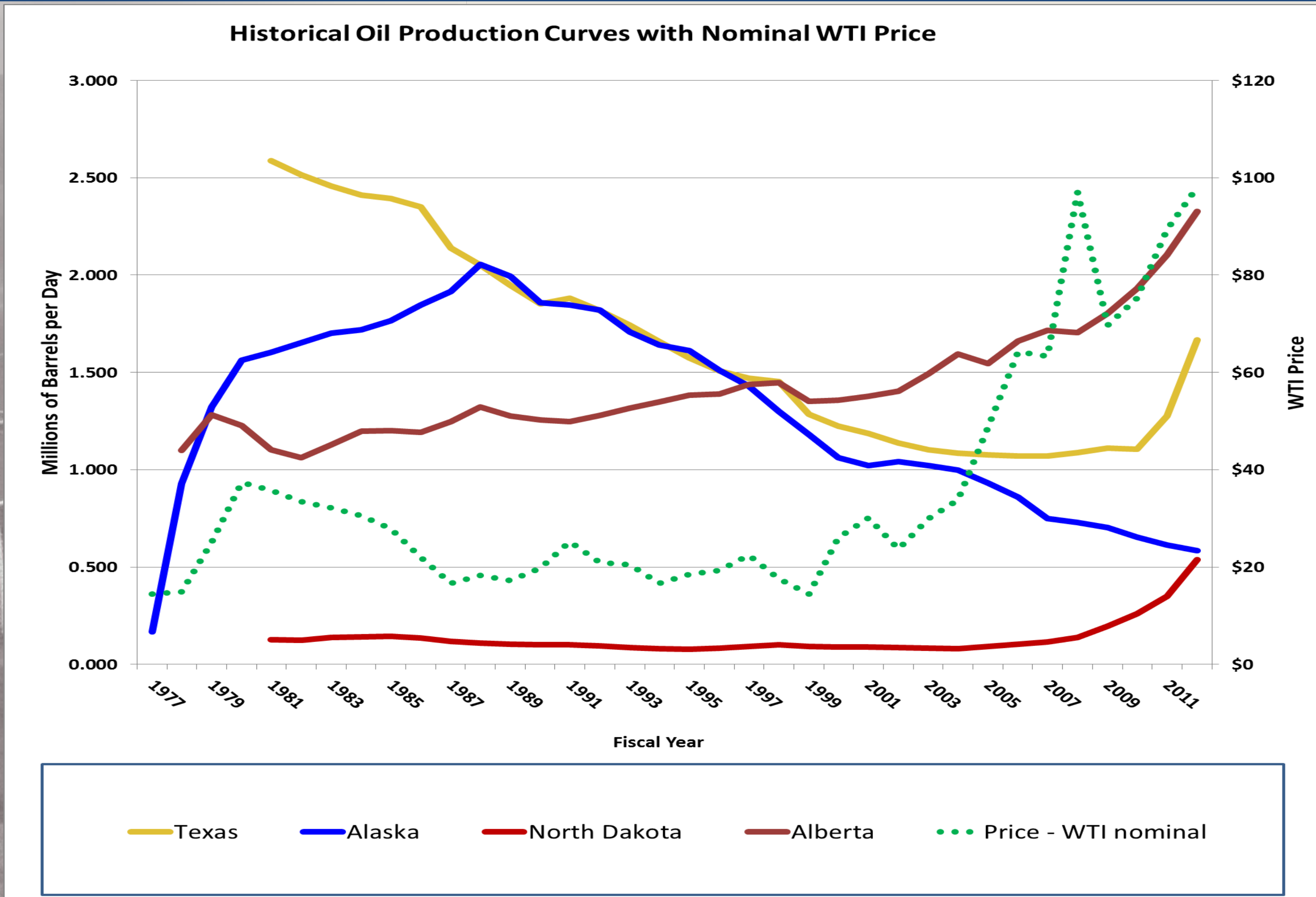
More Alaska Production Act: Creating *Opportunity for Alaskans*

Michael Pawlowski, Oil and Gas Program Manager
State of Alaska, Department of Revenue
November 6, 2013

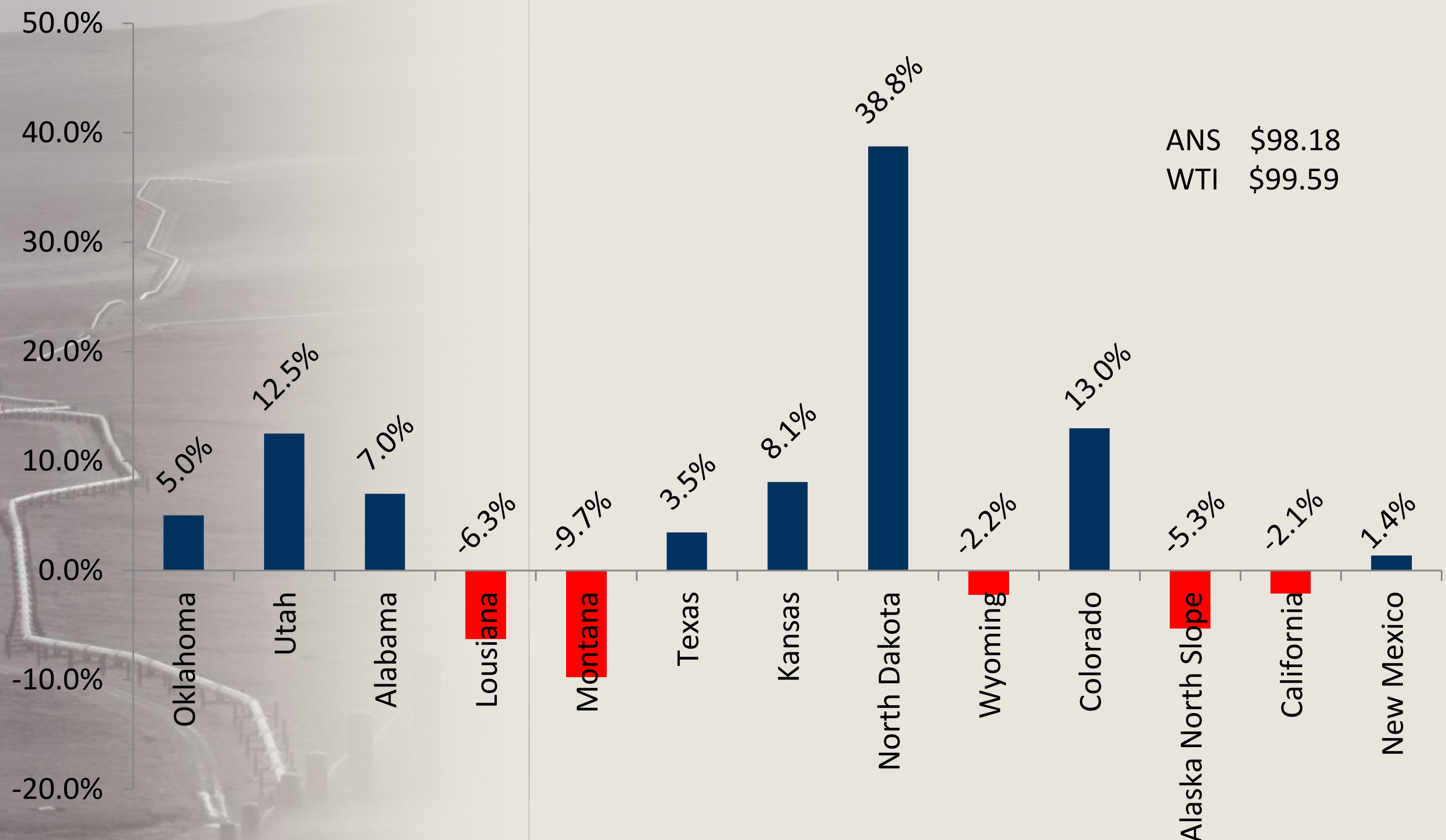
Other Basins Have Turned Decline Around

- Historical Oil Production -



Change in Average Daily Oil Production by State—2007-2008

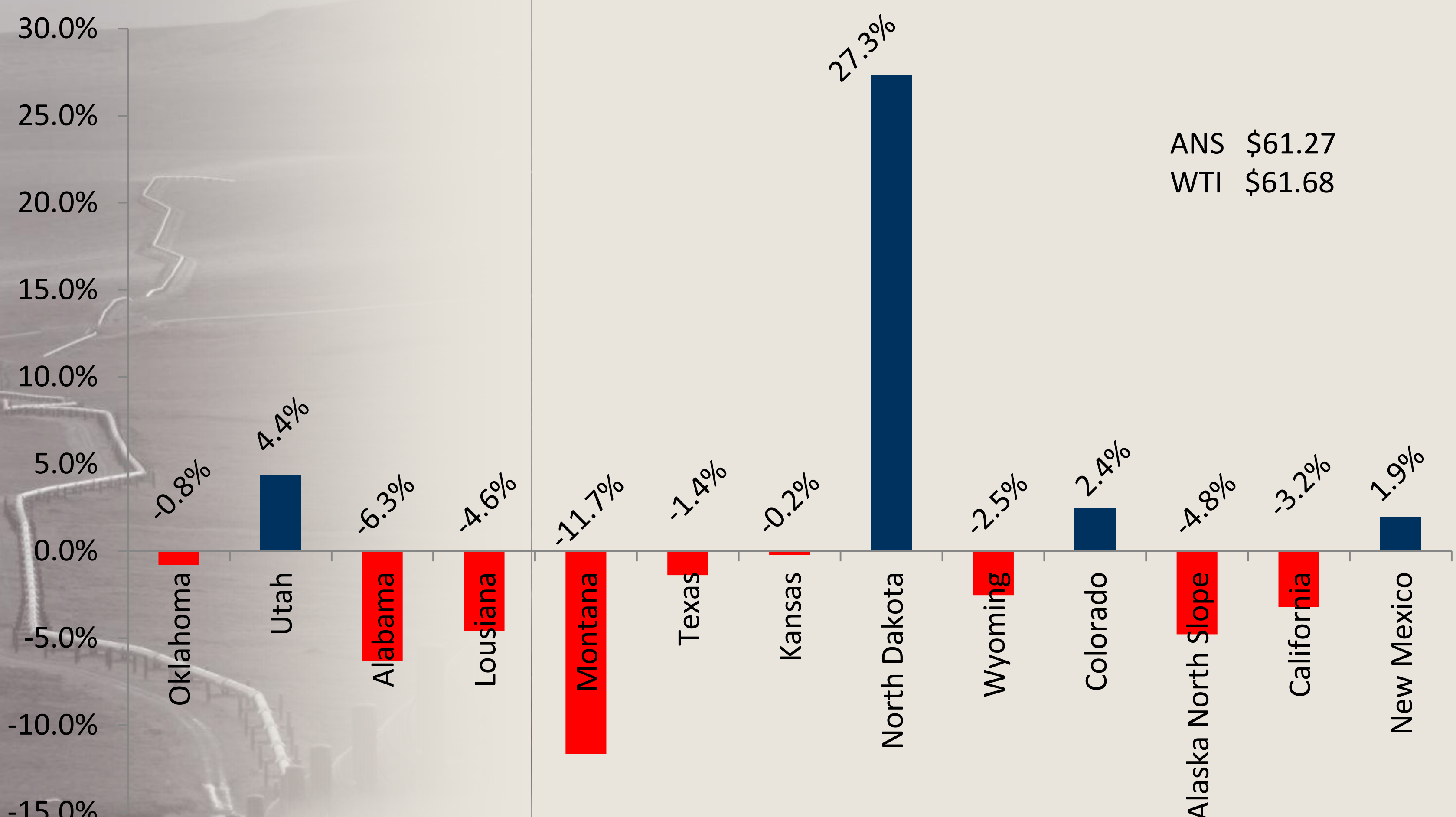
- Prepared by DOR, Economic Research Group (March 18, 2013)-



Source: EIA Crude Oil Production By State. Link: http://www.eia.gov/dnav/pet/pet_crd_crpdn_adc_mbblpd_m.htm

Change in Average Daily Oil Production by State—2008-2009

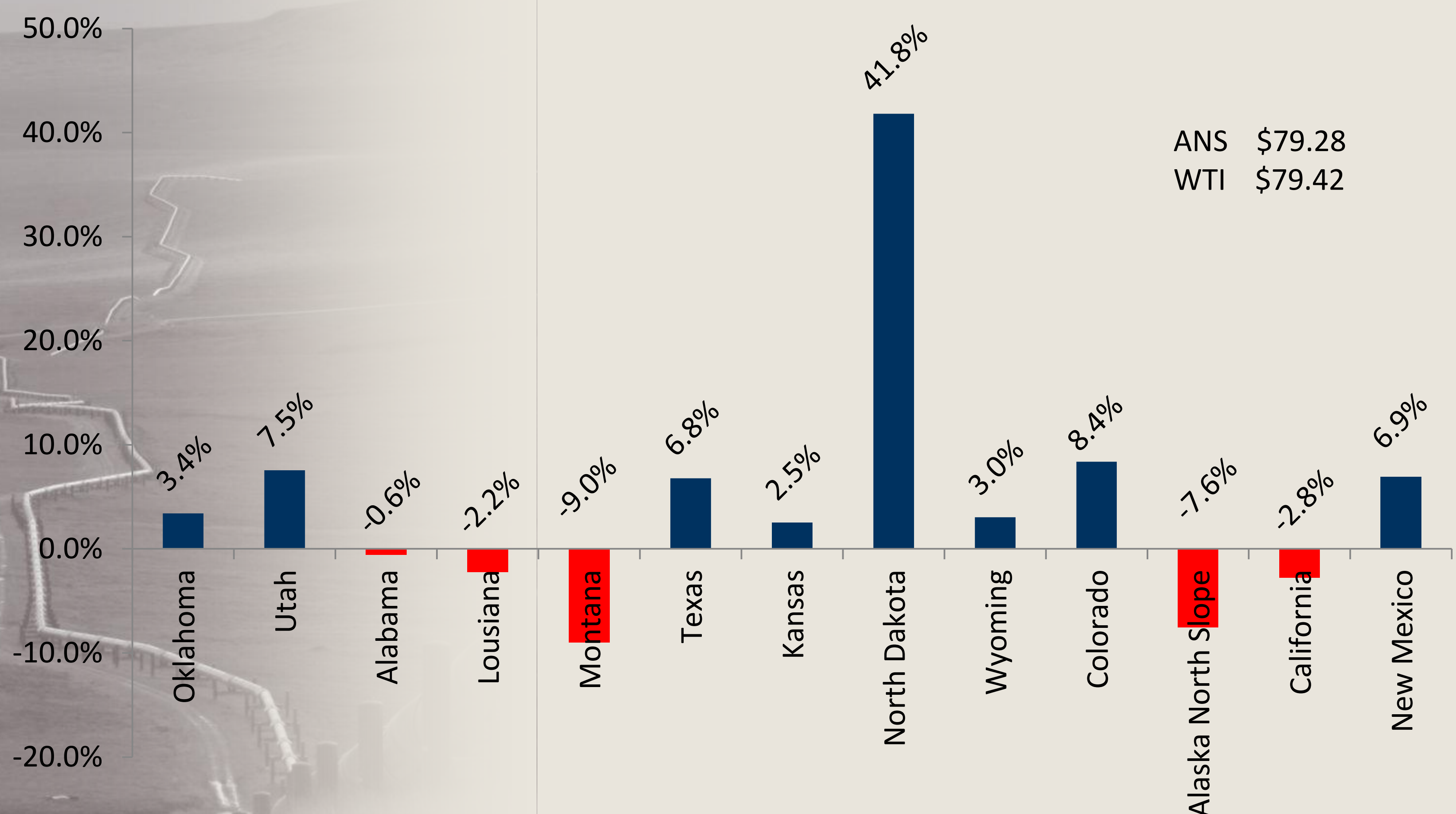
- Prepared by DOR, Economic Research Group (March 18, 2013)-



Source: EIA Crude Oil Production By State. Link: http://www.eia.gov/dnav/pet/pet_crd_crpdn_adc_mbblpd_m.htm

Change in Average Daily Oil Production by State—2009-2010

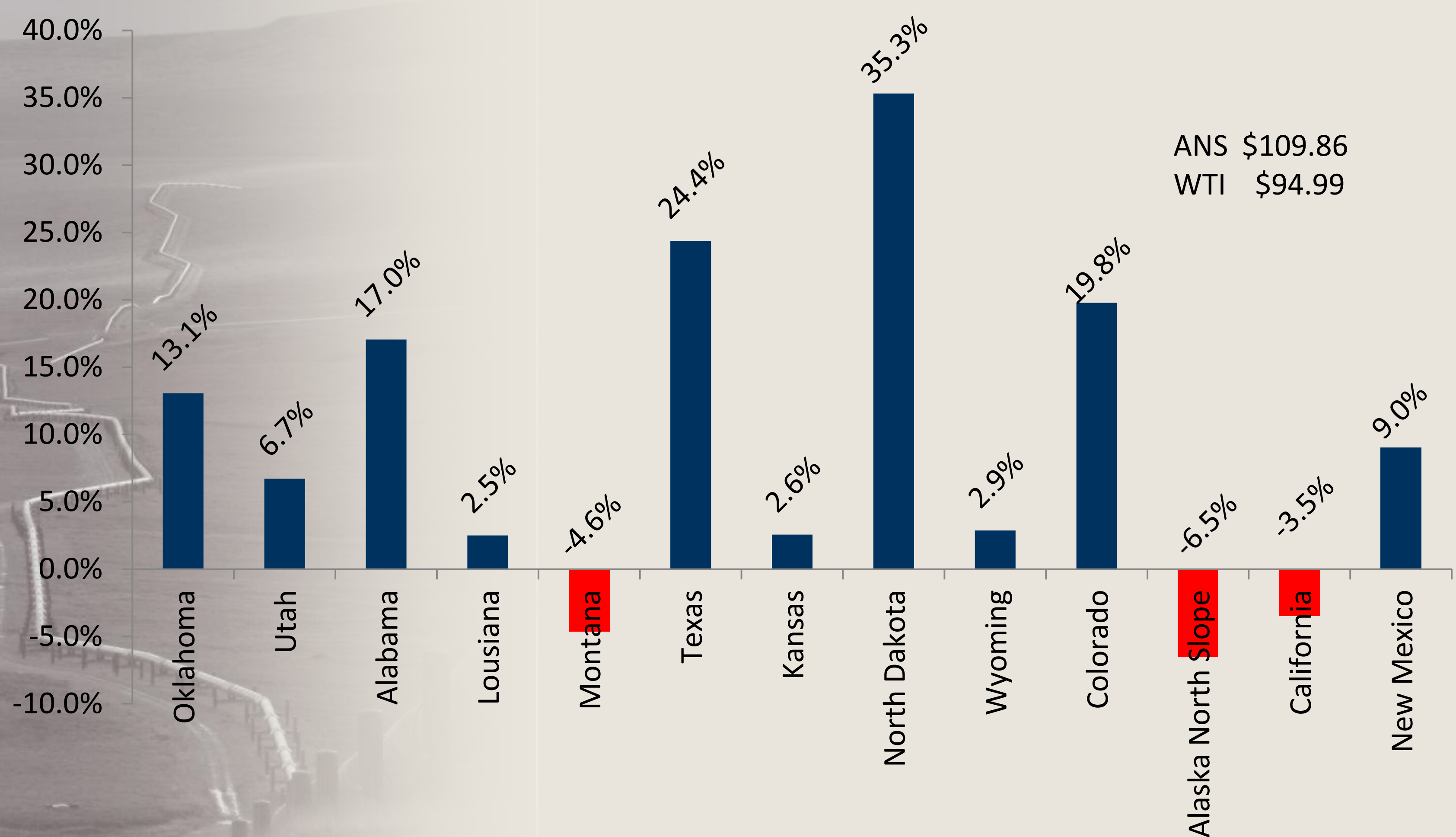
- Prepared by DOR, Economic Research Group (March 18, 2013)-



Source: EIA Crude Oil Production By State. Link: http://www.eia.gov/dnav/pet/pet_crd_crpdn_adc_mbblpd_m.htm

Change in Average Daily Oil Production by State—2010-2011

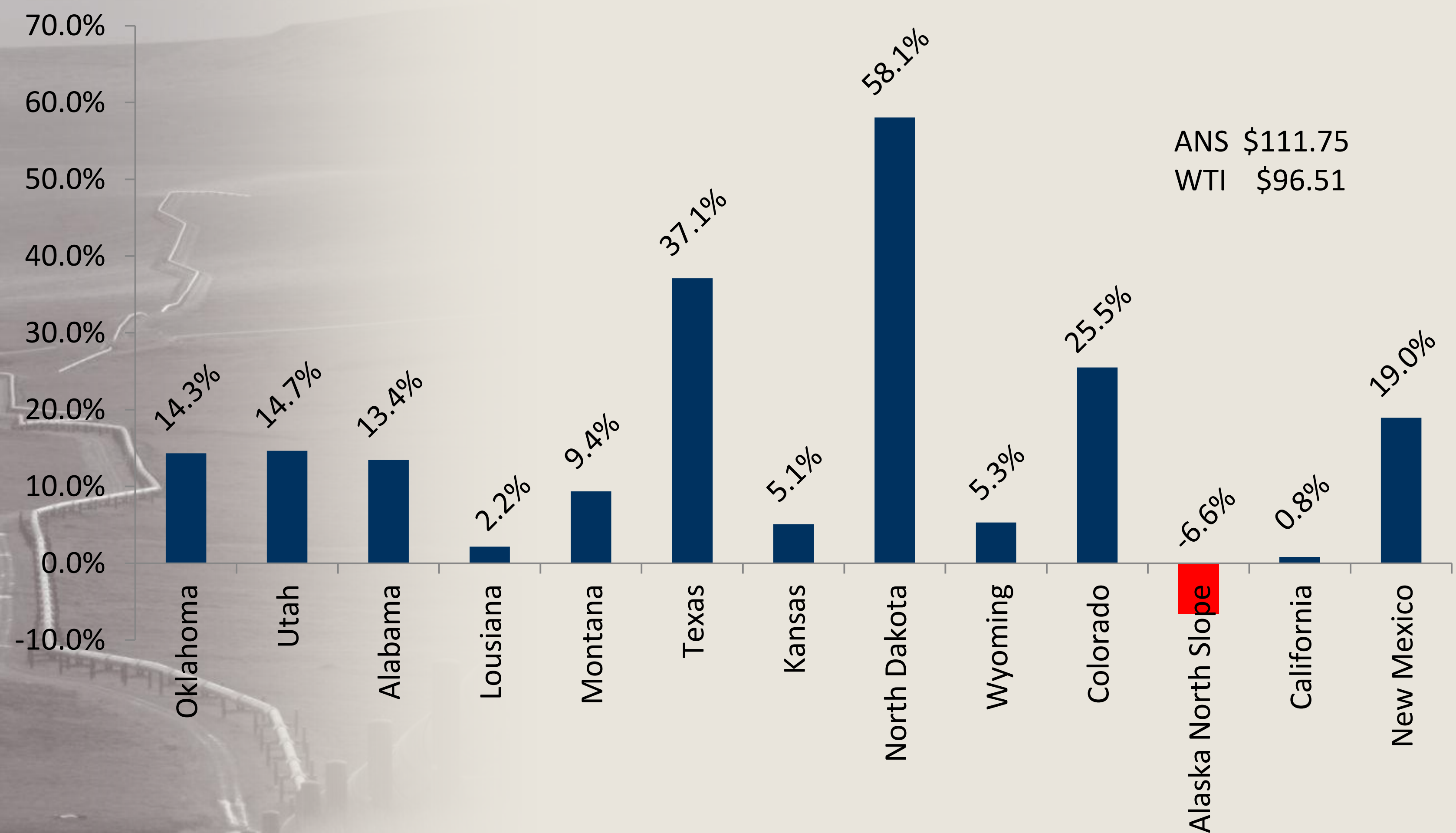
- Prepared by DOR, Economic Research Group (March 18, 2013)-



Source: EIA Crude Oil Production By State. Link: http://www.eia.gov/dnav/pet/pet_crd_crpdn_adc_mbblpd_m.htm

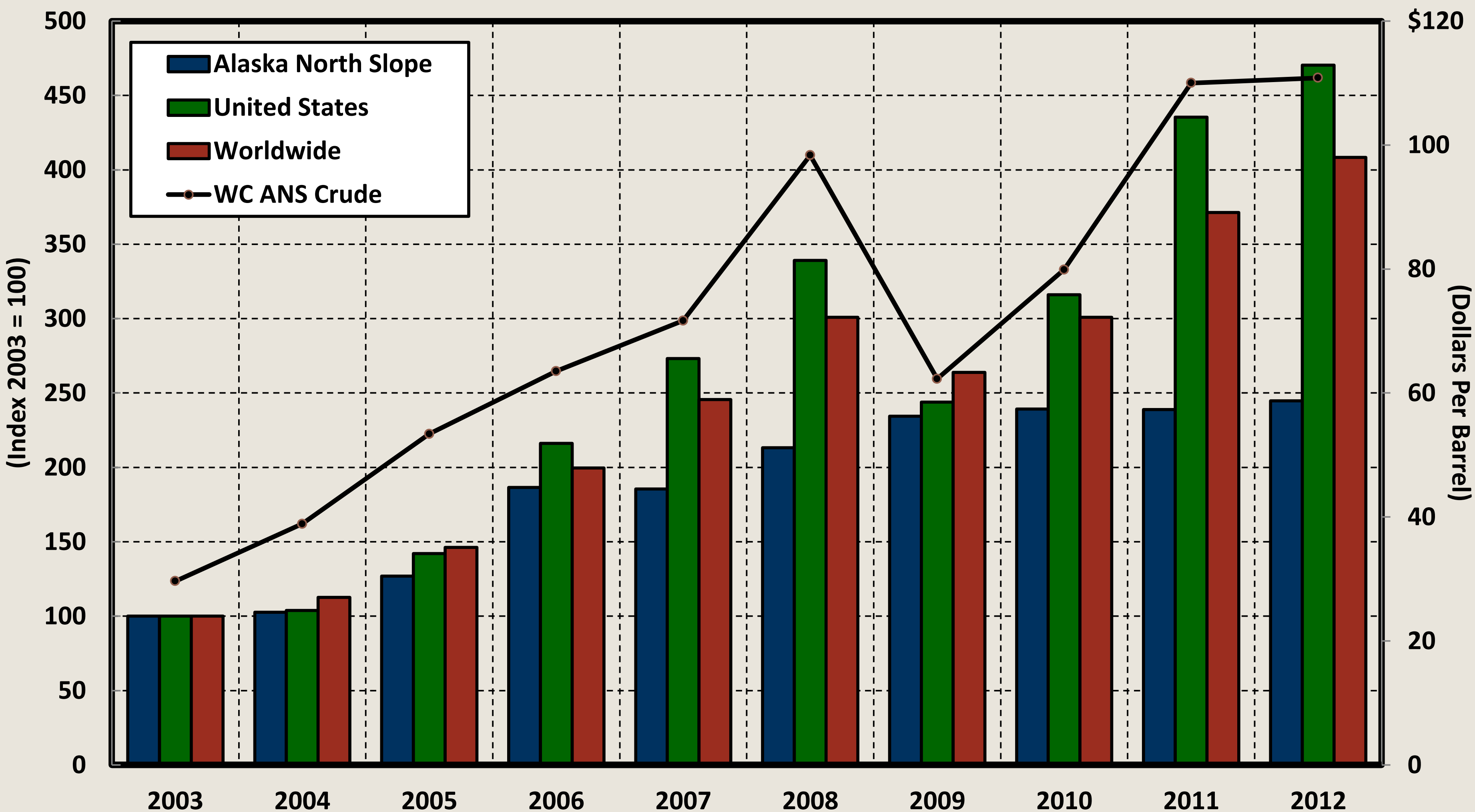
Change in Average Daily Oil Production by State—2011-2012

- Prepared by DOR, Economic Research Group (March 18, 2013)-



Source: EIA Crude Oil Production By State. Link: http://www.eia.gov/dnav/pet/pet_crd_crpdn_adc_mbblpd_m.htm

Est. Capital Spending for Exploration & Development:
AK North Slope vs. U.S. & World Spending*, 2003-2012



* North Slope based on tax return information; U.S. based on top 50 public companies; worldwide based on top 75 public companies

Despite Higher Prices, Revenues from Production Tax Continue to Decline

- Higher prices and lower revenues?
- In FY 2008 an ANS price of $96.51 yielded approximately $6.823 billion in production tax.
- By FY 2014, a price that is $13 higher will yield a bit less than $3.6 billion in production tax.
- If oil production was the same as in FY 08, revenues in FY 14 would be close to $6.5 billion or **$2.7 billion higher than the current forecast.**

Fiscal Year	Average ANS Oil Price (Dollars per Barrel)	Production Tax (After Credits in Billions of Dollars)
2007	$61.60	$2.208
2008	**$96.51**	**$6.823**
2009	$68.34	$3.112
2010	$74.90	$2.871
2011	$94.49	$4.553
2012	$112.65	$6.146
2013	$108.67	$4.353
2014	**$109.61**	**$3.595**

New Production is Critically Important to Offsetting Decline

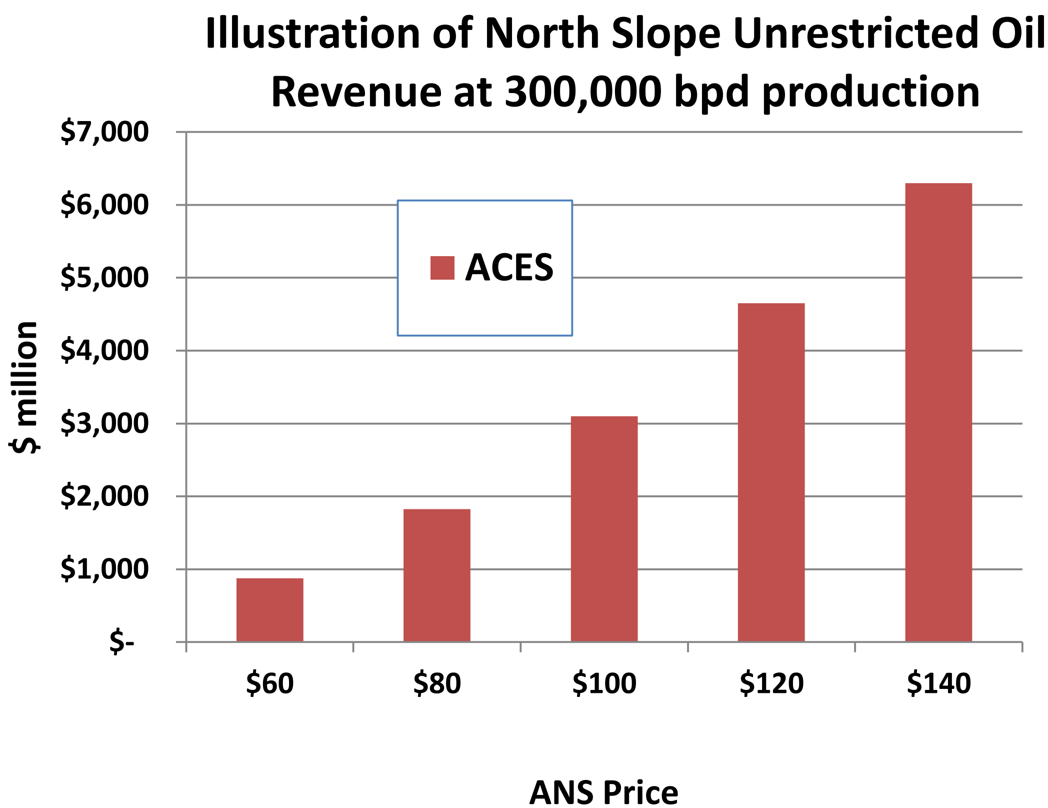
Forecast Oil production on Alaska's North Slope

thousands of barrels per day

FY	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Currently Producing	521.7	474.1	433.9	401.1	367.4	337.9	312.2	289.9	269.6	251.2
Decline Rate of Currently Producing	-9.9%	-9.1%	-8.5%	-7.6%	-8.4%	-8.0%	-7.6%	-7.2%	-7.0%	-6.8%
Risk Adjusted New Oil	16.6	52.5	78.8	98.7	109.4	105.4	110.1	109.6	102.7	93.3
Risk Adjusted Total Forecast	538.3	526.6	512.8	499.7	476.9	443.3	422.4	399.4	372.3	344.5
Anticipated Net Rate of Decline	-7.0%	-2.2%	-2.6%	-2.5%	-4.6%	-7.0%	-4.7%	-5.4%	-6.8%	-7.5%
New Oil Share of Total Production	3.1%	10.0%	15.4%	19.7%	23.0%	23.8%	26.1%	27.4%	27.6%	27.1%

Source: Department of Revenue *Spring 2013 Revenue Forecast*, p. 27

In the Long Term, Even High Prices will not provide adequate revenues



Illustrative North Slope unrestricted oil revenues at 300,000 barrels per day production - ACES ($million)					
ANS Price ($/bbl)	**$60**	**$80**	**$100**	**$120**	**$140**
Royalties	$500	$725	$925	$1,125	$1,325
Production Tax	$200	$825	$1,850	$3,150	$4,575
Corporate Income Tax	$100	$200	$250	$300	$325
Property Tax	$75	$75	$75	$75	$75
Total Oil GFUR	**$875**	**$1,825**	**$3,100**	**$4,650**	**$6,300**

This is a simple illustration based on a "snapshot" model and will not exactly match detailed analysis using a more comprehensive model. (1) Constant Oil Price (2) Production of 300,000 barrels per day (3) Lease expenditures of $30 / taxable barrel ($15 opex and $15 capex per taxable barrel) (4) $10/ barrel transportation costs (5) 12.5% royalty rate with 25% Permanent Fund Share and .5% School Fund Share (5) Effective corporate income tax rate of 6.5% of production tax value after deducting production tax payments (6) For property tax, $75 million was used in all scenarios as an illustration only. Our FY 2022 forecast is currently $76.5 million (7) Unitary analysis - no company specific analysis used (8) Does not include non-petroleum revenues, which totaled $627 million in FY 2012 (9) As this is a simple illustration, all amounts rounded to nearest $25 million.

Consultants for Both the Administration & Legislature Identified the Problems with ACES

ACES: 5 key problems

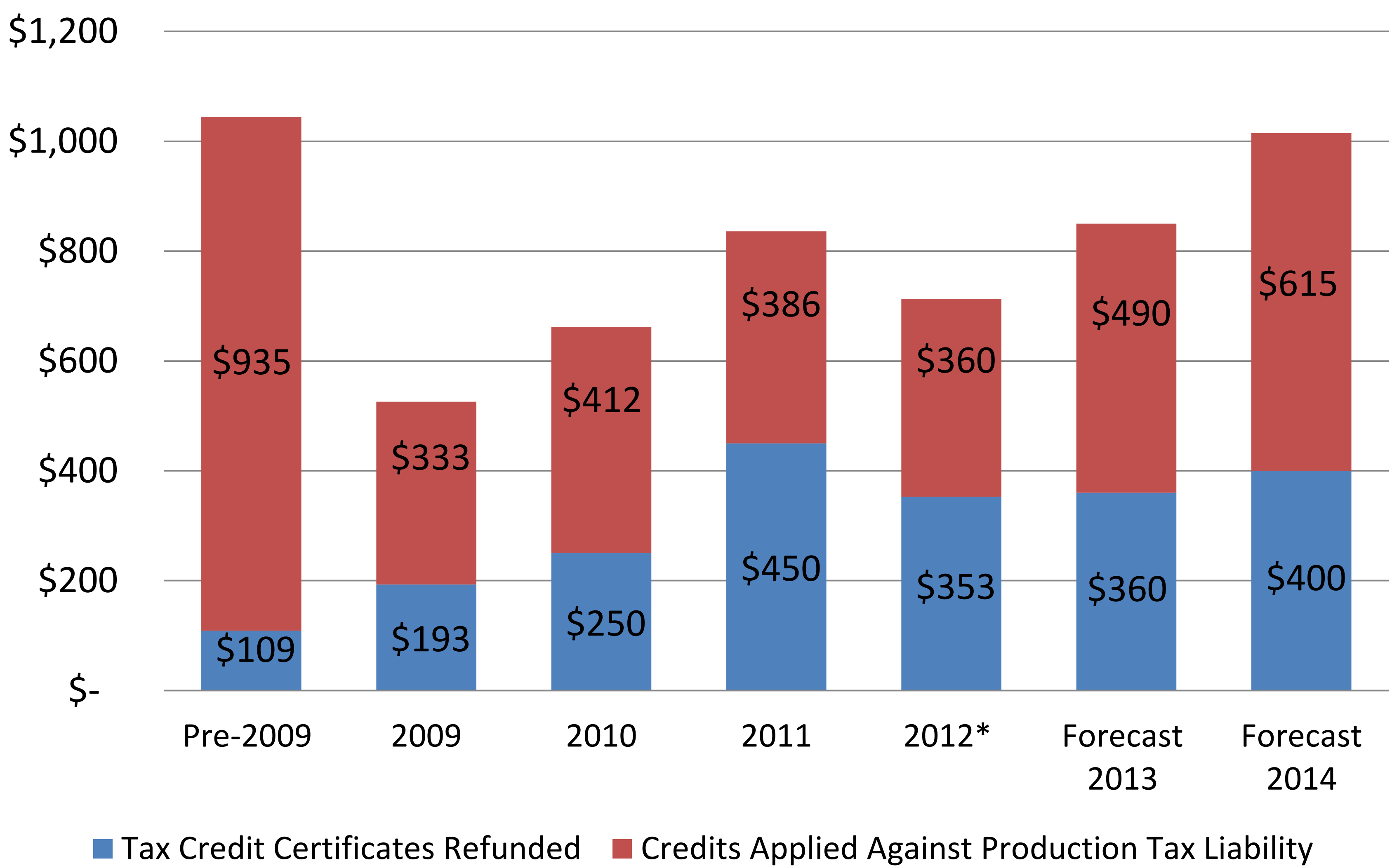
- **High levels of Government Take reduce competitiveness for capital, especially at high prices**
- High marginal tax rates reduce incentives for spending control
- Complexity makes meaningful economic analysis and comparison difficult
- Significant state exposure in low price environments, and for high-cost developments
- Impact of large-scale gas sales on tax rates

UNDER ACES, TAX *RATES* VARIED SIGNIFICANTLY ON A MONTHLY BASIS

	July	August	September	October	November	December
Oil Price	**$132.87**	**$115.98**	**$101.86**	**$73.65**	**$53.94**	**$37.70**
Total barrels per month	20,174,640	17,230,458	21,197,405	23,080,737	22,846,738	22,727,030
Royalty & Federal barrels	2,848,947	2,848,947	2,848,947	2,848,947	2,848,947	2,848,947
Taxable barrels per month	17,325,693	14,381,511	18,348,458	20,231,790	19,997,791	19,878,083
Wellhead value	$126.37	$109.48	$95.36	$67.15	$47.44	$31.20
Gross value of taxable bbls	$2,189,447,867	$1,574,487,850	$1,749,708,987	$1,358,564,721	$948,695,216	$620,196,200
Deductible Opex	$170,833,333	$170,833,333	$170,833,333	$170,833,333	$170,833,333	$170,833,333
Deductible Capex	$145,833,333	$145,833,333	$145,833,333	$145,833,333	$145,833,333	$145,833,333
Taxable value	$1,872,781,200	$1,257,821,183	$1,433,042,320	$1,041,898,054	$632,028,549	$303,529,533
Base rate	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%
Base tax	$468,195,300	$314,455,296	$358,260,580	$260,474,514	$158,007,137	$75,882,383
Taxable value per barrel	$108.09	$87.46	$78.10	$51.50	$31.60	$15.27
Progressive tax rate	26.6%	23.0%	19.2%	8.6%	0.6%	-
Progressive tax	$497,397,040	$289,102,592	$275,726,004	$89,595,168	$4,057,416	$0
Tax before credits	$965,592,340	$603,557,888	$633,986,584	$350,069,682	$162,064,553	$75,882,383
Credits applied	$29,150,000	$29,150,000	$29,150,000	$29,150,000	$29,150,000	$29,150,000
Tax after credits	**$936,442,340**	**$574,407,888**	**$604,836,584**	**$320,919,682**	**$132,914,553**	**$46,732,383**
Effective tax rate on net	**50%**	**46%**	**42%**	**31%**	**21%**	**15%**

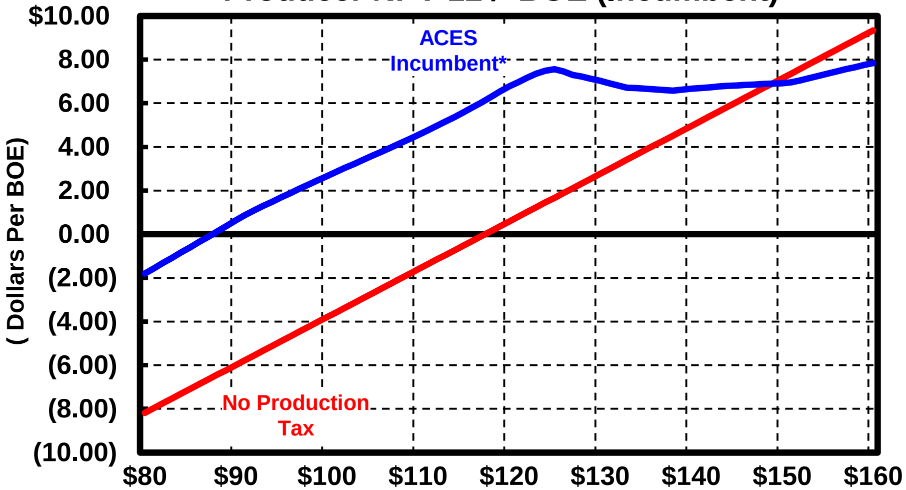
	January	February	March	April	May	June	Total
Oil Price	**$39.01**	**$42.78**	**$47.75**	**$46.56**	**$58.23**	**$69.80**	$68.34
Total barrels per month	21,812,241	20,747,934	23,020,348	20,160,047	22,186,732	17,785,719	252,970,029
Royalty & Federal barrels	2,848,947	2,848,947	2,848,947	2,848,947	2,848,947	2,848,947	34,187,360
Taxable barrels per month	18,963,294	17,898,987	20,171,402	17,311,100	19,337,785	14,936,772	218,782,669
Wellhead value	$32.51	$36.28	$41.25	$40.06	$51.73	$63.30	$61.84
Gross value of taxable bbls	$616,496,702	$649,375,248	$832,070,320	$693,482,668	$1,000,343,635	$945,497,689	$13,178,367,102
Deductible Opex	$170,833,333	$170,833,333	$170,833,333	$170,833,333	$170,833,333	$170,833,333	$2,050,000,000
Deductible Capex	$145,833,333	$145,833,333	$145,833,333	$145,833,333	$145,833,333	$145,833,333	$1,750,000,000
Taxable value	$299,830,035	$332,708,581	$515,403,653	$376,816,001	$683,676,969	$628,831,022	$9,378,367,102
Base rate	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%
Base tax	$74,957,509	$83,177,145	$128,850,913	$94,204,000	$170,919,242	$157,207,756	$2,344,591,775
Taxable value per barrel	$15.81	$18.59	$25.55	$21.77	$35.35	$42.10	$44.27
Progressive tax rate	-	-	-	-	2.1%	4.8%	7.1%
Progressive tax	$0	$0	$0	$0	$14,642,885	$30,434,227	$1,200,955,332
Tax before credits	$74,957,509	$83,177,145	$128,850,913	$94,204,000	$185,562,128	$187,641,982	$3,545,547,108
Credits applied	$29,150,000	$29,150,000	$29,150,000	$29,150,000	$29,150,000	$29,150,000	$349,800,000
Tax after credits	**$45,807,509**	**$54,027,145**	**$99,700,913**	**$65,054,000**	**$156,412,128**	**$158,491,982**	$3,195,747,108
Effective tax rate on net	**15%**	**16%**	**19%**	**17%**	**23%**	**25%**	**34%**
						Less adjustments	$83,792,561
						TOTAL TAX	**$3,111,954,547**

Production Tax Credits Used & Forecast By Fiscal Year ($Millions)

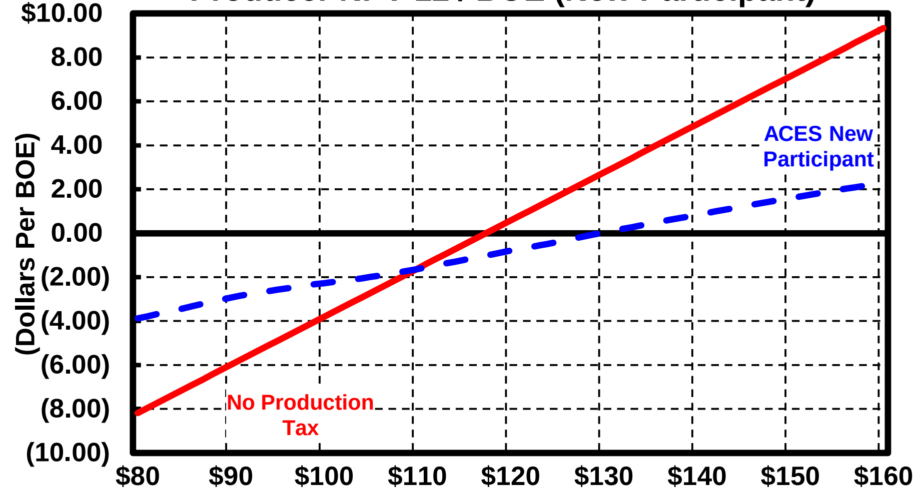


The Economics of High Cost Light Oil Development

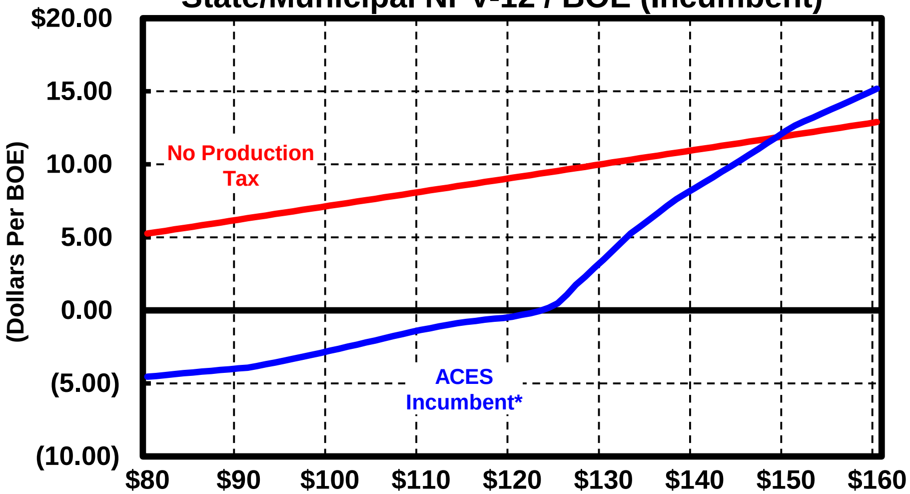
Producer NPV-12 / BOE (Incumbent)



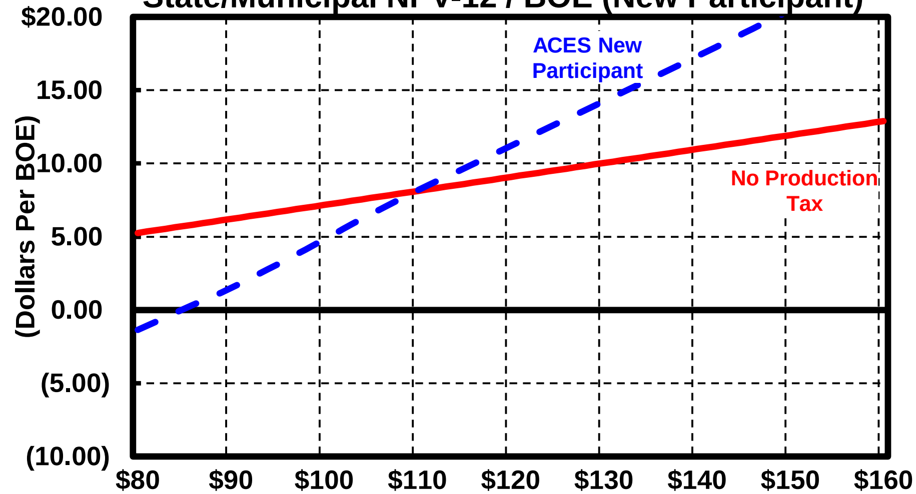
Producer NPV-12 / BOE (New Participant)



State/Municipal NPV-12 / BOE (Incumbent)



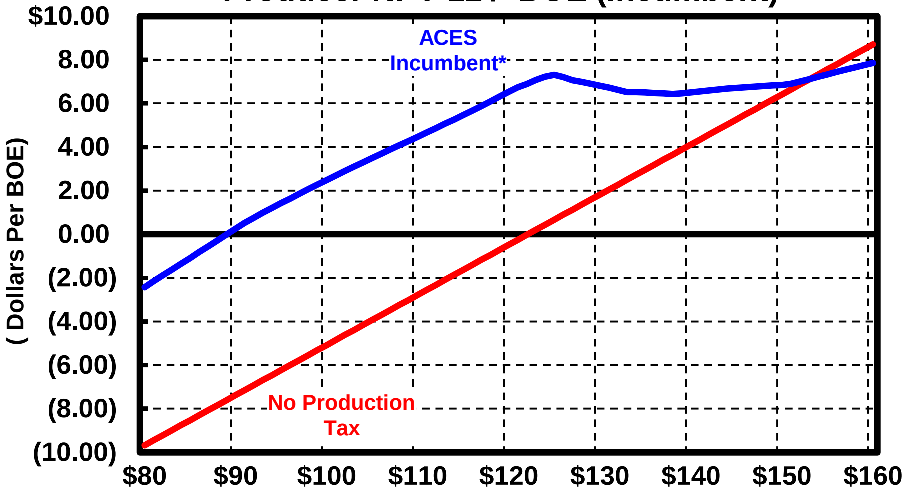
State/Municipal NPV-12 / BOE (New Participant)



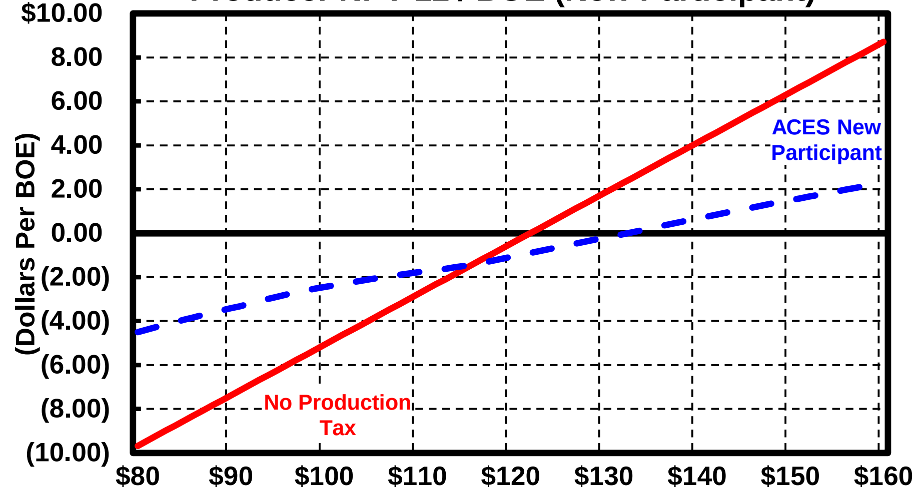
* Analysis of incumbent production includes "buy-down" impact for reduced taxes on existing production.

The Economics of High Cost Heavy Oil Development

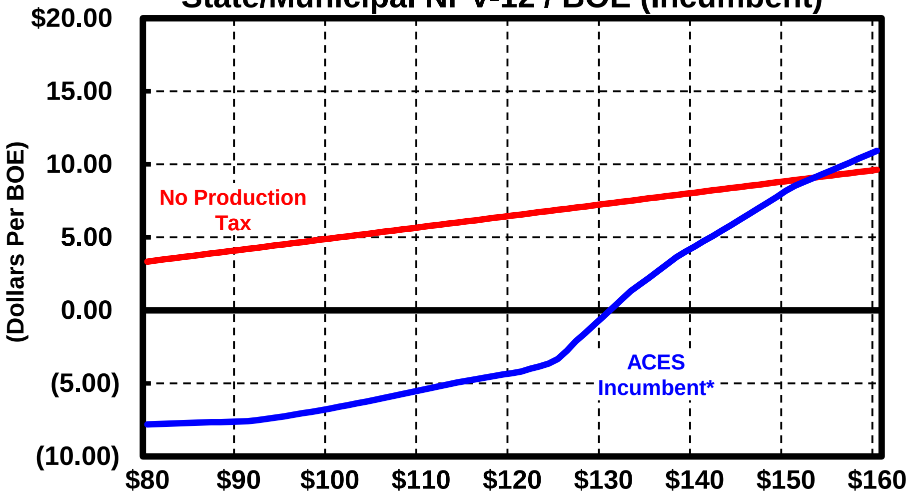
Producer NPV-12 / BOE (Incumbent)



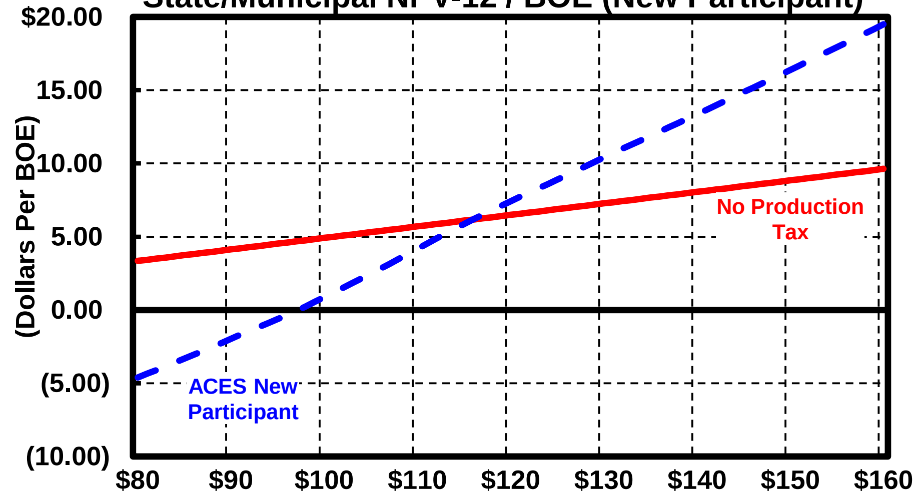
Producer NPV-12 / BOE (New Participant)



State/Municipal NPV-12 / BOE (Incumbent)



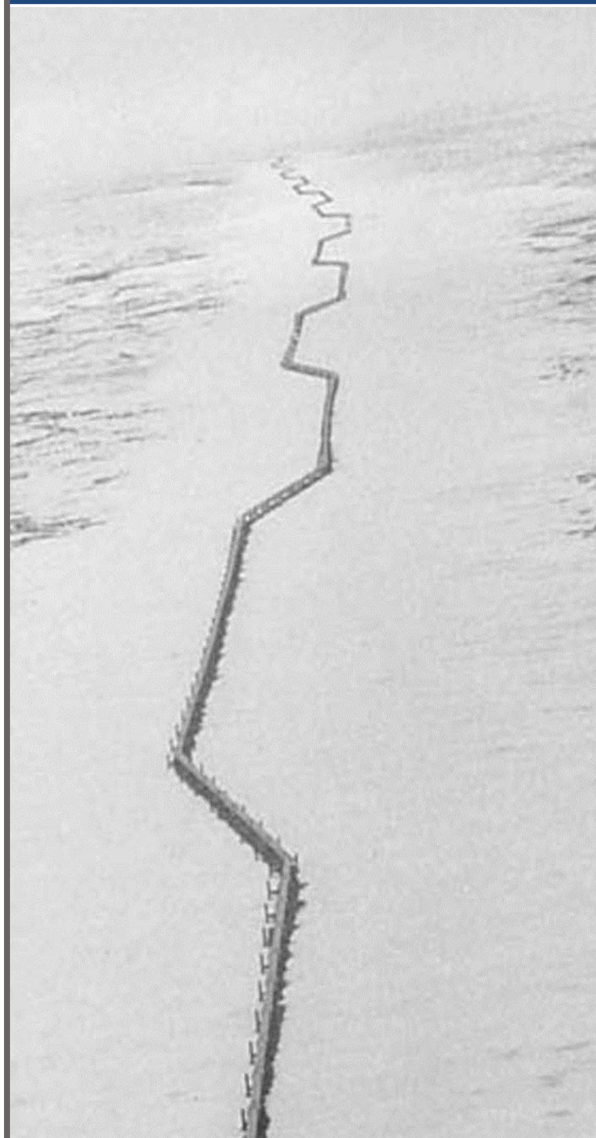
State/Municipal NPV-12 / BOE (New Participant)



* Analysis of incumbent production includes "buy-down" impact for reduced taxes on existing production.

MORE ALASKA PRODUCTION ACT

- MAJOR PROVISIONS -



- Eliminated the progressive portion of the production tax on oil and gas produced after January 1, 2014.
- Increased the tax rate from 25% to 35%.
- Eliminated credits for qualified capital expenditures made after January 1, 2014 north of 68 degrees (North Slope).
- Increased support for explorers and new entrants through the *Net Operating Loss Credit* to 45% until January 1, 2016 and 35% thereafter.
- Created incentive for new oil production:
  - 20% - 30% of the gross value at the point of production for oil produced from (1) units formed after Jan. 1, 2003 (2) new participating areas (3) expansions of participating areas in units formed before Jan. 1, 2003.
- Created a credit per taxable barrel of oil produced:
  - $5 for GVR (aka GRE)
  - $0 - $8 for non-GVR(aka GRE) oil (i.e. *Legacy production*)
- 10% Corporate Income Tax Credit for in-State Manufacturing/Modification (Service Industry)

Revenue Forecast and Budget Outlook

Provisions in HCS CSSB21(FIN) and their estimated fiscal impact in FY15 at $100, $111.67 and $120 per barrel as compared to ACES at the same price levels under Spring 2013 Forecast ($millions)[1]

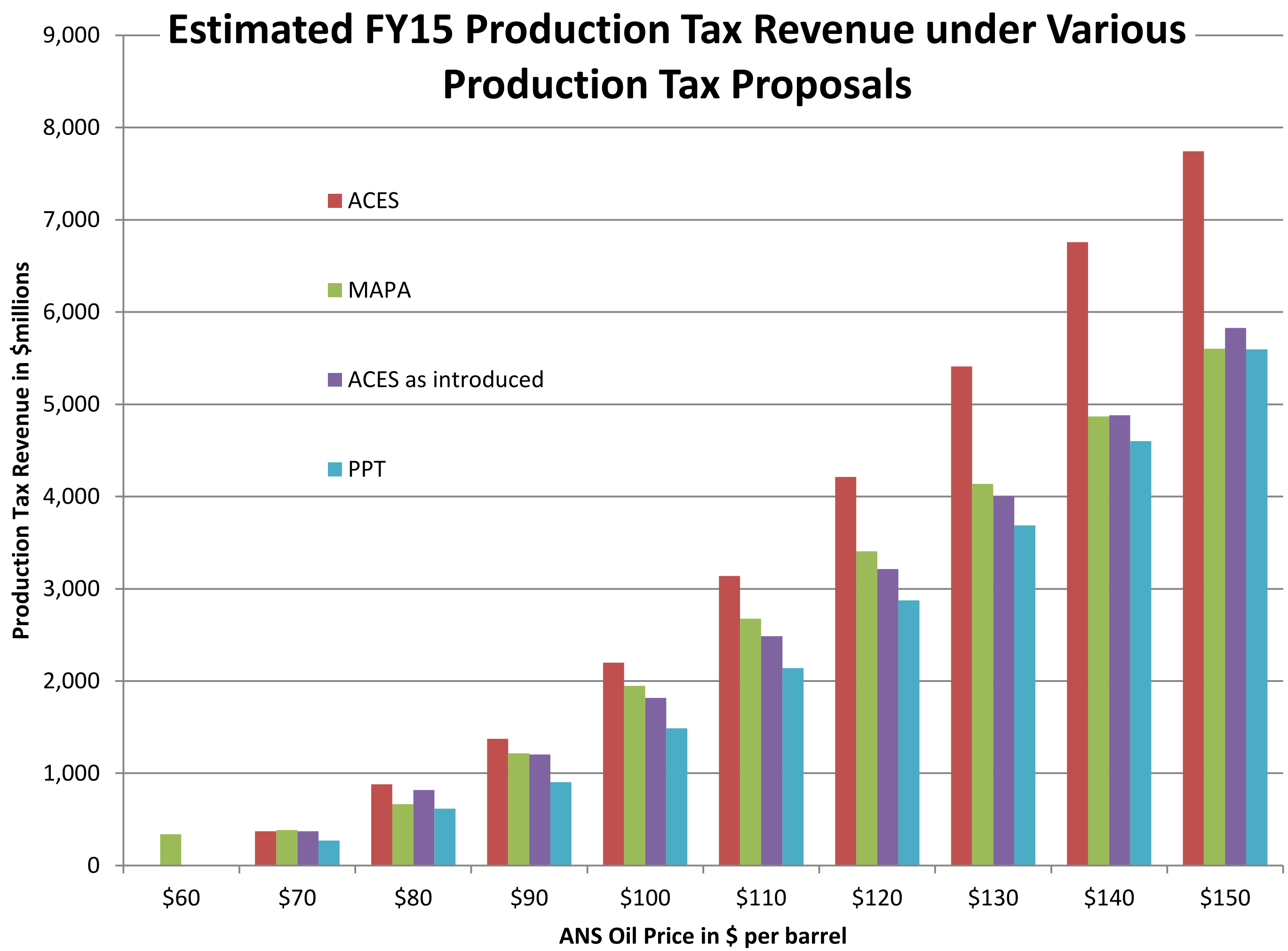
	FY 2015		
Brief Description of Provision	**$100/bbl**	**$111.67/bbl**	**$120/bbl**
1. Elimination of progressive portion of tax	-$750	-$1,400	-$2,000
2. Base tax rate changed to 35% of production tax value	$850	$1,050	$1,175
3. Limitation of credits for qualified capital expenditures for North Slope	$675	$675	$675
4. Net operating loss credit rate increased to 45% until 1/1/16 then 35%; transferable and refundable	See line 11 below		
5. Gross revenue exclusion for oil production in new units and new or expanded participating areas	$0 to -$25	$0 to -$25	$0 to -$25
6. Credit of $5 per taxable barrel for GRE-eligible oil production	-$10	-$10	-$10
7. Sliding scale $0-$8 credit per taxable barrel for non GRE-eligible production based on oil price	-$975	-$815	-$650
8. Credit under AS 43.20 for qualified oil and gas industry expenditures	$0 to -$25	$0 to -$25	$0 to -$25
9. Reduced interest rate for late payments and assessments on most taxes	$0 to -$25	$0 to -$25	$0 to -$25
Total Revenue Impact	**-$210 to -$285**	**-$500 to -$575**	**-$810 to -$885**
10. Impact on Operating Budget of limitation to Qualified Capital Expenditure credit	$150	$150	$150
11. Impact on Operating Budget of increase in Net Operating Loss credits to 45% until 1/1/16 then 35%	-$80	-$80	-$80
Total Fiscal Impact - does not include potential revenue impacts from potential increases in production[2]	**-$140 to -$215**	**-$430 to -$505**	**-$740 to -$815**

(1) All data here are estimates; all figures have been rounded to reflect the uncertainty in the estimates.

(2) "Total Fiscal Impact" includes best estimates of both revenue and operating budget impacts. Operating budget impact for FY 2015 and beyond represents reduction in refunded credits due to limitation of credits for qualified capital expenditures for North Slope. This amount also includes increases in credit refunds paid through the operating budget for the increase in NOL credit rates.

Source: State of Alaska, Department of Revenue

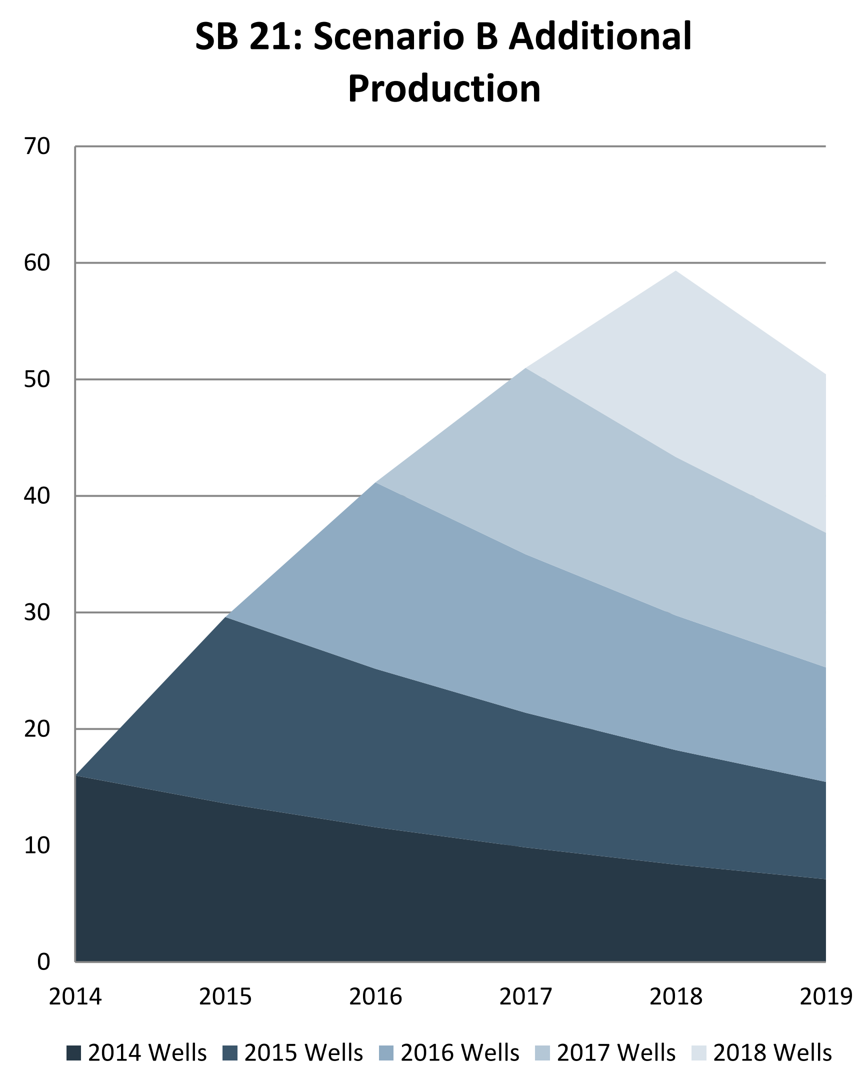
Comparing MAPA to Recent Production Tax Systems



Source: Spring 2013 Forecast. Includes main provisions of production tax proposals and excludes ancillary provisions such as CIT credits and reduced interest rates under MAPA.

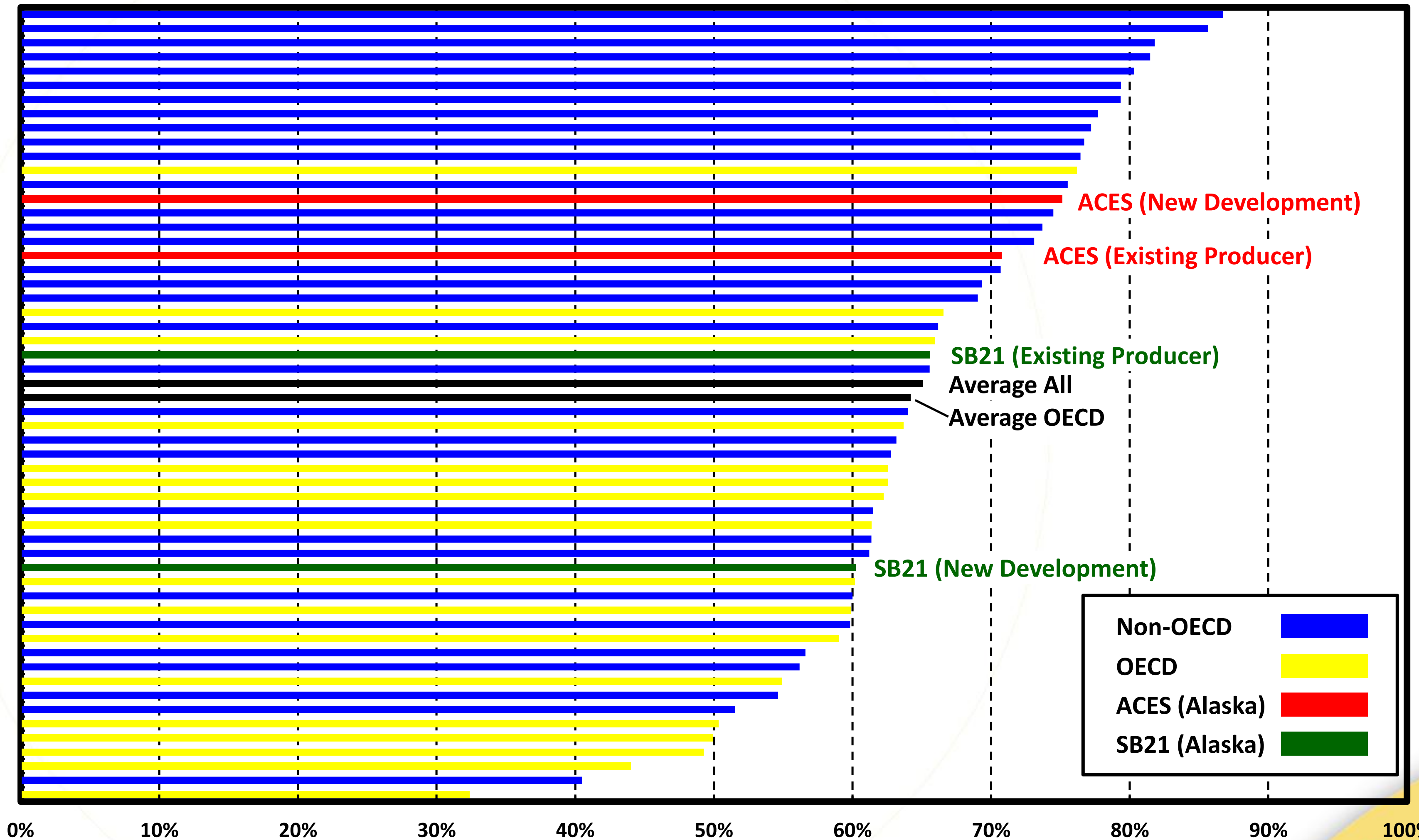
Additional Production – Modeling Additional Revenues

- Department used scenarios to model impact of additional production on revenue picture.
- Legislative and Administration consultants calculated “break-even” volumes.
- At $100 a barrel, the 16 well a year program modeled in scenario B (~16,000 additional barrels per day) resulted in more state revenues over the five year period than would have been collected under ACES.
- At the forecasted price (~$109-$118/bbl) estimates ranged from 35,000 bpd to 45,000 bpd.
- Analysis depends on price and whether a short-term or long-term time horizon?



Globally Competitive: SB21

Government Takes: $100 Wellhead Value



Source: Non-Alaska: PFC Energy; Averages from Econ One Presentation, Analysis of Alaska's Tax System, North Slope Investment and The Administration's Proposal SB21 / SRES CS SB21, March 1, 2013.
Alaska: Econ One Presentation, Analysis of HCS CS SB21 (FIN) for House Finance Committee, April 11, 2013.

More Alaska Production Act: Creating Opportunities

Recent positive industry response to tax reform

These results are encouraging for the future development of the resources discovered.
Recent tax reform passed in Alaska was a critical factor in ensuring the development of this project*, where extreme climate conditions and geographical remoteness result in high operating costs.*

REPSOL – Press Release 23 APRIL 2013

ConocoPhillips Plans to Increase Investment in Alaska Following Oil Tax Reform Legislation

ANCHORAGE – ConocoPhillips plans to increase its investments on Alaska's North Slope following the Alaska State Legislature's recent changes to the state's oil severance tax system.

ConocoPhillips – Press Release 17 APRIL 2013

BP Says Alaska is "Back in the Game"

"As a package, this is an important step forward and will help us compete for more investment. This puts Alaska back in the game," Weiss said of passage by the Alaska Legislature of the committee substitute for Senate Bill 21, the governor's oil tax change.

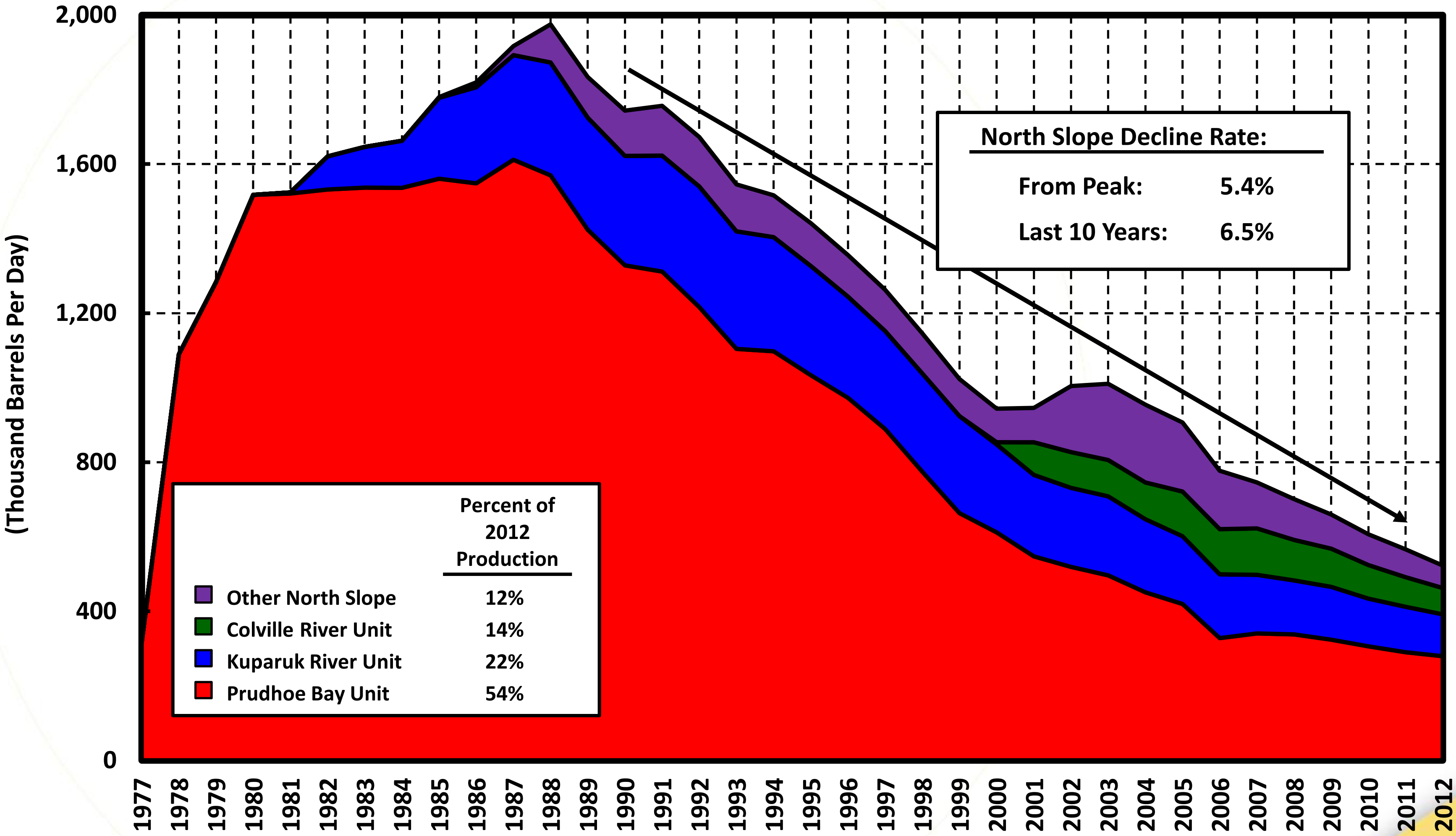
Weiss said following passage of the bill that BP "will change our long-term plans accordingly, seeking appropriate sanctions for additional activity."

"Our evaluation will include natural gas given that an improved oil fiscal environment has been a prerequisite to advancing work on LNG," she said

Janet Weiss, BP's Alaska region president,
Source Week of 4/28/2013
http://www.petroleumnews.com/pnads/447451261.shtml

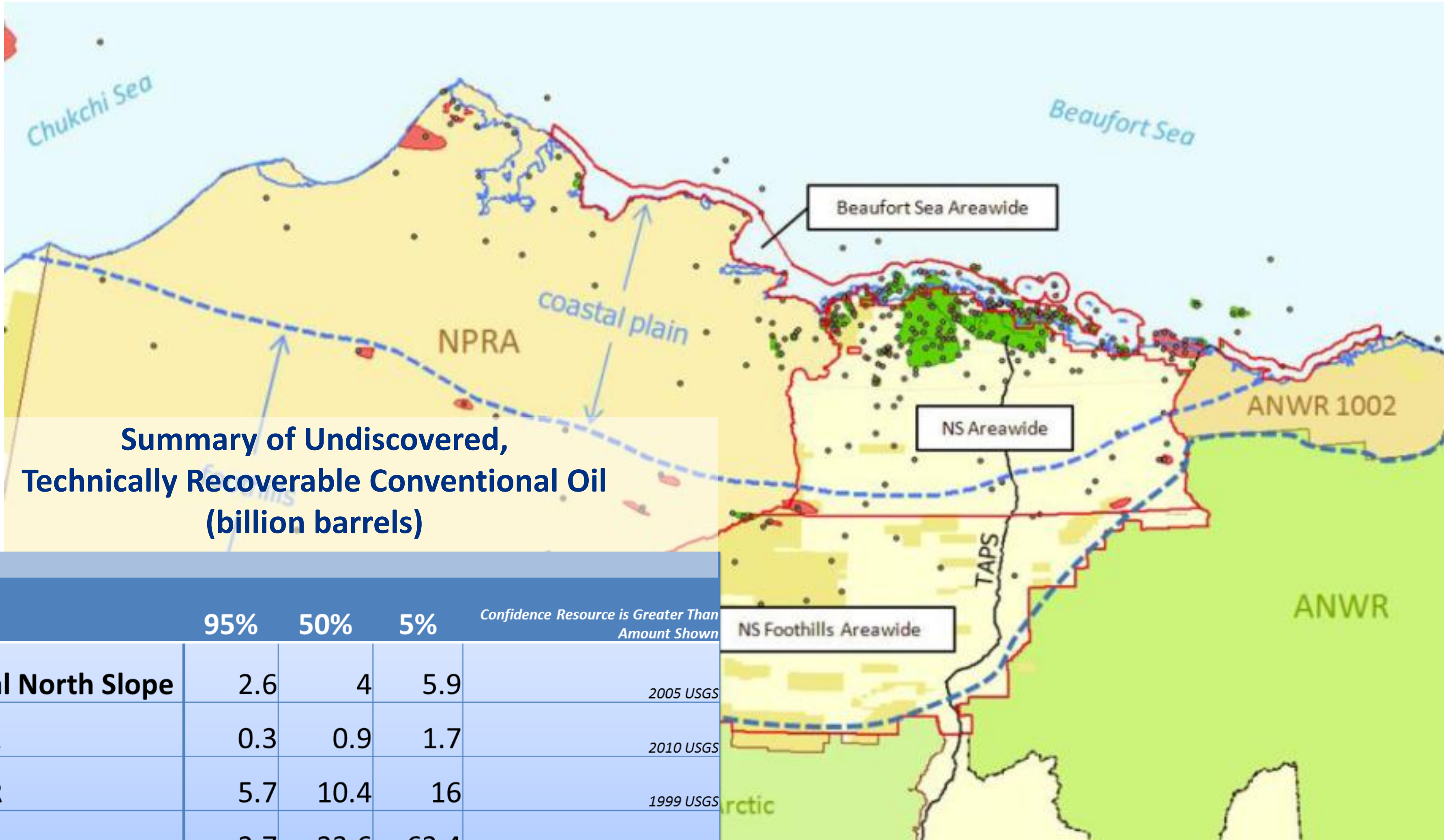
Supplemental Slides

Alaska North Slope Production Over Time: 1977 - 2012



Source: AOGCC.

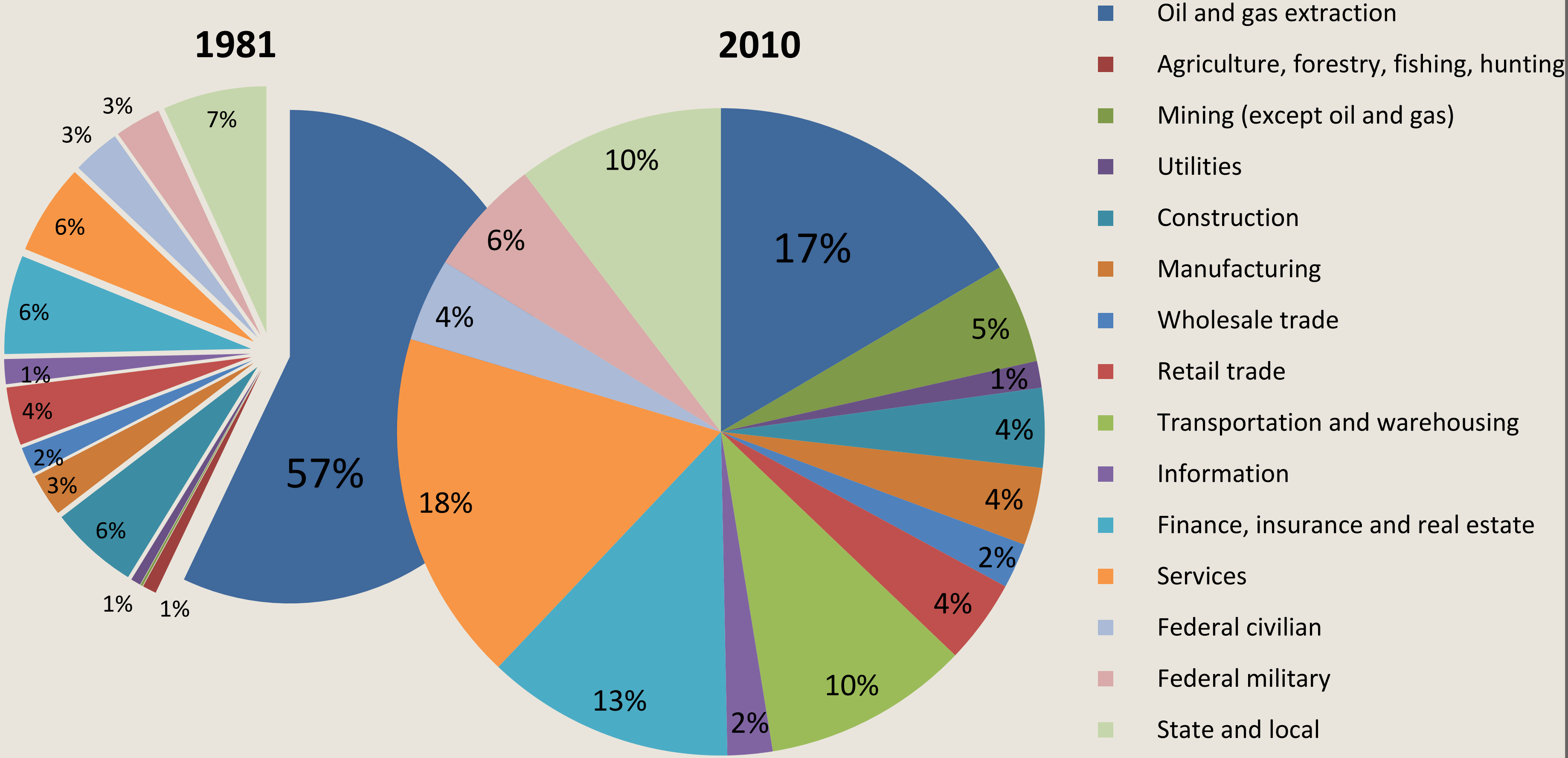
Alaska has tremendous untapped resources



Summary of Undiscovered,
Technically Recoverable Conventional Oil
(billion barrels)

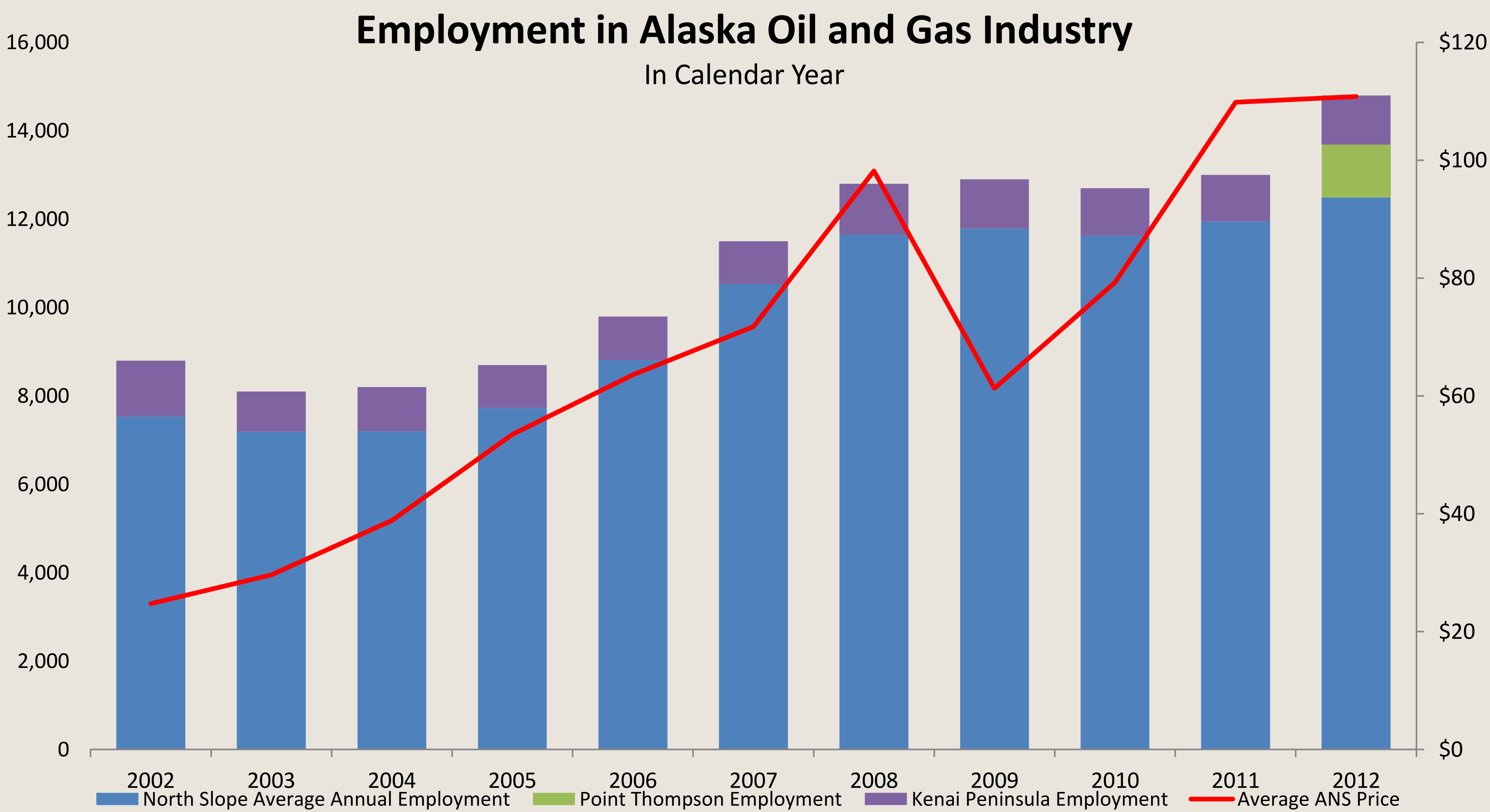
	95%	50%	5%	*Confidence Resource is Greater Than Amount Shown*
Central North Slope	2.6	4	5.9	*2005 USGS*
NPR-A	0.3	0.9	1.7	*2010 USGS*
ANWR	5.7	10.4	16	*1999 USGS*
OCS	2.7	23.6	63.4	*2011 BOEM*
Total	**11.3**	**38.9**	**87.0**	

Alaska Gross Regional Product *Diversified through Oil Development*



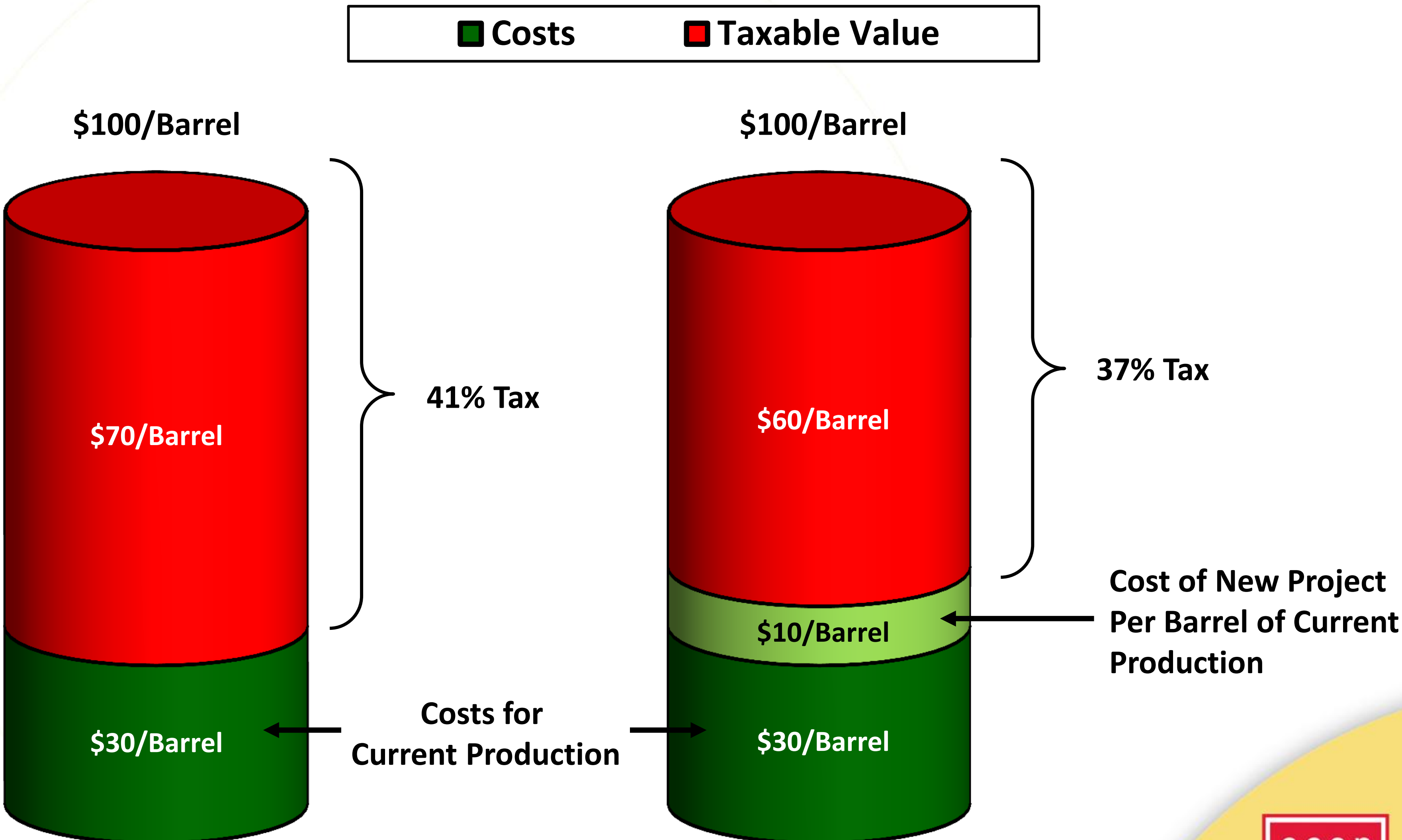
In the third quarter of 2012, nearly a quarter of the 11,100 jobs in Prudhoe Bay — all of which were oil-related — were not identified as oil industry employers. Some of these support jobs include security, catering, accommodations, facilities management, transportation companies, engineering services, and logistics.

Employment Grows with Investment



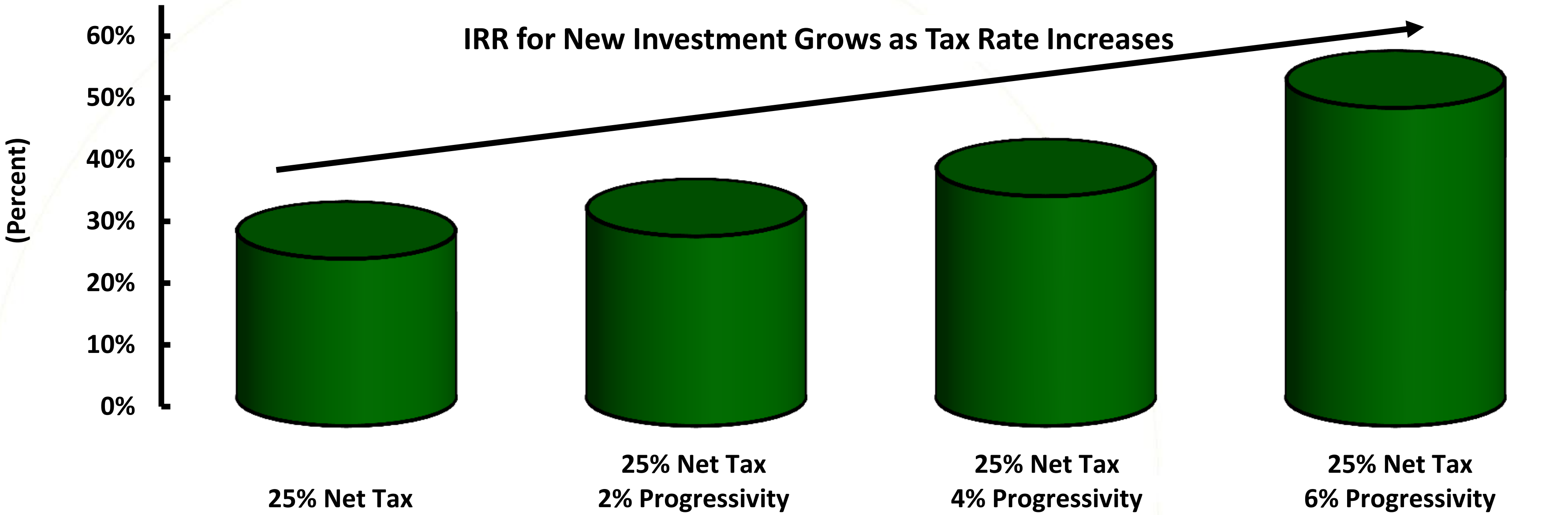
The Case for ACES

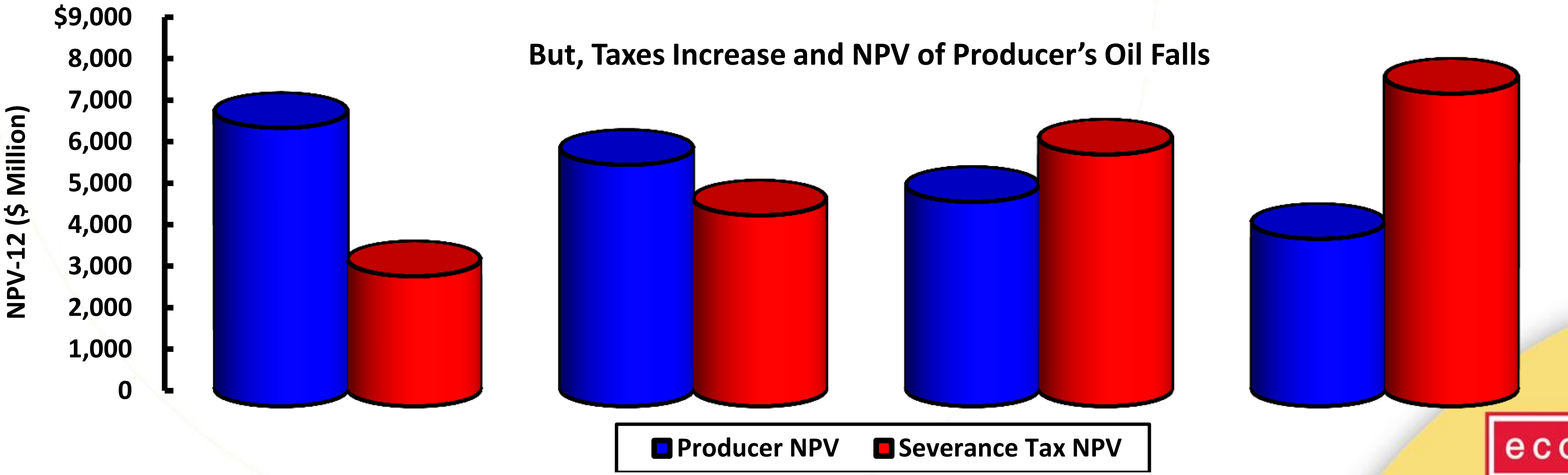
The "Buy-Down" Effect: How It Works



The Case for ACES

Higher Taxes Provide Better Returns and Encourage Investment?





Assumption: Incumbent Producer with ongoing production equal to 25% of Prudhoe Bay / Kuparuk investing in new 50 MB project with development cost of $20 / barrel, royalty of 12.5% and expected wellhead ANS value of $100.