



# Analysis of HB 411: Oil and Gas Production Tax

## Presentation to House Finance Committee



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# BACKGROUND

# Four Major Oil and Gas Revenue Sources

## **Property Tax**

Pipeline, Equipment, Facilities. About 80% of property tax collections are credited back to local governments

## **Royalty**

Landowner's share, usually 12.5%. Most North Slope production is on State land. At least  $\frac{1}{4}$  of royalties go to the Permanent Fund

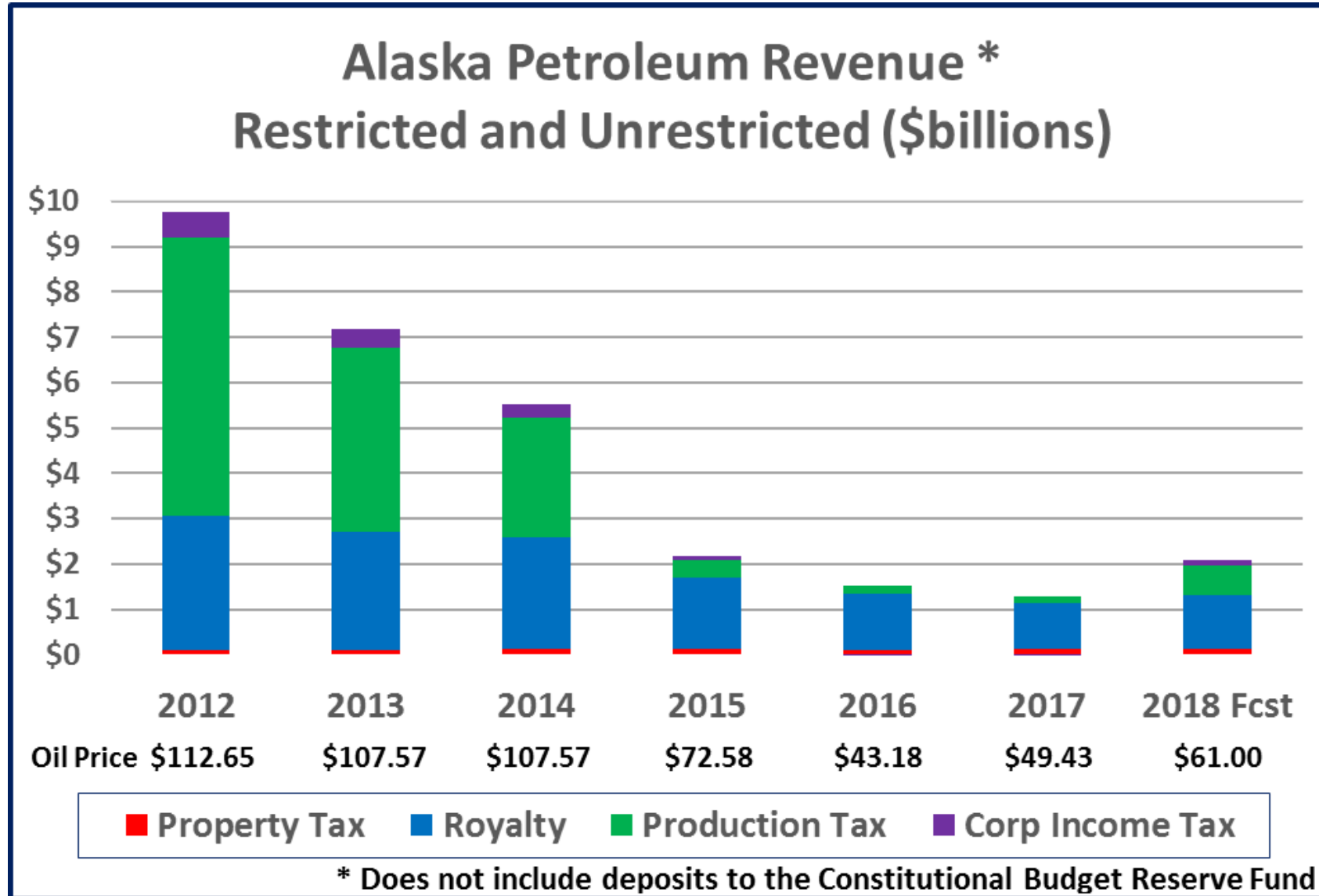
## **Production Tax**

Based on net profits; most of the conflict in recent years is over this tax. North Slope tax is 35% less a variable "per-taxable-barrel" credit, with a gross minimum tax "floor"

## **Corp. Income Tax**

Taxes the remaining profit after production tax, based on global asset apportionment. Rate is 9.4%, but effectively closer to 7%

# Oil and Gas Revenue, Fiscal Years 2012-2018



# Recent Oil and Gas Tax Credit Reform- Recap

## **HB 247 Passed June, 2016**

- Phased out Cook Inlet and reduced Middle Earth credits
- Extended Cook Inlet gas tax cap, added \$1 / bbl oil tax cap
- Added sunset / “graduation” provisions to Gross Value Reduction for new North Slope oil production
- Annual cap on per-company, per-year cash credit payments
- Resident hire priority for cash credit payments
- Limited transparency with annual report of who receives cash for credits
- Increase interest rate on delinquent production taxes for first three years, then reduced to zero
- Technical cleanup and repeal of obsolete language
- Regulation package proposed and adopted, effective 1/1/17

# Recent Oil and Gas Tax Credit Reform- Recap

## **HB 111 Passed July, 2017**

- Most credits no longer eligible for state repurchase after 7/1/17, other than refinery / LNG storage
- NOL credit under former AS 43.55.023(b) repealed 1/1/18
- New system of carried-forward lease expenditures beginning 1/1/18
- Process for how carried-forward lease expenditures are used in a future year once the producer has taxable value
  - “Ringfence,” preventing use until the property for which losses were incurred commences regular production
  - Taxpayer flexibility on use, limited by minimum tax
  - If unused, lease expenditures begin to lose value after 10 years in most cases

# Recent Oil and Gas Tax Credit Reform- Recap

## **HB 111 Passed July, 2017 (continued)**

- Align interest rate changes among all tax types and eliminate three-year interest limitation
- Credits can be carried-back and used against a prior year tax liability including interest and penalties for which an audit assessment has not been issued
- Conditional exploration credits granted at time of application, to ensure place in queue
- Seismic work in Middle Earth no longer eligible for exploration credits after 2017
- Exploration credits in Middle Earth can be used to offset the explorer's corporate income tax
- Delayed repeal of tax credit fund after all are purchased
- Established Legislative working group

# BILL ANALYSIS



# What Does HB 411 Do?

## **The two recently passed oil bills were multi-part and complex**

Although they had some, mostly indirect, tax impacts, they primarily dealt with tax credits with a focus on cashable credits.

## **The major tax components set by SB21 in 2013 were left unchanged:**

- 35% tax on Production Tax Value (PTV, a measure of Profit)
  - \$0 to \$8 per barrel “sliding scale” tax reduction (non-cashable credit )
- Gross Value Reduction for production meeting “new oil” criteria, excluding 20% of gross value from any tax
  - Fixed \$5 per barrel tax reduction on GVR-eligible oil
- Minimum Tax “floor” of 4% of Gross (wellhead) Value
  - Tax due is “higher of” (35% x Net - \$8), or (4% x Gross) for legacy oil

# What Does HB 411 Do?

## **HB411 is a much simpler bill, but it changes several key components of the production tax itself:**

- Reduces the 35% tax on PTV to 25%
- Three additional tax “brackets” of a tax surcharge:
  - 5% of portion of PTV greater than \$40 plus
  - 5% of portion of PTV greater than \$50 plus
  - 5% of portion of PTV greater than \$60
- Eliminates the \$0 to \$8 per barrel tax credit (legacy production)
- Eliminates the \$5 per barrel tax credit (new oil production)

## **Other components are not changed:**

- No change to GVR qualifications or rates
- No change to Minimum Tax rate

# Initial Observations

- Very similar to “House” passed version of HB111
  - Slight differences in supplemental tax brackets
  - Also eliminates the \$5 per barrel credit for GVR oil
- As with House HB111, revenue impact concentrated at \$50-90 oil price
  - Reduces the impact of the minimum tax due to lower “crossover point”
  - Tax impact for GVR oil at low prices due to “hardening floor”
- Tax brackets are materially different from former ACES “progressivity”
  - ACES applied highest tax calculation to all of oil profits, resulting in very high marginal (last dollar earned) tax rates
  - HB411 brackets only charge higher rate on the portion of profits above the rate cutoff. Much lower marginal rate impacts. Similar brackets in HB110 (2011)
  - Brackets tied to BTU-equivalent value, which would be diluted by NS gas production
- Bill length is deceptive
  - 21 of the 25 pages are conforming language related to monthly estimated tax payment and calculation of production tax value

# Fiscal Note- Updated Summary Tables

Provisions in HB 411 and their Estimated Fiscal Impacts based on Spring 2018 Forecast (\$millions) - **FC PRICE**

Revised 4-10-18 by Dept. of Revenue

Description of Provision	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
1. Effective 7/1/18, the production tax rate for North Slope oil is reduced from 35% to 25% of Production Tax Value. A progressive surcharge is established for North Slope oil. The surcharge is 5% of PTV over \$40 per barrel, plus an additional 5% of PTV over \$50 per barrel, plus an additional 5% of PTV over \$60 per barrel, for a maximum marginal tax rate of 40%. The progressive surcharge would be calculated based on a company's statewide PTV per barrel of oil equivalent.	-\$36	-\$33	-\$67	-\$67	-\$83	-\$120	-\$218	-\$314	-\$341	-\$389
2. Effective 7/1/18, repeals per-taxable-barrel credits for North Slope non-GVR oil production.	\$1,193	\$1,126	\$1,078	\$1,093	\$1,124	\$1,138	\$1,134	\$1,130	\$1,120	\$1,122
3. Effective 7/1/18, repeals per-taxable-barrel credits for North Slope GVR-eligible oil production.	\$45	\$32	\$43	\$48	\$54	\$39	\$36	\$38	\$35	\$26
4. Additional impact of implementing above provisions together.	-\$414	-\$368	-\$348	-\$363	-\$374	-\$353	-\$281	-\$211	-\$187	-\$150
<b>Total Revenue Impact</b>	<b>\$788</b>	<b>\$757</b>	<b>\$705</b>	<b>\$712</b>	<b>\$722</b>	<b>\$704</b>	<b>\$671</b>	<b>\$642</b>	<b>\$627</b>	<b>\$610</b>
<b>Total Budget Impact</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Total Fiscal Impact - (does not include potential changes in investment)</b>	<b>\$788</b>	<b>\$757</b>	<b>\$705</b>	<b>\$712</b>	<b>\$722</b>	<b>\$704</b>	<b>\$671</b>	<b>\$642</b>	<b>\$627</b>	<b>\$610</b>
Tax impact of carry-forward lease expenditures and credits - current law	\$228	\$558	\$956	\$1,444	\$1,967	\$2,407	\$2,666	\$2,876	\$3,051	\$3,175
Tax impact of carry-forward lease expenditures and credits - proposed	\$188	\$427	\$695	\$1,030	\$1,403	\$1,714	\$1,898	\$2,045	\$2,169	\$2,259
<b>Change in year-end balance due to proposal</b>	<b>-\$39</b>	<b>-\$130</b>	<b>-\$261</b>	<b>-\$414</b>	<b>-\$564</b>	<b>-\$693</b>	<b>-\$767</b>	<b>-\$832</b>	<b>-\$882</b>	<b>-\$916</b>

NOTE: The fiscal impact of this proposal is an estimate based on the Spring 2018 revenue forecast. Estimates shown here are draft / preliminary based on our interpretation of possible changes, and do not include any changes in company behavior as a result of this proposal. We reserve the right to make modifications to estimates for any forthcoming fiscal notes.

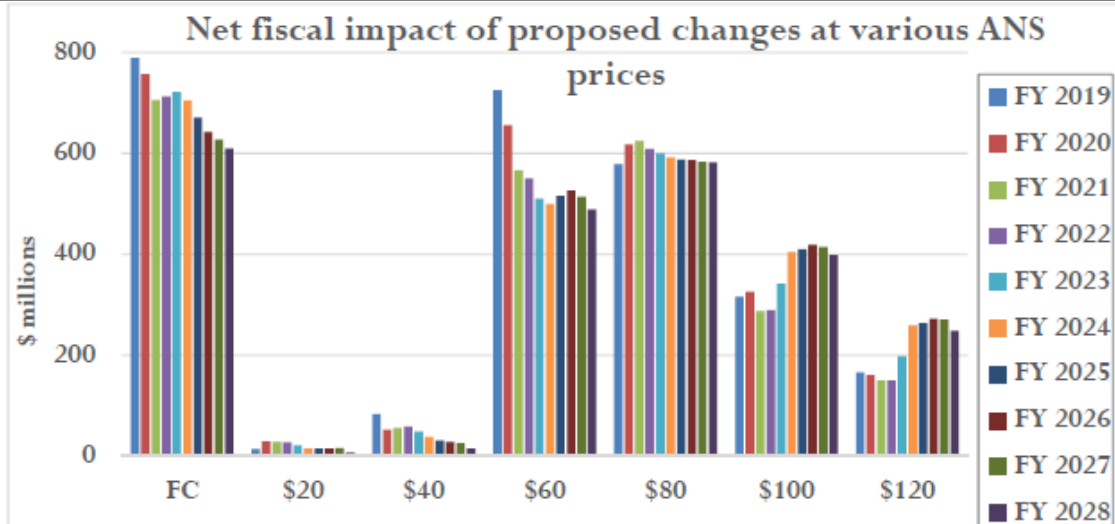
## HOW TO READ THIS PAGE

Revenue change of separate bill sections (at forecast price)

Total Revenue Change

Change in value of carry-forward expenditures

Total revenue change at different prices



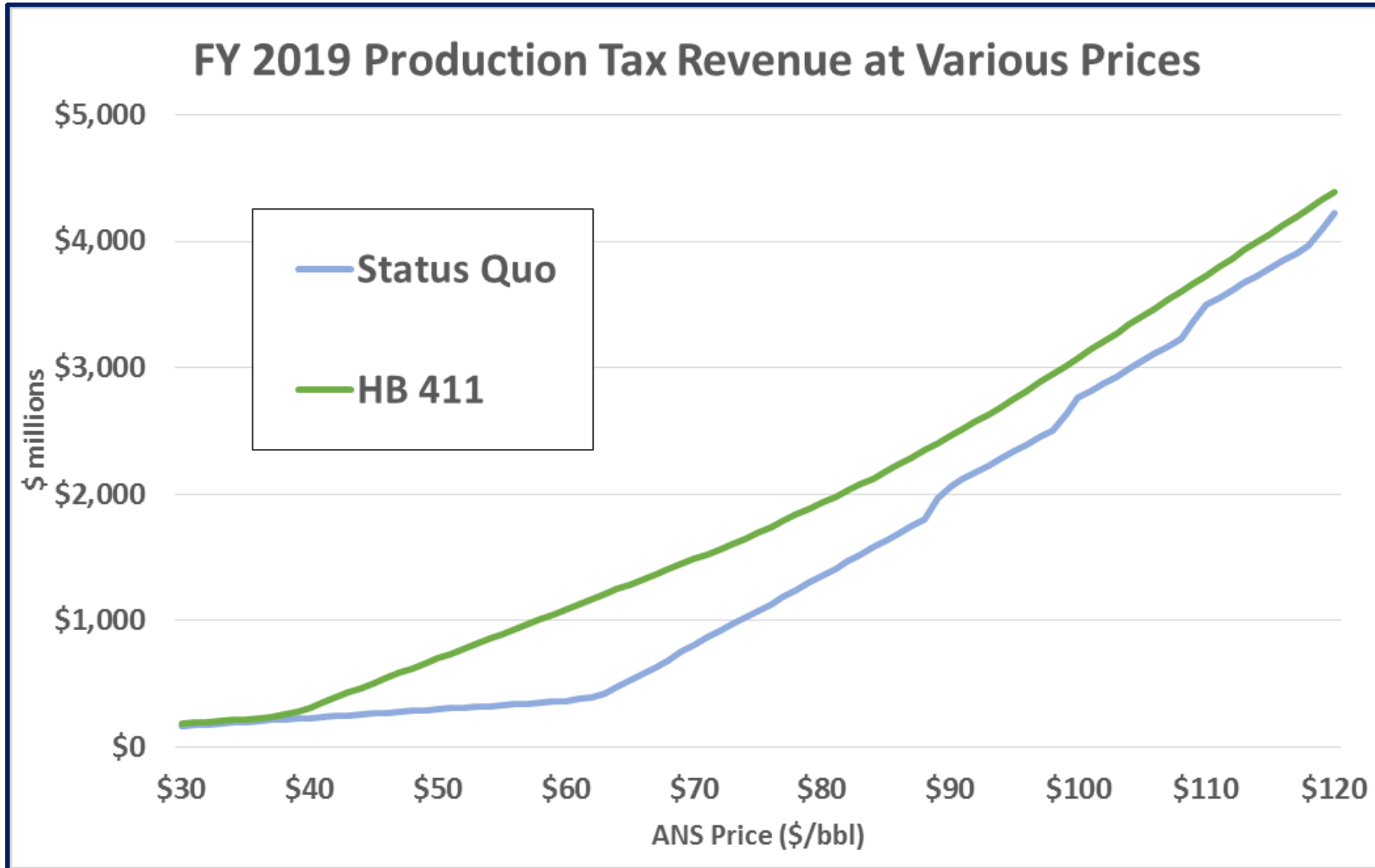
# Revenue Impact of HB 411 is a Function of Price

## Production Tax Calculation At Different Prices

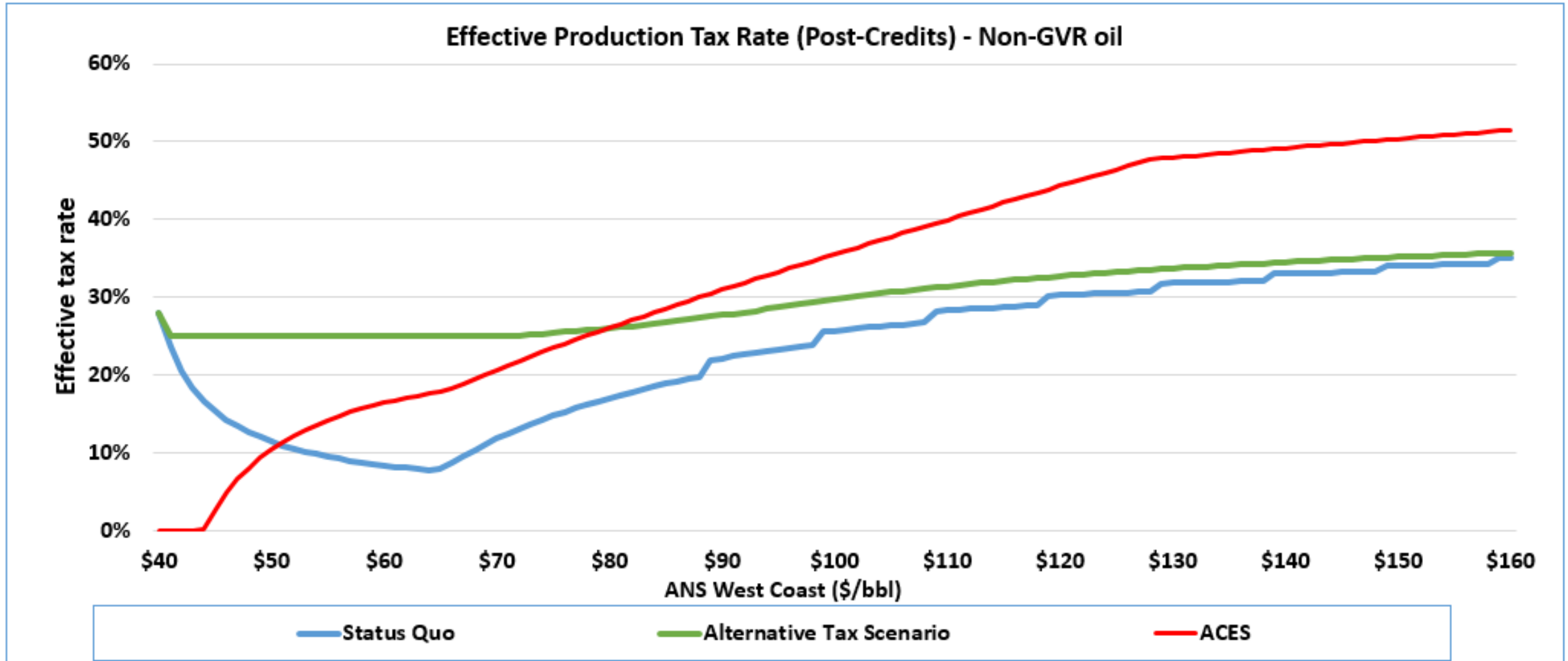
per one barrel of taxable North Slope non-GVR oil; FY19 costs per Spring 18 RSB

Price		\$40	\$50	\$60	\$70	\$80	\$90	\$100	\$110	\$120
Existing	Transport	\$8.87	\$8.87	\$8.87	\$8.87	\$8.87	\$8.87	\$8.87	\$8.87	\$8.87
	GVPP	\$31.13	\$41.13	\$51.13	\$61.13	\$71.13	\$81.13	\$91.13	\$101.13	\$111.13
	Lease Expend	\$26.41	\$26.41	\$26.41	\$26.41	\$26.41	\$26.41	\$26.41	\$26.41	\$26.41
	PTV (net)	\$4.72	\$14.72	\$24.72	\$34.72	\$44.72	\$54.72	\$64.72	\$74.72	\$84.72
	Tax at 35%	\$1.65	\$5.15	\$8.65	\$12.15	\$15.65	\$19.15	\$22.65	\$26.15	\$29.65
	Per-BBL Credit	\$8	\$8	\$8	\$8	\$8	\$7	\$6	\$5	\$4
	Tax per Net	-\$6.35	-\$2.85	\$0.65	\$4.15	\$7.65	\$12.15	\$16.65	\$21.15	\$25.65
	4% Minimum Tax	\$1.25	\$1.65	\$2.05	\$2.45	\$2.85	\$3.25	\$3.65	\$4.05	\$4.45
	<b>Higher Of</b>	<b>\$1.25</b>	<b>\$1.65</b>	<b>\$2.05</b>	<b>\$4.15</b>	<b>\$7.65</b>	<b>\$12.15</b>	<b>\$16.65</b>	<b>\$21.15</b>	<b>\$25.65</b>
Proposed	Tax at 25%	\$1.18	\$3.68	\$6.18	\$8.68	\$11.18	\$13.68	\$16.18	\$18.68	\$21.18
	Bracketed Taxes	\$0.00	\$0.00	\$0.00	\$0.00	\$0.24	\$0.97	\$2.21	\$3.71	\$5.21
	Total Tax per Net	\$1.18	\$3.68	\$6.18	\$8.68	\$11.42	\$14.65	\$18.39	\$22.39	\$26.39
	4% Minimum Tax	\$1.25	\$1.65	\$2.05	\$2.45	\$2.85	\$3.25	\$3.65	\$4.05	\$4.45
	<b>Higher Of</b>	<b>\$1.25</b>	<b>\$3.68</b>	<b>\$6.18</b>	<b>\$8.68</b>	<b>\$11.42</b>	<b>\$14.65</b>	<b>\$18.39</b>	<b>\$22.39</b>	<b>\$26.39</b>
<b>Forecast Tax Increase with 170 million taxable barrels (\$millions)</b>		<b>\$83</b>	<b>\$403</b>	<b>\$725</b>	<b>\$677</b>	<b>\$578</b>	<b>\$400</b>	<b>\$316</b>	<b>\$240</b>	<b>\$165</b>

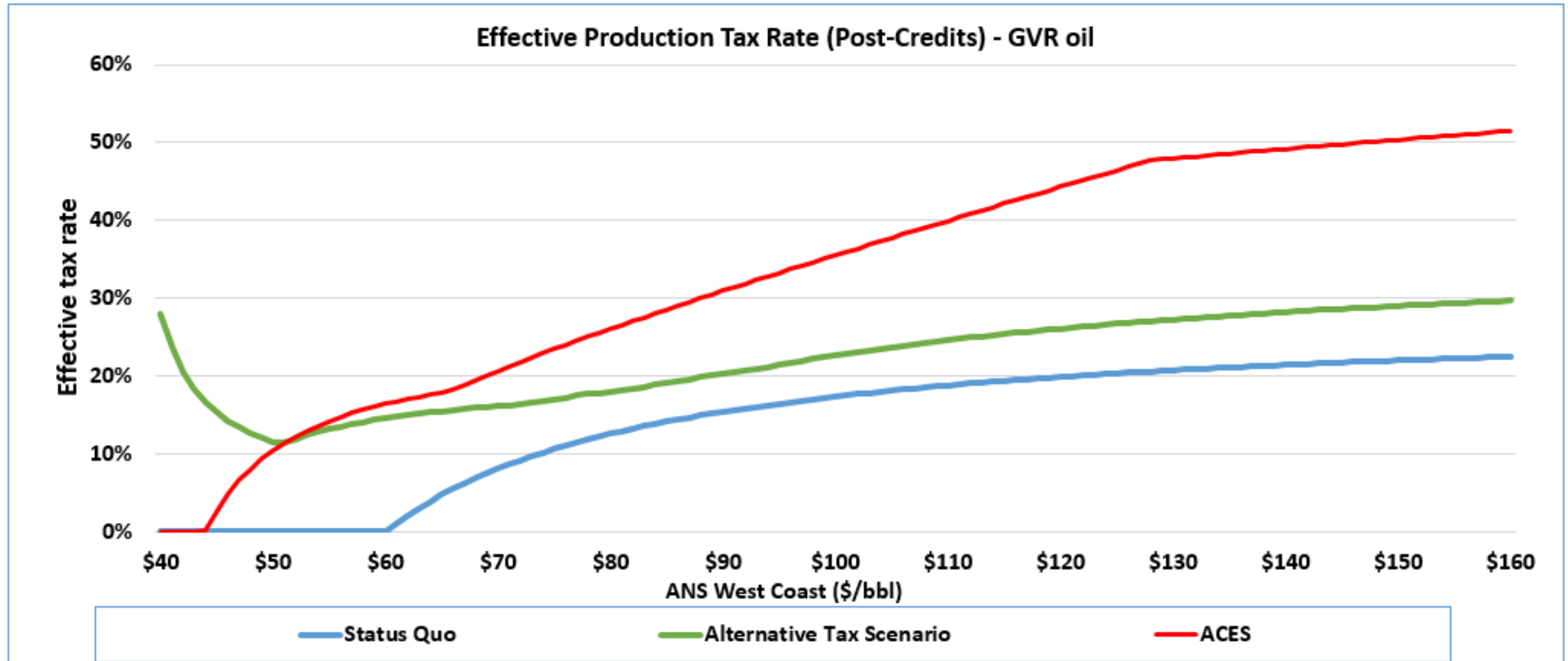
# Revenue Impact of HB 411 is a Function of Price



# Effective Tax Rate is Also a Function of Price



# Effective Tax Rate is Also a Function of Price





# DISCUSSION

# Bill in Context of Ongoing Activities

## **HB111 created a working group to look at outstanding issues**

- The group has not had substantive meetings yet, and has not offered suggestions

## **LB&A has hired three consultants to analyze our system**

- Only one of the three has presented general information to the legislature, no public discussions as of yet

## **The Administration introduced HB331 / SB176, to deal with remaining balance of cashable tax credits**

## **The Department of Revenue has identified several other issues that could be addressed by the committee and consultants**

# Potential Issues for Ongoing Discussion

Items in **blue** are addressed in HB331/ SB176

Items in **green** are addressed in HB411

- Outstanding tax credits due to state no longer making open-ended purchases (\$807 million through 2017 plus ~\$150 million pending)
- Equity between major producers and new explorers as we phase out cash credits
- Ongoing debate on “fair share” at different price points
- Imbalance between 35% offset for spending and losses and a lower effective tax rate on profits
- Large future tax offsets if major recent discoveries are developed
- Limited “upside” to the state during price spikes
- Long-term viability of Cook Inlet tax “caps”
- High volatility and complex administration of a net profits tax system

# Issues for Consideration- Industry Profitability

**Oil profitability estimates are up dramatically since 18 months ago, whereas production tax forecasted revenues are not**

## **Fall 2016 forecast for FY2019**

- \$60 oil price with 442,100 bbl / day ANS production
- PTV (profit on taxable barrels) forecast \$1.8 billion\*
- Production tax forecast \$248 million (13.9%)
- Statutory credit calculation \$54 million

## **Spring 2018 forecast for FY2019**

- \$63 oil price with 526,600 bbl / day ANS production
- PTV (profit on taxable barrels) forecast \$4.7 billion
- Production tax forecast \$410 million (8.7%, +\$162 million)
- Statutory credit calculation \$184 million (+\$130 million)

\* PTV calculation is after paying royalty and property tax, but before production tax, and state and federal income taxes

# Issues for Consideration- Historic Gross Tax

**Before the switch to a net profits tax in 2006, Alaska's oil production tax, the "ELF" (economic limit factor), was a gross tax that varied from field to field.**

**The average tax rate was:**

- 1995: 11.8%
- 1998: 10.5%
- 2001: 8.3%
- 2004: 6.4%
- 2006: 6.7%

**Although taxes were much higher in the era of high prices, since 2015 the production tax has been almost entirely based on the 4% gross tax**

**Under HB411 most companies would pay above the 4% minimum tax at prices above about \$40**

# Issues for Consideration- Tax Stability

## **Alaska has developed a reputation for an unstable tax regime, with seven changes in the past 13 years:**

1. 2005: Gov. Murkowski aggregates Prudhoe Bay satellite fields for ELF calculation
2. 2006: Petroleum Production Tax "PPT" changed from taxing gross revenue to net profits
3. 2007: Alaska's Clear and Equitable Share "ACES" corrects revenue shortfalls due to bad cost estimates in PPT
4. 2010: Cook Inlet Recovery Act "CIRA" provided additional credits outside the North Slope targeted at southcentral gas supply issues
5. 2013: SB21 was a tax cut primarily impacting higher prices and providing "new oil" benefits via the "gross value reduction"
6. 2016: HB247 began tax credit reform, phasing out Cook Inlet credits and limiting "new oil" benefits
7. 2017: HB111 completed tax credit reform, eliminating cashable credits and providing for carried-forward losses

# Issues for Consideration- New Fields

## **The tax change could have unusual impacts on the economics of future projects**

- HB111 eliminated cashable credits for operating losses, and replaced them with carry-forward lease expenditures
- These can be used to reduce future taxable profits, once the underlying leases are in production
- Carry-forwards can only be used to reduce taxes to the minimum tax and not below
- During the 3 to 7 years a field earns the GVR, the per-taxable barrel credit can further reduce taxes to zero
- Once the GVR is sunset, the per-barrel credit cannot be used below the minimum tax

# Issues for Consideration- New Fields

## **The tax change could have unusual impacts on the economics of future projects (continued)**

- The current system assumes that the minimum tax will be the actual tax paid, even at higher prices, until a company is able to “use up” (recover) all of their development costs as carry-forward lease expenditures
- For new producers, current law allows the tax to go to zero but in HB411, with no \$5 per barrel credit, the minimum tax would be paid in those years resulting in a 4% tax obligation
- After the GVR sunsets, the 4% tax would be paid under both status quo and HB411 until lease expenditures are exhausted
- The reduced base rate also means carry forwards effectively have less value
- Depending on the price in the year oil is produced, it may take more carry-forwards to reduce taxes to that minimum tax level
- This could mean it would take fewer years before the regular tax based on profits would kick in



# Issues for Consideration- New Fields

## Life Cycle Analysis for hypothetical new field

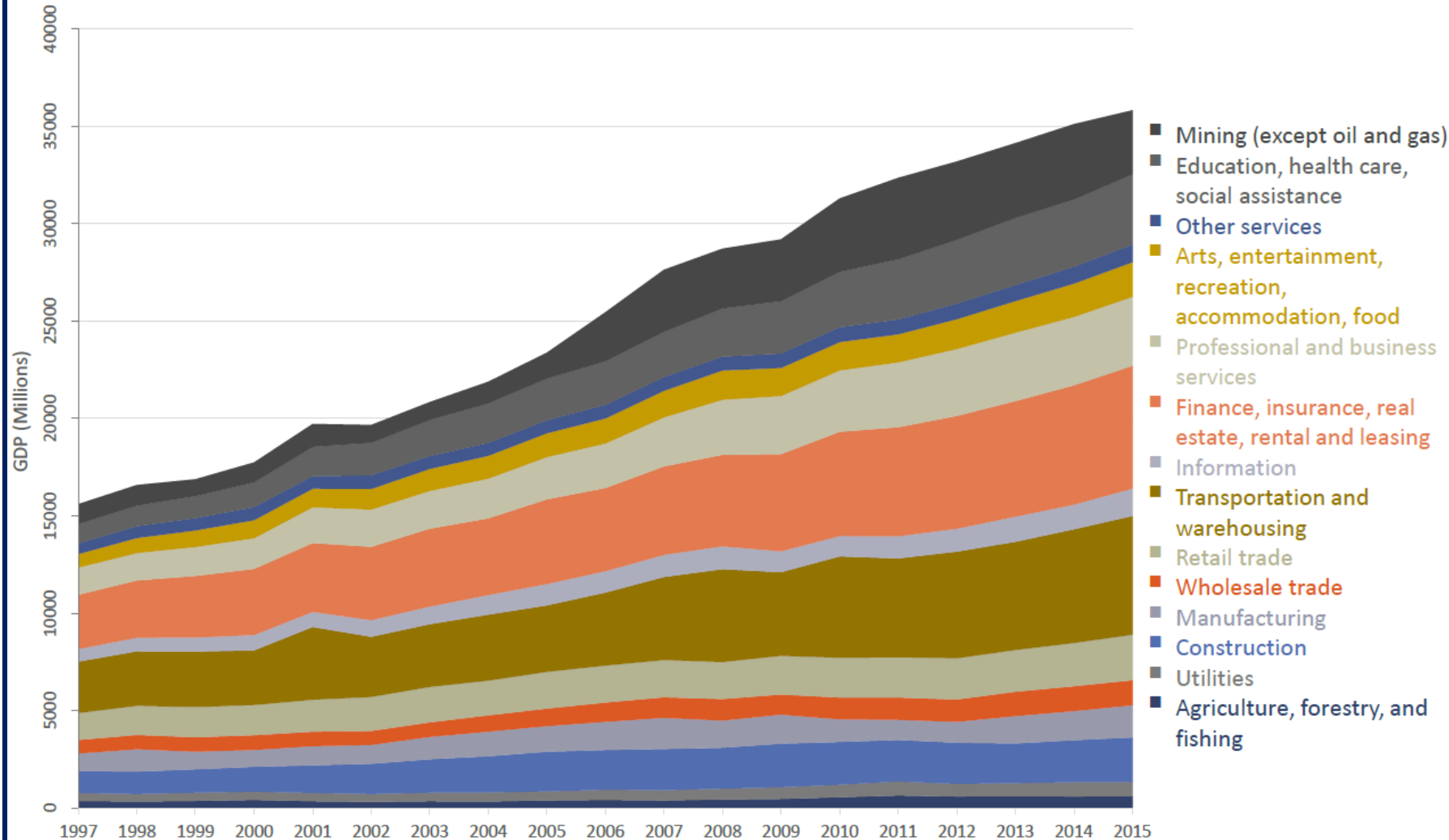
(Large field model; 750 million barrels,  
120,000 bbl / day peak production)

Oil Price	Total Production Tax (\$millions)		Producer IRR		Break Even Price (NPV10)	
	Status Quo	HB411	Status Quo	HB411	Status Quo	HB411
\$60	\$5,913	\$7,888	7.5%	7.0%	\$72	\$75
\$70	\$9,442	\$11,366	9.6%	9.1%		
\$80	\$13,484	\$15,229	11.4%	10.8%		
Spring 18 FC	\$6,440	\$8,352	7.9%	7.4%		

# CONCLUSION

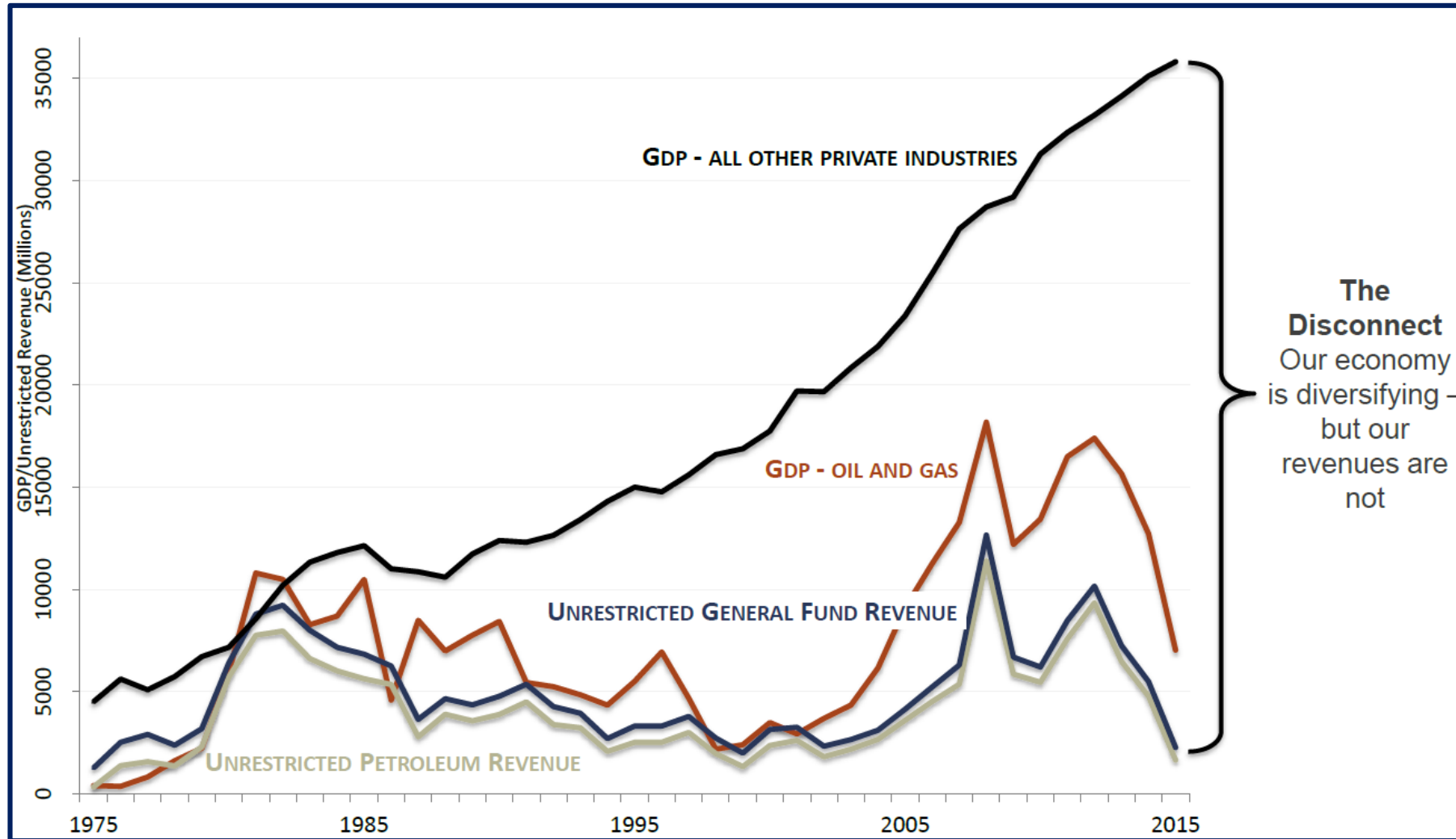
# From Commissioner Navarre's 3/20 Presentation

Nominal GDP of All Other (non-petroleum) Private Industries, 1997-2015



**The overall  
Alaska economy  
has grown  
steadily...**

# From Commissioner Navarre's 3/20 Presentation



**...while the state's revenue has tracked closely with just the oil and gas industry**

# Final Observations

- The legislature appears to be reaching consensus on a partial fiscal plan relying on a structured use of Permanent Fund earnings
- The apparent remaining budget gap will likely be in the \$500 to \$700 million range
- The most appropriate mechanism to fill this gap is via a broad based tax tied to the overall state economy
- Oil and gas taxation should be based on fair share and related economic development issues, not budgetary need in any specific year
- Major oil and gas tax changes should be backed by substantial analysis and review looking at both unique local factors as well as global comparables
- Last year the legislature set in motion a process to revisit these fair share issues with the intention to use this to inform the next major tax rewrite
- Until the completion of the process set in motion last year, it may be premature to address a substantial tax revision at this time

# THANK YOU

Please find our contact information below:

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