly if workers allocate to private sector.
"Clean" capital budget cut	-697	-\$60	If cuts affect federal matching dollars, impacts will be considerably larger. Assumes 100% resident impact.	Larger negative due to higher business costs and lower productivity depending on where capital budget is cut.
A broad spending cut	-1,076	-\$112	Assumes 100% resident impact.	Potentially larger if service quality decreases business investment.
Permanent Fund Dividend Reduction	-375	-\$111	Consumption propensity, no behavioral effects (eg assumes PFD income spent identically to all other income).	Effects are seen more in short run.
Broad sales tax with fewer exclusions	-313	-\$96	Assumes no substitution/savings. Consumption propensity.	Lower jobs and income with a permanent reduction real income. Some substitution will occur to untaxed items depending on how broad the tax is.
Narrower sales tax with more exclusions	-290	-\$92		
A flat income tax	-309	-\$100	Assumes no labor reduction. Consumption propensity.	Mild decrease in labor supply and potential migration of high earners. Potentially individuals changing their taxes to reduce total tax liability.
A progressive income tax	-291	-\$102		
State Property Tax with local credit	-365	-\$110	Consumption propensity. Assumes landlords and renters split tax incidence. Residential property only.	Efficient tax because of fewer distortions.
Increase oil government take	-44	-\$4	No dynamic investment effects. In reality, firms will change <u>expectations</u> of future tax changes. Assumes fully resident incidence.	Reductions in investment (exploration and development) which leads to subsequent reduction in production. See "Petroleum Taxes" Section (4) Literature Review.
Increase in corporate taxes	-141	-\$11		Reductions in investment. See "Long run corporate tax impacts" Section (4) Literature Review.

Short-Run Impacts

3 tiers of *job* effects

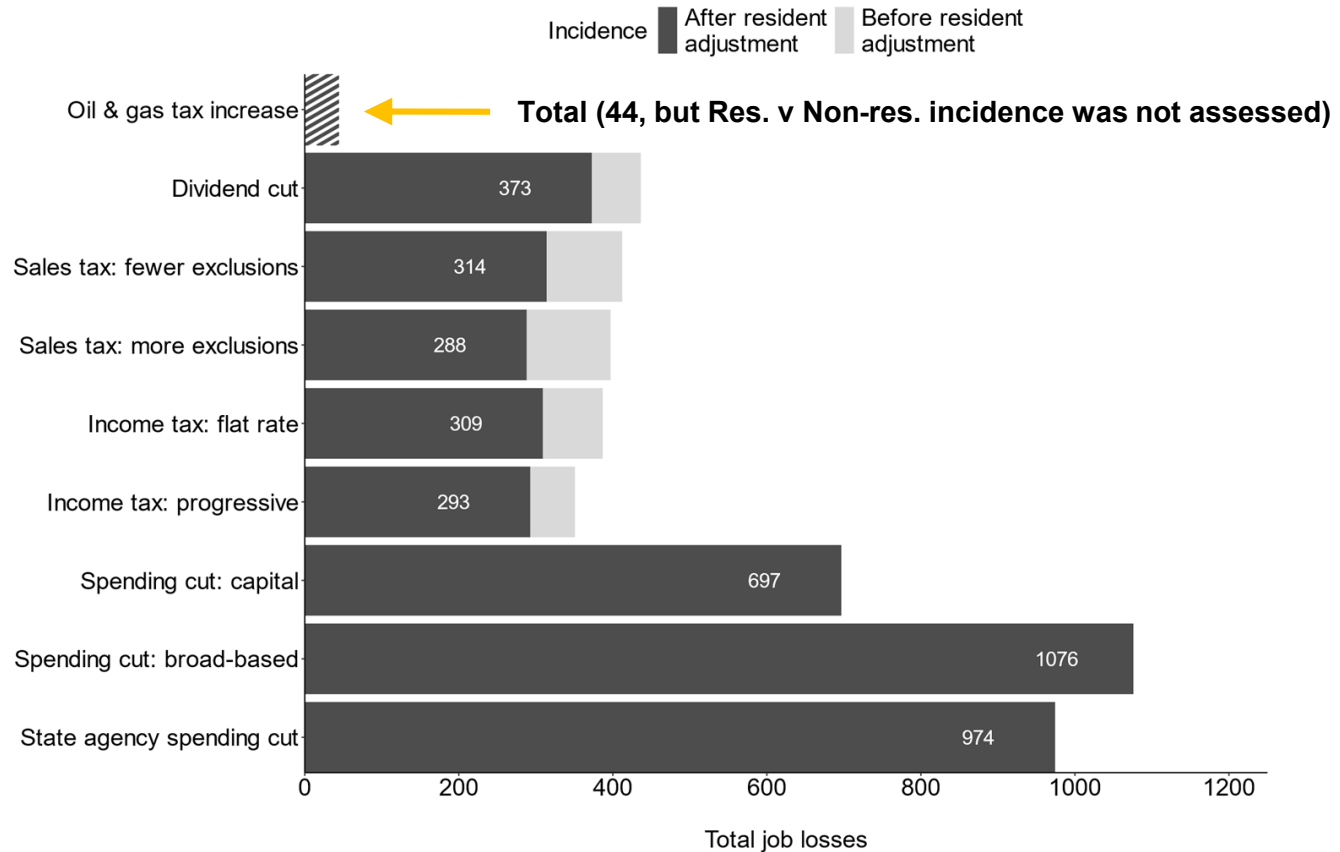
- Larger: Those that start with a “job cut” (state cuts)
- Intermediate: Options that affect household income
- Smaller: Business taxes (caveat, short run effect)

3 tiers of *income* effects

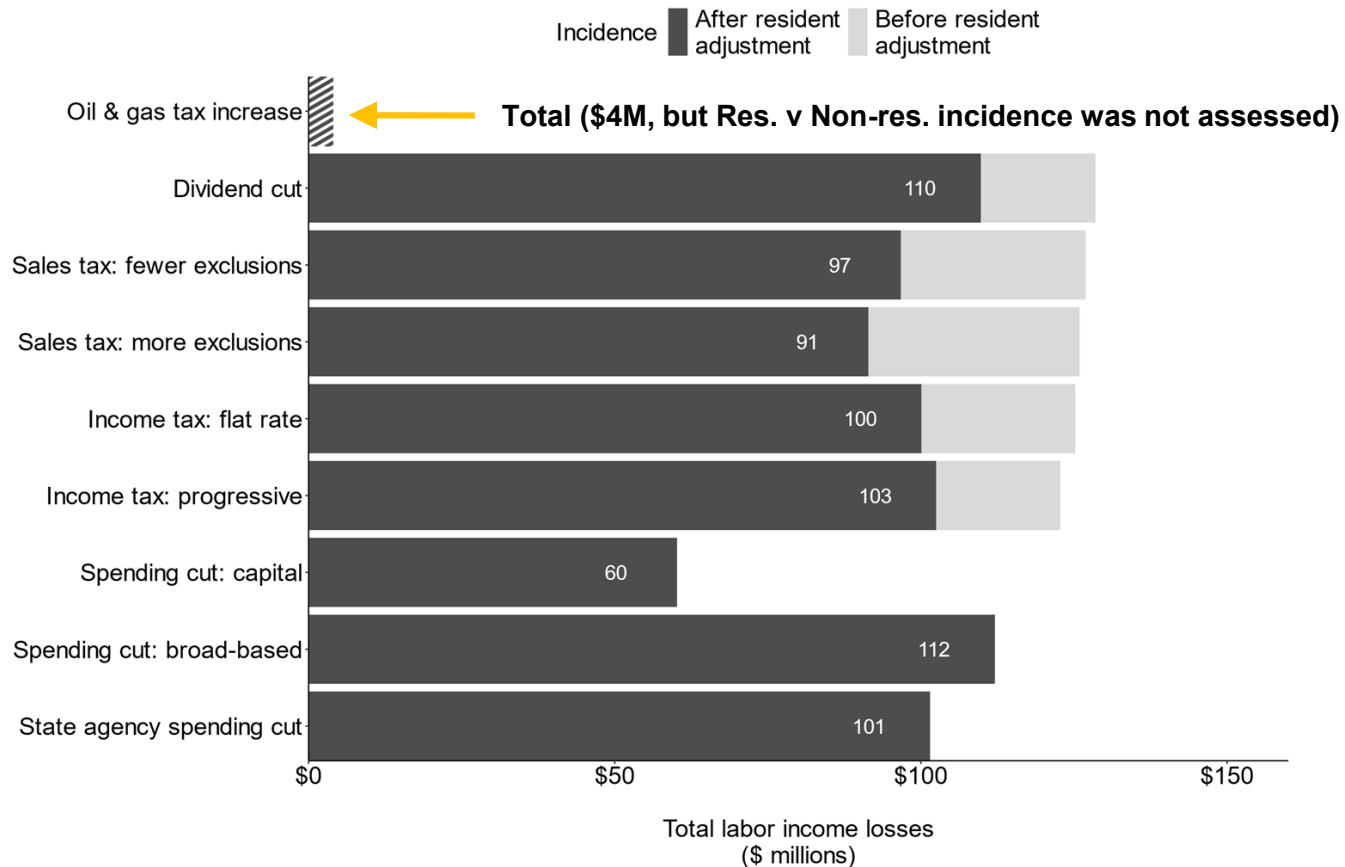
- Larger: State *job* cuts; options that affect household income
- Intermediate: State capital budget cuts (as not all of capital spending is on construction worker income)
- Smaller: Business taxes (caveat, short run effect)



Short-Run Total Job Losses for \$100M in Deficit Reduction



Short-Run Total Labor Income Losses for \$100M in Deficit Reduction





3.4 Comparisons with Previous Studies



2016 ISER “Short Run Impacts”

	2026	2016
Options Evaluated	The 10 from 2016 + Oil + corporate taxes; - state worker pay cut; + 3 variations	10
Scenarios	IMPLAN now defaults to something closer to “ISER” estimates for Alaska. We consider uncertainty for non-resident purchases for sales tax base.	“High impact” - Households more responsive to income change (IMPLAN default) “Low impact” - Households less responsive to income change (ISER estimates)
IMPLAN Vintage	2023- AK-specific leakage numbers. Higher marginal propensity to consume	2013 - Assumed National-level leakage
Non-resident wages	Estimated distribution of non-resident worker wages from AKDOL	Assumed same distribution of income of resident and non-resident workers
Non-resident spending	Estimated non-resident spending from sampled credit card data and visitor spending surveys	Approximated with seasonal sales tax data.
Federal Income Tax	Simulated with TaxSim	Approximated with IRS data



What changed since 2016 Report?

- Business taxes not evaluated in 2016
- State cuts are similar
- Broad based taxes and PFD cuts are generally smaller
 - Inflation & Income growth (28.6% CPI-U)
 - Better data on spending leakage, visitor spending, and non-resident wages
 - More non-resident workers
 - Visitor industry growth
- 2017 Tax Cut and Jobs Act (TCJA)
 - Reduced share of SALT that Feds pick up (SALT cap + higher standard deduction + reduced rates)
 - Reduced progressivity of 10% Federal Surcharge

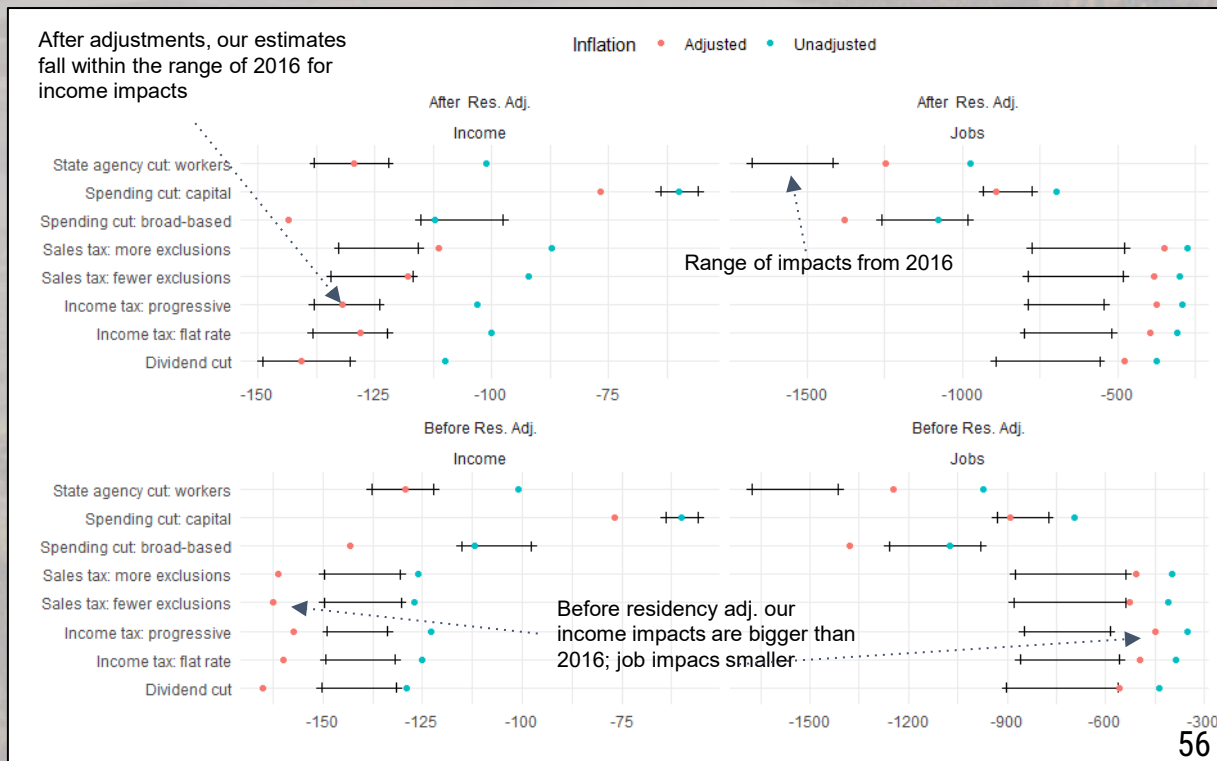


Comparing 2016 and 2025

Our estimates are generally smaller than 2016.

We update resident vs. non-resident impact based on improved data, federal policy changes, and spending patterns

Inflation explains some of the discrepancies. (raising \$100M in 2016 was larger share of economy than in 2025)

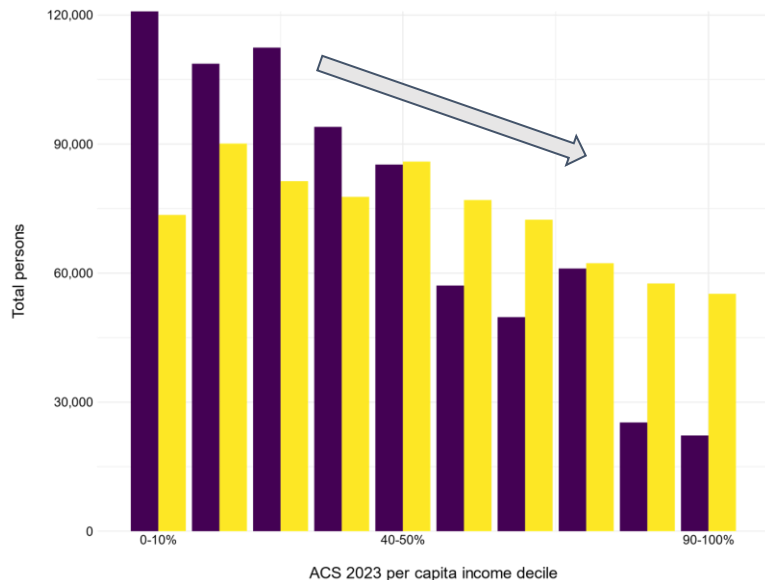


What changed - Nominal Income Growth

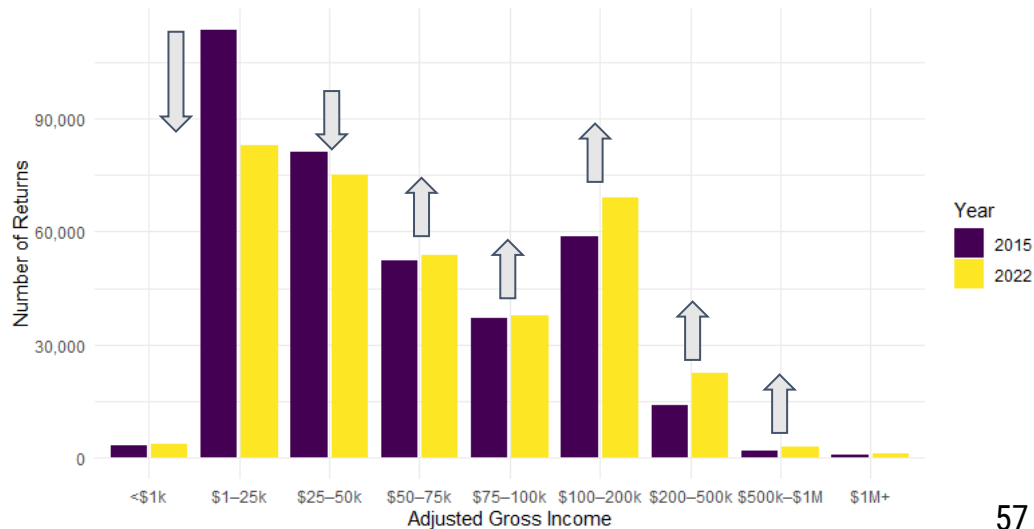
Higher income households save more/spend less → *less spillover impact.*

Two sources of data show AK income distribution is shifting from lower to higher income groups

Census Data



IRS Data

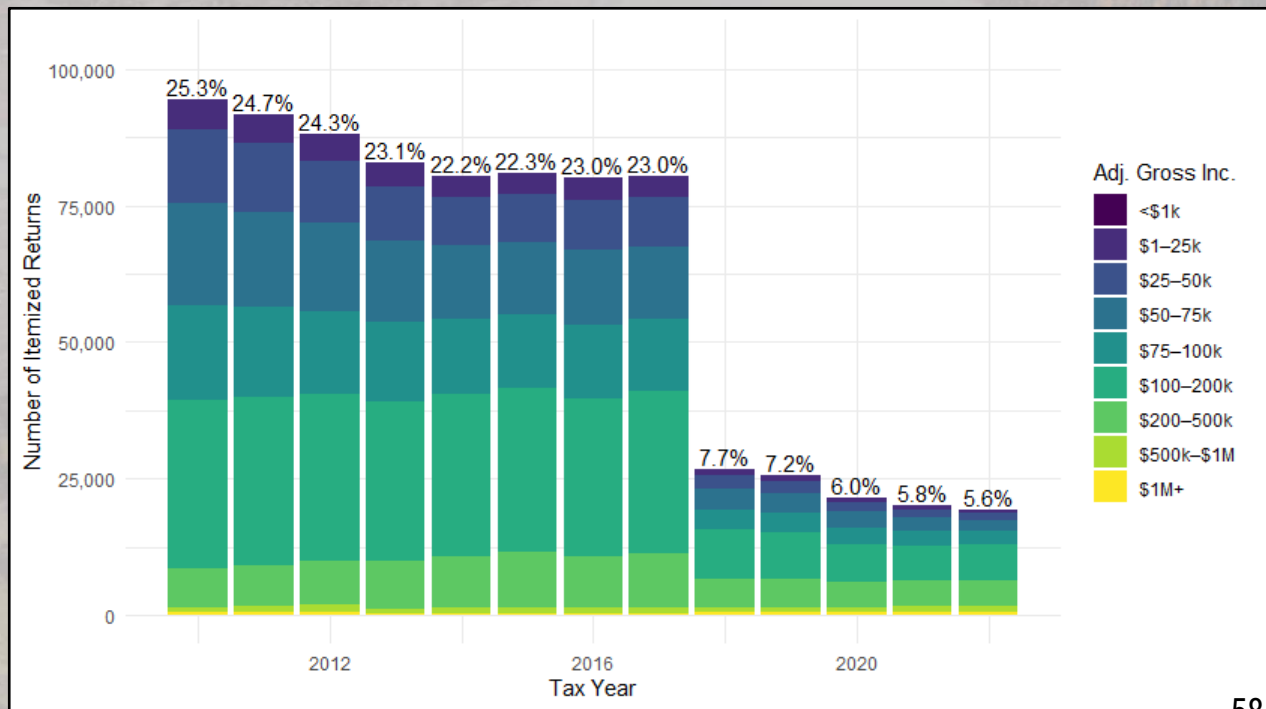


What changed - Federal Policy

TCJA increased standard deduction & capped SALT deductions.

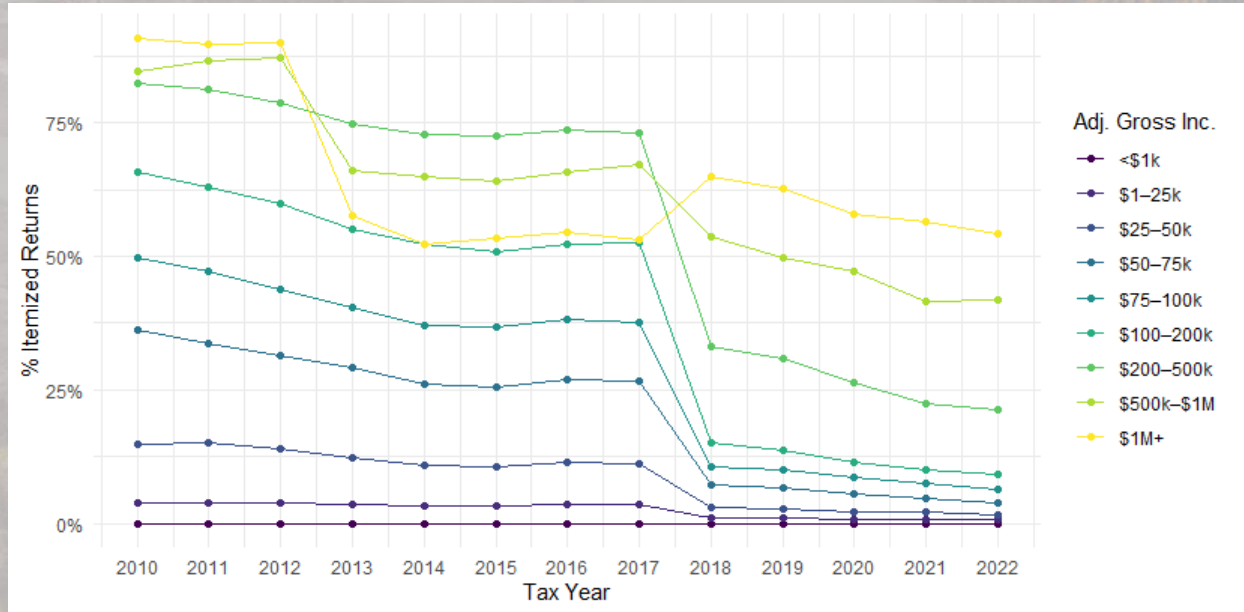
Result:
of itemized returns in Alaska fell from 80,350 returns (23%) in 2017 to 26,740 (8%) in 2018

Impact: Federal government picks up smaller share of AK taxes.



What changed - Federal Policy

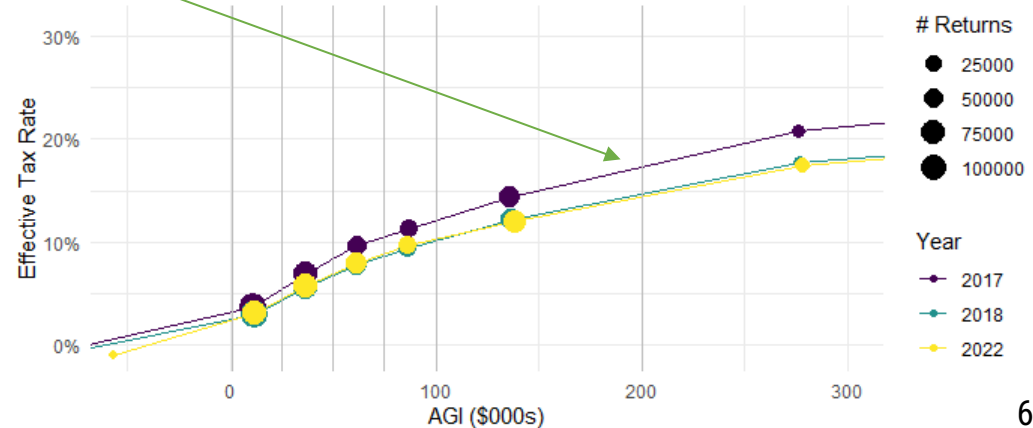
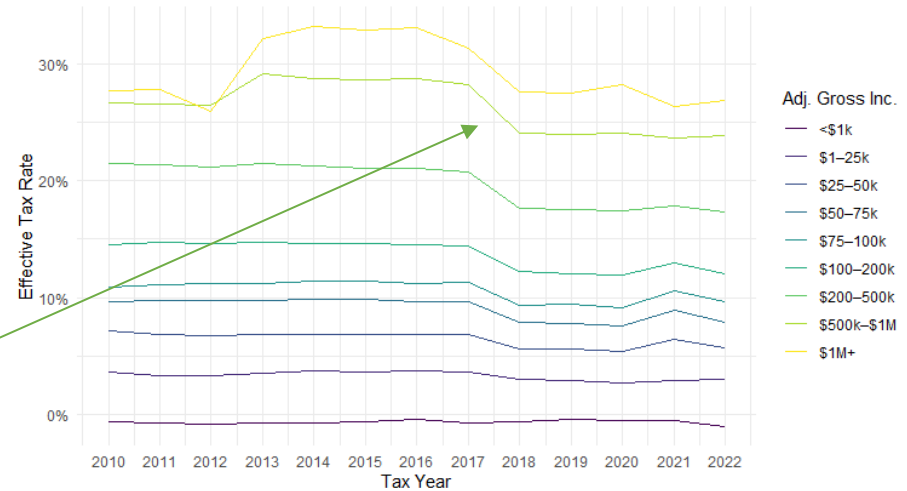
Only those in the highest income brackets continue to itemize at similar rates.



What changed – Federal Policy

2016 and Current Study both use a 10% Federal income tax surcharge. **TCJA lowered tax rates**, changing the relative rates for lower and higher income HHs.

This makes the progressive tax relatively more flat, shifting burden towards lower income households. Also reduces Federal incidence of AK taxes.



What changed – Resident Share of Burden

- Sales tax burden
 - 2016 Study used best available data on visitor spending
 - Today, much better data on direct visitor spending in the state
 - 2016 Study used best available data on non-resident worker spending
 - Today, better data available on non-resident worker wages, so their spending is more accurately modeled
- Income tax burden
 - 2016 Study used best available data on non-resident worker wages
 - Today, better data available on non-resident worker wages. We know non-resident workers have lower wages, on average, than Alaskan workers (seafood processing workers large share of total non-resident workers)



Residency Adjustments			
Fiscal Option	Share - 2016	Share - 2025	Reason for Change
Workforce reduction	100%	100%	
A broad spending cut	100%	100%	
“Clean” capital budget cut	100%	100%	
Spending cut: pay	100.0%	NA	
Permanent Fund Dividend Reduction	99%	99%	
Broad sales tax with fewer exclusions	89.6%	84%	Better data on spending from visitors. Different assumptions about non-resident workers. TCJA changes.
Narrower sales tax with more exclusions	88.5%	82%	
A flat income tax	92.6%	91%	Better data on non-resident wages. TCJA changes.
A progressive income tax	92.6%	97%	
State Property Tax with local credit	87.9%	90%	2025 assessed residential property only
Increase oil government take	NA	NA	
Increase in corporate taxes	NA	NA	

What changed – Leakage

- One reason we see smaller employment effects is that IMPLAN's data on leakage - the portion of spending that flows out of state and doesn't circulate in Alaska economy - has changed
- Online retail spending has grown, increasing leakage
- More detailed data in model on regional spending. IMPLAN received major update in 2017 which incorporated much more accurate leakage data; showed leakage was much higher than previously modeled.
 - 2016 results likely overestimated effects





3.5 Variations



Variations on other scenarios

We model 3 variations of the previously described scenarios

- 2% flat income tax; AK residents could apply their PFDs against tax liability.
 - Purpose: combines “best who-pays” features of PFD and income tax cases:
 - Applying PFDs towards state taxes would allow households to avoid paying federal taxes on PFD income
 - Non-residents still taxed, but don’t qualify for dividend credit
- Add higher summer-seasonal rates to the narrow/broad sales taxes
 - Purpose: shift incidence of sales tax to non-residents when visitor volumes are highest.
- Modify the broad corporate tax change to provide a tax incentive based on employment





3.5.1 Income Tax with PFD Credit



Income Tax, PFD Credit: Methodology

2% flat income tax; AK residents could apply their PFDs against tax liability.

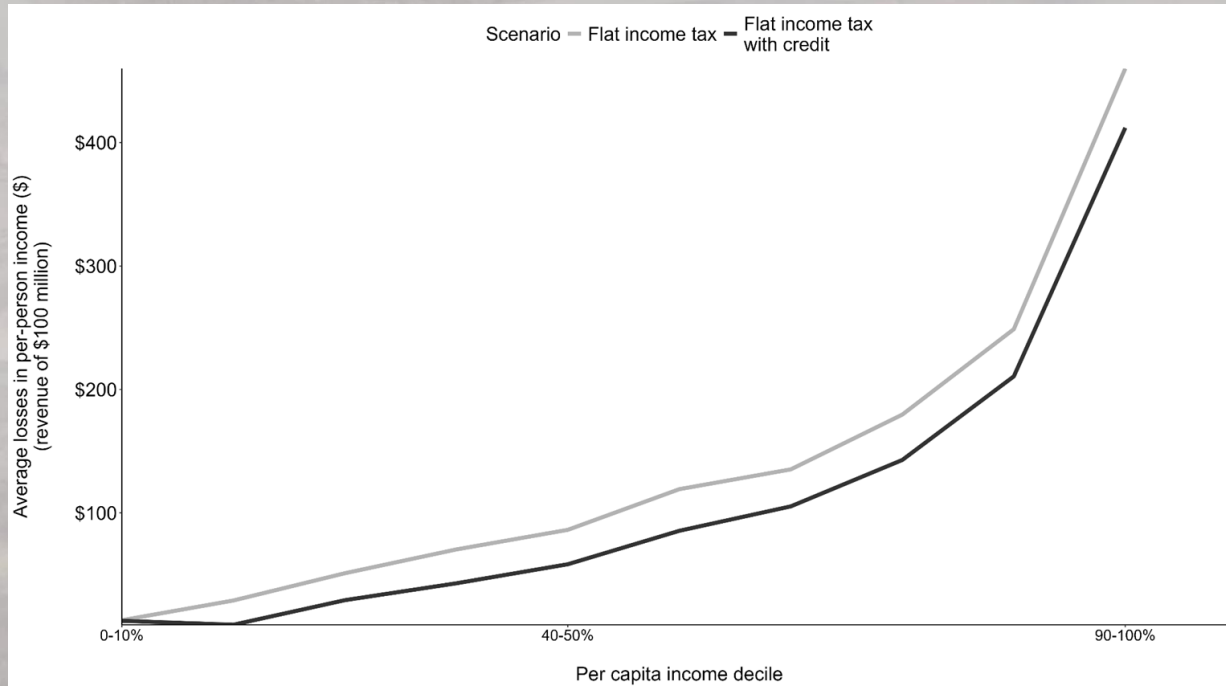
- 2% flat income tax modeled as before
- 2023 base year - PFD: \$1,312 (as in other parts of the analysis)
- We assume all residents participate
- Any PFD amount not applied to state tax liability would be received as cash

Combines “best who-pays” features of PFD and income tax cases:

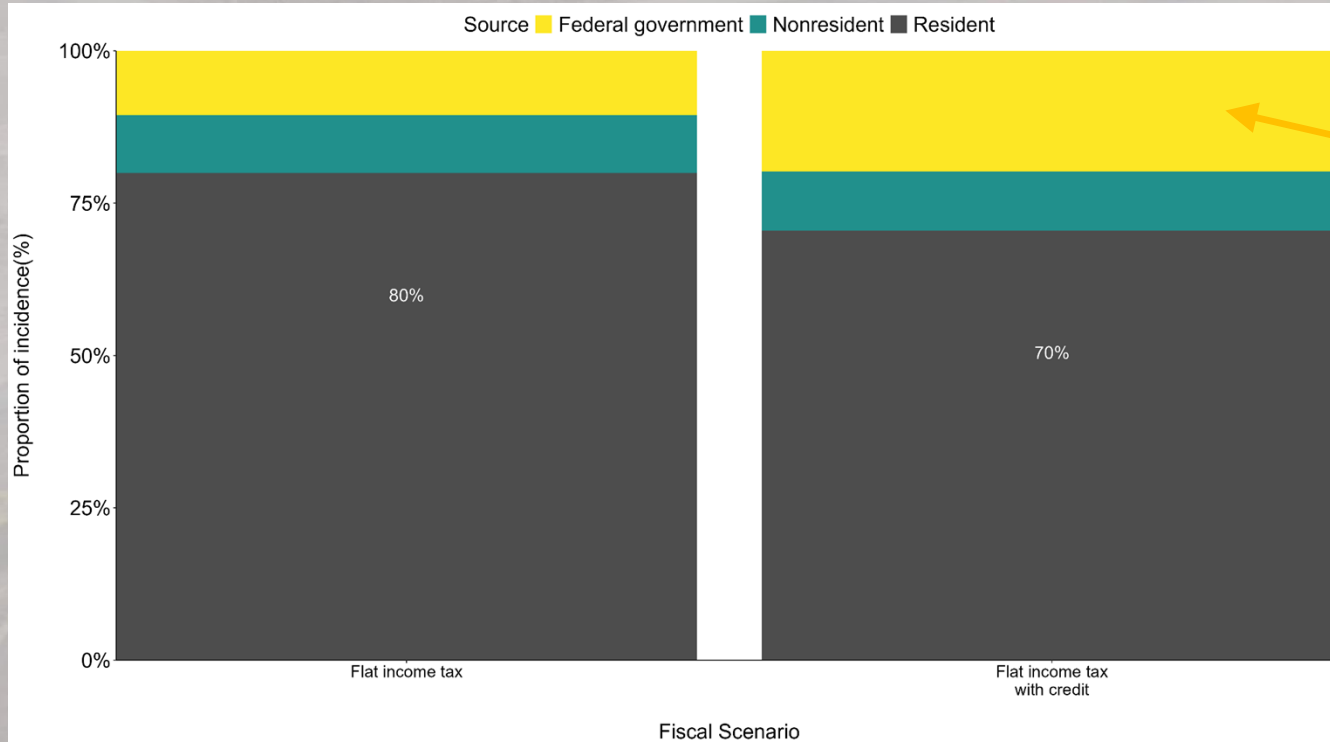
- Applying PFDs towards state taxes would allow households to avoid paying federal taxes on PFD income
- Non-residents still taxed, but don't qualify for dividend credit



Income Tax, PFD Credit: Results



Income Tax, PFD Credit: Results



Federal Gov't's Incidence increases as fewer Alaskans pay taxes on their PFD income.



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3.5.2 Seasonal Sales Tax



Seasonal Sales Tax: Methodology

To model the seasonal sales tax, we utilized the following approach

- From the previous sales tax methodology, we were able to calculate incidence on residents, non-resident workers, and tourists
- In modeling the seasonal sales tax, we considered the case where there was a deviation of one percent in high season and low season (i.e., 2 percent from November to April and 4 percent from May to October or 3 percent from November to April and 5 percent from May to October)
- We assumed that residents consumed the same bundle of goods constantly throughout the year (i.e., we did not allow for substitution effects with the seasonal sales tax)



Seasonal Sales Tax: Methodology

- Allowing for substitution effects would have a minor impact, but would likely decrease the burden on residents
- Spending is distributed across seasons based on the fraction of total visitor-days occurring in each season
 - I.e., a season that accounts for all visitor-days receives the full allocation of spending
- To estimate fraction of visitor-days across high and low seasons, we utilize two data sources: Dewey ([link](#)) and Alaska visitor survey ([link](#))
- Our estimates range from 56 percent to 87 percent in high season
- We used the average: 72 percent



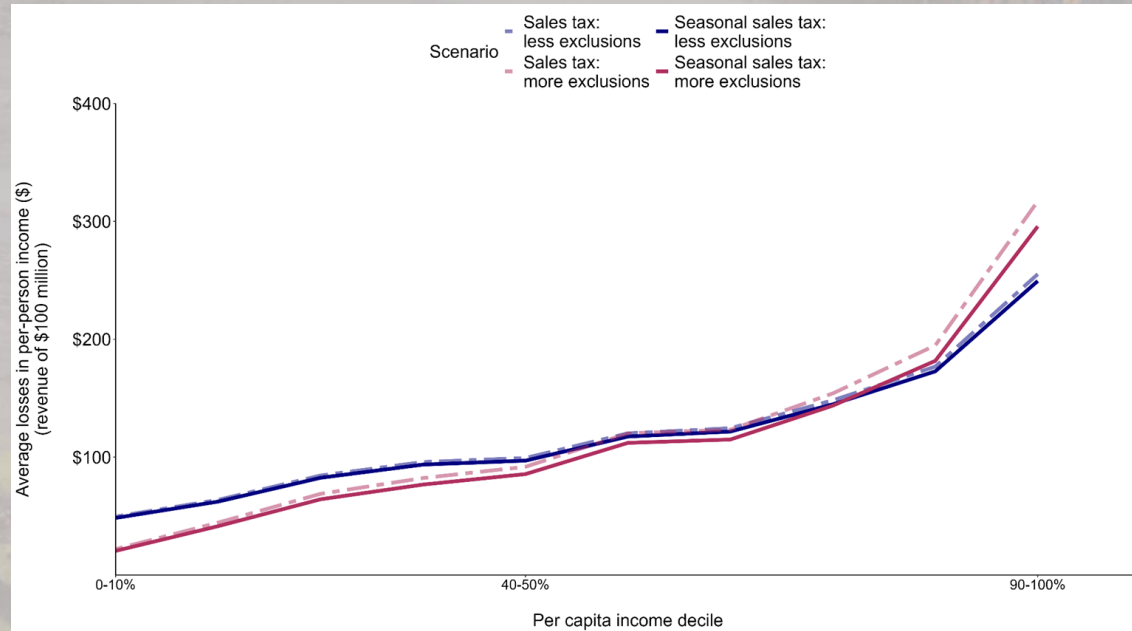
Seasonal Sales Tax: Methodology

- From here we calculated the new incidence for residents
- We also include high and low scenarios:
 - Low scenario: we assume that non-resident workers spend all of their income outside of the state
 - High scenario: we assume that non-resident workers spend all of their income in the state and in high season
- These high and low scenarios provide bounds on what we might expect from a seasonal sales tax
- Further estimates could include alternative scenarios for tourist days spent in the state, however 72 percent is a relatively conservative estimate for how many visitors occur in the high season



Seasonal Sales Tax: Results

- Given these assumptions, the seasonal sales tax shifts the tax burden of sales tax toward non-resident workers and visitors, but doesn't change the relative impacts on higher vs. lower income households

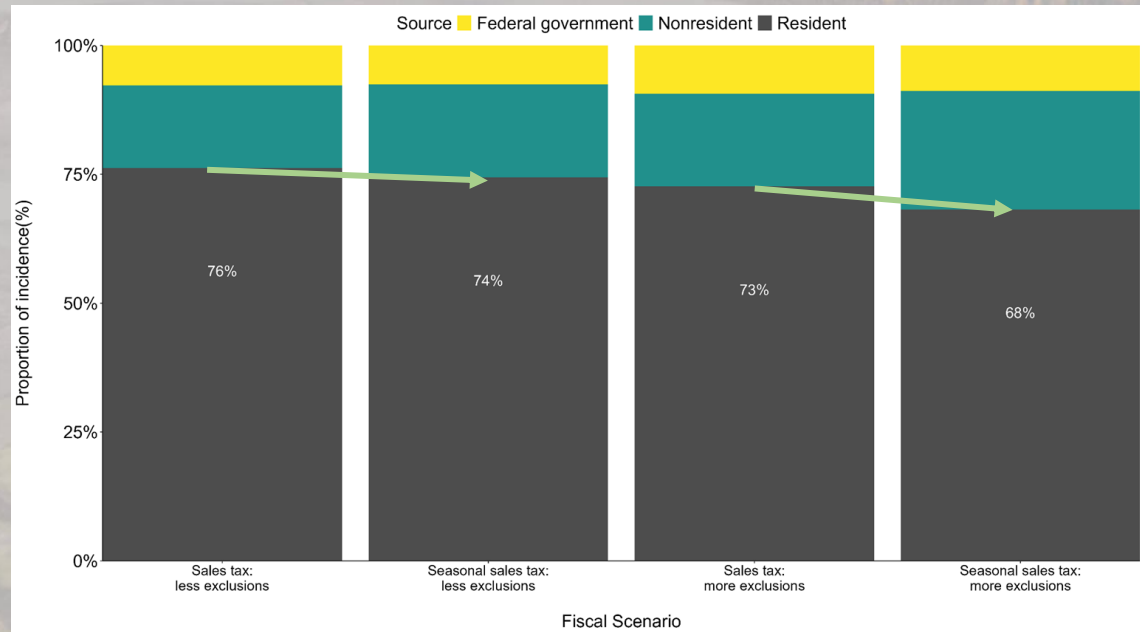


Seasonal Sales Tax: Results

Given these assumptions, seasonal sales tax shifts tax burden away from AK residents

The size of the shift depends on assumptions.

For each dollar raised, a seasonal sales tax would reduce impact on AK families's disposable income by 2-5 percentage points



Seasonal Sales Tax: Results

Broader base:

For each dollar raised from a 3% broad sales tax (not seasonal), Alaska families would see their disposable income fall by 76 cents

For each dollar raised from a seasonal tax of 2% in off-season and 4% in on-season, Alaska families would see their disposable income fall by 74 cents

Narrow base:

For each dollar raised from a 4% narrow sales tax (not seasonal), Alaska families would see their disposable income fall by 73 cents

For each dollar raised from a seasonal tax of 3% in off-season and 5% in on-season, Alaska families would see their disposable income fall by 68 cents



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3.5.3 Modify Corporate Income Tax to Provide Employment Incentives



Employment-Based Corporate Tax: Methodology

Economic development strategies often tie tax abatement or incentive policies to employment.

Conceptually -> firms receive tax credit/incentive for job creation

In the base case, all firms receive a tax change proportional to their current corporate income tax payments.

This variation reduces corporate taxes proportionate to each industry's employment intensity.

Labor-intensive industries like retail see larger tax reductions, mirroring the intention of employment incentive policies.

Results presented in Section 3.6



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3.5.4 Combine Two Policy Scenarios



Combining Two Policy Scenarios

Possible to implement a roughly budget neutral combination of policies that stimulates medium term growth and employment

- Couple less distortionary revenue generation with expansionary fiscal policy
- Many possible combination of policies could achieve similar result
- We model a single illustrative example: coupling less distortionary tax (e.g., property tax) with expansionary fiscal policy (e.g., capital project investment)

Results presented in Section 3.6



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3.6 Dynamic Effects



Dynamic Impact Analysis with *REMI*

- Regional Economic Models, Inc. (REMI) is the leading commercial provider of dynamic regional modeling software.
- We compare REMI's results with (1) the academic literature on the long run economic effects of fiscal policy (2) the results of more simple analysis in IMPLAN.



Dynamic Models

- Each dynamic scenario is designed to match as closely as possible to the scenario in the static model
 - 1 scenario, progressive income tax, could not be modeled because REMI's model provided to ISER does not account for different household types
 - We also model two variations of scenarios related to the corporate income tax
- Options are scaled to reduce deficit by \$100M
- Outcomes of interest: personal income, population, employment (total and in key industries), GDP/output (total and in key industries).
- We compare the state of the world with a given fiscal scenario to the status quo state of the world and compare the difference in outcomes.
- Because the model is dynamic, the effect changes over time.



Dynamic Results Summary

Dynamic (REMI) results are broadly consistent with static (IMPLAN) analysis

- Especially in terms of relative effects across policies

The policies with the largest impacts generate large direct employment effects as a first order impact. This creates:

- Immediate and sustained out-migration
- Large persistent demand response

Short-run effects are not necessarily predictive of long-run outcomes

- E.g., capital budget cut has large short run effects that decline significantly by 2040, but state government workforce cuts have very similar short run and long run effects



Dynamic Results Summary - Continued

Possible to implement a roughly budget neutral combination of policies that stimulates medium term growth and employment

- Couple less distortionary revenue generation (e.g., property tax) with expansionary fiscal policy (e.g., capital project investment)

Direct employment effects are good proxy for output (GDP) response (compared to personal income)



Important Notes

Many of the IMPLAN/Short Run assumptions carry over

- Scenarios are:
 - Independent (i.e., policy combos do not appear to amplify or dampen effects)
 - Nearly symmetric in increases or decreases
 - Locally linear
 - Not budget neutral

Some important differences

- REMI accounts for:
 - Dynamic responses to taxes
 - Allows for migration in and out of Alaska
 - Short-run and long-run responses
- This REMI model does not allow us to look at distributional effects by resident income

Technical notes:

- Each policy is implemented in 2027 and sustained through 2050
- All Scenarios scaled to raise \$100M





3.6.1 REMI Model Results

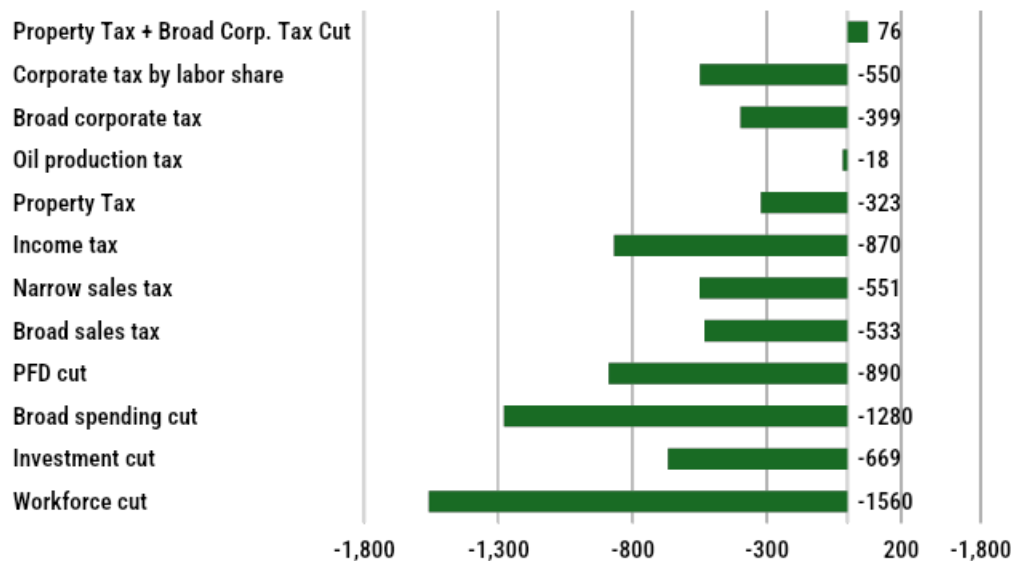


Dynamic Modeling Results

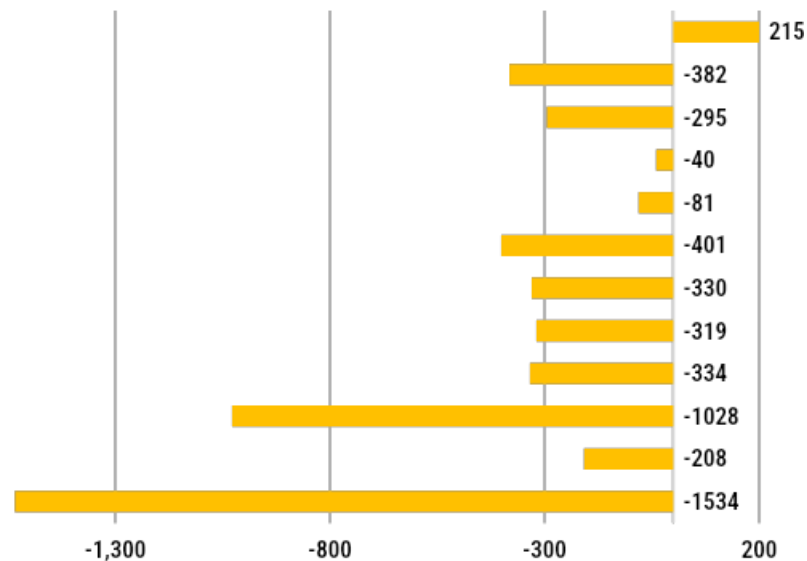
		Employment		Income (2025 \$Ms)		Total Output (2025 \$Ms)	
	Year:	2027	2050	2027	2050	2027	2050
Policy							
Workforce cut		-1560	-1534	-125	-212	-320	-375
Investment cut		-669	-208	-53	-29	-155	-55
Broad spending cut		-1280	-1028	-108	-170	-264	-245
PFD cut		-890	-334	-156	-105	-171	-78
Broad sales tax		-533	-319	-89	-78	-112	-101
Narrow sales tax		-551	-330	-89	-78	-112	-104
Income tax		-870	-401	-154	-120	-172	-97
Property Tax		-323	-81	-63	-37	-83	-66
Oil production tax		-18	-40	-2	-7	-12	-41
Broad corporate tax		-399	-295	-61	-60	-90	-106
Corporate tax by labor share		-550	-382	-82	-79	-116	-118
Property Tax + Broad Corp. Tax Cut		76	215	-2	23	7	40

Dynamic Modeling Results - Employment

2027 Employment

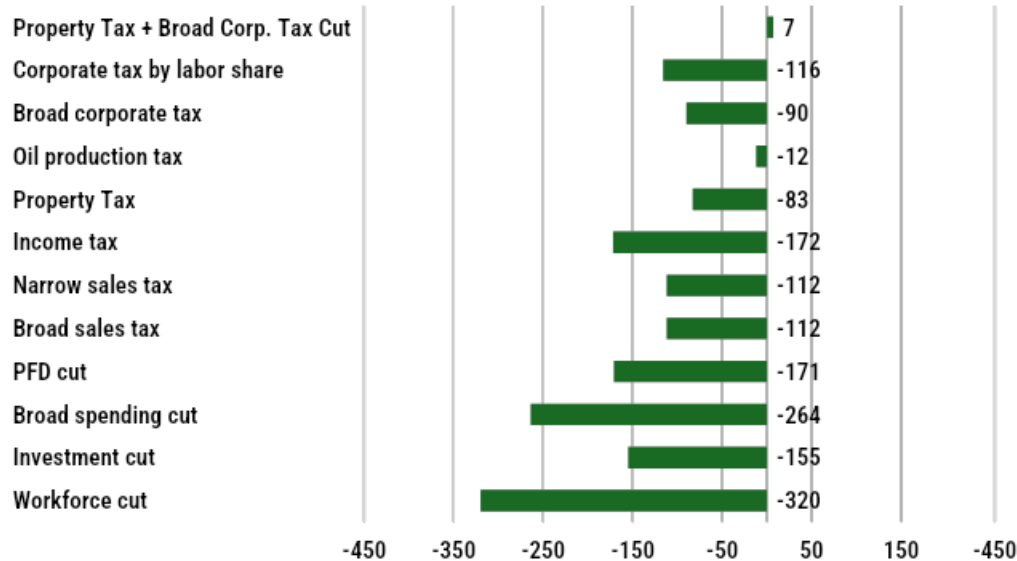


2050 Employment

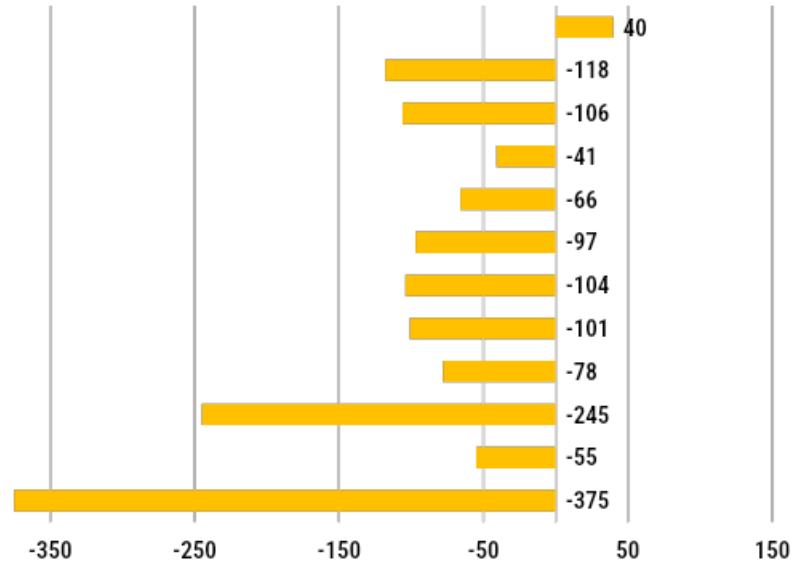


Dynamic Modeling Results - GDP/Output (\$M's)

2027 Output



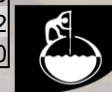
2050 Output



Example Output: State Workforce Cuts

Category	Units	2027	2030	2040	2050
<i>Personal Income</i>	Millions of Fixed Local (2025) Dollars	-125	-157	-184	-212
<i>Population</i>	People	-498	-1401	-1873	-1796
<i>Total Employment</i>	Jobs	-1560	-1748	-1537	-1534
<i>Employment for Key Industries</i>					
<i>Change in natural resources</i>	Jobs	-5	-15	-5	-2
<i>Change in construction</i>	Jobs	-2	-6	-5	-3
<i>Change in manufacturing</i>	Jobs	-1	-4	-4	-3
<i>Change in retail and wholesale</i>	Jobs	-1	-4	-3	-2
<i>Change in transportation and public utilities</i>	Jobs	-1	-3	-3	-2
<i>Change in finance, insurance, and real estate</i>	Jobs	-44	-45	-38	-39
<i>Change in services</i>	Jobs	-403	-436	-426	-450
<i>Change in government</i>	Jobs	-751	-818	-812	-805
<i>Total Output</i>	Millions of Fixed (2025) Dollars	-320	-361	-335	-375
<i>Output for Key Industries</i>					
<i>Change in natural resources</i>	Millions of Fixed (2025) Dollars	-4	-1	4	5
<i>Change in construction</i>	Millions of Fixed (2025) Dollars	-34	-47	-14	-14
<i>Change in manufacturing</i>	Millions of Fixed (2025) Dollars	-11	-11	-8	-7
<i>Change in retail and wholesale</i>	Millions of Fixed (2025) Dollars	-19	-25	-27	-32
<i>Change in transportation and public utilities</i>	Millions of Fixed (2025) Dollars	-12	-8	-1	0
<i>Change in finance, insurance, and real estate</i>	Millions of Fixed (2025) Dollars	-28	-33	-32	-35
<i>Change in services</i>	Millions of Fixed (2025) Dollars	-57	-64	-73	-92
<i>Change in government</i>	Millions of Fixed (2025) Dollars	-154	-172	-184	-200

Note: Output and employment in key industries do not necessarily sum to total output and total employment. Unlisted industries make up the difference.



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Case Study – Petroleum Tax

Category	Units	2025	2030	2040	2050
<i>Personal Income</i>	Millions of Fixed Local (2025) Dollars	-1.9	-7	-7.5	-6.5
<i>Population</i>	People	-8.4	-67.3	-92.2	-71.7
<i>Total Employment</i>	Jobs	-20	-71	-56	-41
<u><i>Employment for Key Industries</i></u>					
<i>Change In Construction</i>	Jobs	-4.6	-15.2	-4.8	-1.7
<i>Change In Retail trade</i>	Jobs	-1.9	-5.7	-4.9	-3.4
<i>Change In Professional, scientific, and technical services</i>	Jobs	-1	-3.9	-3.8	-3
<i>Change In Oil and gas extraction</i>	Jobs	-1.3	-4	-3.4	-2.3
<i>Change In Food services and drinking places</i>	Jobs	-0.77	-2.94	-3.17	-2.46
<i>Total Output</i>	Millions of Fixed (2025) Dollars	-13	-46	-47	-41
<u><i>Output for Key Industries</i></u>					
<i>Change In Oil and gas extraction</i>	Millions of Fixed (2025) Dollars	-6.2	-22.1	-26	-23.6
<i>Change In Petroleum and coal products manufacturing</i>	Millions of Fixed (2025) Dollars	-2.9	-8.6	-8	-6.5
<i>Change In Construction</i>	Millions of Fixed (2025) Dollars	-1.01	-3.39	-1.2	-0.48
<i>Change In Real estate</i>	Millions of Fixed (2025) Dollars	-0.36	-1.24	-1.15	-0.95
<i>Change In Professional, scientific, and technical services</i>	Millions of Fixed (2025) Dollars	-0.2	-0.8	-0.96	-0.91

Note: Output and employment in key industries do not sum to total output and total employment. Unlisted industries make up the difference.

Income losses are ~\$7M in the long run per \$100M increase (larger than short run estimate of \$4M)

Job losses are ~40 in the long run per \$100M increase (similar to short run estimate of 44)

Job losses hit construction first and hardest.

Output (GDP) contracts by \$46M over five years and only recovers somewhat.

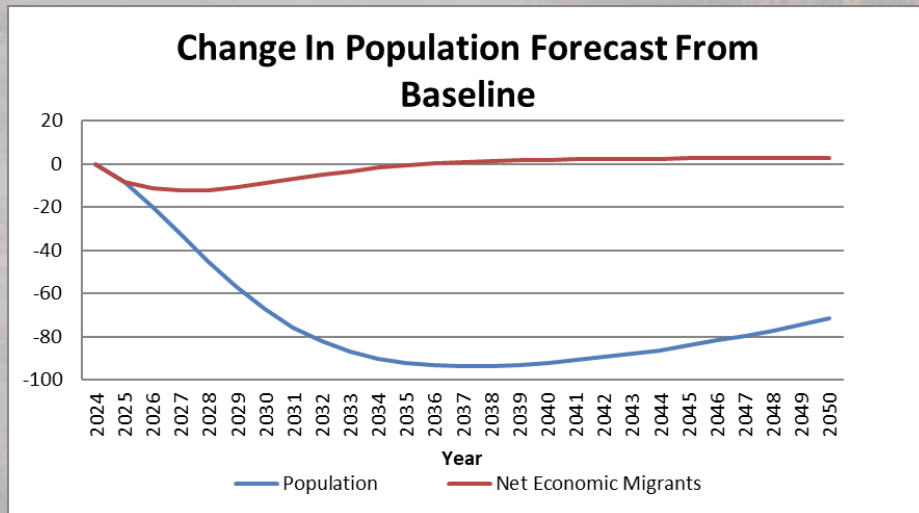


Case Study – Petroleum Tax

Full dynamics for two outcomes:
migration and total population

REMI suggests that increasing petroleum taxes by \$100M would result in an increase in outmigration of 10-20 persons per year through 2035.

Eventually, the economy adjusts to the shock, but the population of the state is smaller by 80-100 people through 2050 than it would have been without the tax.





3.7 Short Run Impacts of Differing “PFD Splits”

Impacts of Deviation from FY25 Split of 25/75



PFD “Splits”

What would be the net impact of using a different fraction of the Percent of Market Value draw from the Permanent Fund for Permanent Fund Dividends?

Procedure: Begin with FY25 Enacted

(PFD “Split” was 25/75. Operating Budget was \$5.168B (94%). Capital Budget was \$330.7 (6%))

Now Imagine -

Traditional petroleum and non-petroleum and revenues are fixed.

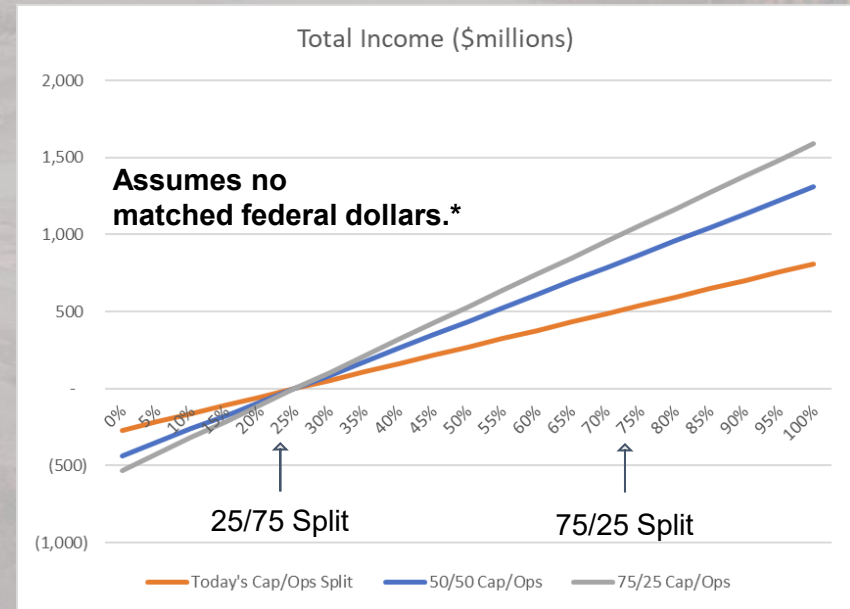
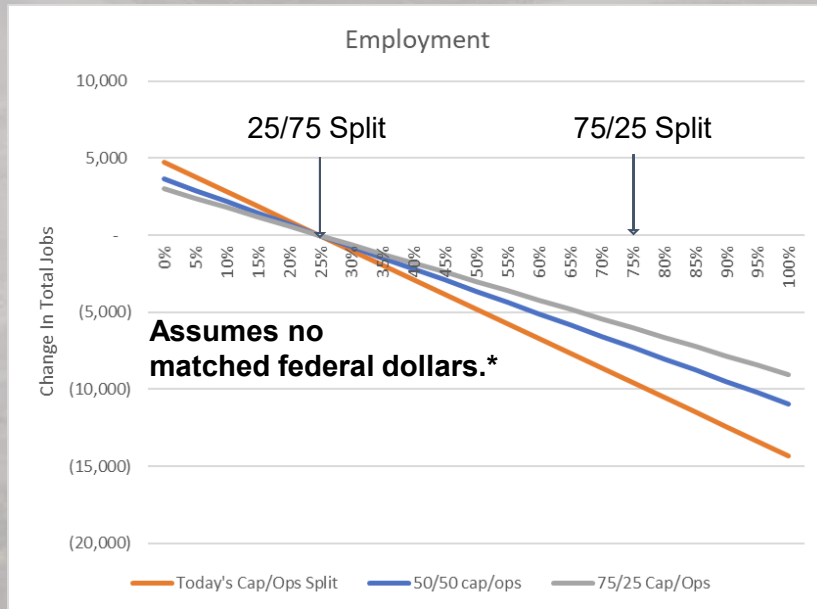
\$1 more (less) allocated to PFDs -> \$1 dollar less (more) for Operating and Capital Budgets.

3 hypotheticals change how to allocate that dollar of state spending to capital (Cap) and operating (SPs)

- a) **Assume Today's Cap/Ops Split (6/94)**: Every \$1 change in state spending is 6 cents capital budget, 94 cents operating
- b) **Assume Cap/Ops Split (50/50)**: Every \$1 change in state spending is 50 cents capital budget, 50 cents operating
- c) **Assume Cap/Ops Split (75/25)**: Every \$1 change in state spending is 75 cents capital budget, 25 cents operating



PFD “Splits”



***If agency or capital spending changes affected federally matched dollars, impacts would be significantly larger.**



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PFD “Splits”

If traditional revenues are fixed, adjusting from the 25/75 to higher PFD splits requires offsetting spending.

- As split for PFD gets larger,
 - net direct and multiplier jobs decline (as state workers must be cut and their spending is removed from the economy). While the PFD induces additional activity as Alaskans spend dividends, this additional spend is not large enough to offset.
 - But, incomes rise on net. The direct effect of the income increase plus its multiplier effects is larger than the income lost from state workers and their multiplier spending
- Capital spending has smaller multiplier effects for both jobs and income
 - If the increase in split comes disproportionately from capital, job losses are small and income gains are smaller
- This analysis does not account for **matched federal dollars**. If spending which has federal match was cut, **impacts** will be **significantly larger**.





4. Literature Review





4.1 Income & Sales Tax Impacts



Income Tax Behavioral Literature

In theory, income taxes can lead to declines in labor supply. However recent research suggests that **workers may instead exploit tax loopholes** (DeBacker et al. 2019)

There is mixed evidence that a small portion of very high income households may migrate away due to income taxes (Young et al. 2011)

Evidence suggests that **very high income retirees and top 0.1% investment earners may be more prone to migration** than other demographics (Young et al. 2011)



Sales Tax Behavioral Literature

Households are quite **responsive** to sales taxes (Baker, Johnson, and Kueng 2021)

Evidence suggests that households will **marginally substitute taxed goods for untaxed goods** (Baker, Johnson, and Kueng 2021)

Further, households may **purchase goods from online distributors to avoid sales taxes** (Baker, Johnson, and Kueng 2021)

Sales taxes added at the cash register have little effect on household purchases while tax-inclusive prices decrease purchasing of goods (Chetty, Looney, and Kroft 2009)





4.2 Business Tax Impacts



Petroleum Taxes

Tax impacts vary by time horizon and design

- *Production* (short-run) often unaffected
- *Drilling* (medium-run) moderately responsive
- *Exploration/Discovery* (long-run) more sensitive
- **Severance taxes** (on gross value/volume) more distortionary
- **Profit-based taxes** (on rents) have more limited behavioral effects

Empirical findings:

- **Brown et al. (2020)**: Severance tax $\uparrow \rightarrow$ drilling $\downarrow$ (elasticity -0.2 to -0.4) $\rightarrow$ moderate revenue potential, limited labor impact
- **Brewer (2025)**: Severance tax $\downarrow \neq$ drilling $\uparrow \rightarrow$ tax cuts not effective stimulus
- **Ahlvik et al. (2022)**: Royalties $\uparrow$ 1pp $\rightarrow$ exploration $\downarrow$ 3%, discoveries $\downarrow$ 4.4% $\rightarrow$ long-run effects
- **Reimer et al. (2017)**: Alaska ACES (profit tax $\uparrow$ + refundable credits) $\rightarrow$ no short-run effect on activity
- **Rao (2018)**: windfall profit tax (oil) - well-level production (Cali) -0.295 to -0.371 (on after-tax q produced); "a 10 percent excise tax would lead to a roughly 3 to 4 percent change in domestic oil production".

<https://www.aeaweb.org/articles?id=10.1257/pol.20140483>



Petroleum Taxes

Ahlvik et al. (2022) studies 130 oil tax changes internationally. Finds that a 1 percentage point increase in taxes on gross revenue decreases exploration and discoveries by 4% [95% CI -6% to -1%].

Finds no evidence that taxes change production in the first 10 years after change; 95% confident that true effect lies between -4% and +6%.

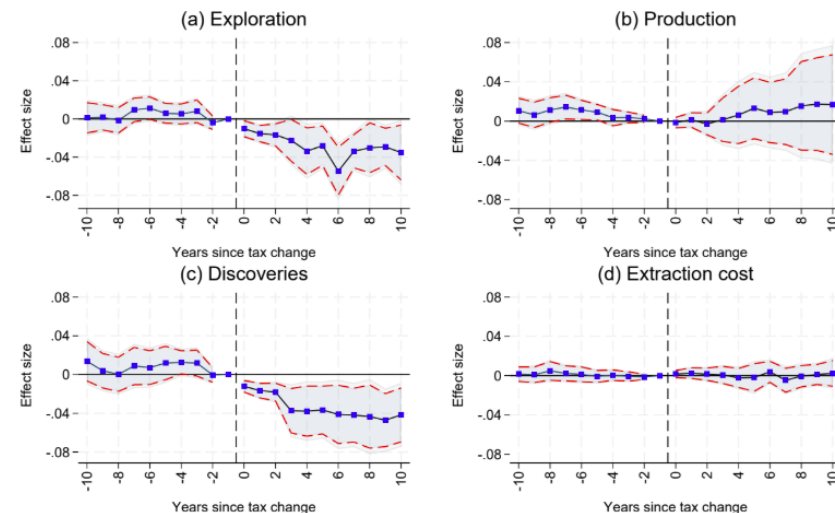


Figure 3: Estimated impact of production tax changes on (a) exploration, (b) production, (c) discoveries and (d) extraction costs for 1pp change in production taxes

Notes: Graphs show coefficients on year-since-tax-reform indicators from regressions corresponding to the specification of equation (2), where each reform is normalized to represent one percentage point increase in production taxes. We take $\log(1+y)$ transformation of each dependent variable and use data for company/year/regime with non-zero levels of exploration or production. All effects are shown in relation to year -1. Connected dots show yearly values, red dashed lines show 90% confidence interval and gray area shows 95% confidence intervals. Standard errors are two-way clustered by country and company.

Short-term state corporate tax impacts

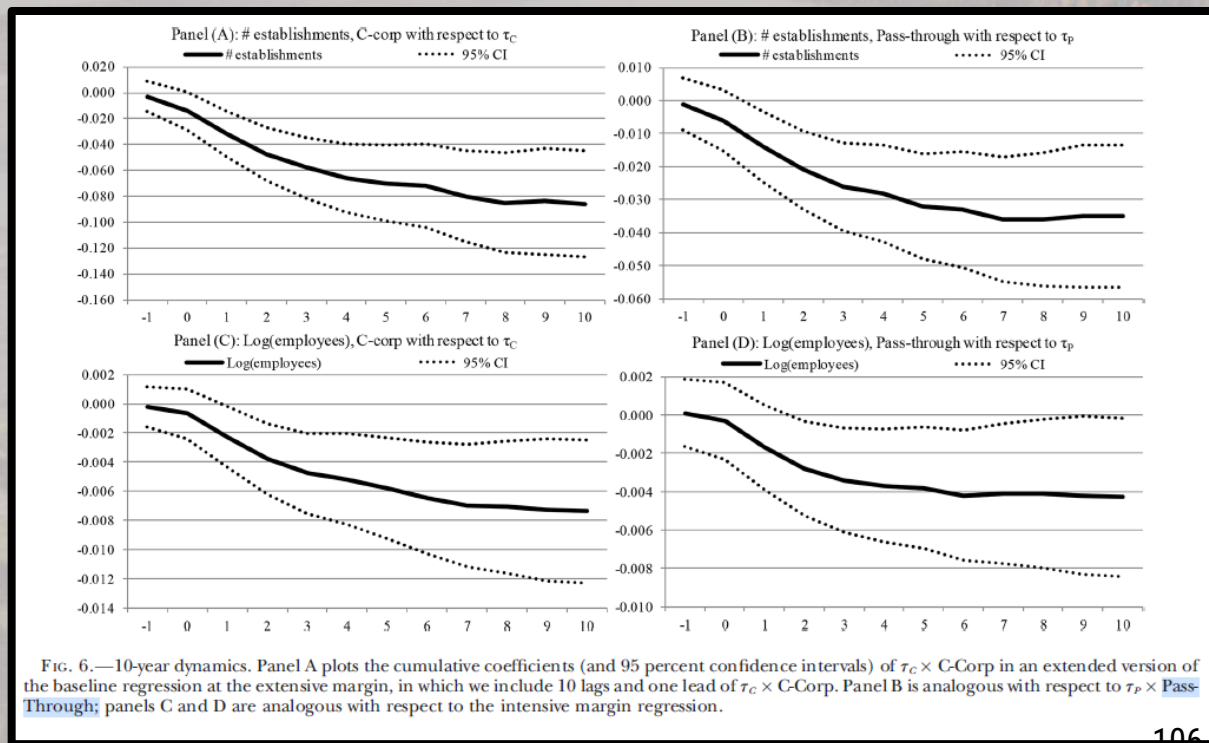
In general, there is a negative response in employment, wages, and business establishments. Note that 'cuts' only shown to have positive effects during a recession.

- **Employment (Elasticity Range: -0.3 to -0.5) & Wages (-0.3 to -0.6; -0.1 to -0.4)**
 - Ljungqvist & Smolyansky (2014; NBER) studying border state counties
 - Felix (2009; Kansas City Fed)
- **Establishments/firm in state (tax elasticities on establishments of -0.4 to -0.5)**
 - Giroud and Rauh (2019; JPE) studying multi-state firms; employment impact within previous range (-0.35).



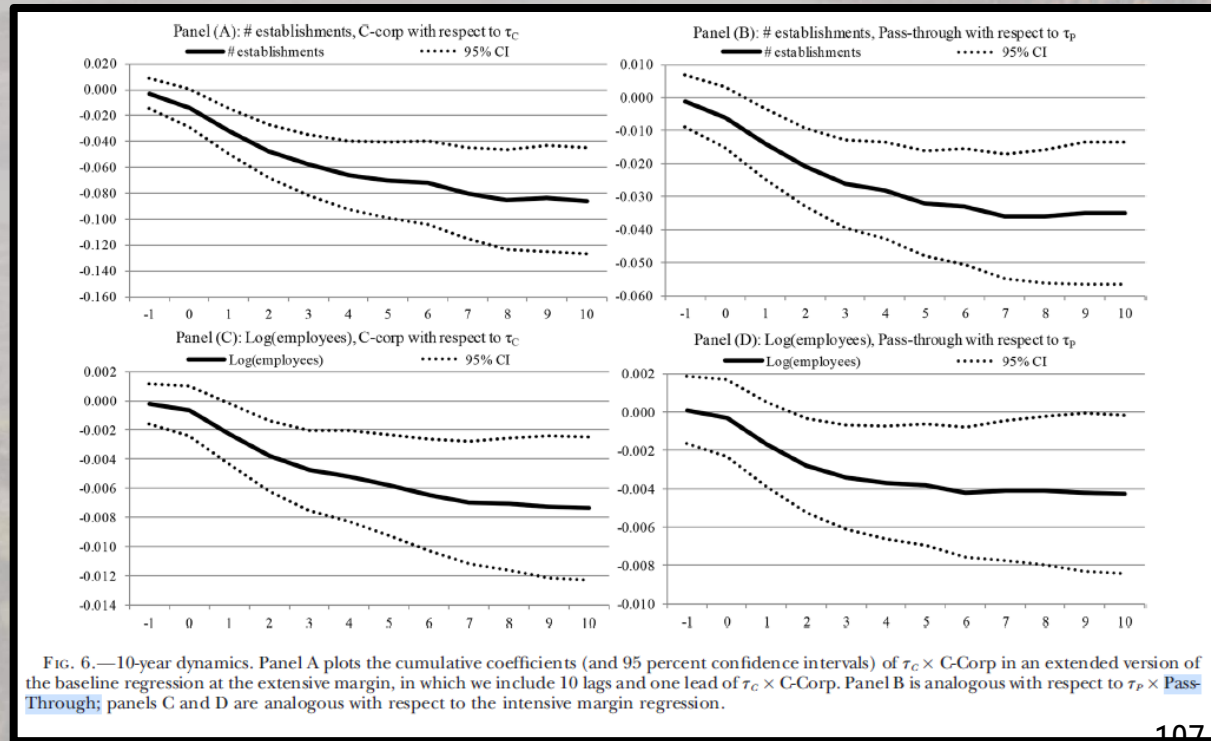
Long run corporate tax impacts

- Short-term corp. tax elasticities on establishments of -0.4 to -0.5
- Longer-term (Panel A&C), a 1% increase in corporate taxes led to:
 - 1.2% reduction in # establishments/firm,
 - 0.7% reduction in employees/firm
- Effects stabilized after 5-7 years



Long run personal tax impacts on pass-through entities

- Short-term personal tax elasticities on establishments of -0.2 to -0.4
- Longer-term (Panel B&D), a 1% increase in personal taxes led to:
 - 0.95% reduction in # establishments/firm,
 - 0.4% reduction in employees/firm
- Effects stabilized after 3-5 years



Business Incentives Literature

By 2019, business tax incentives were ~\$46B of \$60B of local economic development spending (Bartik 2020)

Incentive costs/job vary widely by state and program design (\$6500-\$122,000 in 2025\$; **average \$60,000/job**) (Slattery & Zidar 2020)

Firm-specific incentive subsidies may be higher, at \$157,000/job (avg. 2002-2017, in 2025\$) [$n=543$] and **\$262,000/job in 2023** (Slattery & Zidar 2020; Good Jobs First 2024); mixed effects on employment gains outside immediate sector and positive spillovers on nearby firm performance (Slattery & Zidar 2020; Patrick 2016; Bloom et al. 2019)

Cited arguments that only **2-25% of firms made location decisions due to incentives** offered (Bartik 2018)





4.3 Cost of Fiscal Uncertainty



Cost of Uncertainty

Uncertainty measure: counts number of state specific + national news articles that mention fiscal risk ([link](#) for more details)

Real GDP (millions of chained 2017 dollars): measures the inflation-adjusted value of total economic output, expressed in millions of dollars using a chain-weighted price index

Outcome of interest: what is the relationship between fiscal uncertainty and economic growth?



Cost of Uncertainty - Methodology

$$\log(\text{Real GDP}_{s,t}) = \sum_{k=0}^4 \beta_k EPU_{s,t-k} + \sum_{k=0}^4 \gamma_k EPU_{National,t-k} + \alpha_s + \delta_t + \epsilon_{s,t}$$

s = state

t = quarter

State fixed effects - α_s

Quarter fixed effects - δ_t

Standard errors are clustered by state



Cost of Uncertainty - Methodology

State-level uncertainty shocks (EPU_Shock_std) - We include the shock at time t and its next four lags:

- This lets the model capture whether the effects of uncertainty are immediate, delayed, or persistent.

National uncertainty (EPUNational_q_std) also included with four lags.

- This controls for uncertainty that affects every state at the same time.

State fixed effects - These absorb permanent differences between states (e.g., Alaska is always different from California in many ways).

Quarter fixed effects - These absorb national business-cycle patterns (e.g., nationwide recessions, seasonal effects).



Cost of Uncertainty

Across all states, the relationship suggests that a one standard deviation increase in uncertainty leads to -1.8 percent decline in real GDP growth

In 2016, Alaska experienced a large increase in fiscal uncertainty due to oil price volatility

This increase in fiscal uncertainty is approximately 1.65 standard deviations (or at the 95th percentile)

Suggests that Alaska experienced approximately 2 to 3 percent lower real GDP growth due to uncertainty

Other research supports this: Bloom (2009), Baker et. al (2016)



Cost of Uncertainty Literature

Particularly a concern for industries that have high capital costs (such as the resource industry in Alaska)

Uncertainty in Alaska's fiscal environment could be tangibly costly for the economy.

Uncertainty (in a broad sense) leads to **lower** business investment (Bloom 2014)

One example: Jens (2013) estimates during gubernatorial elections, there is a **decline between 5% to 15% of business investment** (Jens 2017)

Further, a 30 day budget delay **increases borrowing costs by 10 basis points on bonds** (Poterba 2014)





5. Conclusions



Conclusions

- This analysis is not meant to forecast what would happen if one option were implemented
 - This analysis should provide context for considerations.
- Future work might include more detailed modeling of specific policy options
- No particular policy is without tradeoffs
- This work provides an opportunity to consider tax and spending options with differing levels of economic distortion and growth implications for Alaska's economy





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7. Appendix



Datasets

- American Community Survey
- Internal Revenue Service, Statistics of Income. Alaska 2010-2023.
- Bureau of Labor Statistics, Consumer Expenditure Survey
- Bureau of Economic Analysis, Personal Consumption Expenditures
- Dewey Safegraph Spend Patterns
- Nonresidents Working in Alaska 2023 (2025), Alaska Department of Labor and Workforce Development Research and Analysis Section
- *Alaska Visitor Volume Summer 2023 & Winter 2023-24 (2024) and Alaska Visitor Volume Report Summer 2024 (2025)*, McKinley Research Group
- *Alaska 2022-2023 Visitor Profile Report*, prepared for Alaska Travel Industry Association by Destination Analysts
- Alaska Taxable
- Municipality of Anchorage 2023 CAMA Parcel database



ACS Descriptive Statistics

Income per capita decile	Observations	Total persons	Total households	Average household size	Average household income
0-10%	452.00	73,531.00	31,529	2.33	\$ 11,758.12
10-20%	363.00	90,131.00	29,832	3.02	\$ 35,952.06
20-30%	359.00	81,384.00	30,653	2.66	\$ 54,213.50
30-40%	340.00	77,728.00	30,598	2.54	\$ 68,056.02
40-50%	266.00	85,943.00	30,678	2.80	\$ 88,272.27
50-60%	250.00	76,997.00	30,617	2.51	\$ 105,723.65
60-70%	240.00	72,431.00	30,761	2.35	\$ 112,833.57
70-80%	268.00	62,310.00	30,617	2.04	\$ 129,306.59
80-90%	251.00	57,597.00	30,972	1.86	\$ 159,856.72
90-100%	252.00	55,203.00	30,252	1.82	\$ 286,730.61



Consumption Propensity in IMPLAN

Households of different incomes have different spending patterns.

Low income households save less and pay less in federal taxes; when their incomes are reduced by \$1, it is assumed that their spending decreases by \$1.

When high income households see an income shock, their spending is less directly affected because they also reduce saving and federal tax payments.

Spending Reduction per Dollar of Lost Income	
Income Group	Reduction
Households <15k	\$1.00
Households \$15-30k	\$1.00
Households \$30-40k	\$1.00
Households \$40-50k	\$1.00
Households \$50-70k	\$0.96
Households \$70-100k	\$0.98
Households \$100-150k	\$0.94
Households \$150-200k	\$0.84
Households >\$200k	\$0.58

Fiscal Option	How it was modeled	Incidence
Workforce reduction of 1,300 positions	Removed 1,300 jobs from the sector named employment and payroll of state government employment	100%
\$100M “clean” capital budget cut	Reduced spending by \$60 million in a sector named construction in new commercial structures and reducing spending by \$40 million in a sector named construction in other non-residential structures.	100%
A broad \$100M cut	Removed \$100 million from the spending of a sector named other state government enterprises.	100%
A \$600 Permanent Fund Dividend Reduction	Starts with a representative sample of Alaskan households. We remove from these households' income an amount equal to the liability they would individually face from the fiscal option. For PFD reduction, the total household dividend income, for income tax their modeled state tax liability, and for sales tax their modeled expenditure on the goods and services subject to the tax (times the tax rate). We divide households into 9 income categories, each with its own propensity to spend from income. When household incomes are reduced via an assumed fiscal option, they reduce their spending proportionally based on their consumption propensity. Reduced spending has ripple effects through the economy, which are modeled in through the I/O framework. These impacts are reduced by the “incidence” that falls to non-residents (as we assumes non-residents will not adjust their spending behavior in response to the fiscal options).	99% Assuming 1% of PFDs are paid to individuals as they out-migrate. Alaskans deduct* PFD reduction from Federal taxes regardless of whether they itemize.
Broad 3% sales tax with fewer exclusions		76%. Assumes \$4.5B in taxable visitor spending; \$0.6B in non-resident worker taxable spending; Alaskans deduct sales tax from federal taxes if they itemize.
Narrower 4% sales tax with more exclusions		73%. Assumes \$4.2B in taxable visitor spending; \$0.5B in non-resident worker taxable spending; Alaskans deduct sales tax from federal taxes if they itemize.
A 2% flat income tax		Assumes \$3.1B in non-resident taxable wage income. Alaskans deduct income tax from federal taxes if they itemize.
A progressive income tax (10% Federal tax)		Assumes \$3.1B in non-resident taxable wage income. Alaskans deduct income tax from federal taxes if they itemize.
20 Mill State Property Tax with local credit	For households in the ACS, we estimate property value based on either housing value, property taxes paid, or monthly rent. For homeowners outside of the unorganized borough, we impute property value from property taxes paid, and assuming the weighted average local property tax rate. For homeowners within the unorganized borough, we treat housing value as an estimate of property value. Last, for renters, we assume monthly rent equals 1% of property value, and a pass through rate to renters of 50%. We model the state property tax scenario allowing local property taxes as a credit against tax liabilities.	86%. Assumes 90% property ownership by non-residents.
\$100M increase oil government take	Removed \$100M from fixed other property type income.	100%
\$100M increase in corporate taxes	Removed \$100M from fixed other property type income proportionate to current industry contributions.	100%

Incidence of Sales Tax

	Residents (\$Ms)	Non-resident workers (\$Ms)	Visitors (\$Ms)	Total Tax Base (\$Ms)	Resident Incidence		
					Base Case	Zero Non-Res Workers	Non-Res Workers Spend AK Wages Exactly Like Alaskans
2024 Personal Consumption Expenditure in Alaska:	\$49,112	\$1,424	\$ 4,458	\$54,994	89%	92%	83%
Less foreign travel:	(\$722)	(\$21)					
Less Exemptions for Financial services furnished without payment & Social services and religious activities	(\$2,121)	(\$61)					
Subtotal	\$46,269	\$1,341	\$ 4,458	\$52,068	89%	91%	82%
Less Exemptions for shelter, healthcare, education:	(\$18,968)	(\$550)					
Subtotal: fewer exclusions	\$27,301	\$792	\$ 4,458	\$32,550	84%	86%	78%
Less Exemptions for Utilities, and Food at Home	(\$4,616)	(\$134)	\$ (289)				
Subtotal: more exclusions	\$22,685	\$658	\$ 4,168	\$27,511	82%	84%	77%

See slide notes.



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Adjusting Non-resident Workers from “PFD” to Census/ACS Definition

Income Group	Worker Counts (#)			Average Wages (\$s)				Total Wages (\$m)					
	PFD-Defined Non-Resident	Non-Residents that Become Residents	PFD- Defined Resident	PFD-Defined Non- Resident	Non-Residents that Become Residents	PFD-Defined Resident	PFD-Defined Non- Resident	Non-Residents that Become Residents	ACS-Defined Non-Res	PFD-Defined Resident	ACS-Defined Res		
Less than 15k	4,175	205	5,000	\$ 14,179	\$ 14,637		\$ 59		\$3	\$ 56	\$ -	\$ 3	
15-30k	49,137	3,490	61,230	\$ 21,559	\$ 19,415	\$ 25,015	\$ 1,059		68	\$ 992	\$ 1,532	\$ 1,599	
30-40k	13,211	2,170	19,115	\$ 33,650	\$ 34,142	\$ 36,140	\$ 445		74	\$ 370	\$ 691	\$ 765	
40-50k	2,826	810	88,907	\$ 43,950	\$ 45,232	\$ 44,716	\$ 124		37	\$ 88	\$ 3,976	\$ 4,012	
50-70k	15,177	2,618	81,528	\$ 58,556	\$ 53,814	\$ 61,543	\$ 889		141	\$ 748	\$ 5,017	\$ 5,158	
70-100k	5,688	75	59,698	\$ 83,986	\$ 71,695	\$ 81,194	\$ 478		5	\$ 472	\$ 4,847	\$ 4,853	
100-150k	1,000	274	2,655	\$ 105,684	\$ 105,684	\$ 111,046	\$ 106		29	\$ 77	\$ 295	\$ 324	
150-200k	950		-	\$ 189,845		\$ 189,845	\$ 180		-	\$ 180	\$ -	\$ -	
Greater than 200k	917		- 2,300	\$ 213,603		\$ 243,152	\$ 196		-	\$ 196	\$ 559	\$ 559	
Totals									\$ 357	\$ 3,179	\$ 16,917	\$ 17,273	



Full REMI Scenario Results



\$100M Capital Investment Cut

Category	Units	2027	2030	2040	2050
<i>Personal Income</i>	Millions of Fixed Local (2025) Dollars	-53	-57	-35	-29
<i>Population</i>	People	-222	-585	-481	-294
<i>Total Employment</i>	Jobs	-669	-659	-288	-208
<u><i>Employment for Key Industries</i></u>					
<i>Change in natural resources</i>	Jobs	-5	-15	-5	-2
<i>Change in construction</i>	Jobs	-2	-6	-5	-3
<i>Change in manufacturing</i>	Jobs	-1	-4	-4	-3
<i>Change in retail and wholesale</i>	Jobs	-1	-4	-3	-2
<i>Change in transportation and public utilities</i>	Jobs	-1	-3	-3	-2
<i>Change in finance, insurance, and real estate</i>	Jobs	-19	-18	-8	-7
<i>Change in services</i>	Jobs	-175	-177	-121	-104
<i>Change in government</i>	Jobs	-34	-63	-32	-21
<i>Total Output</i>	Millions of Fixed (2025) Dollars	-155	-150	-66	-55
<u><i>Output for Key Industries</i></u>					
<i>Change in natural resources</i>	Millions of Fixed (2025) Dollars	-16	-12	-2	0
<i>Change in construction</i>	Millions of Fixed (2025) Dollars	-68	-62	-15	-8
<i>Change in manufacturing</i>	Millions of Fixed (2025) Dollars	-5	-5	-2	-1
<i>Change in retail and wholesale</i>	Millions of Fixed (2025) Dollars	-11	-13	-10	-10
<i>Change in transportation and public utilities</i>	Millions of Fixed (2025) Dollars	-6	-3	1	0
<i>Change in finance, insurance, and real estate</i>	Millions of Fixed (2025) Dollars	-15	-15	-8	-6
<i>Change in services</i>	Millions of Fixed (2025) Dollars	-26	-27	-24	-25
<i>Change in government</i>	Millions of Fixed (2025) Dollars	-7	-13	-7	-5

Note: Output and employment in key industries do not necessarily sum to total output and total employment. Unlisted industries make up the difference.

\$100M Broad State Spending Cut

Category	Units	2027	2030	2040	2050
<i>Personal Income</i>	Millions of Fixed Local (2025) Dollars	-108	-146	-167	-170
<i>Population</i>	People	-744	-2081	-2764	-2344
<i>Total Employment</i>	Jobs	-1280	-1481	-1206	-1028
<u><i>Employment for Key Industries</i></u>					
<i>Change in natural resources</i>	Jobs	-5	-15	-5	-2
<i>Change in construction</i>	Jobs	-2	-6	-5	-3
<i>Change in manufacturing</i>	Jobs	-1	-4	-4	-3
<i>Change in retail and wholesale</i>	Jobs	-1	-4	-3	-2
<i>Change in transportation and public utilities</i>	Jobs	-1	-3	-3	-2
<i>Change in finance, insurance, and real estate</i>	Jobs	-36	-39	-35	-33
<i>Change in services</i>	Jobs	-333	-377	-376	-355
<i>Change in government</i>	Jobs	-555	-604	-516	-418
<i>Total Output</i>	Millions of Fixed (2025) Dollars	-264	-307	-260	-245
<u><i>Output for Key Industries</i></u>					
<i>Change in natural resources</i>	Millions of Fixed (2025) Dollars	-4	-2	2	3
<i>Change in construction</i>	Millions of Fixed (2025) Dollars	-39	-53	-19	-15
<i>Change in manufacturing</i>	Millions of Fixed (2025) Dollars	-10	-10	-8	-6
<i>Change in retail and wholesale</i>	Millions of Fixed (2025) Dollars	-17	-22	-23	-23
<i>Change in transportation and public utilities</i>	Millions of Fixed (2025) Dollars	-10	-7	-3	-3
<i>Change in finance, insurance, and real estate</i>	Millions of Fixed (2025) Dollars	-24	-32	-32	-29
<i>Change in services</i>	Millions of Fixed (2025) Dollars	-47	-55	-62	-70
<i>Change in government</i>	Millions of Fixed (2025) Dollars	-114	-126	-116	-102

Note: Output and employment in key industries do not necessarily sum to total output and total employment. Unlisted industries make up the difference.

\$100M PFD Cut

Category	Units	2027	2030	2040	2050
<i>Personal Income</i>	Millions of Fixed Local (2025) Dollars	-156	-166	-124	-105
<i>Population</i>	People	-299	-827	-733	-518
<i>Total Employment</i>	Jobs	-890	-971	-449	-334
<u><i>Employment for Key Industries</i></u>					
<i>Change in natural resources</i>	Jobs	-5	-15	-5	-2
<i>Change in construction</i>	Jobs	-2	-6	-5	-3
<i>Change in manufacturing</i>	Jobs	-1	-4	-4	-3
<i>Change in retail and wholesale</i>	Jobs	-1	-4	-3	-2
<i>Change in transportation and public utilities</i>	Jobs	-1	-3	-3	-2
<i>Change in finance, insurance, and real estate</i>	Jobs	-34	-32	-17	-13
<i>Change in services</i>	Jobs	-429	-416	-262	-195
<i>Change in government</i>	Jobs	-47	-95	-57	-43
<i>Total Output</i>	Millions of Fixed (2025) Dollars	-171	-192	-89	-78
<u><i>Output for Key Industries</i></u>					
<i>Change in natural resources</i>	Millions of Fixed (2025) Dollars	-3	-2	2	2
<i>Change in construction</i>	Millions of Fixed (2025) Dollars	-36	-46	1	0
<i>Change in manufacturing</i>	Millions of Fixed (2025) Dollars	-7	-6	-2	-2
<i>Change in retail and wholesale</i>	Millions of Fixed (2025) Dollars	-21	-23	-16	-14
<i>Change in transportation and public utilities</i>	Millions of Fixed (2025) Dollars	-11	-8	-2	-2
<i>Change in finance, insurance, and real estate</i>	Millions of Fixed (2025) Dollars	-27	-29	-16	-13
<i>Change in services</i>	Millions of Fixed (2025) Dollars	-59	-59	-43	-39
<i>Change in government</i>	Millions of Fixed (2025) Dollars	-9	-19	-11	-9

Note: Output and employment in key industries do not necessarily sum to total output and total employment. Unlisted industries make up the difference.

\$100M Broad Sales Tax

Category	Units	2027	2030	2040	2050
<i>Personal Income</i>	Millions of Fixed Local (2025) Dollars	-89	-108	-92	-78
<i>Population</i>	People	-253	-758	-855	-618
<i>Total Employment</i>	Jobs	-543	-727	-447	-324
<i>Employment for Key Industries</i>					
<i>Change in natural resources</i>	Jobs	-5	-15	-5	-2
<i>Change in construction</i>	Jobs	-2	-6	-5	-3
<i>Change in manufacturing</i>	Jobs	-1	-4	-4	-3
<i>Change in retail and wholesale</i>	Jobs	-1	-4	-3	-2
<i>Change in transportation and public utilities</i>	Jobs	-1	-3	-3	-2
<i>Change in finance, insurance, and real estate</i>	Jobs	-29	-37	-30	-23
<i>Change in services</i>	Jobs	-235	-275	-208	-158
<i>Change in government</i>	Jobs	-30	-72	-58	-42
<i>Total Output</i>	Millions of Fixed (2025) Dollars	-111	-163	-117	-101
<i>Output for Key Industries</i>					
<i>Change in natural resources</i>	Millions of Fixed (2025) Dollars	-4	-7	-8	-7
<i>Change in construction</i>	Millions of Fixed (2025) Dollars	-22	-34	-3	-1
<i>Change in manufacturing</i>	Millions of Fixed (2025) Dollars	-8	-15	-15	-12
<i>Change in retail and wholesale</i>	Millions of Fixed (2025) Dollars	-15	-19	-16	-14
<i>Change in transportation and public utilities</i>	Millions of Fixed (2025) Dollars	-11	-14	-14	-13
<i>Change in finance, insurance, and real estate</i>	Millions of Fixed (2025) Dollars	-16	-21	-16	-13
<i>Change in services</i>	Millions of Fixed (2025) Dollars	-29	-37	-33	-31
<i>Change in government</i>	Millions of Fixed (2025) Dollars	-6	-15	-12	-10

Note: Output and employment in key industries do not necessarily sum to total output and total employment. Unlisted industries make up the difference.

\$100M Narrow Sales Tax

Category	Units	2027	2030	2040	2050
<i>Personal Income</i>	Millions of Fixed Local (2025) Dollars	-89	-108	-92	-78
<i>Population</i>	People	-253	-760	-862	-620
<i>Total Employment</i>	Jobs	-551	-739	-458	-330
<i>Employment for Key Industries</i>					
<i>Change in natural resources</i>	Jobs	-5	-15	-5	-2
<i>Change in construction</i>	Jobs	-2	-6	-5	-3
<i>Change in manufacturing</i>	Jobs	-1	-4	-4	-3
<i>Change in retail and wholesale</i>	Jobs	-1	-4	-3	-2
<i>Change in transportation and public utilities</i>	Jobs	-1	-3	-3	-2
<i>Change in finance, insurance, and real estate</i>	Jobs	-30	-38	-31	-23
<i>Change in services</i>	Jobs	-243	-283	-214	-162
<i>Change in government</i>	Jobs	-31	-73	-59	-42
<i>Total Output</i>	Millions of Fixed (2025) Dollars	-112	-165	-120	-104
<i>Output for Key Industries</i>					
<i>Change in natural resources</i>	Millions of Fixed (2025) Dollars	-4	-8	-8	-7
<i>Change in construction</i>	Millions of Fixed (2025) Dollars	-22	-34	-3	-2
<i>Change in manufacturing</i>	Millions of Fixed (2025) Dollars	-8	-15	-15	-12
<i>Change in retail and wholesale</i>	Millions of Fixed (2025) Dollars	-15	-19	-16	-14
<i>Change in transportation and public utilities</i>	Millions of Fixed (2025) Dollars	-11	-15	-15	-14
<i>Change in finance, insurance, and real estate</i>	Millions of Fixed (2025) Dollars	-16	-22	-16	-13
<i>Change in services</i>	Millions of Fixed (2025) Dollars	-30	-38	-34	-31
<i>Change in government</i>	Millions of Fixed (2025) Dollars	-6	-15	-13	-10

Note: Output and employment in key industries do not necessarily sum to total output and total employment. Unlisted industries make up the difference.

\$100M Income Tax

Category	Units	2027	2030	2040	2050
<i>Personal Income</i>	Millions of Fixed Local (2025) Dollars	-154	-171	-137	-120
<i>Population</i>	People	-434	-1196	-1213	-899
<i>Total Employment</i>	Jobs	-870	-997	-517	-401
<u><i>Employment for Key Industries</i></u>					
<i>Change in natural resources</i>	Jobs	-5	-15	-5	-2
<i>Change in construction</i>	Jobs	-2	-6	-5	-3
<i>Change in manufacturing</i>	Jobs	-1	-4	-4	-3
<i>Change in retail and wholesale</i>	Jobs	-1	-4	-3	-2
<i>Change in transportation and public utilities</i>	Jobs	-1	-3	-3	-2
<i>Change in finance, insurance, and real estate</i>	Jobs	-33	-33	-20	-17
<i>Change in services</i>	Jobs	-415	-418	-288	-226
<i>Change in government</i>	Jobs	-52	-107	-72	-54
<i>Total Output</i>	Millions of Fixed (2025) Dollars	-172	-203	-107	-97
<u><i>Output for Key Industries</i></u>					
<i>Change in natural resources</i>	Millions of Fixed (2025) Dollars	-3	-2	2	2
<i>Change in construction</i>	Millions of Fixed (2025) Dollars	-36	-49	-1	-2
<i>Change in manufacturing</i>	Millions of Fixed (2025) Dollars	-7	-7	-3	-3
<i>Change in retail and wholesale</i>	Millions of Fixed (2025) Dollars	-21	-24	-17	-16
<i>Change in transportation and public utilities</i>	Millions of Fixed (2025) Dollars	-11	-8	-3	-3
<i>Change in finance, insurance, and real estate</i>	Millions of Fixed (2025) Dollars	-27	-31	-20	-17
<i>Change in services</i>	Millions of Fixed (2025) Dollars	-58	-61	-49	-46
<i>Change in government</i>	Millions of Fixed (2025) Dollars	-10	-21	-15	-12

Note: Output and employment in key industries do not necessarily sum to total output and total employment. Unlisted industries make up the difference.

\$100M Oil Production Tax

Category	Units	2027	2030	2040	2050
<i>Personal Income</i>	Millions of Fixed Local (2025) Dollars	-2	-5	-7	-7
<i>Population</i>	People	-7	-40	-84	-70
<i>Total Employment</i>	Jobs	-18	-54	-55	-40
<i>Employment for Key Industries</i>					
<i>Change in natural resources</i>	Jobs	-5	-15	-5	-2
<i>Change in construction</i>	Jobs	-2	-6	-5	-3
<i>Change in manufacturing</i>	Jobs	-1	-4	-4	-3
<i>Change in retail and wholesale</i>	Jobs	-1	-4	-3	-2
<i>Change in transportation and public utilities</i>	Jobs	-1	-3	-3	-2
<i>Change in finance, insurance, and real estate</i>	Jobs	-1	-2	-2	-2
<i>Change in services</i>	Jobs	-6	-17	-20	-17
<i>Change in government</i>	Jobs	-2	-7	-9	-7
<i>Total Output</i>	Millions of Fixed (2025) Dollars	-12	-35	-46	-41
<i>Output for Key Industries</i>					
<i>Change in natural resources</i>	Millions of Fixed (2025) Dollars	-6	-18	-26	-24
<i>Change in construction</i>	Millions of Fixed (2025) Dollars	-1	-3	-1	-1
<i>Change in manufacturing</i>	Millions of Fixed (2025) Dollars	-3	-7	-8	-7
<i>Change in retail and wholesale</i>	Millions of Fixed (2025) Dollars	0	-1	-1	-1
<i>Change in transportation and public utilities</i>	Millions of Fixed (2025) Dollars	0	-1	-1	-1
<i>Change in finance, insurance, and real estate</i>	Millions of Fixed (2025) Dollars	-1	-2	-2	-2
<i>Change in services</i>	Millions of Fixed (2025) Dollars	-1	-3	-4	-4
<i>Change in government</i>	Millions of Fixed (2025) Dollars	0	-1	-2	-2

Note: Output and employment in key industries do not necessarily sum to total output and total employment. Unlisted industries make up the difference.

\$100M Broad Corporate Tax

Category	Units	2027	2030	2040	2050
<i>Personal Income</i>	Millions of Fixed Local (2025) Dollars	-61	-79	-71	-60
<i>Population</i>	People	-169	-548	-677	-485
<i>Total Employment</i>	Jobs	-399	-603	-420	-295
<i>Employment for Key Industries</i>					
<i>Change in natural resources</i>	Jobs	-5	-15	-5	-2
<i>Change in construction</i>	Jobs	-2	-6	-5	-3
<i>Change in manufacturing</i>	Jobs	-1	-4	-4	-3
<i>Change in retail and wholesale</i>	Jobs	-1	-4	-3	-2
<i>Change in transportation and public utilities</i>	Jobs	-1	-3	-3	-2
<i>Change in finance, insurance, and real estate</i>	Jobs	-20	-31	-28	-21
<i>Change in services</i>	Jobs	-185	-240	-199	-149
<i>Change in government</i>	Jobs	-22	-58	-53	-38
<i>Total Output</i>	Millions of Fixed (2025) Dollars	-90	-148	-124	-106
<i>Output for Key Industries</i>					
<i>Change in natural resources</i>	Millions of Fixed (2025) Dollars	-4	-10	-11	-10
<i>Change in construction</i>	Millions of Fixed (2025) Dollars	-17	-27	-4	-2
<i>Change in manufacturing</i>	Millions of Fixed (2025) Dollars	-7	-14	-14	-11
<i>Change in retail and wholesale</i>	Millions of Fixed (2025) Dollars	-9	-13	-13	-11
<i>Change in transportation and public utilities</i>	Millions of Fixed (2025) Dollars	-9	-16	-18	-17
<i>Change in finance, insurance, and real estate</i>	Millions of Fixed (2025) Dollars	-13	-19	-16	-13
<i>Change in services</i>	Millions of Fixed (2025) Dollars	-27	-37	-37	-34
<i>Change in government</i>	Millions of Fixed (2025) Dollars	-4	-12	-11	-9

Note: Output and employment in key industries do not necessarily sum to total output and total employment. Unlisted industries make up the difference.

\$100M Labor Weighted Corporate Tax

Category	Units	2027	2030	2040	2050
<i>Personal Income</i>	Millions of Fixed Local (2025) Dollars	-82	-104	-93	-79
<i>Population</i>	People	-238	-738	-879	-636
<i>Total Employment</i>	Jobs	-550	-779	-530	-382
<u><i>Employment for Key Industries</i></u>					
<i>Change in natural resources</i>	Jobs	-5	-15	-5	-2
<i>Change in construction</i>	Jobs	-2	-6	-5	-3
<i>Change in manufacturing</i>	Jobs	-1	-4	-4	-3
<i>Change in retail and wholesale</i>	Jobs	-1	-4	-3	-2
<i>Change in transportation and public utilities</i>	Jobs	-1	-3	-3	-2
<i>Change in finance, insurance, and real estate</i>	Jobs	-20	-29	-24	-18
<i>Change in services</i>	Jobs	-282	-348	-287	-215
<i>Change in government</i>	Jobs	-30	-74	-65	-47
<i>Total Output</i>	Millions of Fixed (2025) Dollars	-116	-175	-136	-118
<u><i>Output for Key Industries</i></u>					
<i>Change in natural resources</i>	Millions of Fixed (2025) Dollars	-3	-6	-5	-4
<i>Change in construction</i>	Millions of Fixed (2025) Dollars	-22	-35	-5	-2
<i>Change in manufacturing</i>	Millions of Fixed (2025) Dollars	-6	-10	-10	-8
<i>Change in retail and wholesale</i>	Millions of Fixed (2025) Dollars	-12	-18	-18	-16
<i>Change in transportation and public utilities</i>	Millions of Fixed (2025) Dollars	-8	-13	-13	-12
<i>Change in finance, insurance, and real estate</i>	Millions of Fixed (2025) Dollars	-17	-24	-19	-16
<i>Change in services</i>	Millions of Fixed (2025) Dollars	-42	-54	-53	-49
<i>Change in government</i>	Millions of Fixed (2025) Dollars	-6	-15	-14	-11

Note: Output and employment in key industries do not necessarily sum to total output and total employment. Unlisted industries make up the difference.

\$100M Property Tax

Category	Units	2027	2030	2040	2050
<i>Personal Income</i>	Millions of Fixed Local (2025) Dollars	-63	-75	-51	-37
<i>Population</i>	People	-152	-475	-421	-216
<i>Total Employment</i>	Jobs	-323	-466	-177	-81
<u><i>Employment for Key Industries</i></u>					
<i>Change in natural resources</i>	Jobs	-5	-15	-5	-2
<i>Change in construction</i>	Jobs	-2	-6	-5	-3
<i>Change in manufacturing</i>	Jobs	-1	-4	-4	-3
<i>Change in retail and wholesale</i>	Jobs	-1	-4	-3	-2
<i>Change in transporation and public utilities</i>	Jobs	-1	-3	-3	-2
<i>Change in finance, insurance, and real estate</i>	Jobs	-11	-17	-9	-5
<i>Change in services</i>	Jobs	-117	-152	-83	-45
<i>Change in government</i>	Jobs	-20	-50	-32	-19
<i>Total Output</i>	Millions of Fixed (2025) Dollars	-83	-129	-82	-66
<u><i>Output for Key Industries</i></u>					
<i>Change in natural resources</i>	Millions of Fixed (2025) Dollars	-5	-10	-10	-10
<i>Change in construction</i>	Millions of Fixed (2025) Dollars	-20	-31	-2	0
<i>Change in manufacturing</i>	Millions of Fixed (2025) Dollars	-4	-7	-6	-5
<i>Change in retail and wholesale</i>	Millions of Fixed (2025) Dollars	-6	-10	-6	-5
<i>Change in transporation and public utilities</i>	Millions of Fixed (2025) Dollars	-7	-13	-16	-15
<i>Change in finance, insurance, and real estate</i>	Millions of Fixed (2025) Dollars	-19	-23	-15	-11
<i>Change in services</i>	Millions of Fixed (2025) Dollars	-18	-25	-20	-17
<i>Change in government</i>	Millions of Fixed (2025) Dollars	-4	-10	-7	-5

Note: Output and employment in key industries do not necessarily sum to total output and total employment. Unlisted industries make up the difference.

\$100M Property Tax + \$100M Corp. Tax Cut

Category	Units	2027	2030	2040	2050
<i>Personal Income</i>	Millions of Fixed Local (2025) Dollars	-82	-104	-93	-79
<i>Population</i>	People	-238	-738	-879	-636
<i>Total Employment</i>	Jobs	-550	-779	-530	-382
<u><i>Employment for Key Industries</i></u>					
<i>Change in natural resources</i>	Jobs	-5	-15	-5	-2
<i>Change in construction</i>	Jobs	-2	-6	-5	-3
<i>Change in manufacturing</i>	Jobs	-1	-4	-4	-3
<i>Change in retail and wholesale</i>	Jobs	-1	-4	-3	-2
<i>Change in transporation and public utilities</i>	Jobs	-1	-3	-3	-2
<i>Change in finance, insurance, and real estate</i>	Jobs	-20	-29	-24	-18
<i>Change in services</i>	Jobs	-282	-348	-287	-215
<i>Change in government</i>	Jobs	-30	-74	-65	-47
<i>Total Output</i>	Millions of Fixed (2025) Dollars	-116	-175	-136	-118
<u><i>Output for Key Industries</i></u>					
<i>Change in natural resources</i>	Millions of Fixed (2025) Dollars	-3	-6	-5	-4
<i>Change in construction</i>	Millions of Fixed (2025) Dollars	-22	-35	-5	-2
<i>Change in manufacturing</i>	Millions of Fixed (2025) Dollars	-6	-10	-10	-8
<i>Change in retail and wholesale</i>	Millions of Fixed (2025) Dollars	-12	-18	-18	-16
<i>Change in transporation and public utilities</i>	Millions of Fixed (2025) Dollars	-8	-13	-13	-12
<i>Change in finance, insurance, and real estate</i>	Millions of Fixed (2025) Dollars	-17	-24	-19	-16
<i>Change in services</i>	Millions of Fixed (2025) Dollars	-42	-54	-53	-49
<i>Change in government</i>	Millions of Fixed (2025) Dollars	-6	-15	-14	-11

Note: Output and employment in key industries do not necessarily sum to total output and total employment. Unlisted industries make up the difference.

\$100M Property Tax + \$100M Capital Spend

Category	Units	2027	2030	2040	2050
<i>Personal Income</i>	Millions of Fixed Local (2025) Dollars	-10	-18	-16	-8
<i>Population</i>	People	70	110	61	80
<i>Total Employment</i>	Jobs	345	194	112	129
<u><i>Employment for Key Industries</i></u>					
<i>Change in natural resources</i>	Jobs	-5	-15	-5	-2
<i>Change in construction</i>	Jobs	-2	-6	-5	-3
<i>Change in manufacturing</i>	Jobs	-1	-4	-4	-3
<i>Change in retail and wholesale</i>	Jobs	-1	-4	-3	-2
<i>Change in transporation and public utilities</i>	Jobs	-1	-3	-3	-2
<i>Change in finance, insurance, and real estate</i>	Jobs	8	1	0	3
<i>Change in services</i>	Jobs	58	25	38	60
<i>Change in government</i>	Jobs	14	12	0	2
<i>Total Output</i>	Millions of Fixed (2025) Dollars	72	20	-15	-11
<u><i>Output for Key Industries</i></u>					
<i>Change in natural resources</i>	Millions of Fixed (2025) Dollars	11	2	-8	-9
<i>Change in construction</i>	Millions of Fixed (2025) Dollars	48	31	14	8
<i>Change in manufacturing</i>	Millions of Fixed (2025) Dollars	2	-3	-4	-3
<i>Change in retail and wholesale</i>	Millions of Fixed (2025) Dollars	5	3	3	5
<i>Change in transporation and public utilities</i>	Millions of Fixed (2025) Dollars	-1	-10	-16	-15
<i>Change in finance, insurance, and real estate</i>	Millions of Fixed (2025) Dollars	-4	-8	-8	-5
<i>Change in services</i>	Millions of Fixed (2025) Dollars	8	2	4	8
<i>Change in government</i>	Millions of Fixed (2025) Dollars	3	2	0	0

Note: Output and employment in key industries do not necessarily sum to total output and total employment. Unlisted industries make up the difference.



Economic Impacts of Alaska Fiscal Options 2026

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