Overview of Fall 2009 Revenue Forecast

Presentation to the
Senate Finance Committee
January 26, 2010
Alaska Department of Revenue

Outline for Presentation

- **Fall 2009 Revenue Forecast for FY2010 and 2011**
  - **Total Revenue**
  - **Unrestricted Revenue**
  - **Non-Oil Revenue**
- **10-Year Revenue and Spending Projection**
- **How Production Tax Is Calculated**
  - **FY 2009 Production tax Calculated**
  - **Impact of Oil Price Volatility**
  - **FY 2010 & 2011 Production Tax Projected**
- **Components of Production Tax Forecast**
  - **Oil Production Forecast**
  - **Oil Price Forecast**
  - **Lease Expenditures Forecast / Oil Company Spending**

Fall 2009
Revenue Forecast
FY2010 and FY2011

FY 10 and FY 11 Total Revenue

Revenue Type	FY10 ($M)	FY11 ($M)
Unrestricted Revenue		
Oil Revenue	$ 4,167.5	$ 4,647.7
Other Revenue (except Federal & Investment)	$ 389.3	$ 405.8
Investment Earnings	$ 221.1	$ 183.2
Subtotal Unrestricted	**$ 4,777.9**	**$ 5,236.7**
Restricted Revenue		
Oil Revenue	$ 1,057.3	$ 708.3
Other Revenue (except Federal & Investment)	$ 588.9	$ 589.6
Investment Earnings	$ 3,307.3	$ 3,252.8
Federal Revenue	$ 2,916.7	$ 2,916.7
Subtotal Restricted	**$ 7,870.2**	**$ 7,467.4**
Total Revenue	**$ 12,648.1**	**$ 12,704.1**

Source: Fall 2009 Revenue Sources Book

FY 10 & FY 11 General Fund Unrestricted Revenue

Revenue Type	FY 10 ($M)	% Total	FY 11 ($ M)	% Total
Royalty - Net PF / SF	$ 1,470.3	30.8%	$ 1,540.4	29.4%
Production Tax	$ 2,126.1	44.5%	$ 2,430.9	46.4%
Corp Income Tax	$ 470.0	9.8%	$ 580.0	11.1%
Property Tax	$ 101.1	2.1%	$ 96.3	1.8%
Subtotal Oil Revenue	**$ 4,167.5**	**87.2%**	**$ 4,647.7**	**88.8%**
Non-Oil Revenue	$ 610.4	12.8%	$ 589.0	11.2%
Total Revenue	**$ 4,777.9**	**100.0%**	**$ 5,236.6**	**100.0%**

Source: Fall 2009 Revenue Sources Book

FY 2010 and FY 2011 Non-Oil Revenue Detail

Revenue Type	FY 10 ($M)	% Total	FY 11 ($M)	% Total
Taxes				
Corporate Income	$ 86.6	14.2%	$ 89.1	15.1%
Mining	$ 29.2	4.8%	$ 28.6	4.9%
Insurance Premium	$ 43.9	7.2%	$ 43.0	7.3%
Tobacco	$ 43.5	7.1%	$ 43.1	7.3%
Motor Fuel	$ 30.0	4.9%	$ 40.3	6.8%
Other Taxes	$ 51.2	8.4%	$ 54.7	9.3%
Subtotal Taxes	**$ 284.4**	**46.6%**	**$ 298.8**	**50.7%**
Investments	**$ 221.1**	**36.2%**	**$ 183.2**	**31.1%**
Other *	**$ 104.9**	**17.2%**	**$ 107.0**	**18.2%**
Total Non-Oil	**$ 610.4**	**100.0%**	**$ 589.0**	**100.0%**

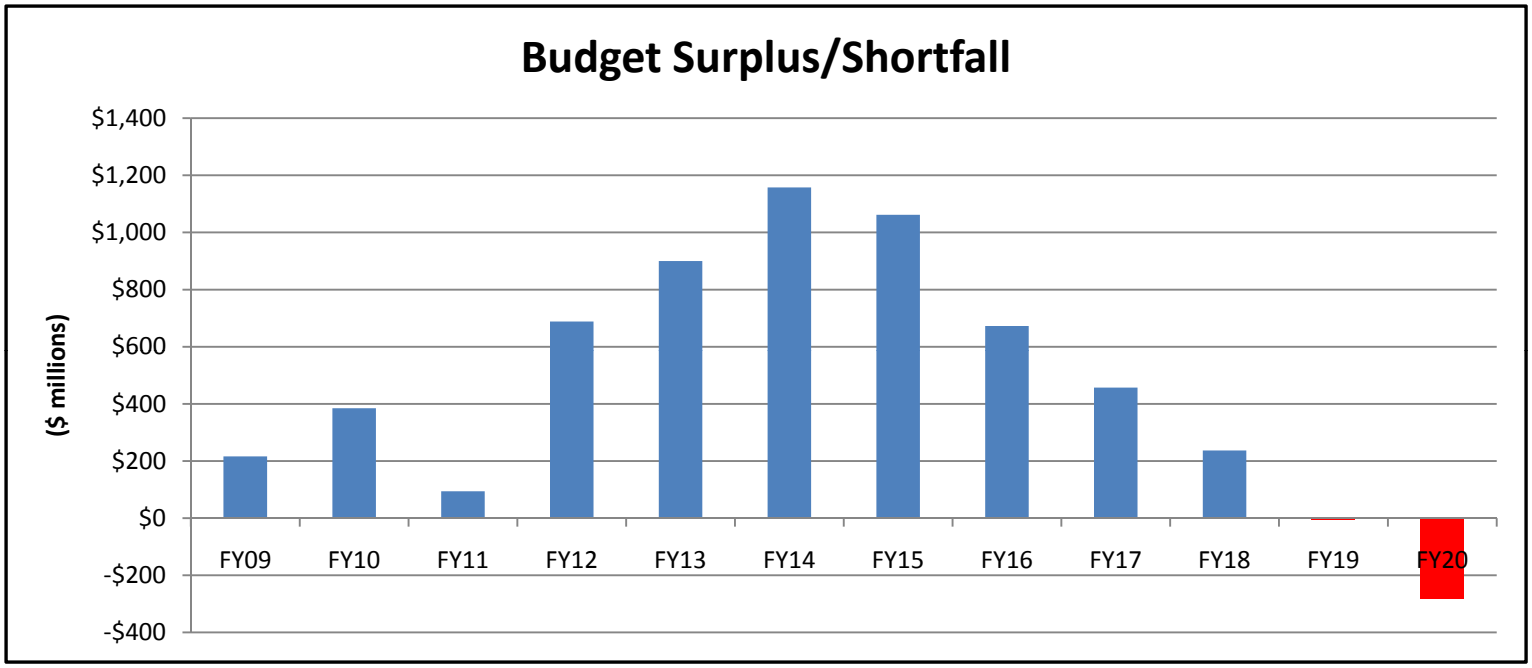
*Other includes Charges for Services, Fines and Forfeitures, Licenses & Permits, Rents & Royalties, and Miscellaneous non-oil revenues.

Source: Fall 2009 Revenue Sources Book

10-Year Revenue/Spending Projection

10-Year Revenue and Spending

Assumes Fall 2009 Revenue and 3% budget escalation from FY11



Revenue vs. Spending ($Millions)	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
General Fund Unrestricted Revenue	6,874.9	4,800.0	5,236.6	5,573.3	5,931.6	6,340.2	6,399.8	6,170.7	6,120.1	6,069.5	6,002.7	5,904.9
General Fund Expenses	6,659.0	4,415.2	4,742.6	4,884.9	5,031.4	5,182.4	5,337.8	5,498.0	5,662.9	5,832.8	6,007.8	6,188.0
Budget Surplus/Shortfall	215.9	384.8	94.0	688.4	900.2	1,157.8	1,062.0	672.7	457.2	236.7	(5.1)	(283.1)
Reserve Balances												
CBRF Total	7,114.4	9,070.0	9,750.0	11,082.0	12,704.0	14,674.0	16,649.0	18,330.0	19,884.0	21,301.0	22,561.0	23,903.0
Statutory Budget Reserve Balance	1,000.0	1,000.0	1,000.0	1,000.0	1,000.0	1,000.0	1,000.0	1,000.0	1,000.0	1,000.0	995.0	712.0
Total Reserve Balances	8,114.4	10,070.0	10,750.0	12,082.0	13,704.0	15,674.0	17,649.0	19,330.0	20,884.0	22,301.0	23,556.0	24,615.0

Source: OMB

- FY09 represents actuals rather than forecast.
- FY10 surplus/shortfall calculation adds $22.1 in reappropriations and carry over to total available revenue.
- FY11 surplus calculation subtracts $400 from surplus for Governor's Performance Scholarship Fund and $13.1 deposit to Public Education Fund for FY12. CBR balance assumes that all available surplus is deposited to CBR main fund.

Appropriations projections do not represent a commitment by the Administration to propose spending at a particular level in FY11 or any future year. The 10 year forecast shows that unanticipated shortfalls during the period could be filled primarily through the use of reserve funds. However, other options could be used in whole, or in part. The plan will be revisited as conditions warrant.

How Production Tax Is Calculated

FY 09 Production Tax Calculated

	Per Barrel	Barrels	Value
Avg ANS Oil Price ($/bbl) & Daily Production (bbls)	$68.34	692,127	$47,299,959
Annual Production (bbl)			
Total Annual Production/Value	**$68.34**	**252,626,355**	**$17,264,485,101**
Royalty and Federal barrels		(34,187,360)	($2,336,364,182)
Taxable barrels		**218,438,995**	**$14,928,120,918**
Downstream (Transportation) Costs ($/bbl)			
ANS Marine Transportation	($2.05)		
TAPS Tariff	($4.59)		
Other	$0.16		
Total Transportation Costs	**($6.48)**	**218,438,995**	**($1,415,484,688)**
Lease Expenditures			
Deductible Operating Expenditures	($9.39)		($2,050,000,000)
Deductible Capital Expenditures	($8.01)		($1,750,000,000)
Total Lease Expenditures	**($17.40)**	**218,438,995**	**($3,800,000,000)**
Production Tax Value (PTV)	**$44.46**	**218,438,995**	**$9,712,636,231**
Production Tax			
Base Tax (25%*PTV)			$2,428,159,058
Progressive Tax Rate = ($44.46-$30) * 0.4% = **5.8%**			
Progressive Tax = (5.8% * PTV)			$561,928,014
Total Tax Due before credits			**$2,990,087,072**
Credits Applied Against Taxes			($350,000,000)
Total Tax after credits			**$2,640,087,072**

Source: Department of Revenue from production tax monthly information forms, annual returns, and company forecasts

$2.6 Billion??

But Didn't We Collected
$3.1 billion in
Production Tax in FY09

Why the difference?

FY 09 Monthly Tax Calculations –

Monthly Oil Price Volatility Matters!

	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**

	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
						Less adjustments	$83,792,561
						TOTAL TAX	**$3,111,954,547**

Source: Department of Revenue from production tax monthly information forms, annual returns, and company forecasts

FY 09 Monthly Tax Calculations –

Monthly Oil Price Volatility Matters!

	July	August	September	October	November	December	
Oil Price	**$132.87**	$115.98	$101.86	$73.65	$53.94	**$37.70**	**28%**
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**	**5%**

	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
						Less adjustments	$83,792,561
						TOTAL TAX	$3,111,954,547

Source: Department of Revenue from production tax monthly information forms, annual returns, and company forecasts

FY 10 Production Tax Projected

	Price	Barrels	Value
Avg ANS Oil Price ($/bbl) & Daily Production (bbls)	$66.93	658,762	$44,090,941
Annual Production (bbl)			
Total		240,448,130	$16,093,193,341
Royalty and Federal barrels		(31,230,860)	($2,090,281,460)
Taxable barrels		209,217,270	$14,002,911,881
Downstream (Transportation) Costs ($/bbl)			
ANS Marine Transportation	($2.07)		
TAPS Tariff	($4.18)		
Other	$0.35		
Total Transportation Costs	**($5.90)**	**209,217,270**	**($1,234,381,893)**
Lease Expenditures			
Deductible Operating Expenditures	($9.08)		($1,900,000,000)
Deductible Capital Expenditures	($9.56)		($2,000,000,000)
Total Lease Expenditures	**($18.64)**	**209,217,270**	**($3,900,000,000)**
Production Tax Value (PTV)	**$42.39**	**209,217,270**	**$8,868,529,988**
Production Tax			
Base Tax (25%*PTV)			$2,217,132,497
Progressive Tax = (5.0% * PTV)			$439,492,116
Total Tax before credits			**$2,656,624,613**
Credits Applied Against Taxes			($360,000,000)
Total Tax after credits			$2,296,624,613
Less adjustment			($170,500,793)
Production Tax per forecast			**$2,126,123,820**

Source: Department of Revenue from production tax monthly information forms, annual returns, and company forecasts

FY 11 Production Tax Projected

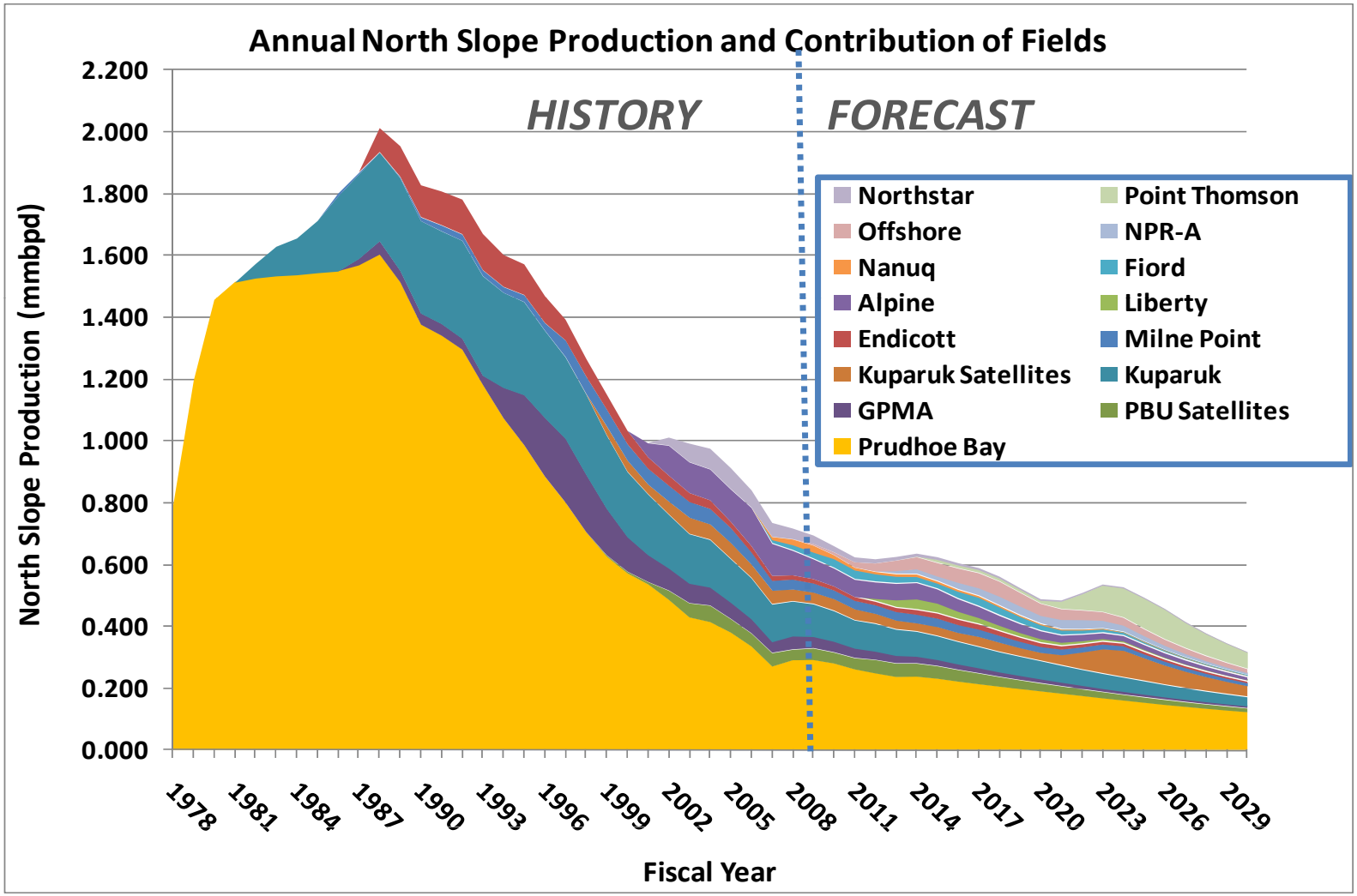
	Price	Barrels	Value
Avg ANS Oil Price ($/bbl) & Daily Production (bbls)	$76.35	622,879	$47,556,812
Annual Production (bbl)			
Total	**$76.35**	**227,350,835**	**$17,358,236,252**
Royalty and Federal barrels		(29,293,075)	($2,236,526,276)
Taxable barrels		**198,057,760**	**$15,121,709,976**
Downstream (Transportation) Costs ($/bbl)			
ANS Marine Transportation	($2.05)		
TAPS Tariff	($4.40)		
Other	$0.46		
Total Transportation Costs	**($5.99)**	**198,057,760**	**($1,186,365,982)**
Lease Expenditures			
Deductible Operating Expenditures	($10.60)		($2,100,000,000)
Deductible Capital Expenditures	($11.87)		($2,350,000,000)
Total Lease Expenditures	**($22.47)**	**198,057,760**	**($4,450,000,000)**
Production Tax Value (PTV)	**$47.89**	**198,057,760**	**$9,485,343,994**
Production Tax			
Base Tax (25%*PTV)			$2,371,335,998
Production Tax Value per barrel			
Progressive Tax = (7.2% * PTV)			$678,839,772
Total Tax before credits			$3,050,175,770
Credits Applied Against Taxes			($420,000,000)
Total Tax after credits			$2,630,175,770
Less adjustment			($199,271,070)
Production Tax per forecast			**$2,430,904,700**

Source: Department of Revenue from production tax monthly information forms, annual returns, and company forecasts

Components of Production Tax Calculation

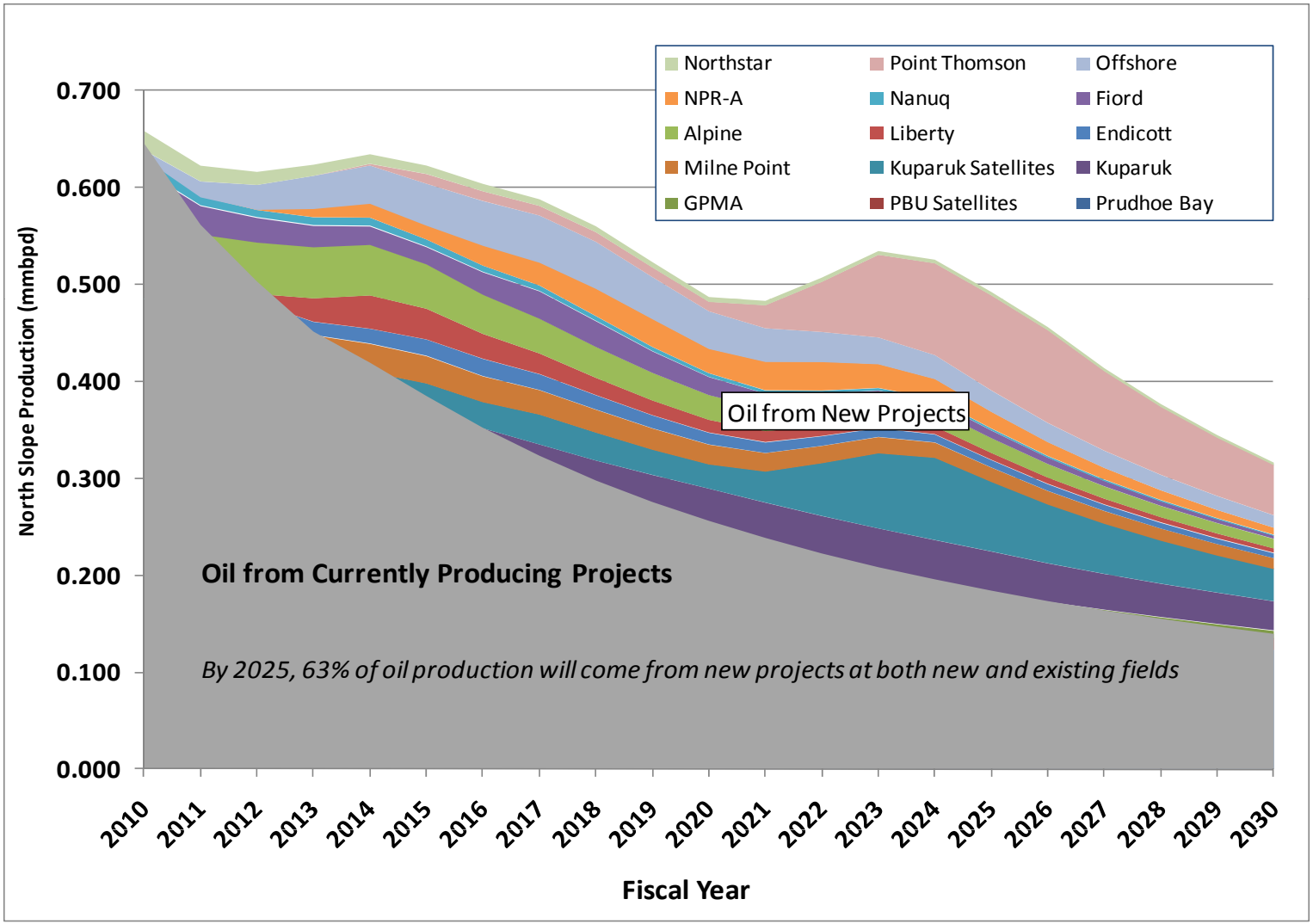
Fall 2009
Oil Production
Forecast

ANS Production, History & Forecast



Source: Fall 2009 Revenue Sources Book

Forecasted ANS Production FY 2010 - 2030



Source: Fall 2009 Revenue Sources Book

Production Decline

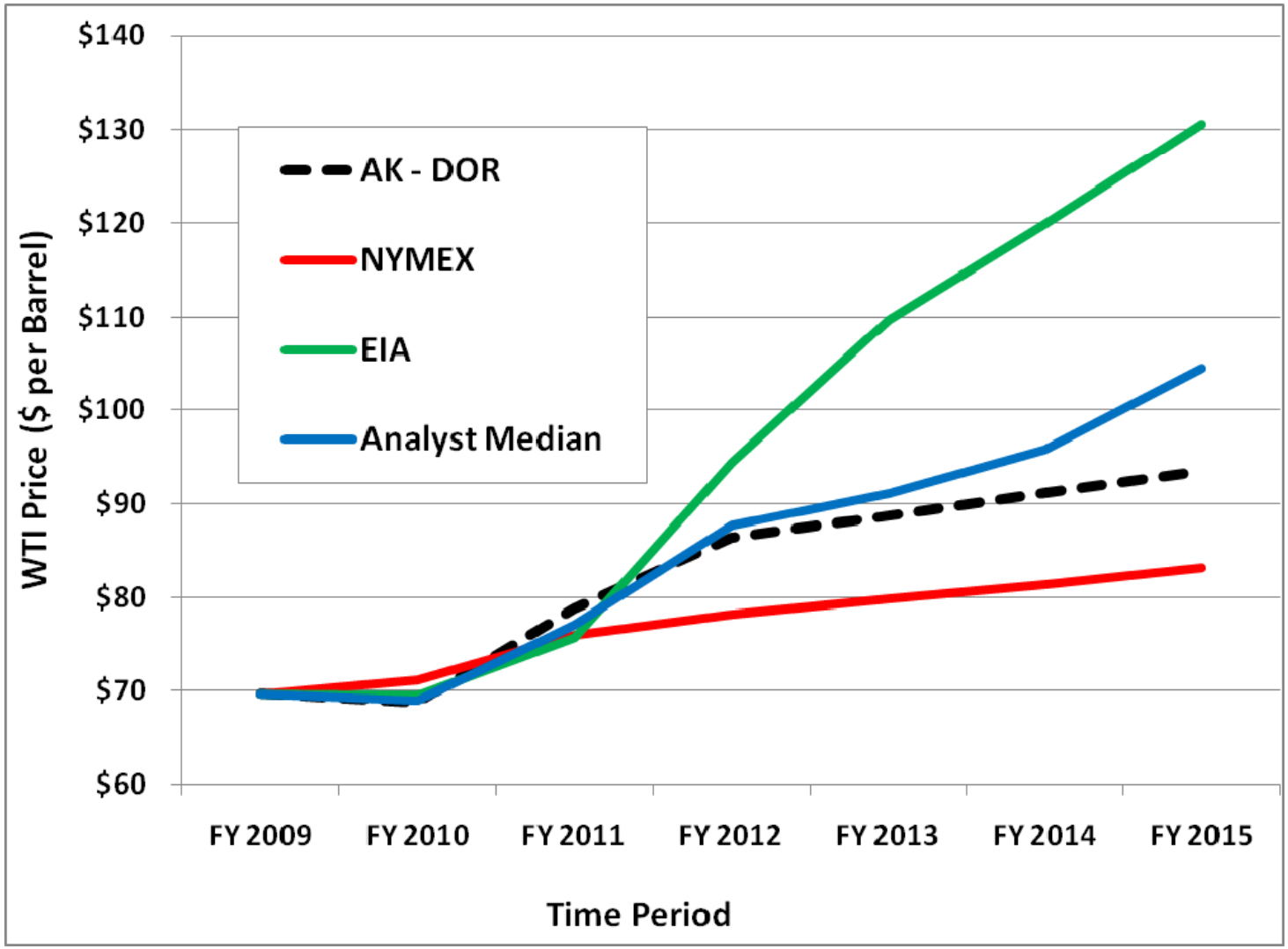
- **FY 1988: production peak → 2.01 mmbpd.**
- **FY 2009: production → 0.693 mmbpd, a 66% decline since peak.**
- **FY 1988 to date: production decline rate → 4.9% per year, on average.**
- **Over the last 10 years: production decline rate → 4.8% per year, on average.**
- **Forecast production decline rate → 3.6% per year, on average, through FY 2030.**

Fall 2009 Oil Price Forecast

Price Forecast Methodology

- **FY 2010- 2012: Average of participant forecasts from Price Forecasting Session**
- **24 Participants from DOR, DNR, DOL, OMB, University, Legislative Finance and outside participants**
- **Presentations: supply, demand, world economy, outside expert forecasts, etc.**
- **Due to economic uncertainty, session focused on near-term prices**
- **Beyond FY 2012: Constant real price, 2.75% inflation**

Price Forecasts as of October 2009



Source: DOR, Bloomberg, Wall St Journal, Energy Information Agency

Fall 2009 DOR Oil Price Forecast

Fiscal Year	WTI	ANS
2009	$69.71	$68.34
2010	$68.71	$66.93
2011	$78.85	$76.35
2012	$86.43	$83.93
2013	$88.74	$86.24
2014	$91.11	$88.61
2015	$93.55	$91.05

Source: Fall 2009 Revenue Sources Book

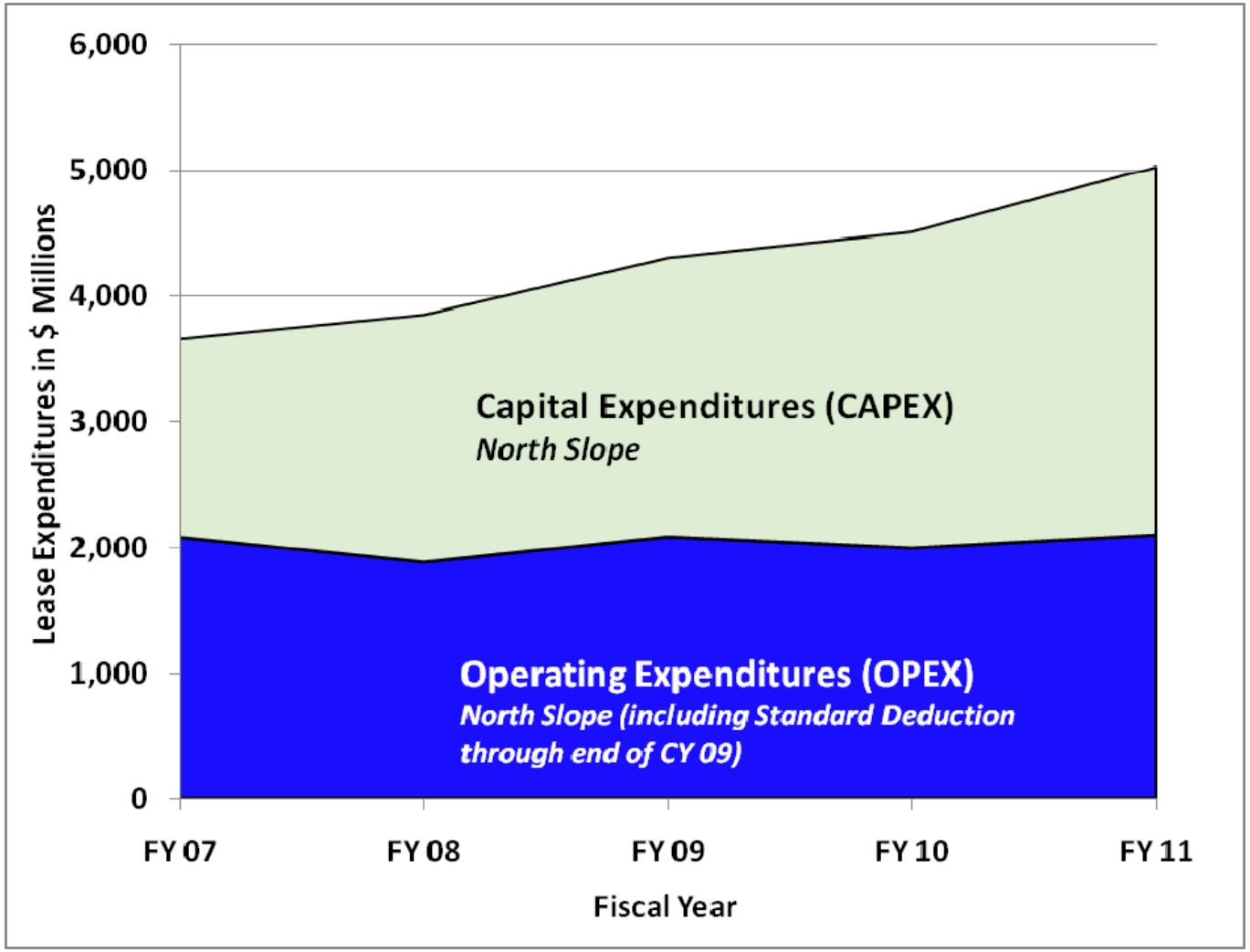
Fall 2009
Lease Expenditure Forecast
(Oil Company Spending)

Lease Expenditures (Costs)

- **FY 2007 – FY 2009 lease expenditures based on unaudited company reported expenditure estimates submitted on production tax monthly forms and annual returns**
- **FY 2010 – FY 2011 lease expenditure forecasts were compiled from company submitted information**
- **Under ACES, DOR requests expenditure forecast estimates and other documentation from oil companies**
- **Operating expenditures are expected to remain steady but increase on a per-barrel basis as production declines.**
- **Capital expenditures are expected to increase in FY 2010 and FY 2011.**
- **New field development driving increased investment.**

Source: Alaska Department of Revenue

Lease Expenditures (Costs)



Source: Department of Revenue from production tax monthly information forms, annual returns, and company forecasts.

Lease Expenditures per Barrel

	FY 07	FY 08	FY 09	FY 10	FY 11
Lease Expenditures ($ millions)					
Operating Expenditures (OPEX)	2,081	1,881	2,085	1,996	2,100
Capital Expenditures (CAPEX)	1,578	1,967	2,212	2,505	2,923
Production (bpd)	739,702	715,950	692,127	658,762	622,879
Lease Expenditures per barrel ($)					
OPEX per barrel ($)	7.71	7.20	8.25	8.30	9.24
CAPEX per barrel ($)	5.84	7.53	8.76	10.42	12.86

Source: Department of Revenue from production tax monthly information forms, annual returns, and company forecasts