An Independent View of HB 110

Presentation to the House Finance Committee
March 24, 2011

Rick Harper
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Houston, TX

What I'll be discussing

1. Alignment and diversity of interests between the state and industry
2. Industry decision making criteria
3. Obligations of a lessee
4. Limitations of claims by industry
5. Production declines and resource potential
6. Specific concerns with proposed bill
7. Advantages of current tax law (ACES)
8. Alternatives

Summary of Conclusions

- The administration and industry has not made their case that a tax rollback of this scale will be offset by production gains
- Industry has steered the debate towards fiscal competitiveness and away from prospect economics
- The bill disproportionately benefits existing production
- Industry's response to this bill suggests the state's goals will not be met
- There are alternatives

Rick Harper: Highlights of Professional Experience

- Principal, Energy of Business Consulting Associates
- Senior Vice President, Northwest Natural Gas Company
- President and CEO, Canor Energy Ltd. (Calgary, AB)
- President, ARCO Gas (Atlantic Richfield Company)
- Assistant to the President, United Gas Pipeline Company

Rick Harper: Consulting Practice

- 38 Years domestic and international experience
- Lease to the burner tip
- LB&A Consultant on Stranded Gas Contract
- Advised Palin Administration on Tax and Gasline issues
- Work for industry, government, and private royalty owners

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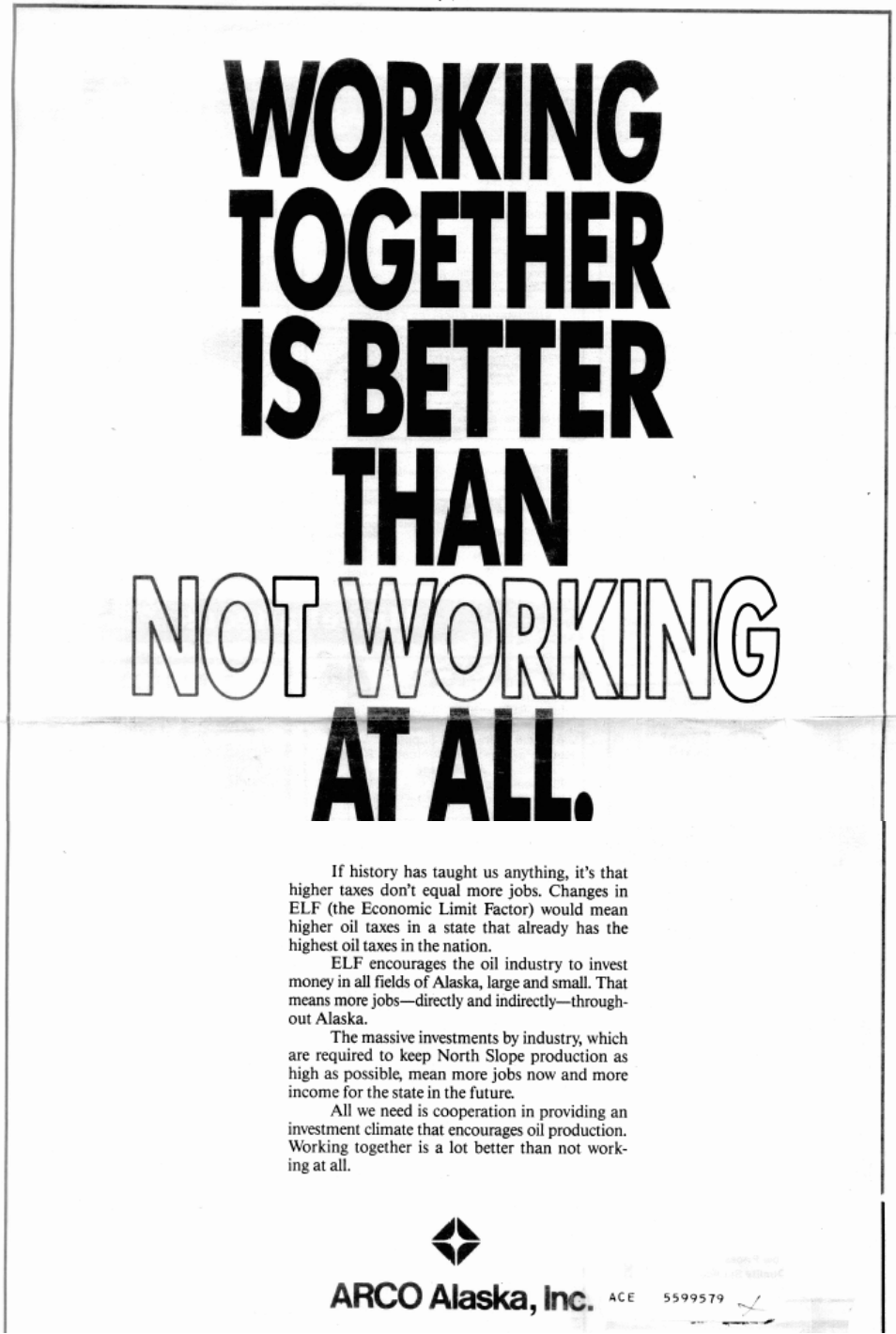
What is the alignment with industry?

- Royalty and taxation
- Relevance of studies and testimony
- Not just what you're hearing- what aren't you hearing?
- Informing your intuition



WORKING TOGETHER IS BETTER THAN NOT WORKING AT ALL.

If history has taught us anything, it's that higher taxes don't equal more jobs. Changes in ELF (the Economic Limit Factor) would mean higher oil taxes in a state that already has the highest oil taxes in the nation.

ELF encourages the oil industry to invest money in all fields of Alaska, large and small. That means more jobs—directly and indirectly—throughout Alaska.

The massive investments by industry, which are required to keep North Slope production as high as possible, mean more jobs now and more income for the state in the future.

All we need is cooperation in providing an investment climate that encourages oil production. Working together is a lot better than not working at all.

ARCO Alaska, Inc. ACE 5599579

Oil companies have been saying tax increases will severely limit the industry for a long time.

Source: Alaska Journal of Commerce, February 6, 1989

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Authorizations for Expenditure

- Before they get to final decision makers, capital requests are streamlined
- Low, Expected, and High cases
  - The Expected case is given by far the most weight. In my opinion, most proposals today use an expected oil price in the $60 – $70 range
  - The Low case is also very important because company executives want to protect against loss
  - The High case is the least important consideration

- (ConocoPhillips calls “Expected Case” the “success case”)

What issues are considered?

- Prospectivity (resource potential) is by far the main driver
- Progressivity in Alaska is very low in the $60-$70 range and doesn't become a significant cost driver until $80-$90 and beyond
- Because of our front-loaded credits, the current system benefits producers more at the low end than it costs them at the high end

What issues are considered?

- Timing, permit, and technical issues
- Fiscal system also considered, but based on the effective tax rate
- Dale Pittman of ExxonMobil, testimony March 23: *"For us it's the effective tax rate"* that is the primary driver.

- I will say more about "marginal" versus "effective" tax rates later in the presentation

What issues are considered?

- Projects don't have to compete against the rest of the world
- The industry is not capital limited, although individual companies may be
- Each basin stands on its own, including North Dakota, Deepwater Gulf, etc.
- This is not a zero sum game
- Energy and commodity ventures are currently a magnet for capital worldwide
- There are alternatives for development for lessees

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Obligations of a Lessee

- The reason Alaska is desirable is prospectivity. The rocks.
- Companies bid leases based on belief in these rocks
- Signing the lease is a go / no go document
- The decision to sign the lease is a commitment to develop given “reasonable expectation of profit”
- After that point Alaska is not expected to compete with the rest of the world

Prudent Operator Standard

- Alaska's leases are based on the "Reasonably Prudent Operator Standard."
- Implied covenants are: to develop, to market, and to administer the leases
- The operator must develop given a reasonable assumption of profit
- Profit.
  Not meeting an international hurdle rate.
- The contractual relationship with each lessor stands on its own independent of other similar arrangements

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Alaska is Desireable

- Consistent argument that we must be competitive with other jurisdictions
- Not providing field development plans, hard economic projections, or AFEs (authorizations for expenditure)
- No evidence has been presented that the economics are upside down in Alaska
- Many factors in Alaska's tax code work in industry's favor (will be discussed later)
- What's missing here is more relevant to your decision than what's present

Contributions to cyclical decline

- Crash of late 2008 / total collapse of capital markets
- Alaska has complex logistics
- Facility capacity and access issues
- Permitting issues- both State and Federal
- Limited available labor and equipment, especially with major technology-driven boom in North Dakota and shale gas booms in the Lower 48
- Delay in project advancement due to potential tax change

How Can We Reverse the Tr

- Sample Investor Decision Criteria:
  - Prospectivity
  - Geopolitical stability
  - Regulations (access to resources, development permitting, environmental constraints)
  - Operations (existing infrastructure, experienced workforce availability, costs, market proximity)
  - **Tax Regime => CS HB 110 (RES) Focus**

The Commissioner of Revenue said that many factors influence investment.

He said taxes are just the easiest one we can control.

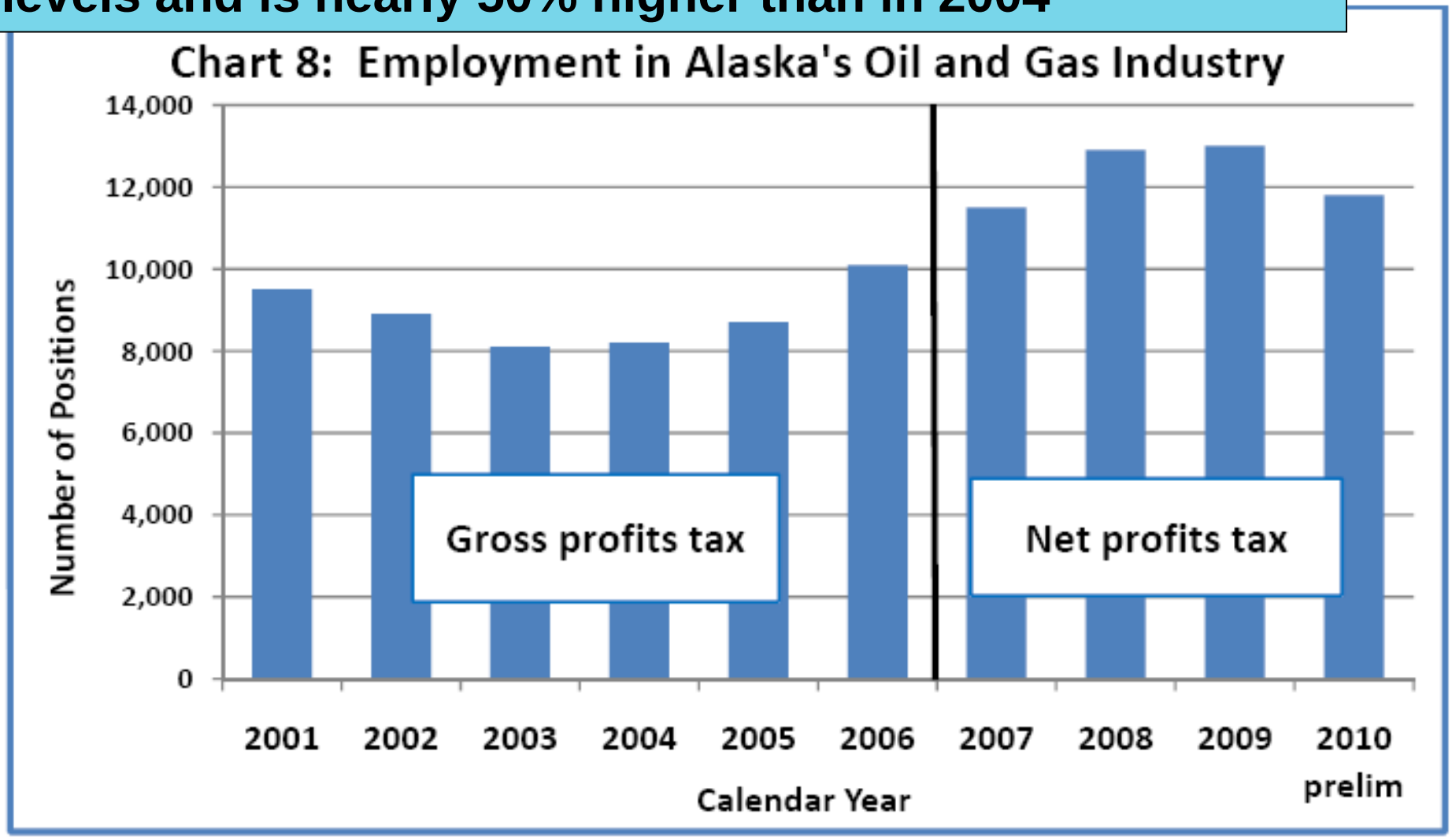
Source: CS HB 110 (RES) Introduction, Proposed Changes to the Oil & Gas Production Tax, Presentation to House Finance, March 14 2011, Alaska Department of Revenue, p. 10.

In the absence of concrete and verifiable analysis of specific prospects, a presumption should be made that no change in taxation is warranted

- Alaska offers Royalty Relief if a producer can prove the economics of a field require it.
- It's only been requested four times since 2000, and granted twice.

Lost Jobs: Correlation does not Imply Causation

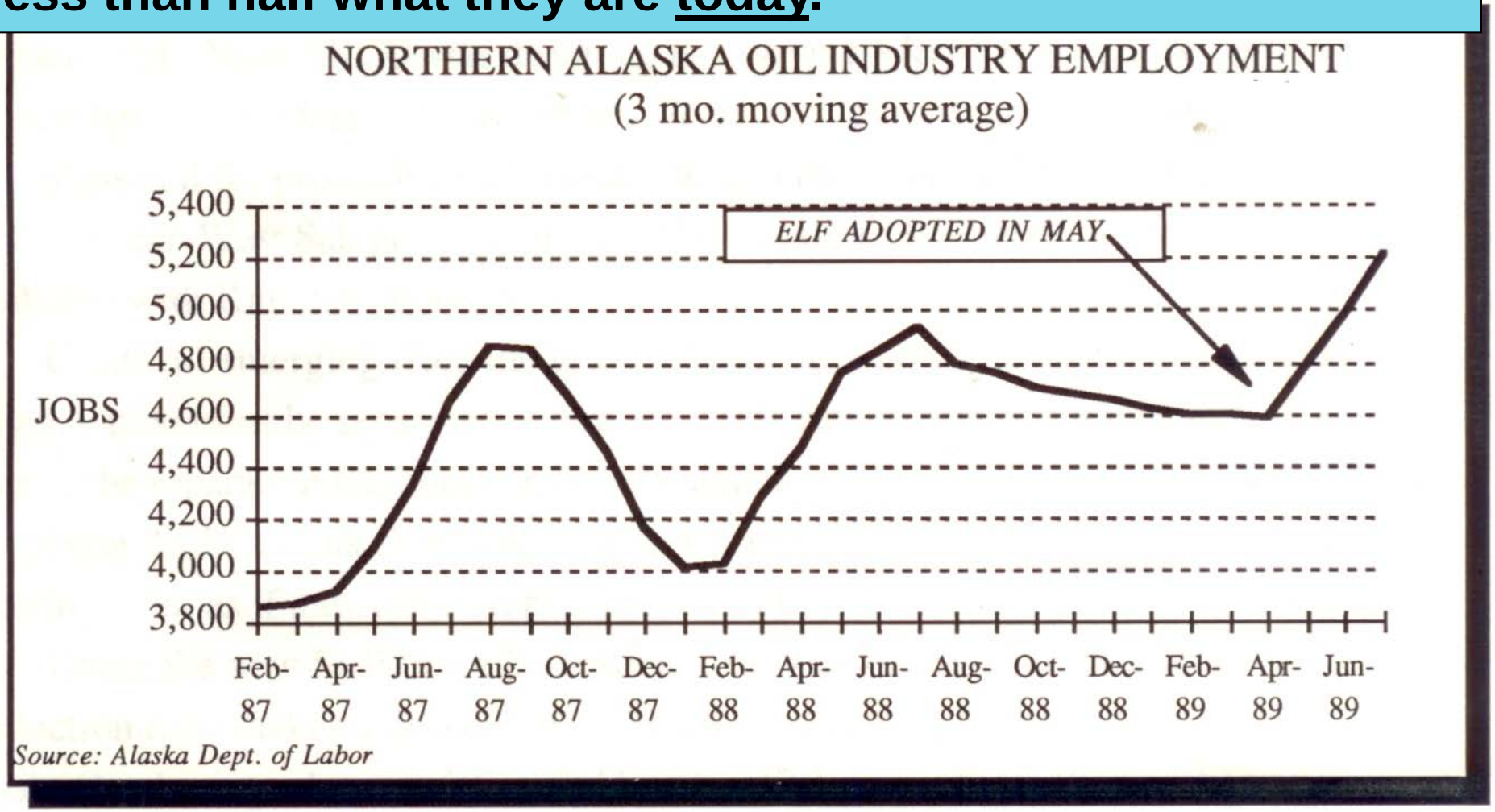
Employment declined in 2010, but is still above 2007 levels and is nearly 50% higher than in 2004



Source: Oil and Gas Production Tax Status Report to the Legislature
Alaska Department of Revenue January 18, 2011, p.11

Despite similar concerns at the time, oil field employment also increased after the ELF tax increase of 1989.

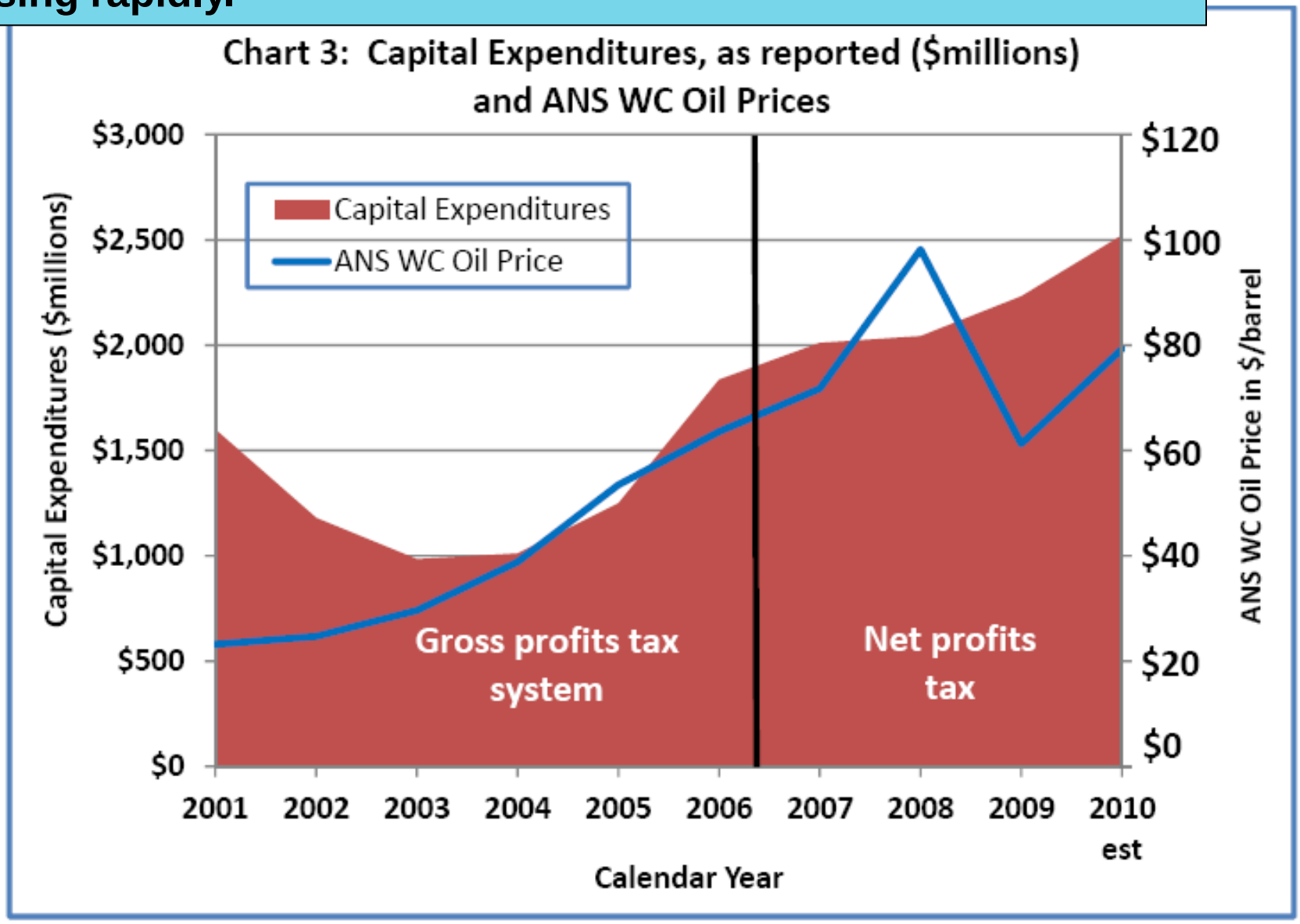
Also notable- total North Slope oil industry jobs then were less than half what they are today.



Source: Alaska Department of Labor, 1989

Declining Activity: Ain't Necessarily So

Total capital spending, as well as spending per barrel, are increasing rapidly.



Source: Oil and Gas Production Tax Status Report to the Legislature
Alaska Department of Revenue January 18, 2011, p.6

JuneauEmpire.com

From just a few weeks before the start of this session

Oil industry boosting Alaska spending

Tuesday, November 30, 2010

Story last updated at 11/30/2010 - 10:49 am

Oil industry boosting Alaska spending
By Pat Forgey | JUNEAU EMPIRE

Alaska's oil industry is boosting its spending in the state more than expected, which may be good for future oil production and jobs, but is limiting the state's profit from rising oil prices.

The state's official oil production tax estimate for the current fiscal year is now $2.6 billion, down about $250 million from last year.

A combination of declining production and increased industry spending kept the state from profiting from the price rise as much as it would have otherwise, however.

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Production Declines

- No discernable evidence yet that ACES has impacted production one way or another. Not enough time has passed
- The impact of changes to ACES on production is highly speculative
- North Slope production has declined 4% to 6% per year since the peak in 1989. This is the natural trend for a maturing basin
- Production taxes on all new / small fields was less than 1% through 2005, and production declined at the same rate

Firm commitments from industry are lacking

- All companies carefully word what they say, but there is no identifiable commitment to add new oil or reduce the rate of decline
- "If its and buts were candy and nuts, my what a Christmas we'd have!"
  -Dandy Don Meredith, circa 1972

Increased investment = Alaskan jobs and production

- BP will re-evaluate the entire inventory of opportunities
  - Note: BP owns 26% of Prudhoe Bay - investments require other working interest owner approvals

- Opportunities that could become competitive if bill is passed:
  - Increased drilling, potentially adding another Rig in service
  - Increased wellwork
  - Gas Partial Processing /I - PAD
  - Evaluate 'at scale' development viscous oppo
  - Increased R&D spending to develop heavy oil

Read carefully, there are no promises here

- The sooner the bill takes affect, the sooner increased activity can happen

Source: House Finance Committee, BP Alaska Testimony- Claire Fitzpatrick, CFO March 23, 2011, p.7

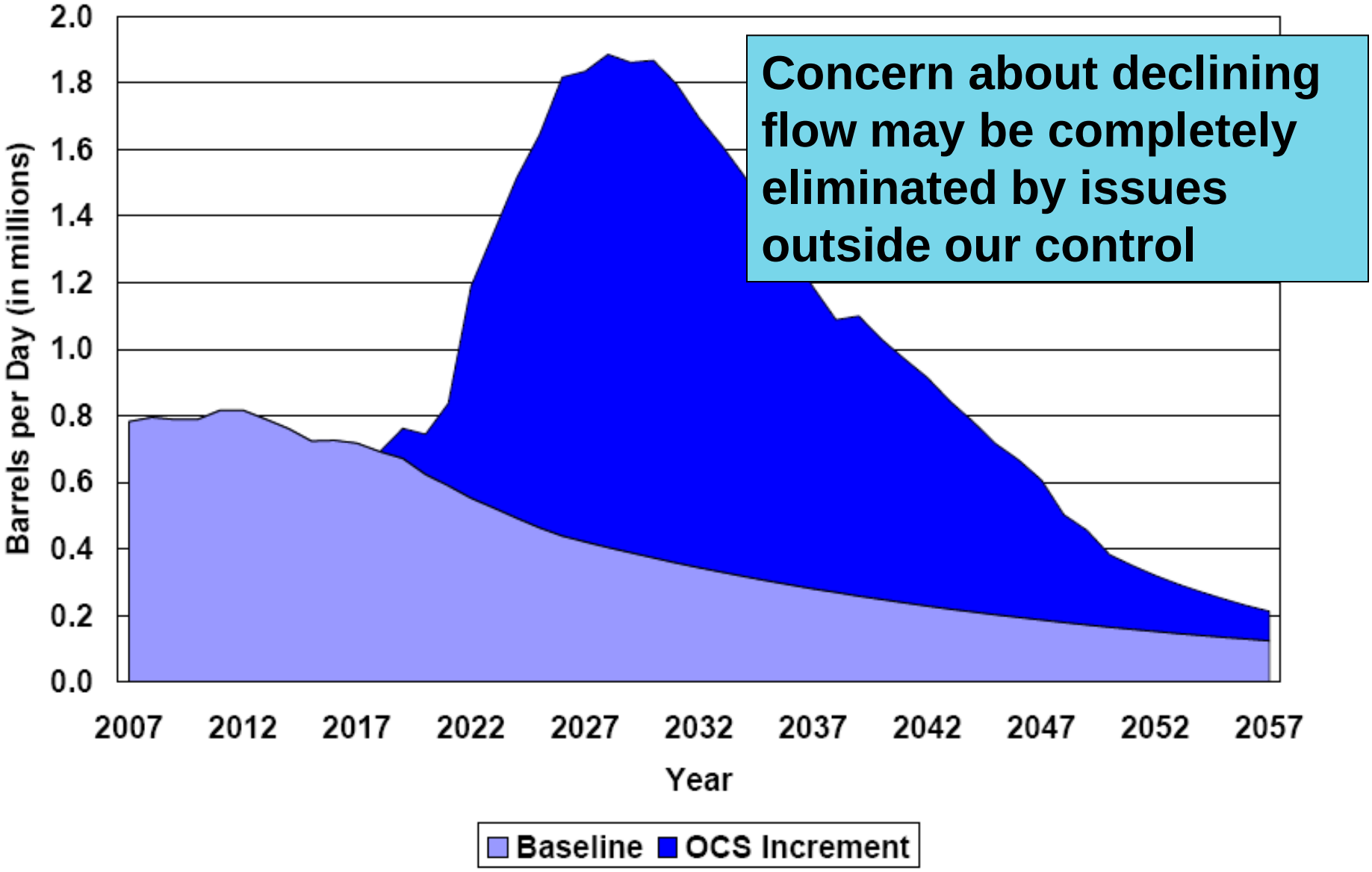
Is Industry About to Walk Away from TAPS?

- Major producers own a piece of the line. The economics of TAPS and oil production are integrated.
- 6% decline highly unlikely given current ongoing investment and updated projections.
- Natural reduction in decline rate appears to be occurring in recent years.
- No consensus on technical limits of TAPS. Many things can be done to recondition the line to work at lower flows.

Things that may dramatically increase production include

- Technology changes, such as advances in seismic capability and multi-lateral wells
- Due to higher prices and technological development, greater economic viability of traditionally challenged resources including heavy oil, tight sands, and shale oil
- Major discovery coming on line offshore or on federal land (NPRA / ANWR)
- Gasline, GTL, or LNG projects

North Slope Oil Production With OCS



Source: Alaska Oil & Gas Association Testimony to the House Resources Committee on House Bill 110, Marilyn Crockett, AOGA Executive Director February 16, 2011, p.8

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Changes to Progressivity

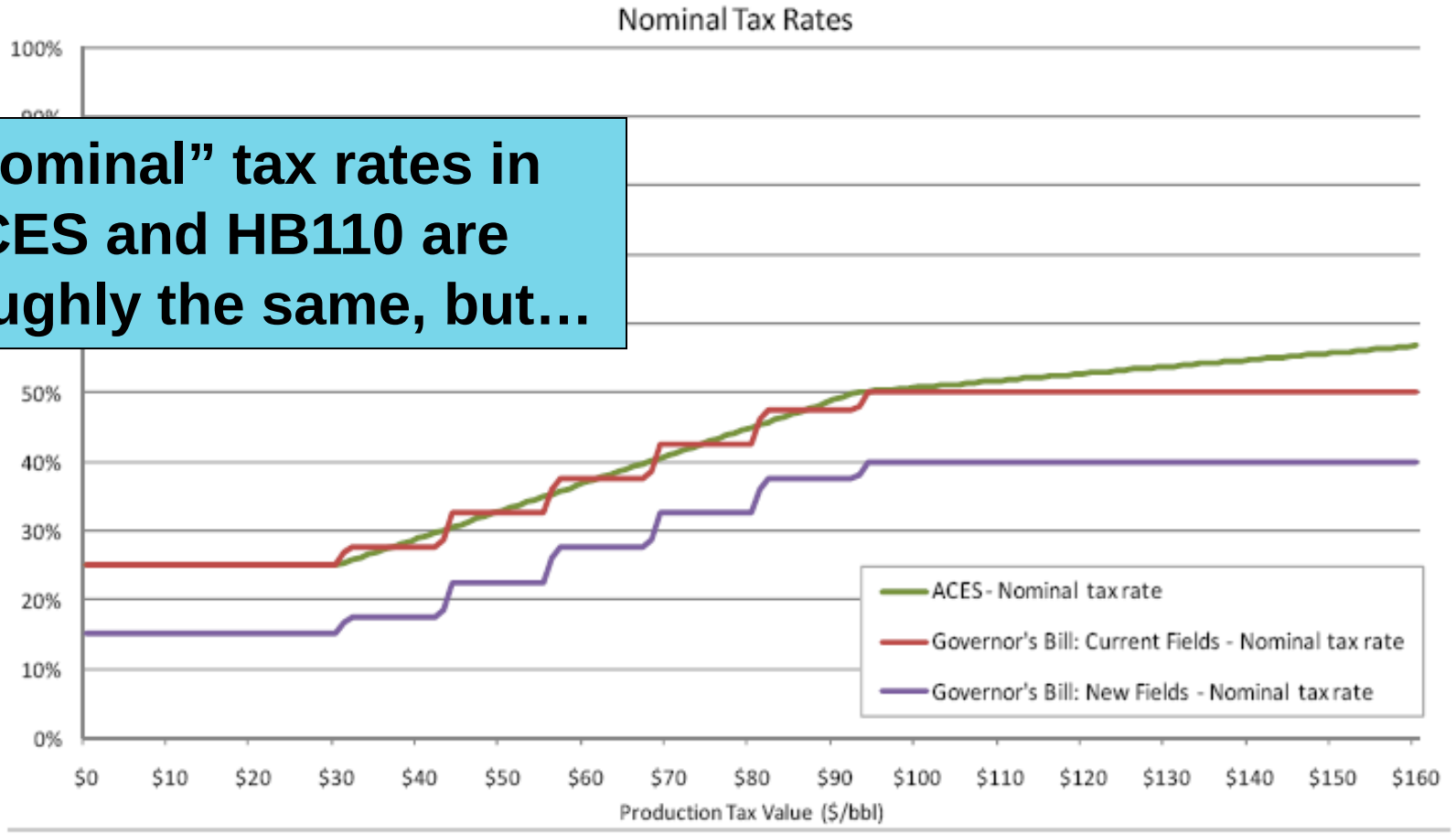
- This is where most of the revenue will be lost: $800 million to over $2 billion / year depending on the price of oil

FY 2013: -$382 million
FY 2014: -$961 million
FY 2015: -$1,126 million
FY 2016: -$1,341 million
FY 2017: -$1,423 million

Source: HB110 Fiscal Note #1, Department of Revenue

Nominal Tax Rates
Current law and HB 110

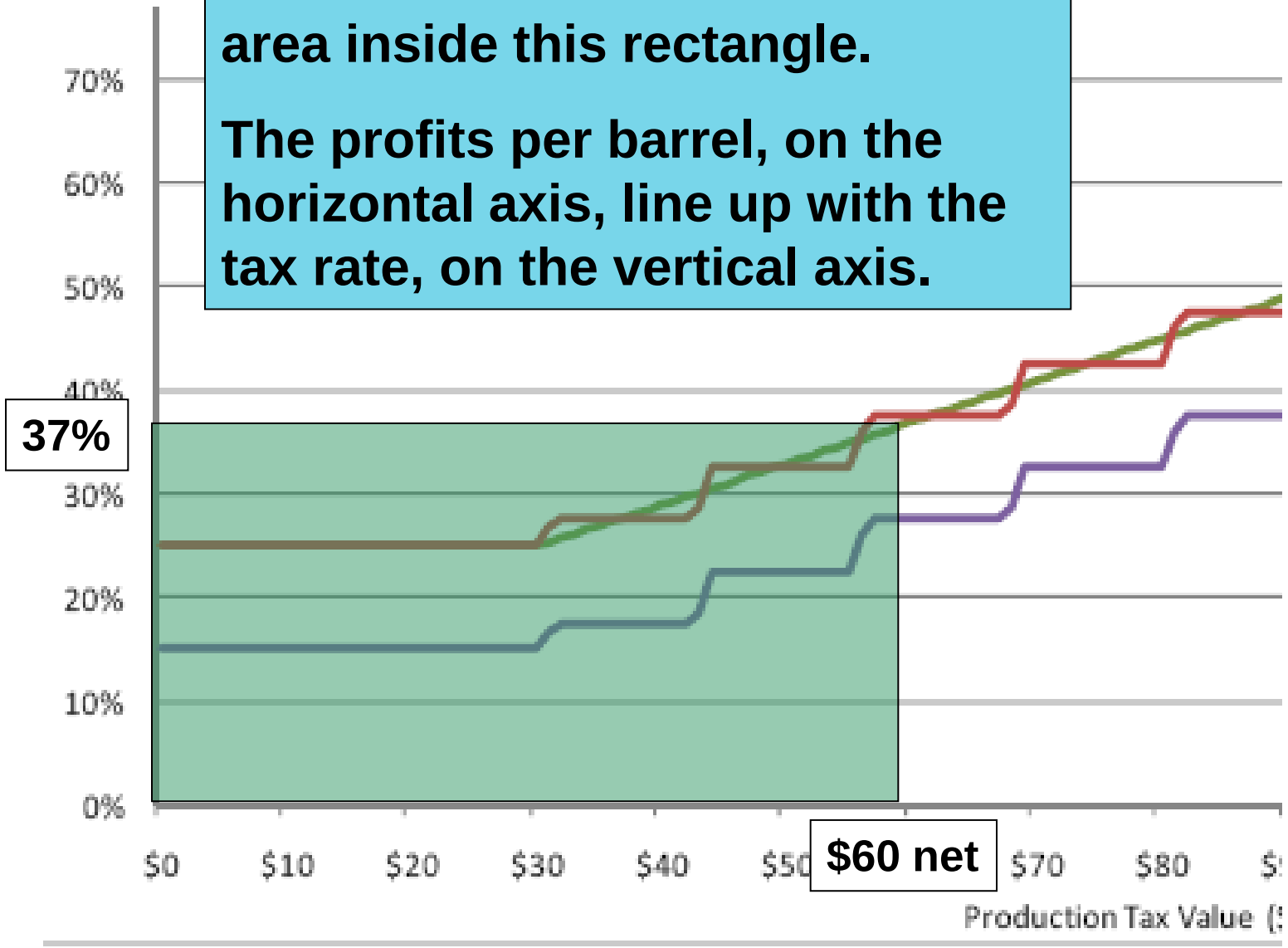
“Nominal” tax rates in ACES and HB110 are roughly the same, but…



Source: HB 110 Presentation, Primary Goals Tax Rates and Cash Flows, Bill Sectional, Presentation to the House Resources Committee, February 21, 2011, Alaska Department of Revenue, p.12

Under current law (ACES), our taxes can be envisioned as the area inside this rectangle.

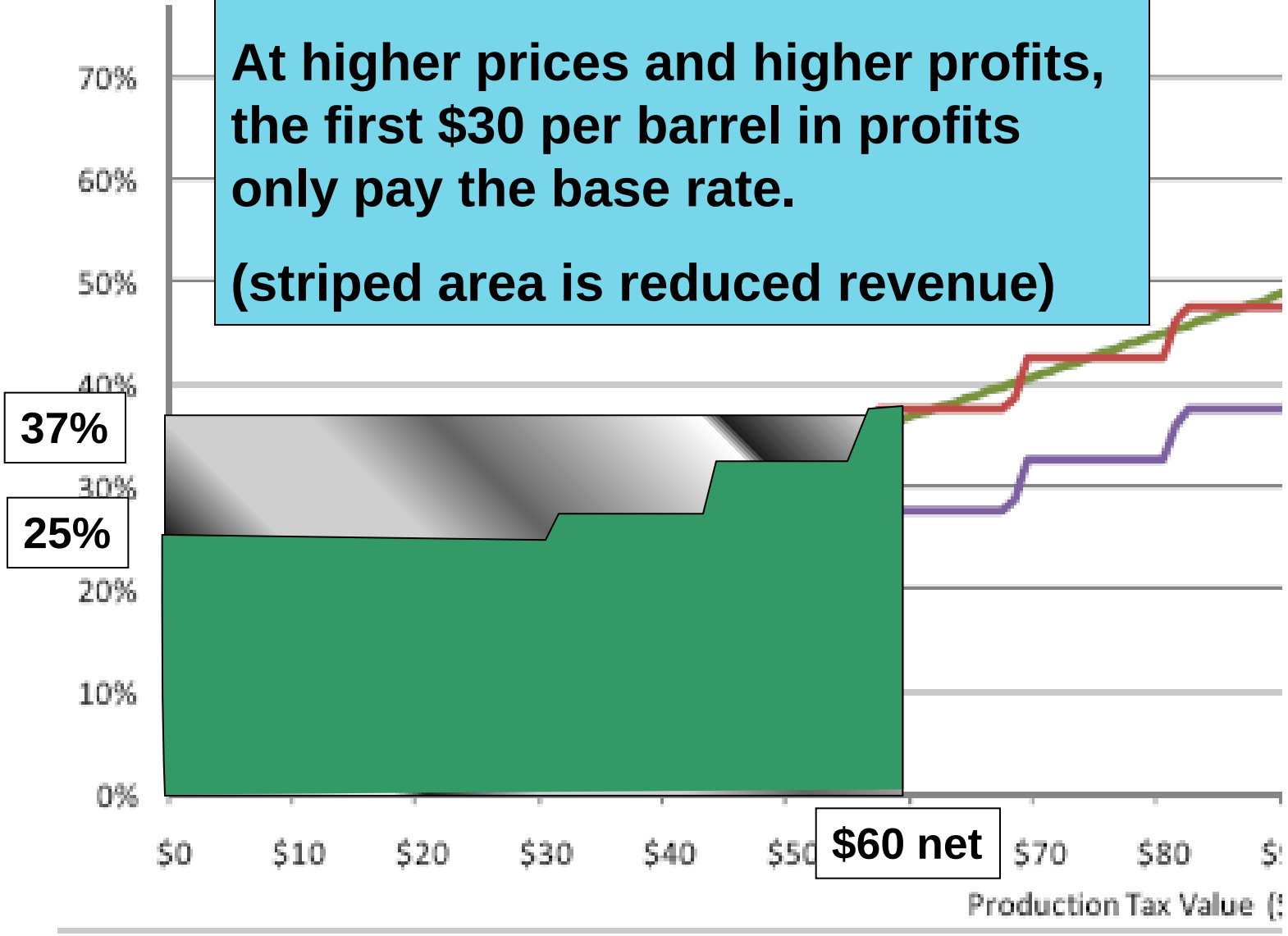
The profits per barrel, on the horizontal axis, line up with the tax rate, on the vertical axis.

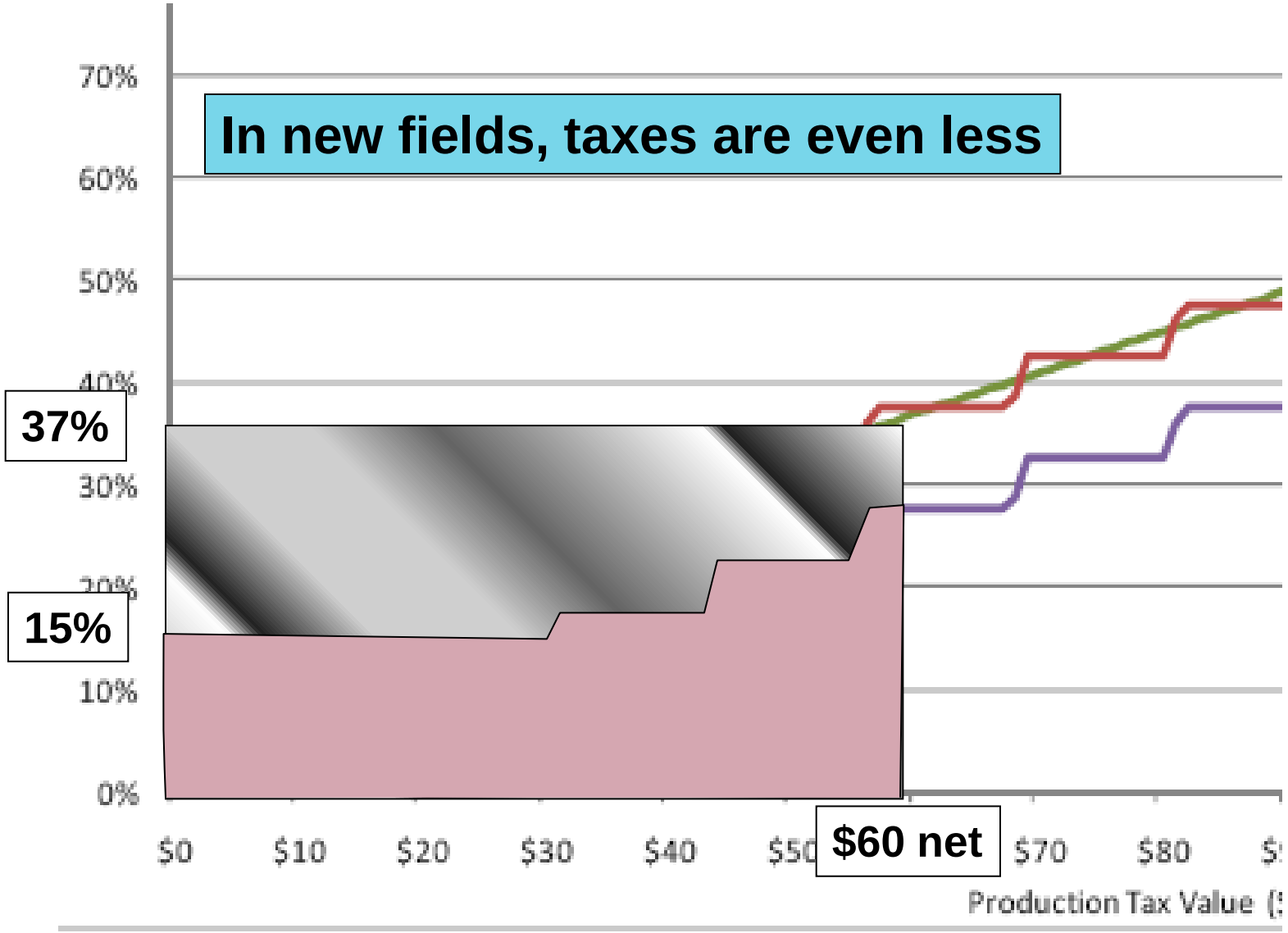


Under HB110, our taxes are reduced to only the area under the line.

At higher prices and higher profits, the first $30 per barrel in profits only pay the base rate.

(striped area is reduced revenue)




In new fields, taxes are even less
70%
60%
50%
40%
37%
30%
15%
10%
0%
$0
$10
$20
$30
$40
$50
$60 net
$70
$80
Production Tax Value

Changes to Progressivity

- “Brackets” are inappropriate for a net profits tax. ACES is very different than the personal income tax
- All deductions and expenses are recaptured by the producer before the first dollar of taxes is paid.
- A producer could be paying the base 25% rate on $billions in net income.
- In current law, the $12 million “small producer credit” effectively creates a lower tax bracket for developers of new, smaller fields

Changes to Progressivity

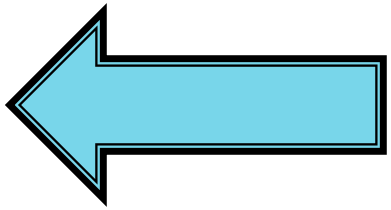
- Most arguments in favor of changes are based on high "marginal tax rates."
- Very little discussion of what this really means
- Total taxes paid on the last dollar earned. Despite what is said, profits go up steadily with the price of oil
- High marginal rates were built into ACES
- The flip side = high marginal state participation in new investment
- Effective tax rates drive producer decisions, not marginal rates.

Progressivity, by its very nature, creates marginal tax rates that are higher than the effective rate.

During the ACES debates, this was discussed as a positive benefit.

Progressivity Impacts

- **The use of progressivity creates a sizeable difference between the effective rate and the marginal rate of tax in relation to investment decisions**
  - This is present with the existing PPT language
  - The impact provides either:
    - A good sized "carrot" to invest; or
    - A good sized "stick" to not export after tax cash flow from Alaska



Source: Gaffney Cline, Alaska's Equitable Share, House Finance Committee, November 7, 2007, p. 15

How The Net Tax System Operates

- "Net" taxes all fields at a single rate
  - If only looking at the "headline" net tax rate, this would be the perception
  - In re… of different part… reservoirs at di…
    - Based upon their individual profitability

If a company invests, their tax burden decreases dramatically.

- **Further, it doesn't tax operating profits, but retained cash flow after reinvestment**

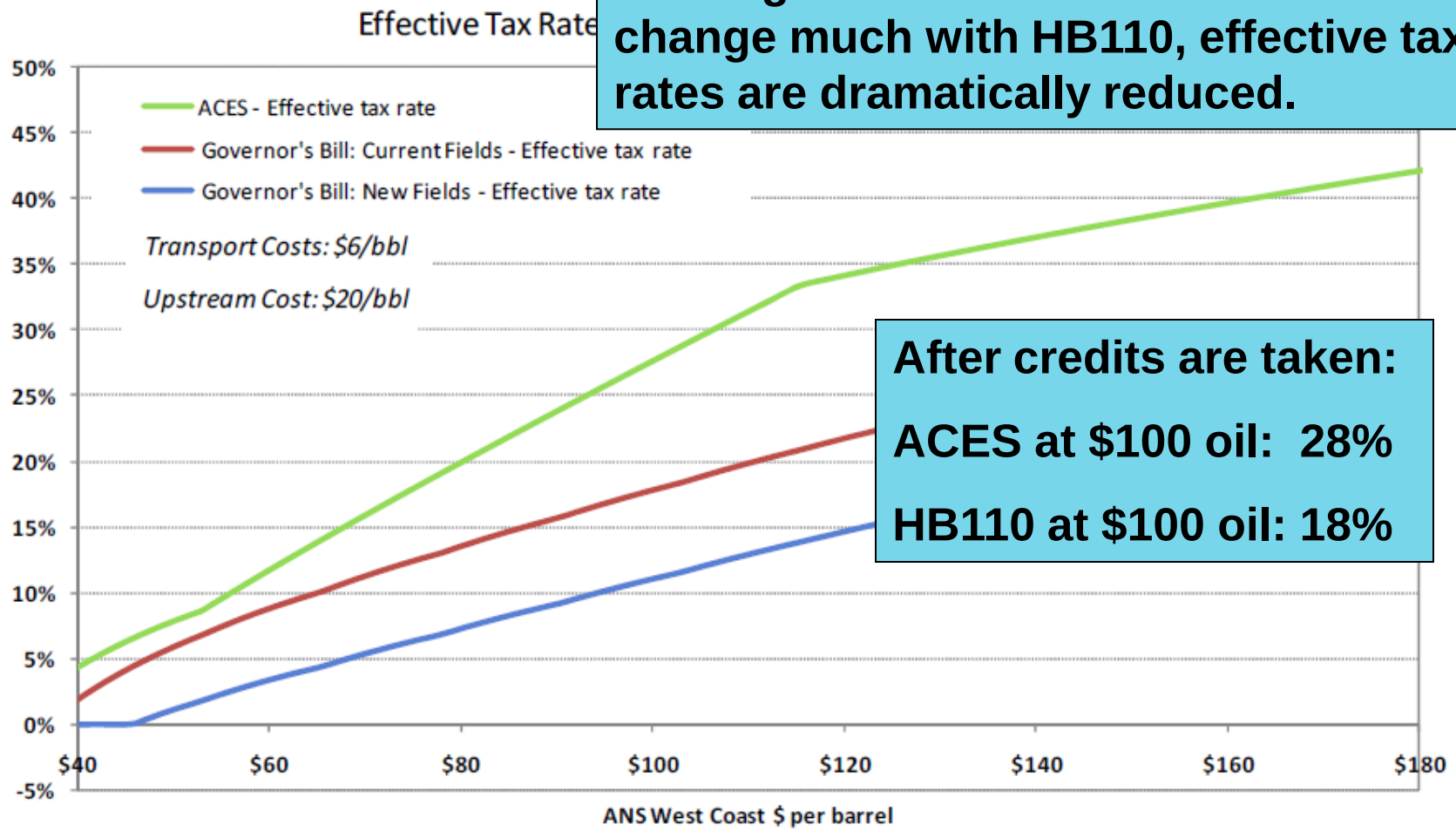
Source: Gaffney Cline, Alaska's Equitable Share, House Finance Committee, November 7, 2007, p. 44

Changes to Progressivity

- Dale Pittman of Exxon said in testimony: “For us it’s the effective tax rate” that drives decisions

Effective Tax Rates on Gross Current law and HB 110

Although nominal tax rates don't change much with HB110, effective tax rates are dramatically reduced.



After credits are taken:

ACES at $100 oil: 28%

HB110 at $100 oil: 18%

Source: HB 110 Introduction, Proposed Changes to the Oil & Gas Production Tax, Presentation to the House Resources Committee, February 7, 2011, Alaska Department of Revenue, p.33

Reduced Base Rate for New Fields

- Under ELF, there was a lower base rate for the first five years of production: 12.25% versus 15% of the gross
- The reduced rate in HB110 lasts forever
- There is no economic reason to maintain any reduced rate for longer than it takes a producer to recapture their initial investment

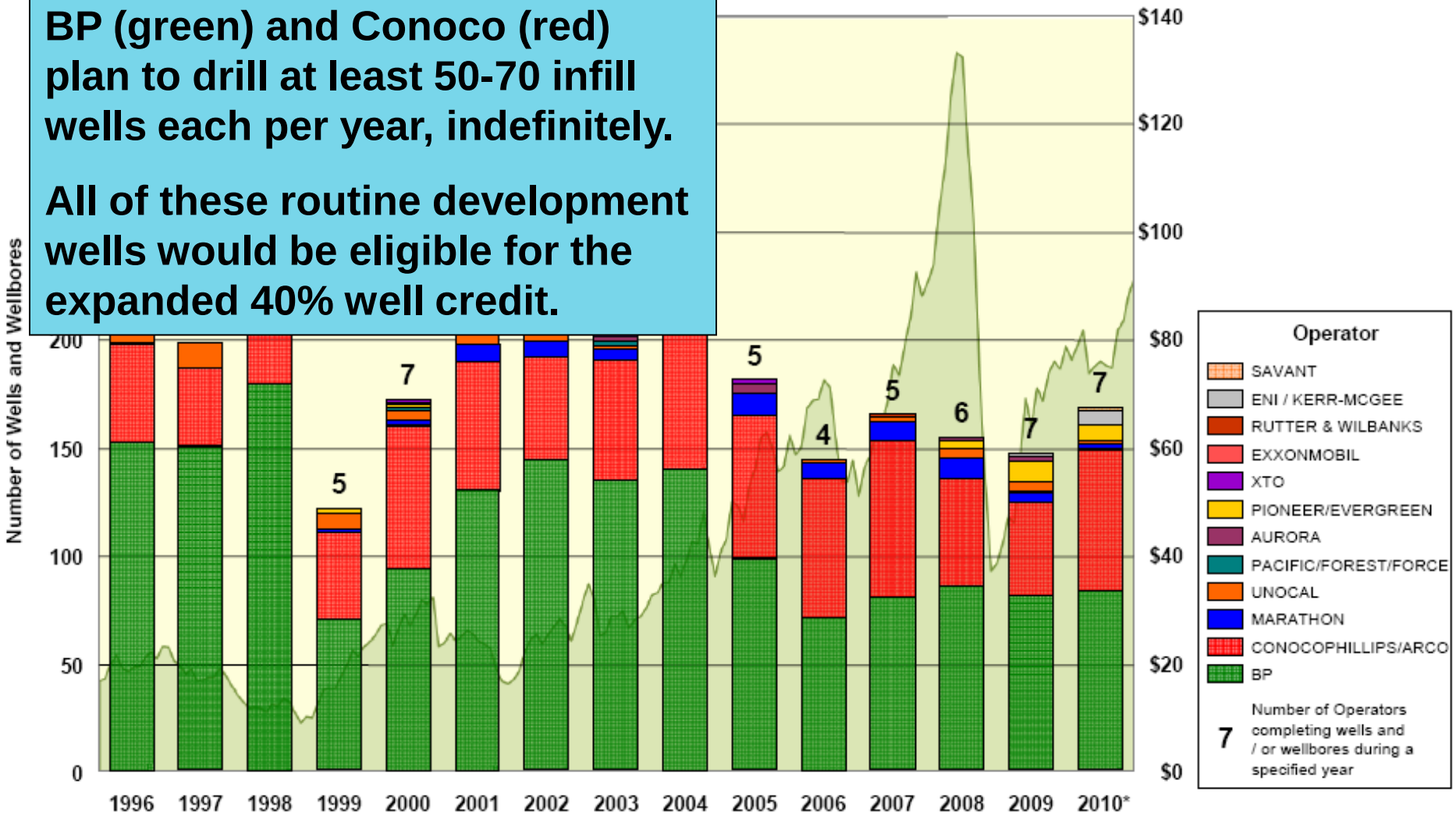
Well Credit Increase

- Department of Revenue estimates this will cost between $200 and $400 million / year
- This broad a range indicates a lack of knowledge from which to estimate the actual extent of these costs
- The vast majority of this credit will benefit activity that is already happening
- Industry has indicated that 80% of new oil will come from legacy fields. This sort of infill drilling has been shown to be highly profitable

DEVELOPMENT AND SERVICE WELLS / WELLBORES
Statewide: Completed, Suspended or Abandoned (1996 - 2010)*
with West Coast Spot Price for Alaska North Slope Crude Oil (Dollars per Barrel)

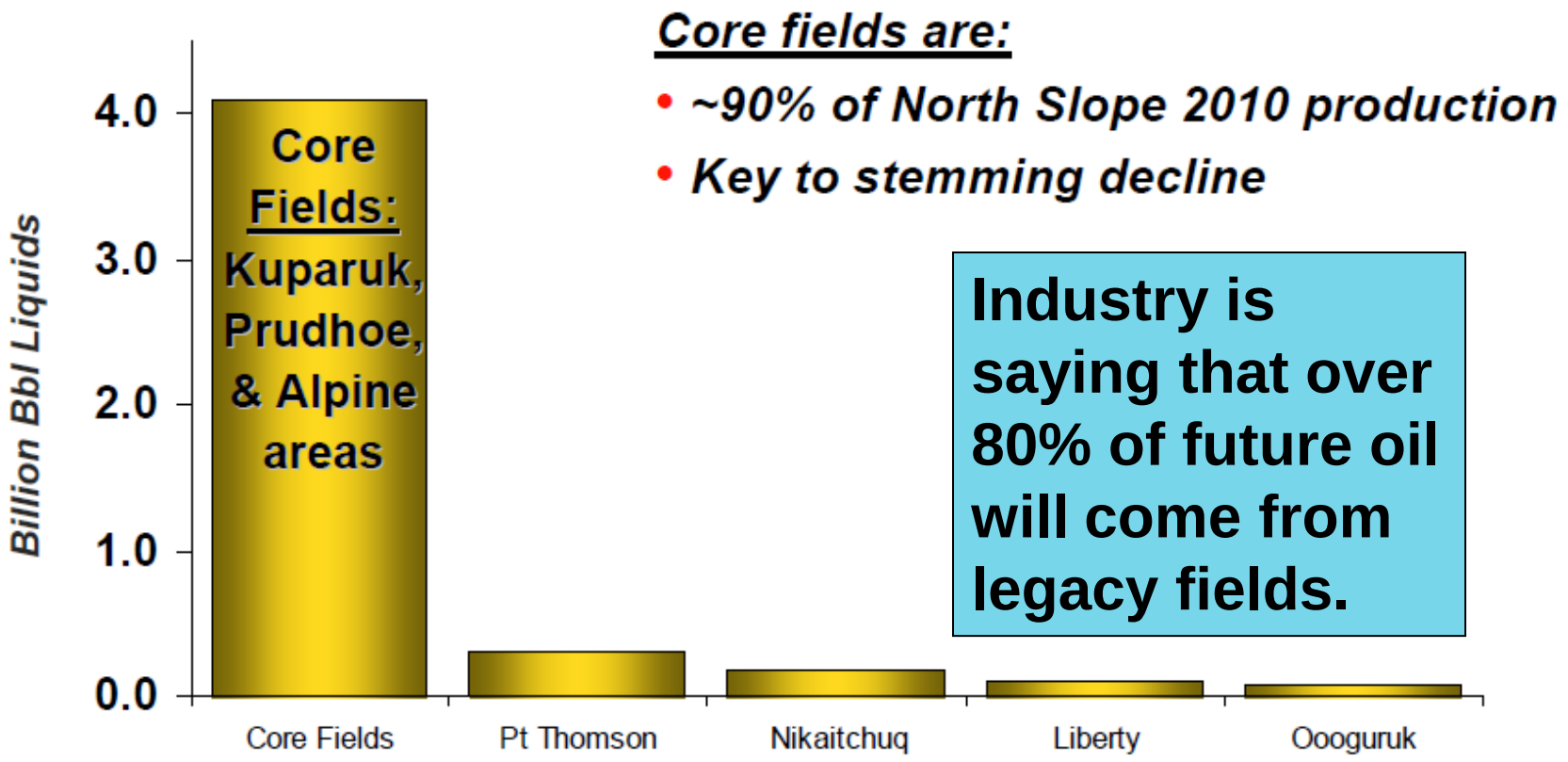
BP (green) and Conoco (red) plan to drill at least 50-70 infill wells each per year, indefinitely.

All of these routine development wells would be eligible for the expanded 40% well credit.



Source: Alaska Oil and Gas Conservation Commission (AOGCC), Presentation to House Finance Committee from Commissioner Dan Seamount, March 17, 2011, p. 23

North Slope Remaining Barrels



Core fields are:

- ***~90% of North Slope 2010 production***
- ***Key to stemming decline***

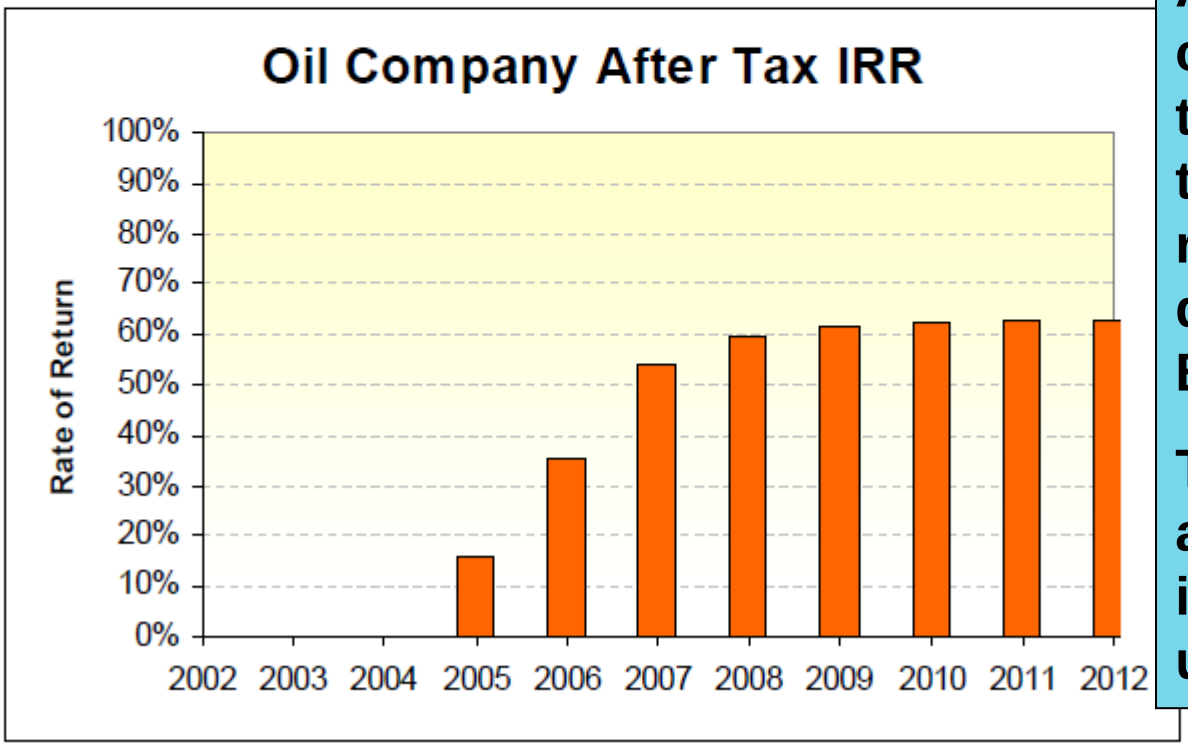
Industry is saying that over 80% of future oil will come from legacy fields.

Core fields are dominant source of state production

Source: ConocoPhillips testimony to House Resources Committee on HB110, February 16, 2011, p. 10

BP Prudhoe Bay

- **This is the after tax return on (300%) investment realized by the Prudhoe Bay owners**



In 2007 the Administration's consultant showed that even if costs triple, the rate of return on infill drilling in Prudhoe Bay was over 60%.

They could not find a stress case where infill drilling was uneconomical.

Source: Gaffney Cline, Alaska's Equitable Share, House Finance Committee, November 7, 2007, p. 77

Change from Monthly to Annual Progressivity Calculation

- Fairness: producers sell oil into price spikes that often have nothing to do with conditions in Alaska (i.e. a Middle East crisis)
- Alaska should also be able to benefit
- Alaska gets value from volatility. Revenue increases more during a price spike than it declines during a price drop.
- According to the Department of Revenue, Alaska would have lost between $150 and $450 million / year since 2007 with an annual instead of monthly tax calculation

Revenue impact of price volatility: Different scenarios with $90 oil cost (ACES tax system)

Average Annual Cost of Oil = $90

Price for each of four quarters				Revenue ($million)	Change
90	90	90	90	3,724	-
80	90	90	100	3,764	40
80	80	100	100	3,807	83
70	70	110	110	4,049	325
70	70	70	150	4,186	462
60	60	80	160	4,355	631

A switch to annual calculation of value is not just about convenience.
It is a real financial hit to the state.

Source: House Minority, internal model

General Conclusion

- HB 110 bill unfortunately results in reducing taxes significantly on current production
- The goal should be to increase exploration and exploitation may not be met and is overshadowed by massive tax cuts on legacy production
- The tax reductions in HB110 are so large that it would be almost impossible for Alaska to recapture the foregone revenue
- If the bill passes, without significant new production Alaska's non-permanent-fund savings will be depleted in 8-10 years

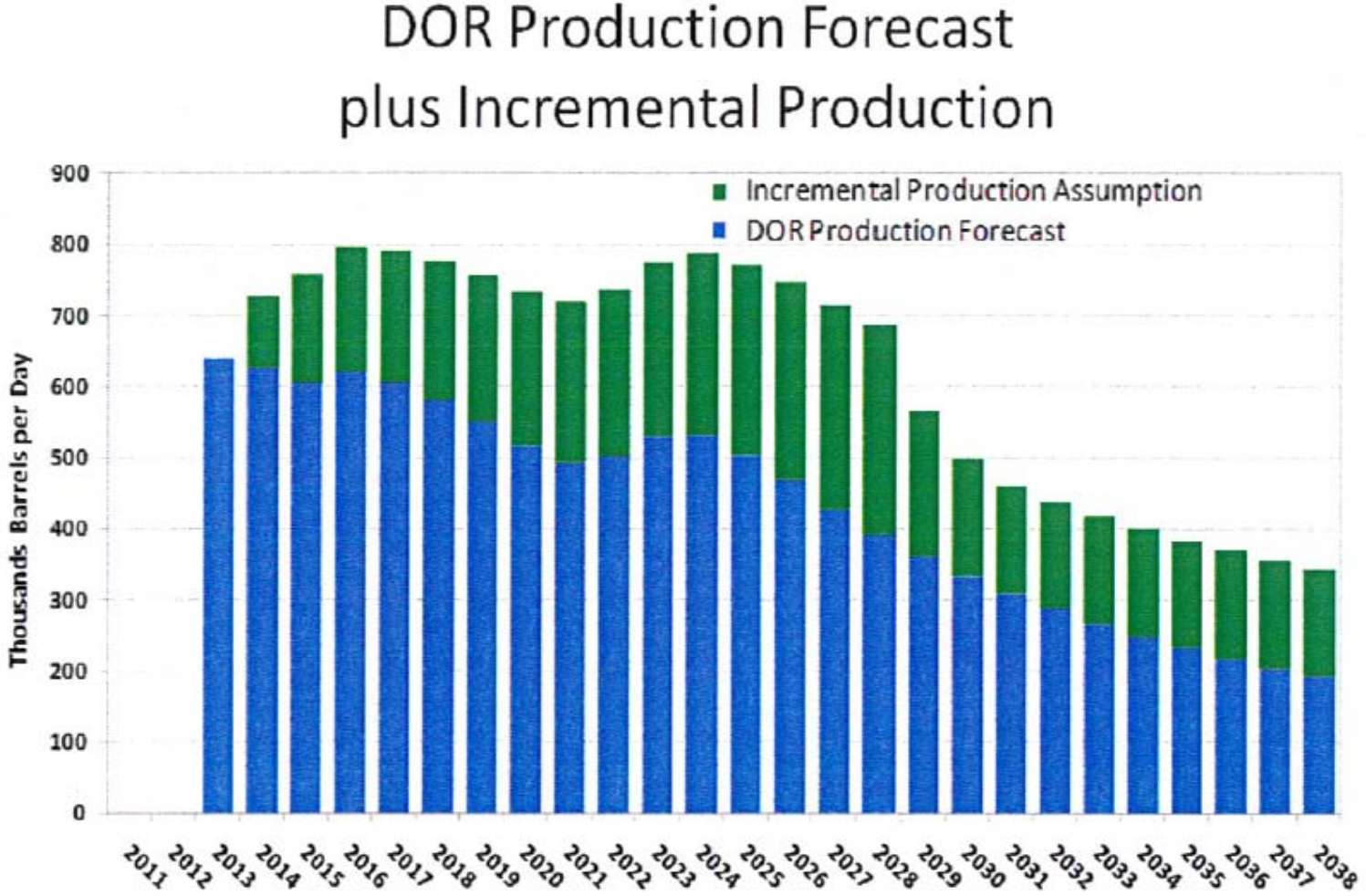
Required Production to Replace Lost Revenue

	ACES	HB110	HB110
Barrels / day	622,000	622,000	1,040,000
Price of Oil	$80	$80	$80
Production Tax Revenue, net of credits ($millions)	$2,590	$1,580	$2,590

	ACES	HB110	HB110
Barrels / day	622,000	622,000	1,070,000
Price of Oil	$100	$100	$100
Production Tax Revenue, net of credits ($millions)	$5,000	$3,040	$5,000

Source: House Minority, internal model

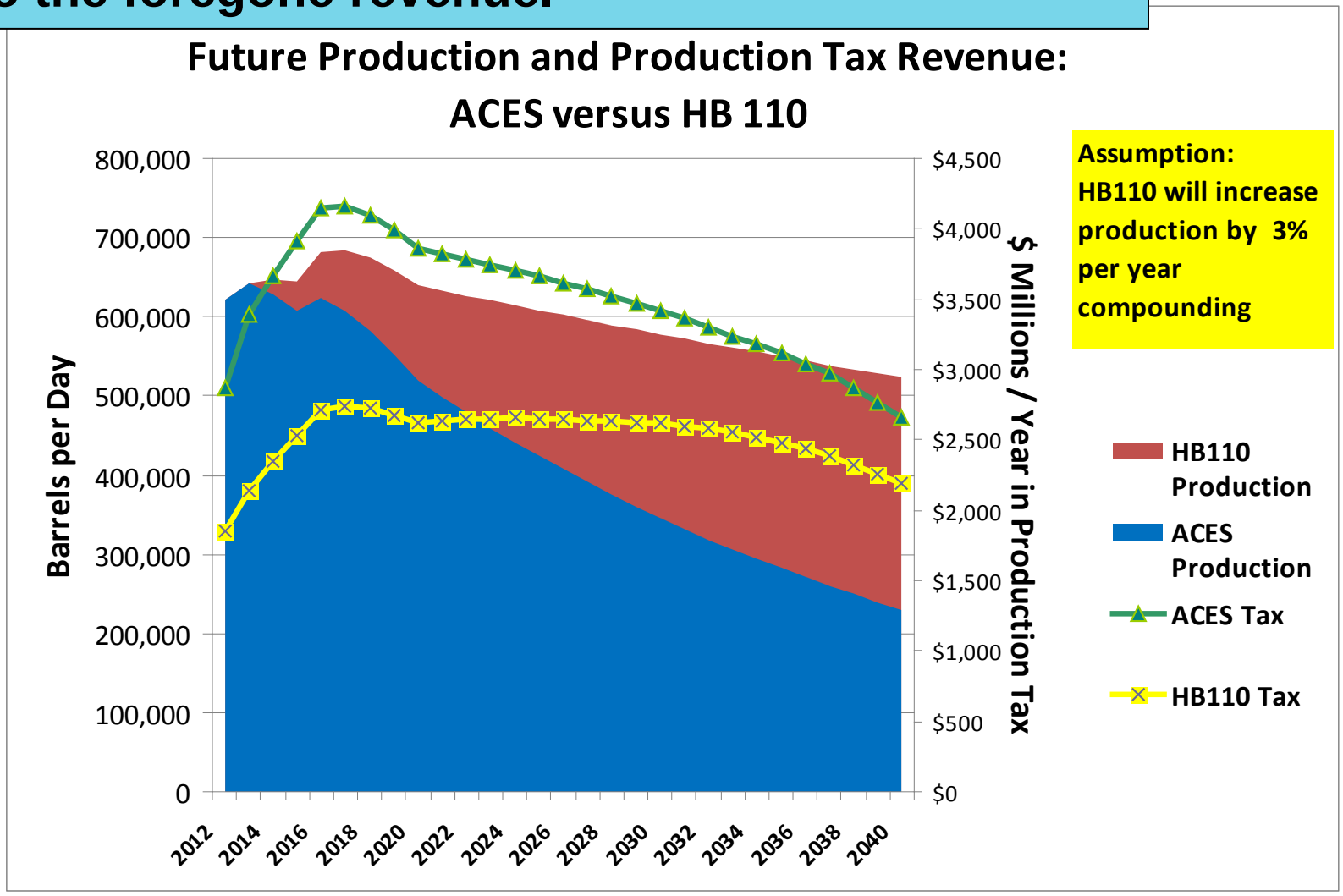
This scenario, from a DOR response to the Resources committee, is speculative.
It adds large amounts of oil in the first few years, which dramatically effects long term revenue projections.



Source: DOR Production Profile; Fall 2010 Revenue Sources Book.
Incremental Production: Great Bear Petroleum; 18 February, 2011.

An alternative scenario shows gradual added production over time.

In these scenarios, it is much harder to catch up to the foregone revenue.



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Advantages of ACES

- **100% Capital recapture in first year**
  (no depreciation)
- **No Ring Fencing**
  (new field development work can be deducted against current production)
- **Stackable credits**
  (state pays 45% to 80% of development costs)
- **Pays for desired actions**
  (spending reduces both taxes and tax rate)
- **Political stability**

Outsiders' View of Alaska

Many provisions of our current tax code make Alaska extremely attractive

	Rank*	Economic Impact
Immediate Deduction of Capex	Top 1-3	High
Investment Credits	Top ¼	Moderate-High
Amount (up to 40%)	Top 10	High
Credits to Cash	Top 1 or 2	Moderate, Big, Huge Ind.
No ringfence (Exploration/Appraisal)	Top 10	Huge
87% Marginal Rate	Bottom 5-10	Moderate (Huge Optically)
Cost per bbl	Bottom ¼	High
Environmental Costs	Bottom 10	High

* Where Top is best Bottom is worst from Producer viewpoint

Source: Petroleum Fiscal System Design, Presentation to House Resources Committee, Rich Ruggiero, Gaffney Cline, February 11, 2011, p.12

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An example of alternative approaches

- Targeted credits to improve exploration economics
- Better information requirements
- Permit streamlining and certainty
- Facility sharing / facility access
- Enforce duty to develop