

# Revenue Sources Book

*Alaska Department of Revenue – Tax Division*



# FALL 2007



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# FALL 2007

# STATE OF ALASKA

## DEPARTMENT OF REVENUE

### Tax Division

**Sarah Palin, Governor**

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January 8, 2008

The Honorable Sarah Palin, Governor of Alaska  
P.O. Box 110001  
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Dear Governor Palin:

Enclosed with this letter is the Department of Revenue's Fall 2007 *Revenue Sources Book*. This report includes an accounting of state revenues received in Fiscal Year 2007 and projections for FY 2008 through FY 2017.

Revenue from oil production remains the State's primary revenue source and takes four forms, the State's royalty share, production tax, corporate income tax and property tax. The report includes revenue estimates that incorporate HB 2001 – Alaska's Clear and Equitable Share (ACES) production tax, passed by the legislature in November 2007 and signed into law in December. With the new production tax, our revenue estimates are significantly higher than would have been expected under the prior law.

The ACES production tax remains based on the net value of oil and gas production. It also includes associated tax credits to encourage investment in the state's petroleum sector, leading to higher future oil production and thus higher long-term revenues. The combination of the net-based tax and the investment credits means that our revenue estimates are driven by our forecasts of three variables, oil prices, oil production levels, and oil production costs.

We project Alaska North Slope (ANS) crude oil prices will average \$72.64 per barrel for the current fiscal year (the fiscal-year-to-date average is \$80.51 per barrel as of December 20, 2007). In the medium term, we believe there will be downward pressure on oil prices, and our forecast for Alaska North Slope crude for FY 2009 is about \$66.32, and for FY 2010 it is \$63.40 a barrel.

Our long-run ANS crude oil price forecast for FY 2015 and beyond is \$41.05 per barrel increasing at the projected rate of inflation. While this is lower than today's market price and lower than some expert predictions, we are deliberately cautious in our approach. Oil prices more than doubled between January 2007 and November 2007 and it is quite possible they could decline just as rapidly in the future. We believe that our long term view—that oil prices will eventually return to historical norms—should not be unduly influenced by the current pricing environment where oil prices are very high and extremely volatile.

Our forecast for natural gas prices at the Henry Hub for FY 2008 is \$6.85 per million BTU. While we do not have a separate section on natural gas, historical prices and our forecast for natural gas prices can be found in the appendices section of our report.

Alaska North Slope crude oil production projections for FY 2008 have been adjusted to 731,000 barrels per day – about 1.2% lower than FY 2007. A significant part of this decrease is attributable to planned and unplanned shut-downs. Production for FY 2009 is projected to decrease to about 701,000 barrels per day. We are assuming that there will be no pipeline shut-downs of the magnitude seen during calendar year 2006. We are also projecting that a new field, Oooguruk, will produce its first crude oil late in FY 2008. In preparing our fall forecast, we have incorporated more “down time” than we had in earlier forecasts due to the aging of the infrastructure on the North Slope and the belief that more maintenance and down time will be required in the future.

The oil production cost estimates used in this report are based upon the limited cost data currently available to the department. However, as required by ACES, the department will soon begin receiving detailed cost reports from taxpayers. This new information will provide us with comprehensive cost data, in a useful format, and will significantly improve our understanding of oil production costs, and enhance our revenue forecasting capabilities.

Non-oil unrestricted revenue in FY 2008 (including Investment Earnings) is expected to be about \$701 million, an increase of about 4% or \$26 million from FY 2007. That amount is expected to decrease in FY 2009 to about \$603 million.

As is often the case, events impacting revenues have occurred since the materials contained in this report were prepared. Of most significance, at the end of December 2007, the State of Alaska concluded negotiations with BP Exploration (Alaska) Inc. and Affiliates (BP) regarding past corporate income taxes due. On December 31, 2007, BP paid the State of Alaska \$379 million that was deposited in the Constitutional Budget Reserve Fund (CBRF). Revenue deposited in the CBRF is considered “restricted,” and as such, does not affect our estimates of General Purpose Unrestricted Revenues (GPUR). Further, this \$379 million is not included in our “restricted” revenue forecast due to the late date at which the settlement became known.

We hope you find the information provided in the Fall 2007 *Revenue Sources Book* to be useful. Our next forecast for FY 2008 and FY 2009 will be provided in the Spring of 2008.

Sincerely,



Patrick Galvin  
Commissioner

# Revenue Sources Book

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# 1. Introduction

## General Discussion

The purpose of the semi-annual Revenue Sources Book is to provide the governor, legislature and citizens of the state a summary of our past collections of state revenue and a forecast of future revenue. Revenues are categorized into four major components: (1) oil, (2) federal, (3) investment, and (4) all other.

Oil revenues continue to dominate the unrestricted revenue picture—and are projected to provide more than 87% of General Purpose Unrestricted Revenue through FY 2014. However, North Slope oil production is declining. In FY 2007, Alaska North Slope (ANS) output was 0.740 million barrels per day compared to a peak of 2.006 million barrels per day in FY 1988. While production declined by approximately 63% over that period,

the market price of oil has more than tripled. For FY 2008, we project ANS oil production will decrease to 0.731 million barrels per day.

Before 2003, the Constitutional Budget Reserve Fund (CBRF) was used to balance the state's budget in 10 of the previous 15 years. Even if prices remain high, the rapid fall in North Slope crude oil volumes could lead to future budget shortfalls and draws on the CBRF.

The Alaska Legislature passed a new oil and gas production tax known as Alaska's Clear and Equitable Share (ACES) during November 2007.

The governor signed this bill into law during December 2007 and the projections in this forecast contain the tax revenue associated with the new law.

Alaska's total revenue picture also includes earnings from investments in the Permanent Fund and CBRF, federal revenue and other sources, such as taxes, charges for services, licenses, permits, fines and forfeitures. The information provided in this book will provide greater insight not only into the sources of revenue that support the state today, but also into future revenues from potential new sources.

Please note that totals in some tables throughout this publication may not equal the sum of components due to rounding.

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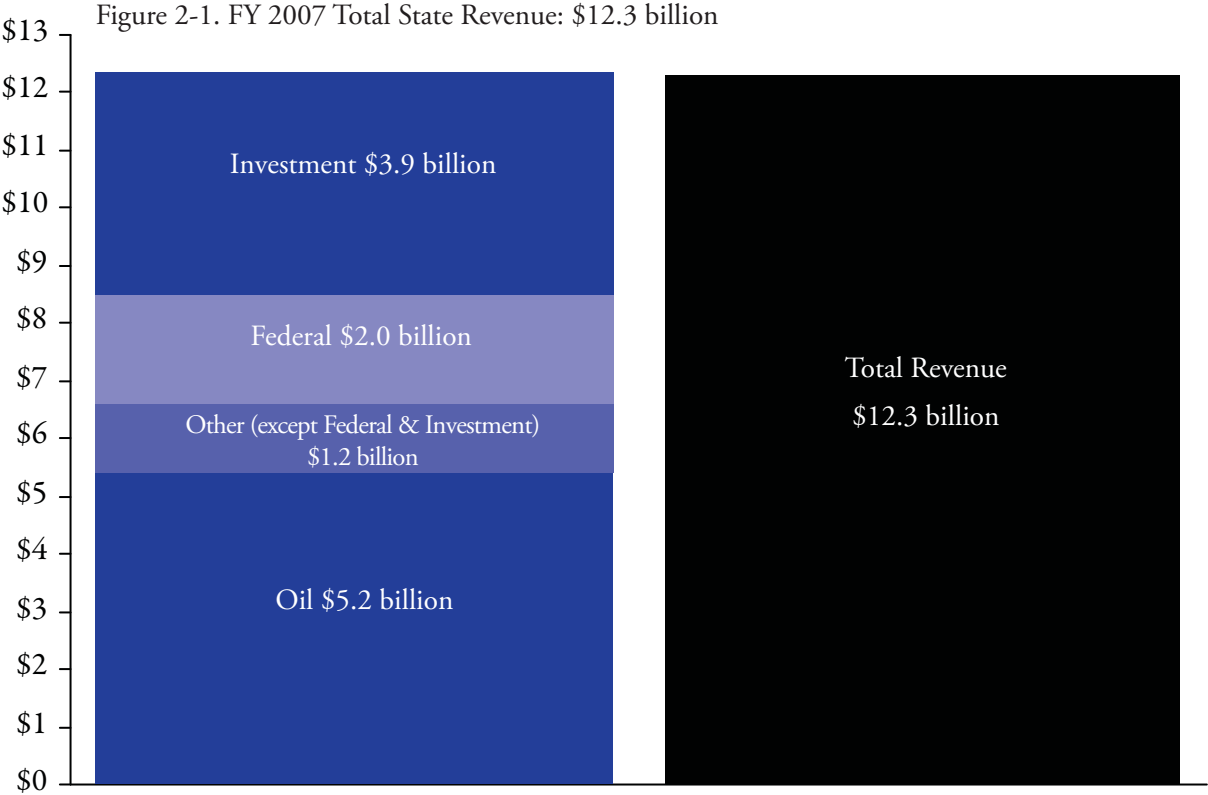
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# 2. Executive Summary

## Total State Revenue



**Figure 2-2. Total State Revenue by Major Component, FY 2007 and Forecasted FY 2008-2009**  
 (\$ million)<sup>(1)</sup>

<b>Oil Revenue</b>	History	Forecast	
	FY 2007	FY 2008	FY 2009
<b>Unrestricted</b>			
Property Tax	65.6	53.5	52.4
Petroleum Corporate Income Tax	594.4	598.9	594.6
Production Tax	2,292.3	3,404.3	2,201.2
Royalties (including Bonuses, Rents, & Interest)	1,613.0	1,846.3	1,571.9
<b>Subtotal</b>	<b>4,565.3</b>	<b>5,903.0</b>	<b>4,420.0</b>
<b>Restricted</b>			
Royalties to Perm Fund & School Fund (includes Bonuses & Rents)	545.7	629.6	537.6
Tax Settlements to CBRF	113.6	20.0	20.0
NPR-A Royalties, Rents & Bonuses	12.8	5.2	5.1
<b>Subtotal</b>	<b>672.1</b>	<b>654.8</b>	<b>562.6</b>
<b>Total Oil Revenue</b>	<b>5,237.4</b>	<b>6,557.8</b>	<b>4,982.7</b>
<b>Other Revenue (except Federal &amp; Investment)</b>			
<b>Unrestricted</b>			
Taxes	437.3	406.6	390.0
Charges for Services	28.5	28.5	28.5
Fines and Forfeitures	7.2	8.4	8.4
Licenses and Permits	42.0	42.4	43.0
Rents and Royalties	11.8	10.0	10.0
Other	9.7	23.4	14.4
<b>Subtotal</b>	<b>536.5</b>	<b>519.3</b>	<b>494.3</b>
<b>Restricted</b>			
Taxes	105.9	132.9	134.8
Charges for Services	228.2	246.3	248.0
Fines and Forfeitures	22.7	34.4	34.6
Licenses and Permits	35.6	36.6	36.9
Rents and Royalties	5.8	5.3	5.3
Other	286.7	122.5	181.8
<b>Subtotal</b>	<b>684.9</b>	<b>578.0</b>	<b>641.4</b>
<b>Total Other Revenue</b>	<b>1,221.4</b>	<b>1,097.3</b>	<b>1,135.7</b>

Figure 2-2. Continued

Federal Revenue	History	Forecast	
	FY 2007	FY 2008	FY 2009
<b>Restricted</b>	1,971.9	2,524.1	2,524.1
<b>Total Federal Revenue</b>	<b>1,971.9</b>	<b>2,524.1</b>	<b>2,524.1</b>

## Investment Revenue

### Unrestricted

Investments	137.1	180.6	106.9
Interest Paid by Others	1.6	1.6	1.6
<b>Subtotal</b>	<b>138.7</b>	<b>182.2</b>	<b>108.5</b>

### Restricted

Investments	44.7	48.2	32.6
Constitutional Budget Reserve Fund	180.7	167.7	160.5
Other Treasury Managed Funds	41.2	25.1	26.9
Alaska Permanent Fund (GASB) <sup>(2)</sup>	3,471.2	2,570.3	2,557.1
<b>Subtotal</b>	<b>3,737.8</b>	<b>2,811.3</b>	<b>2,777.1</b>
<b>Total Investment Revenue</b>	<b>3,876.5</b>	<b>2,993.5</b>	<b>2,885.6</b>

## Grand Total

**12,307.2 13,172.7 11,528.1**

<sup>(1)</sup> The figures in this table do not include a December 2007 settlement in the amount of \$379 million deposited into the Constitutional Budget Reserve Fund that will significantly increase FY 2008 restricted oil revenue.

<sup>(2)</sup> Both realized and unrealized gains and losses are included per GASB 34 as interpreted by the Finance Division of the Department of Administration in its Comprehensive Annual Financial Report.

Figure 2-3. Total State Revenue by Major Component, FY 2007

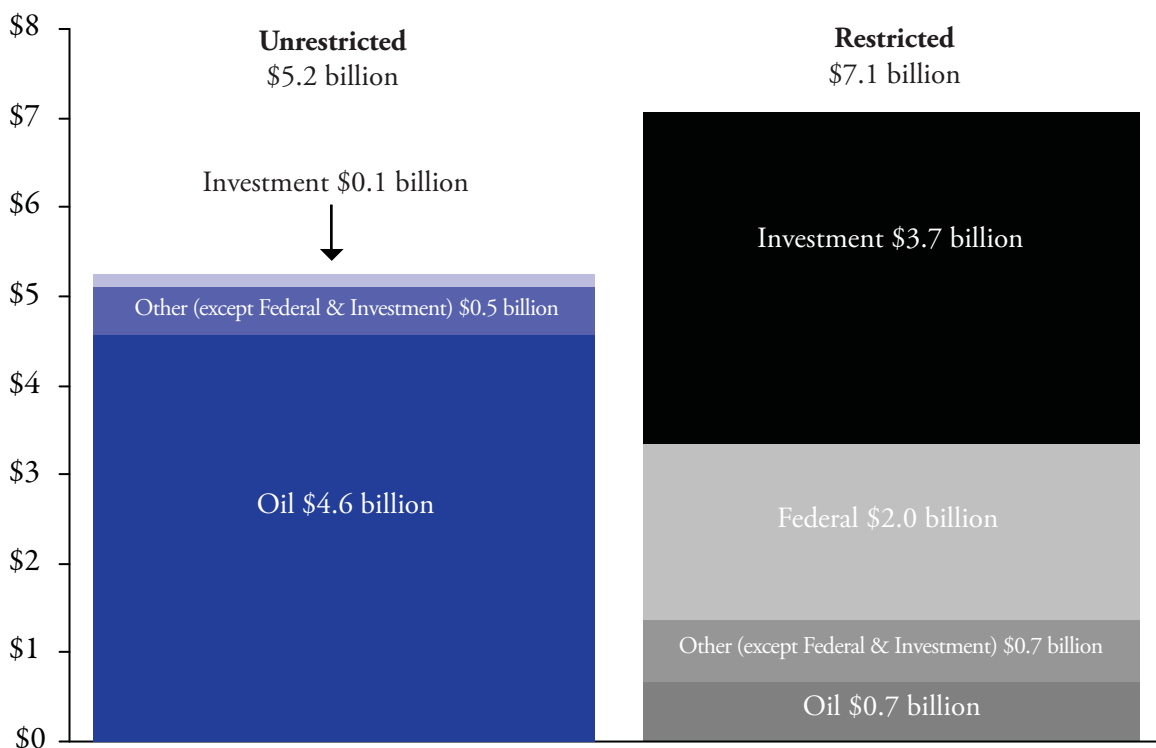


Figure 2-4. Total State Revenue, FY 2007 and Forecasted FY 2008-2009 (\$ million)

Revenue Source	History	Forecast	
	FY 2007	FY 2008	FY 2009
<b>Unrestricted</b>			
Oil Revenue	4,565.3	5,903.0	4,420.0
Other Revenue (except Federal & Investment)	536.5	519.3	494.3
Investment Earnings	138.7	182.2	108.5
<b>Subtotal</b>	<b>5,240.5</b>	<b>6,604.5</b>	<b>5,022.8</b>
<b>Restricted<sup>(1)</sup></b>			
Oil Revenue	672.1	654.8	562.6
Other Revenue (except Federal & Investment)	684.9	578.0	641.4
Investment Earnings	3,737.8	2,811.3	2,777.1
Federal Revenue	1,971.9	2,524.1	2,524.1
<b>Subtotal</b>	<b>7,066.7</b>	<b>6,568.2</b>	<b>6,505.3</b>
<b>Grand Total</b>	<b>12,307.2</b>	<b>13,172.7</b>	<b>11,528.1</b>

<sup>(1)</sup> The figures in this table do not include a December 2007 settlement in the amount of \$379 million deposited into the Constitutional Budget Reserve Fund that will significantly increase FY 2008 restricted oil revenue.

## Unrestricted Revenue and Restricted Revenue

Throughout this forecast we report two types of revenue: General Purpose Unrestricted Revenue (frequently referred to simply as unrestricted revenue) and restricted revenue. These two types of revenue are based on the two components of the General Fund in the Alaska State Accounting System (AKSAS)—the unrestricted component and the restricted component—with certain adjustments.

### General Purpose Unrestricted Revenue (GPUR)

General Purpose Unrestricted Revenue reflects revenue that is not restricted by the constitution, state or federal law, trust or debt restrictions or customary practice. Most legislative and public debate centers on this category of revenue, and this is the amount generally used for budget planning purposes and designated in budget documents as General Fund revenue. General Purpose Unrestricted Revenue reported in this forecast includes funds deposited into the unrestricted component of the General Fund, with certain adjustments:

- Reductions might include: (a) revenue earmarked for specific programs, (b) pass-through revenue for qualified regional aquaculture and dive fishery associations, and (c) revenue shared with municipal governments and organizations (e.g., fisheries taxes).
- Additions might include transfers from the unclaimed property trust to the state treasury.

The Department of Revenue uses a three-step process to make its final estimate of General Purpose Unrestricted Revenue.

**Step 1.** We estimate all revenue for the unrestricted component of the General Fund in the Alaska State Accounting System (AKSAS), as well as certain program receipts, by using our forecast models and obtaining estimates from other state agencies.

**Step 2.** We then consult the Governor's Office of Management and Budget and Legislative Finance for their input.

**Step 3.** Finally, following analysis, we adjust our initial projection to derive a

forecast of total General Purpose Unrestricted Revenue.

Figure 2-5 on the next two pages sets out FY 2007 General Purpose Unrestricted Revenue and our forecast for FY 2008 and 2009.

### Restricted Revenue

Restricted revenue represents any revenues that are not considered General Purpose Unrestricted Revenue. This includes revenue restricted by the constitution, state or federal law, trust or debt restrictions, or customary practice.

Restricted revenue reported in this forecast includes money deposited into the restricted component of the General Fund, with certain additions. Additions might include: (a) receipts deposited in funds other than the General Fund, and (b) receipts that deposited into the unrestricted component of the General Fund but restricted by statute or customarily appropriated for a particular purpose or program, such as sharing of fish tax revenue with municipalities.

Figure 2-5. General Purpose Unrestricted Revenue, FY 2007 and Forecasted FY 2008-2009 (\$ million)

Oil Revenue	History	Forecast	
	FY 2007	FY 2008	FY 2009
Property Tax	65.6	53.5	52.4
Petroleum Corporate Income Tax	594.4	598.9	594.6
Production Tax			
Oil & Gas Production	2,282.2	3,392.5	2,189.9
Oil & Gas Hazardous Release	10.1	11.8	11.3
<b>Subtotal Production Tax</b>	<b>2,292.3</b>	<b>3,404.3</b>	<b>2,201.2</b>
Royalties (including Bonuses, Rents, & Interest)			
Mineral Bonuses & Rents	22.2	5.7	4.4
Oil & Gas Royalties	1,583.8	1,833.6	1,566.1
Interest	7.0	7.0	1.4
<b>Subtotal Royalties</b>	<b>1,613.0</b>	<b>1,846.3</b>	<b>1,571.9</b>
<b>Total Oil Revenue</b>	<b>4,565.3</b>	<b>5,903.0</b>	<b>4,420.0</b>
<b>Other Revenue (except Federal &amp; Investment)</b>			
<b>Taxes</b>			
Sales & Use Tax			
Alcoholic Beverages	17.1	18.5	18.5
Tobacco Products – Cigarettes	35.3	36.5	36.5
Tobacco Products – Other	8.5	8.9	9.5
Insurance Premium	46.5	48.1	48.5
Electric and Telephone Cooperative	0.2	0.2	0.2
Motor Fuel	39.2	39.4	39.8
Vehicle Rental	8.0	8.2	8.5
Tire Fee	1.5	1.5	1.5
<b>Subtotal Sales &amp; Use Tax</b>	<b>156.3</b>	<b>161.3</b>	<b>163.0</b>
<b>Subtotal Corporate Income Tax</b>	<b>176.9</b>	<b>139.4</b>	<b>129.1</b>
Fish Tax			
Fisheries Business	17.1	18.0	18.6
Fishery Resource Landing	5.3	5.6	5.8
<b>Subtotal Fish Tax</b>	<b>22.4</b>	<b>23.6</b>	<b>24.4</b>
Other Tax			
Mining	79.1	79.8	71.0
Estate	0.1	0.0	0.0
Gaming	2.5	2.5	2.5
<b>Subtotal Other Tax</b>	<b>81.7</b>	<b>82.3</b>	<b>73.5</b>
<b>Subtotal Taxes</b>	<b>437.3</b>	<b>406.6</b>	<b>390.0</b>

Figure 2-5. Continued

<b>Other Revenue (except Federal &amp; Investment)</b>	History	Forecast	
	FY 2007	FY 2008	FY 2009
Charges for Services			
General Government	26.1	26.1	26.1
Natural Resources	2.1	2.1	2.1
Other	0.3	0.3	0.3
<b>Subtotal Charges for Services</b>	<b>28.5</b>	<b>28.5</b>	<b>28.5</b>
<b>Subtotal Fines &amp; Forfeitures</b>	<b>7.2</b>	<b>8.4</b>	<b>8.4</b>
Licenses & Permits			
Alcoholic Beverage Licenses	1.0	1.0	1.0
Motor Vehicle	38.5	38.9	39.5
Other	2.5	2.5	2.5
<b>Subtotal Licenses &amp; Permits</b>	<b>42.0</b>	<b>42.4</b>	<b>43.0</b>
Rents & Royalties			
Other Non-Petroleum Rents & Royalties	10.2	8.4	8.4
Coal Royalties	1.3	1.3	1.3
Cabin Rentals	0.3	0.3	0.3
<b>Subtotal Rents &amp; Royalties</b>	<b>11.8</b>	<b>10.0</b>	<b>10.0</b>
Other			
Miscellaneous	9.7	7.9	7.9
Unclaimed Property	0.0	15.5	6.5
<b>Subtotal Other</b>	<b>9.7</b>	<b>23.4</b>	<b>14.4</b>
<b>Total Other Revenue (except Federal &amp; Investment)</b>	<b>536.5</b>	<b>519.3</b>	<b>494.3</b>
<b>Investment Revenue</b>			
Investments	137.1	180.6	106.9
Interest Paid by Others	1.6	1.6	1.6
<b>Total Investment Revenue</b>	<b>138.7</b>	<b>182.2</b>	<b>108.5</b>
<b>Grand Total Unrestricted Revenue</b>	<b>5,240.5</b>	<b>6,604.5</b>	<b>5,022.8</b>

## Crude Oil Price Forecast

Oil revenue is projected to provide more than 87% of forecasted General Purpose Unrestricted Revenue through FY 2014. Three elements are critical to the oil revenue forecast: price, volume, and to a lesser extent lease expenditures.

There is no price for Alaska crude oil on the New York Mercantile Exchange (NYMEX)<sup>(1)</sup> or other commodity exchanges. The spot price of Alaska North Slope (ANS) crude oil is calculated by subtracting a market differential from the price of West Texas Intermediate

(WTI) quoted on the NYMEX. Four different assessment services estimate that market differential and report a daily spot price for ANS.

All of Alaska's oil production is delivered to refineries on the U.S. West Coast (including Alaska and Hawaii). Consequently, Alaska's royalty and production tax revenue depends in large part on the average market price of ANS crude oil at U.S. West Coast refining centers.

Figure 2-6 shows crude oil prices for FY 2007 and the Department of Revenue's forecast of prices for the 11-year period beginning with the current fiscal year FY 2008 and continuing through FY 2018. The oil price forecast is based on a subjective assessment of market dynamics and trend analysis by participants at a Department of Revenue price forecasting seminar.

**Figure 2-6. Nominal WTI, ANS West Coast and ANS Wellhead, FY 2007 and Forecasted FY 2008-2018 (\$ per barrel)**

Fiscal Year	WTI	ANS West Coast	ANS Wellhead
2007	63.63	61.63	55.67
2008 <sup>(2)</sup>	72.43	72.64	66.30
2009	68.07	66.32	59.52
2010	65.90	63.40	58.49
2011	67.25	64.75	59.65
2012	68.85	66.35	61.03
2013	69.95	67.45	61.96
2014	71.05	68.55	62.95
2015	43.55	41.05	35.31
2016	44.75	42.25	36.34
2017	45.95	43.45	37.28
2018	47.20	44.72	38.32

<sup>(1)</sup> The NYMEX futures market is one source for a WTI quote. A daily WTI spot quote could also be determined by a reporting service's daily assessment of the WTI spot market.

<sup>(2)</sup> FY 2008 Forecast price includes five months of actual prices, which raise the forecast price from \$71.65 to \$72.64 per barrel.



Figure 2-7 shows: (1) the monthly ANS West Coast market price from November 2002, through November 2007, (2) the 60-month moving average ANS West Coast market price for the same period and (3) the NYMEX crude oil futures price of ANS from December 2007 to December 2010.

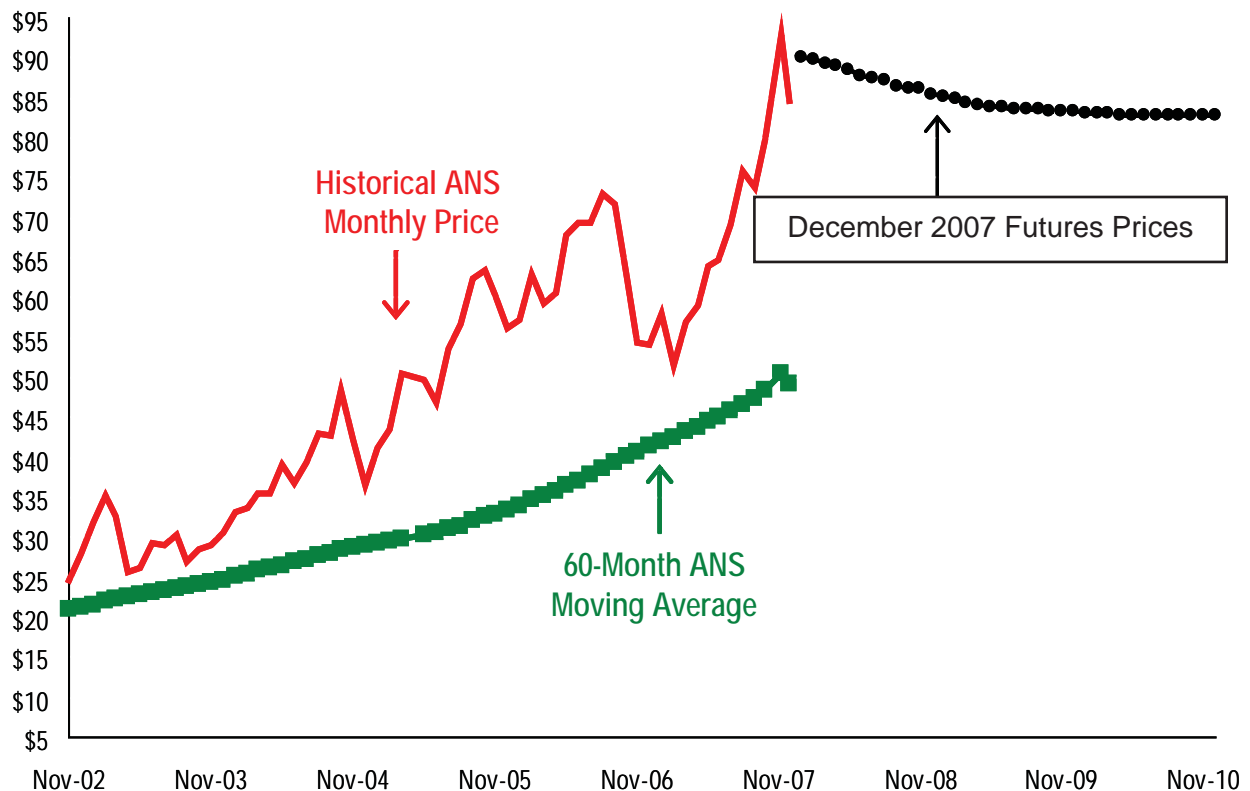
The figure illustrates a number of issues with respect to oil prices including:

- Month-to-month crude oil price volatility—monthly ANS West Coast prices during this time period ranged from \$24.69 per barrel to \$92.98 per barrel.
- The 60-month moving average is \$50.45 per barrel and has more than doubled since 2002.

- The derived futures market price of January 2008 shows prices that are slightly lower than November 2007 record highs.

We assume that over the medium-term, ANS oil prices will average \$66.35 per barrel in FY 2012, \$67.45 per barrel in FY 2013 and \$68.55 per barrel in 2014 (in nominal terms). Over the long run, ANS oil prices are projected to average \$41.05 per barrel in FY 2015, then increase at 2.75% per year, based on inflation. This long-run price assumption was not changed this forecast based on Tax Division protocol.<sup>(3)</sup>

**Figure 2-7. Monthly Nominal ANS West Coast and Futures Market Oil Prices (\$ per barrel)**



<sup>(3)</sup> According to the department's price forecasting protocol, long-run crude oil price projections can only be changed every two years if forecasting seminar participants agree to a change over the prior two consecutive fall forecasting sessions.

**Figure 2-8. Alaska Crude Oil and NGL Production, FY 2007 and Forecasted 2008-2009  
(million barrels per day)**

	History	Forecast	
	FY 2007	FY 2008	FY 2009
<b>Alaska North Slope</b>			
Prudhoe Bay <sup>(1)</sup>	0.274	0.292	0.279
Aurora	0.011	0.009	0.009
Borealis	0.016	0.013	0.014
Midnight Sun	0.004	0.002	0.002
Orion	0.009	0.011	0.015
Polaris	0.003	0.003	0.008
Lisburne	0.012	0.011	0.011
Niakuk <sup>(2)</sup>	0.005	0.005	0.004
Point McIntyre	0.018	0.029	0.026
Raven	0.002	0.001	0.002
Kuparuk	0.122	0.114	0.108
Meltwater	0.003	0.002	0.002
Tabasco	0.004	0.002	0.002
Tarn	0.018	0.016	0.015
West Sak	0.019	0.018	0.020
Milne Point <sup>(3)</sup>	0.022	0.022	0.019
Schrader Bluff	0.011	0.012	0.011
Endicott <sup>(4)</sup>	0.016	0.015	0.014
Badami	0.001	0.000	0.000
Alpine <sup>(5)</sup>	0.105	0.084	0.072
Fiord <sup>(6)</sup>	0.009	0.018	0.020
Nanuq <sup>(7)</sup>	0.009	0.016	0.008
Oooguruk	0.000	0.000	0.013
Northstar	0.046	0.037	0.028
<b>Total Alaska North Slope</b>	<b>0.740</b>	<b>0.731</b>	<b>0.701</b>
increase/decrease from prior period	(0.105)	(0.009)	(0.030)
% change from prior period	-12.5%	-1.2%	-4.1%
<b>Total Cook Inlet<sup>(8)</sup></b>	<b>0.018</b>	<b>0.014</b>	<b>0.013</b>
increase/decrease from prior period	(0.000)	(0.004)	(0.001)
% change from prior period	-1.3%	-21.5%	-7.1%
<b>Total Alaska<sup>(8)</sup></b>	<b>0.758</b>	<b>0.745</b>	<b>0.714</b>
increase/decrease from prior period	(0.106)	(0.013)	(0.031)
% change from prior period	-12.2%	-1.7%	-4.2%

<sup>(1)</sup> Includes NGLs

<sup>(2)</sup> Includes West Niakuk

<sup>(3)</sup> Includes Sag River

<sup>(4)</sup> Includes Eider and Sag Delta

<sup>(5)</sup> Includes Qannik

<sup>(6)</sup> Includes Fiord-Kuparuk

<sup>(7)</sup> Includes Nanuq-Kuparuk

<sup>(8)</sup> Percent change calculation may vary from calculation using production amounts due to rounding

## Crude Oil Production Forecast

Alaska North Slope crude oil production peaked at 2.006 million barrels per day in FY 1988 and has steadily declined since. We anticipate volumes will decline by 1.2% to about 0.731 million barrels per day in FY 2008. In FY 2009 we project a 4.1% decrease in North Slope production due to our anticipation of increased planned and unplanned maintenance on aging facilities, flowlines, pipelines and wells. To account for unforeseen production interruptions slopewide, as well as anticipated scheduled interruptions attributed to renewal projects, we have increased our estimates of downtime versus the spring 2007 forecast for the Greater Prudhoe Bay Area, the Greater Kuparuk Area, the Milne Point Unit and Endicott, depending on the field.

More discussion of this fall 2007 oil production forecast can be found in Section 4. Oil Revenue. A detailed field-by-field production forecast is included in the appendices of this forecast.

## Alaska's Clear and Equitable Share (ACES) Tax Replaces Petroleum Profits Tax (PPT)

One year after the implementation of the Petroleum Profits Tax (PPT), Governor Palin announced that a special legislative session would be held to review and, if necessary, adjust the recently enacted tax. The announcement followed several federal indictments in which current and former state legislators were charged with bribery and extortion relating to

the passage of the PPT. The special session began in Juneau on October 18, 2007, and culminated in the passage of the Alaska Clear and Equitable Share (ACES) tax thirty days later.

Like the PPT, the ACES tax is levied on the net value of oil and gas production. The base tax rate under ACES is 25% (it was 22.5% under PPT) and the progressive surcharge tax rate under ACES is 0.4% for every dollar the net profit per barrel exceeds \$30 (it was 0.25% on profits exceeding \$40 per barrel under PPT). The ACES system continues to authorize credits for capital expenditures, exploration costs, prior year investments and small producer incentives, as the PPT did, but there have been some alterations to the rate and timing of these credits.

The ACES tax also subjects legacy fields Prudhoe Bay and Kuparuk to a standard deduction for operating expenditures. The standard deduction amount is based on company-reported 2006 operating expenditures with a 3% per year inflation component. The standard deduction provision will sunset at the end of calendar year 2009, unless the legislature votes to extend it.

As for administrative changes, the ACES tax will require more thorough reporting from companies. Companies will be required to report volumes and expenditures used to calculate their estimated monthly installments. On March 31st of each year, companies will submit an annual tax return that will "true-up" any tax liabilities or overpayments made throughout the year. Twice yearly, companies will be required to provide the Department of Revenue with their

best estimates of future oil production and lease expenditures. These reporting requirements will greatly enhance the department's ability to forecast expenditures and revenues from oil and gas production.

Among other administrative changes, ACES provides for a class of auditors that will be exempt from the state classified pay scale, and auditors will have six years over which to complete production tax audits. The department expects that these two improvements will enable the state to be more thorough in its review of company-reported expenditures.

The majority of the ACES tax is retroactive to July 1, 2007, although some provisions are retroactive to the implementation of the PPT, on April 1, 2006. Work on regulations should begin during January 2008, and the first ACES monthly estimated payments are expected to be filed at the end of February 2008. The first annual filing and "true-up" of five months difference between PPT and ACES from July 1, 2007, through December 31, 2007, will be due on March 31, 2008.

## Long-Term Unrestricted Revenue Outlook

Using the price, volume and lease expenditure components developed for this fall 2007 forecast, Figure 2-9 summarizes the department's forecast of total General Purpose Unrestricted Revenue through FY 2018.

**Figure 2-9. Total General Purpose Unrestricted Revenue, FY 2007 and Forecasted FY 2008-2018 (\$ million)**

Fiscal Year	Unrestricted Oil Revenue	Unrestricted Other Revenue (except Federal & Investment)	Unrestricted Investment Revenue	Total Unrestricted Revenue	Percent From Oil
2007	4,565.3	536.5	138.7	5,240.5	87%
2008	5,903.0	519.3	182.2	6,604.5	89%
2009	4,420.0	494.3	108.5	5,022.8	88%
2010	4,127.0	478.1	108.5	4,713.6	88%
2011	4,123.7	474.5	108.5	4,706.7	88%
2012	4,226.5	478.5	108.5	4,813.5	88%
2013	4,324.0	487.4	108.5	4,919.9	88%
2014	4,198.0	497.4	108.5	4,803.9	87%
2015	1,371.1	505.2	108.5	1,984.8	69%
2016	1,317.5	516.4	108.5	1,942.4	68%
2017	1,386.2	524.1	108.5	2,018.8	69%
2018	1,718.4	531.7	108.5	2,358.6	73%

## Spending, Revenue Forecast and the Constitutional Budget Reserve Fund

As approved by voters in 1990, all receipts from oil and gas tax and royalty settlements are deposited into the Constitutional Budget Reserve Fund (CBRF). The state has deposited about \$5.8 billion into the reserve fund, and generated another \$2.0 billion in investment earnings. Since the increase in oil prices beginning in about 2003, no CBRF withdrawals have been necessary to balance the state's budget. However, given price volatility and the decline expected in volumes from the North Slope, the state may have to depend on

the CBRF in the future. Through September 30, 2007, approximately \$5.2 billion had been borrowed from the CBRF to balance the budget, leaving a balance of approximately \$2.7 billion. According to the state constitution, the \$5.2 billion that was withdrawn must be repaid to the CBRF.

Two figures are presented to help the reader understand the time period in which the CBRF would be depleted. Figure 2-10(A) presents the case where all surpluses are deposited in the CBRF.

Figure 2-10(B) presents the case where no surpluses are deposited in the CBRF. For example, using the DOR price and revenue forecast and assuming the 2007 baseline General Fund appropriations budget forecast, the CBRF would be depleted by March 2018 if all budget surpluses were deposited into the CBRF (see Figure 2-10(A)). By contrast, if none of the budget surpluses were deposited into the CBRF, the CBRF would be depleted in April 2016 (see Figure 2-10(B)).

Figure 2-10 (A). CBRF Run-Out Date With Revenue Surpluses Deposited into CBRF<sup>(1)</sup>

Annual State Budget (% change)	Fall 2007 Oil Price Forecast <sup>(2)</sup>	Fiscal Model of Oil Revenue & CBRF Performance at Selected Prices (\$ per barrel) <sup>(3)</sup>				
		\$35	\$50	\$65	\$80	\$95
+6%	Jun 2017	Oct 2011	Feb 2014	Nov 2019	Dec 2020	Dec 2020
+5%	Jul 2017	Nov 2011	Mar 2014	Feb 2020	Dec 2020	Dec 2020
+4%	Sep 2017	Nov 2011	Apr 2014	Apr 2020	Dec 2020	Dec 2020
+3%	Oct 2017	Dec 2011	Jun 2014	Dec 2020	Dec 2020	Dec 2020
+2%	Dec 2017	Jan 2012	Aug 2014	Dec 2020	Dec 2020	Dec 2020
+1%	Jan 2018	Jan 2012	Jan 2015	Dec 2020	Dec 2020	Dec 2020
Baseline Fall Forecast	Mar 2018	Feb 2012	Jun 2015	Dec 2020	Dec 2020	Dec 2020
-1%	Apr 2018	Mar 2012	Aug 2015	Dec 2020	Dec 2020	Dec 2020
-2%	Jun 2018	Apr 2012	Sep 2015	Dec 2020	Dec 2020	Dec 2020
-3%	Aug 2018	May 2012	Oct 2015	Dec 2020	Dec 2020	Dec 2020
-4%	Sep 2018	May 2012	Dec 2015	Dec 2020	Dec 2020	Dec 2020
-5%	Nov 2018	Jun 2012	Jan 2016	Dec 2020	Dec 2020	Dec 2020
-6%	Jan 2019	Jul 2012	Feb 2016	Dec 2020	Dec 2020	Dec 2020

Baseline Expenditure Forecast (\$ million)												
2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
\$4,407	\$4,520	\$4,731	\$4,932	\$5,063	\$5,198	\$5,326	\$5,458	\$5,645	\$5,664	\$5,866	\$6,076	\$6,294

<sup>(1)</sup> The figures in these tables do not include a December 2007 settlement in the amount of \$379 million deposited into the Constitutional Budget Reserve Fund that will significantly increase FY 2008 restricted oil revenue.

<sup>(2)</sup> Fall 2007 forecasted ANS price projections are \$71.65 per barrel in FY 2008, \$66.32 per barrel in FY 2009, \$63.40 per barrel in FY 2010, \$64.75 per barrel in FY 2011, \$66.35 per barrel in FY 2012, \$67.45 per barrel in FY 2013, \$68.55 for FY 2014 and \$41.05 for FY 2015. For FY 2016-beyond ANS prices are estimated to grow at 2.75%.

<sup>(3)</sup> Matrix allows reader to select specific fiscal year price (from FY 2010-beyond) to determine CBRF exhaustion date. Fall 2007 forecasted production volumes are used. **A date of Dec-2020 indicates that the CBRF does not run out during matrix timeframe.**

Figure 2-10 (B). CBRF Run-Out Date Without Excess Revenue Surpluses Deposited into CBRF<sup>(1)</sup>

Annual State Budget (% change)	Fall 2007 Oil Price Forecast <sup>(2)</sup>	Fiscal Model of Oil Revenue & CBRF Performance at Selected Prices (\$ per barrel) <sup>(3)</sup>				
		\$35	\$50	\$65	\$80	\$95
+6%	Feb 2016	Aug 2011	Nov 2013	Apr 2017	Dec 2020	Dec 2020
+5%	Feb 2016	Aug 2011	Dec 2013	May 2017	Dec 2020	Dec 2020
+4%	Mar 2016	Sep 2011	Feb 2014	May 2017	Dec 2020	Dec 2020
+3%	Mar 2016	Sep 2011	Mar 2014	Jun 2017	Dec 2020	Dec 2020
+2%	Mar 2016	Oct 2011	Apr 2014	Jul 2017	Dec 2020	Dec 2020
+1%	Apr 2016	Nov 2011	May 2014	Aug 2017	Dec 2020	Dec 2020
Baseline Fall Forecast	Apr 2016	Nov 2011	Jun 2014	Oct 2017	Dec 2020	Dec 2020
-1%	May 2016	Dec 2011	Sep 2014	Nov 2017	Dec 2020	Dec 2020
-2%	May 2016	Jan 2012	Jan 2015	Dec 2017	Dec 2020	Dec 2020
-3%	May 2016	Feb 2012	Jul 2015	Feb 2018	Dec 2020	Dec 2020
-4%	Jun 2016	Feb 2012	Aug 2015	Mar 2018	Dec 2020	Dec 2020
-5%	Jun 2016	Mar 2012	Sep 2015	May 2018	Dec 2020	Dec 2020
-6%	Jun 2016	Apr 2012	Oct 2015	Jul 2018	Dec 2020	Dec 2020

Baseline Expenditure Forecast (\$ million)												
2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
\$4,407	\$4,520	\$4,731	\$4,932	\$5,063	\$5,198	\$5,326	\$5,458	\$5,645	\$5,664	\$5,866	\$6,076	\$6,294

<sup>(1)</sup> The figures in these tables do not include a December 2007 settlement in the amount of \$379 million deposited into the Constitutional Budget Reserve Fund that will significantly increase FY 2008 restricted oil revenue.

<sup>(2)</sup> Fall 2007 forecasted ANS price projections are \$71.65 per barrel in FY 2008, \$66.32 per barrel in FY 2009, \$63.40 per barrel in FY 2010, \$64.75 per barrel in FY 2011, \$66.35 per barrel in FY 2012, \$67.45 per barrel in FY 2013, \$68.55 for FY 2014 and \$41.05 for FY 2015. For FY 2016-beyond ANS prices are estimated to grow at 2.75%.

<sup>(3)</sup> Matrix allows reader to select specific fiscal year price (from FY 2010-beyond) to determine CBRF exhaustion date. Fall 2007 forecasted production volumes are used. **A date of Dec-2020 indicates that the CBRF does not run out during matrix timeframe.**

# 3. Minerals

## Introduction

Mining has been a part of Alaska's economy for more than 100 years. Before the First World War, gold was discovered in the Fortymile district southeast of Fairbanks and around Nome, Fairbanks and Juneau. Copper was mined in the Copper River valley beginning in 1905. Platinum was discovered in southwestern Alaska in 1926, and was commercially mined until 1990.

Today, there are five large mines in operation in Alaska: the Red Dog zinc mine north of Kotzebue, the Greens Creek silver mine near Juneau, the Pogo and Fort Knox gold mines near Fairbanks and the Usibelli coal mine near Healy. Recent high metals prices have inspired new exploration, development and plans to open additional

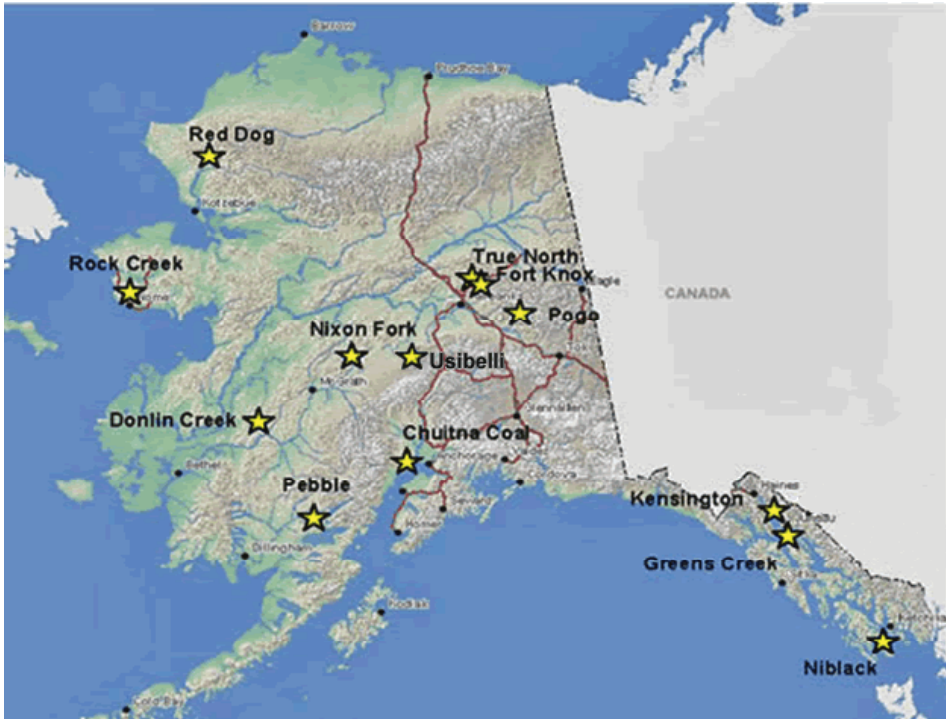
large mines in Alaska. Figure 3-1 presents the location of the mines reviewed in this section.

Low metals prices through the 1990s and early 2000s kept mining industry profits low. As a result, the state's revenues from mining, which are mostly based on net income, were below \$10 million until 2005. However, since 2005, rising metals prices have buoyed net income and therefore state mining revenues, with General Purpose Unrestricted Revenue (GPUR) from the corporate income tax, mining license tax and coal royalties collected from the mining industry reaching \$151.6 million in fiscal year (FY) 2007. Figure 3-2 presents historical and forecast prices for some of the metals that are important to current or future mining

in Alaska. Figure 3-5 shows historical and forecast state unrestricted revenues from the mining corporate income tax, license tax and coal royalties.

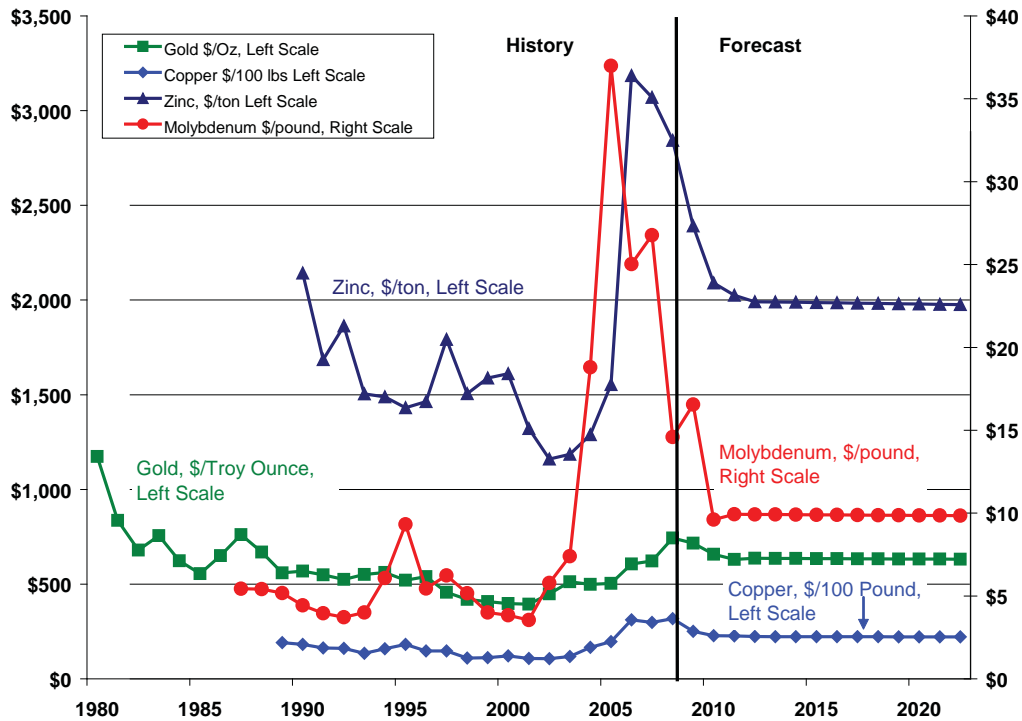
The total value of minerals in Alaska reached a record high of \$2.9 billion in calendar year (CY) 2006. Although gold mining has been the romantic figurehead for the Alaskan mining industry, the total value of gold mined in 2006 (\$344 million) was a distant second behind the total value of zinc (\$2.0 billion). Silver and lead were worth \$190 and \$184 million, respectively. Sand and gravel were worth \$24 million, and coal and peat worth \$49 million was mined in 2006.

Figure 3-1. Current and Proposed Large Mines in Alaska



Source: Alaska Department of Natural Resources

Figure 3-2. Historical and Forecast Metals Prices in Real 2006 Dollars



Sources: Metals prices from Bloomberg; Producer Price Index from the U.S. Bureau of Labor Statistics



## Mining Revenues

### State Mining Revenues

The mining industry provides revenues to the state government in a variety of ways. The majority of revenues come from two taxes: the mining license tax (Alaska's severance tax on mineral production) and the corporate income tax. Alaska also receives revenues from production royalties, annual claim rentals, payments in lieu of annual labor, material sales, filing and application fees, fines, penalties, and bond pool payments.

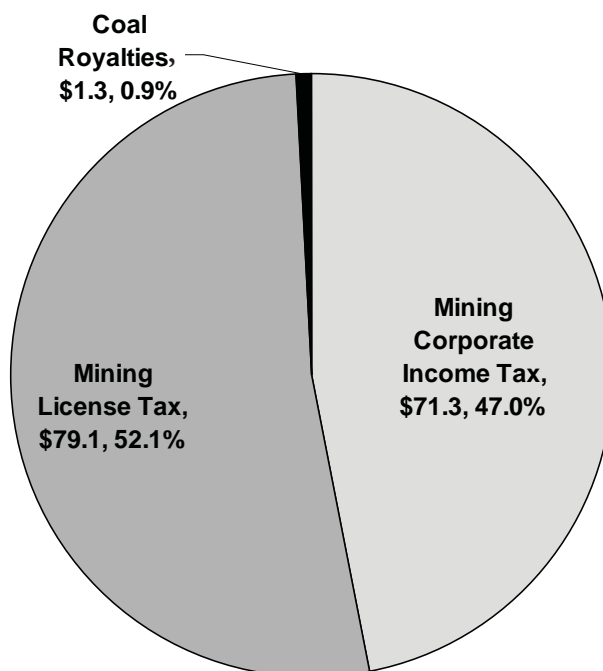
The state's tax and coal royalty revenues from the mining industry have increased from 0.2% of GPUR in FY 2004, the first year of the recent mining revenue uptrend, to 2.9% of GPUR, or \$151.6 million, in FY 2007. By FY 2017 our forecast calls for mining revenue to amount to 5.5% of GPUR. This increase in the relative amount of revenue from the mining industry is driven largely by forecasted declines in GPUR from oil, rather than

by increases in mining revenue. The GPUR portion of these three components for FY 2007 is presented in detail in Figure 3-3, and as a fraction of GPUR in Figure 3-4.

### Taxes

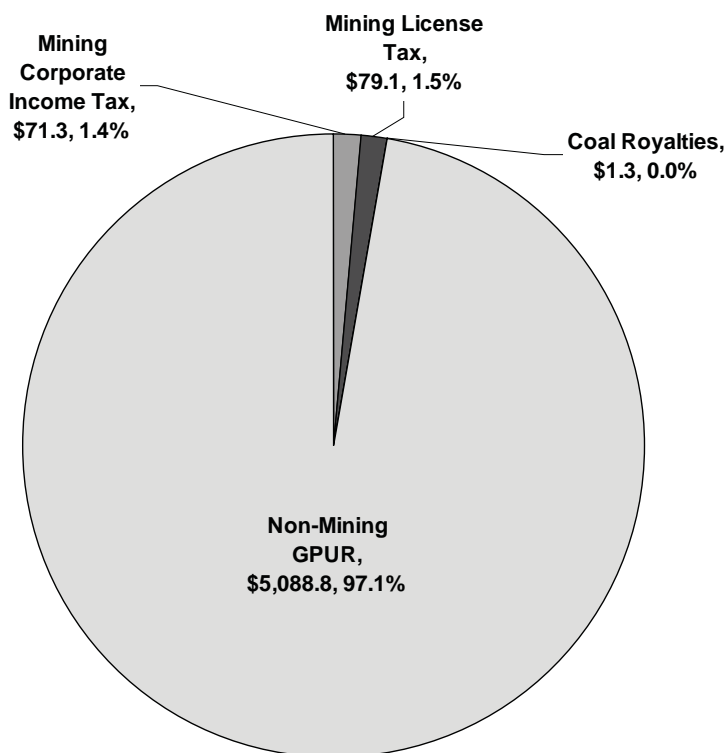
The vast majority of the state's revenue from the mining industry is generated from the corporate income and mining license taxes, with a small amount coming from coal royalty and other payments (see Figure 3-3).

**Figure 3-3. FY 2007 General Purpose Unrestricted Tax and Royalty Revenues from Mining, (\$ million)**



Source: Alaska Department of Revenue

**Figure 3-4. FY 2007 Mining Industry Taxes and Coal Royalties as a Share of General Purpose Unrestricted Revenue (\$ million)**



Source: Alaska Department of Revenue

## Corporate Income Tax

The mechanics of Alaska's corporate income tax are described in Section 5. There are several features which, when taken together, affect corporate tax revenues from mining.

First, it is important to remember that under combination and apportionment, mining activity both inside and outside Alaska can effect the Alaska tax.

Second, there are some favorable provisions of the Internal Revenue Code (IRC) that Alaska adopts by reference. Mining companies can accelerate

deductions by electing to expense 70% of exploration and development costs incurred during the tax year. The IRC also provides for percentage depletion that is based upon a percentage of gross receipts and is unrelated to cost basis. The IRC also allows net operating loss carry forwards, whereby losses resulting from low mineral prices and/or accelerated deductions, can be carried forward to offset income in profitable years.

In our view, the favorable tax provisions of the IRC, coupled with mineral

price fluctuations, has made mining an erratic source of corporate income tax revenue. Since FY 2003, revenue has risen from a low of \$0.2 million to \$71.3 million in FY 2007. With the development of additional large mines in Alaska, the corporate income tax should remain an important source of mining revenue. In FY 2017, revenues are forecast to reach \$46.9 million (see figure 3-5). The corporate income tax forecast is presented in Section 5.

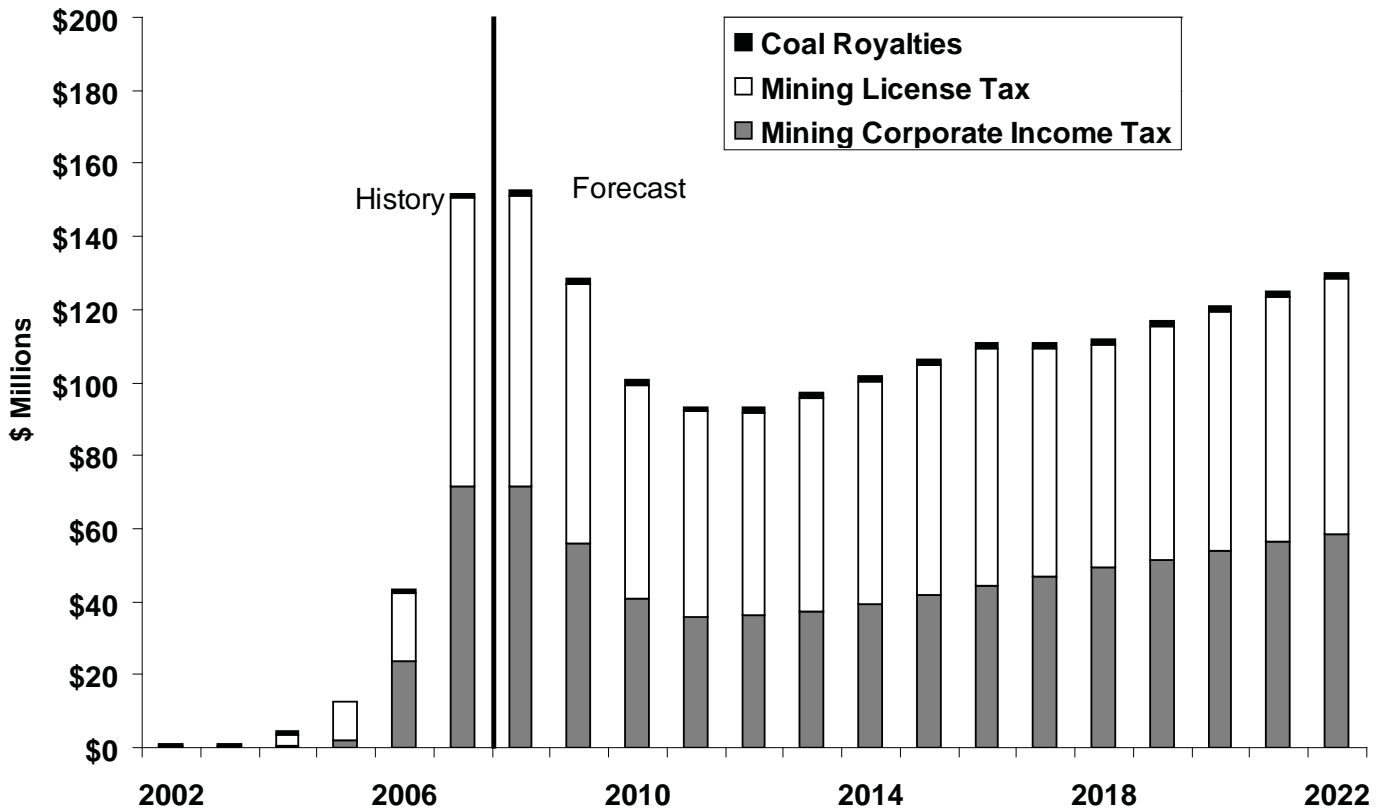
### Mining License Tax

Alaska's severance tax on mining, the mining license tax, is based on the net income of all mining property in Alaska, whether it is on state land or not. New mining operations, except for sand and gravel operations, are exempt from this tax for the first three and a half years after production begins. The tax rates are scaled from 0% to 7% depending on net income, with the 7% rate applying to all net income over \$100,000. In recent years, revenue from

this tax has risen from \$0.4 million in FY 2003 to \$79.1 million in FY 2007. In 2017, revenues from this tax are forecast to be \$62.5 million. Revenues will be lower than current amounts due to lower metals prices, partially offset by new mines subject to the tax. Figure 3-5 presents historical and forecast revenue from the corporate income tax and other mining revenue sources.

The mining license tax forecast is presented in Section 5.

**Figure 3-5. Historical and Forecasted General Purpose Unrestricted Revenues from Mining Taxes and Coal Royalties, by Source (\$ million)**



Source: Alaska Department of Revenue

## Tax Forecasting Methodology

### Corporate Income Tax

The corporate income tax is based on the share of U.S. net income that is apportioned to Alaska based on the share of a company's property, payroll and sales that are in the state. Net income is influenced by many factors, primarily metals prices and general corporate profitability. For the mining industry share of corporate income tax, we model the industry as a whole. Our regression model predicts mining industry corporate income taxes using the statistical relationship between tax payments, U.S. corporate profits and zinc prices. U.S. corporate profits are used as an indicator of overall profitability in the economy, and zinc prices are used because zinc is the largest component of the value of minerals mined in the state, making up more than half the value of Alaska minerals production.

As recently as FY 2005, the forecast of corporate income tax was based on judgment. Our current model is far more objective, and allows us to incorporate statistical relationships and relevant data.

### Mining License Tax

The mining license tax is based on the net income for individual mines. Profits are influenced by factors including production, minerals prices and mining costs. The tax is modeled by constructing models for each major mine, and aggregating the results. This bottom-up approach is a consequence of the structure of the mining license tax, which is based on the profitability of each mine, rather than company-wide profits. For each major mine with a history of mining license tax payments, we construct

a regression model which projects mining license tax liabilities based on the price and production of the primary mineral produced by that mine. Any foreseeable changes in production are included.

For major mines which do not have sufficient history of mining license tax payments to construct a regression model, we use publicly available production, operating and capital cost data to construct a simple model. These simple models estimate taxable income by multiplying the net profit per unit by the number of units produced, allowing for depreciation:

*(Mineral price per unit - operating cost per unit) x number of units produced - depreciation = taxable income.*

The statutory tax rates are then applied to the estimated taxable income to give an estimate of mining license tax revenues from that mine. This method is the most feasible approach to modeling in the absence of historical tax data. Objective, statistical based modeling is relatively new for the mining license tax, and we continue to work to improve our models for this tax.

### Major Tax Forecasting Assumptions

**Metals Prices** - Our metals price assumptions are based on a weighted average of industry analyst forecasts and metals futures market prices. Our current assumptions call for future real metals prices which are at or above their long term averages, but below current levels. Our long term zinc price assumption is \$1,990 per ton, in real

2006 dollars. Our long term gold price assumption is \$630 per troy ounce in real 2006 dollars. See Figure 3-2 for a graphical representation of historical prices and future metal price assumptions. The assumption that future metals prices will be higher than historical averages, but below current levels, is the primary driver for higher state revenue.

**Metals Production - Assumptions** are based on current production levels from publically available information, such as company presentations and annual reports, news releases and information from the Department of Natural Resources (DNR) and the Department of Commerce, Community and Economic Development (DCCED). Our production assumptions call for generally steady minerals production at currently producing mines with some mines starting or ending production as described in the "Industry Overview" section beginning on page 25.

### Tax Summary

The state's largest revenue sources from mining are the corporate income tax and the mining license tax. Together, these tax types, both based on definitions of net income, account for over 95% of state revenues from the mining industry. Continued high metals prices compared to historical averages lead us to believe the state will continue to receive significant revenue from the mining industry.

## Non-Tax Revenues

Production Royalty - Under AS 38.05.212, Alaska charges a production royalty on mining operations conducted on state lands. The production royalty is calculated as three percent of net income as determined under the mining license tax (AS 43.65). To date, few significant mines are operating on state land. The amounts discussed here include only coal royalties, and do not include production royalties from small mines, which are aggregated into the Other Non-Petroleum Rents and Royalties category in Section 5 of this forecast. Coal royalties have fluctuated between \$1.1 and \$1.3 million over the last four years. By 2017, coal royalties are forecast to be \$1.5 million (see Figure 3-5). The new Pogo mine is located on state land, as are some potential mines, such as the Pebble mine. As a result, state revenues from royalties could increase dramatically in the future.

The Alaska constitution requires that at least 25% of total minerals royalties be deposited into the Permanent Fund, with another 0.5% deposited into the Public School Trust Fund. The amounts discussed in this section include only the portion of coal royalties which goes to the General Fund and are available for general appropriation. The total coal royalties received by the state are therefore higher than the amounts presented in this section.

The following revenue components are not reported separately in this forecast, and are aggregated under the categories of Charges for Services, Licenses and Permits or Rents and Royalties in Section 5.

- Claim Rental - AS 38.05.211 requires the holder of a mining claim, leasehold location, prospecting site, or mining lease on state lands (including tide or submerged lands) to pay, in advance, a rental payment for the right to continue to hold their claim. The rental amount for a prospecting site is fixed at \$200 for the two-year term of the site. Annual rental for a mining claim, leasehold location, or mining lease are based on the number of years since it was first located. The amount reported for CY 2006 by DNR was \$3.5 million.
- Payment in Lieu of Annual Labor - AS 38.05.210 requires that labor will be performed or improvements made annually for the benefit or development of each mining claim, leasehold location, and mining lease on state land with few exceptions. Mine owners are allowed to make payments to the state in lieu of these obligations. The minimum amount of labor required to be expended for each mining claim or leasehold location is \$100 per 40-acre claim or \$400 per 160-acre claim. The amount reported for CY 2006 by DNR was \$0.2 million.
- Material Sales - AS 38.05.110-120 allow for material sales on state lands that are not applied for through the location system for mining claims. Materials such as sand, gravel, riprap, rock, limestone, slate, peat and other substances are measured and sold in cubic yards. Mines may sometimes need to purchase these materials from the state, making this a small source of state revenue from the mining industry. The amount reported for CY 2006 by DNR was \$1.8 million, including Mental Health Trust sales.
- Miscellaneous Fees - There are numerous other fees paid by mining companies to the state throughout the life of a mine. They include filing fees, surface application fees, bond pool payments, fines and penalties, annual placer mining application fees and others. The amount reported for CY 2006 by DNR was \$0.1 million.

## Local Mining Revenues

In addition to state government revenue, local governments in Alaska which have mines operating within their borders receive revenue from them. In 2006, local governments received a total of \$14.4 million from the mining industry.<sup>(1)</sup> These revenues primarily come from property taxes and sales taxes.

Mines located in the unorganized borough, such as the Pogo mine in the Southeast Fairbanks Census Area, pay no taxes to local governments, but they provide employment in areas which traditionally have had high unemployment rates, and may provide infrastructure such as roads and airstrips.

<sup>(1)</sup> Alaska's Mineral Industry 2006, Special Report 61, Table 27 page 54

### State Tax Revenues, Company Profitability and Metal Prices

The state's revenues from the mining industry are dominated by taxes: the mining license tax and the corporate income tax, both based on definitions of net income. Therefore, the state's revenue from mining rises as the mining industry's profits rise.

Figure 3-6 shows how the state's tax revenues have fluctuated with the value of metals production. There has been a 330-fold increase from the low of \$0.1 million in 2002 to the high of \$150.4 million in 2006, while the value of metals production less than tripled. State tax revenue increased far faster than metals values over that time

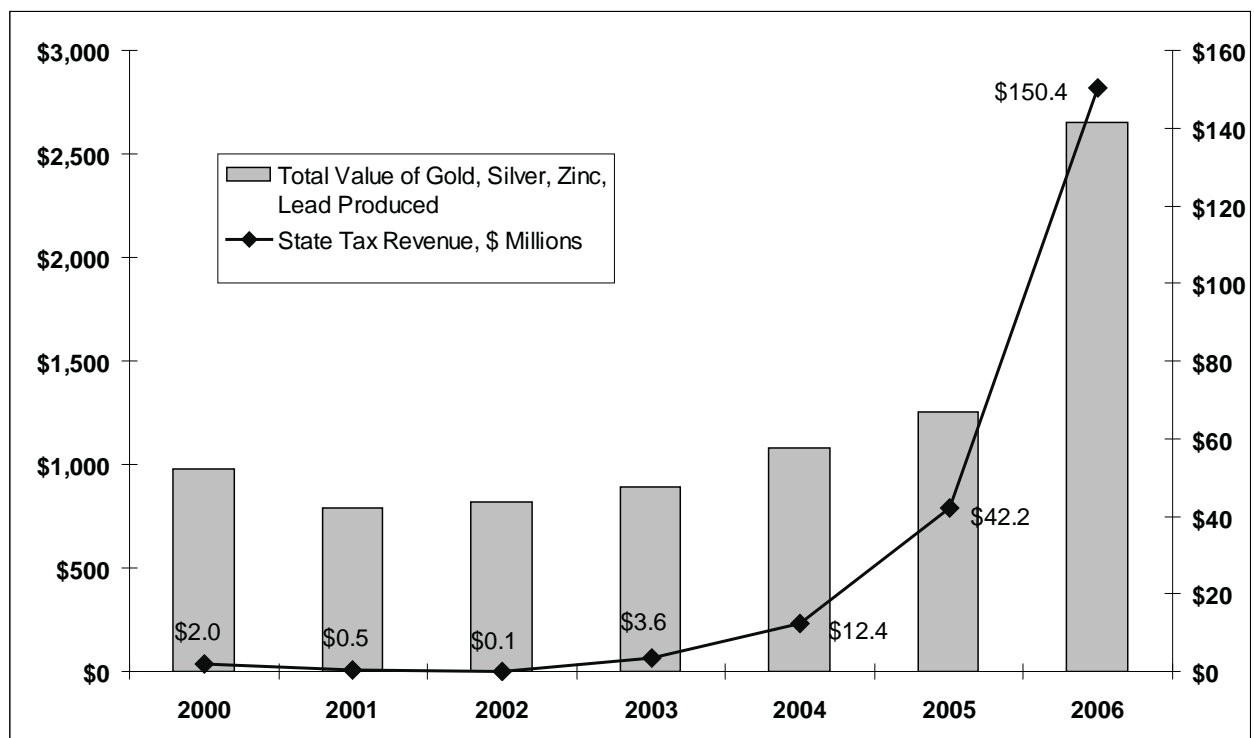
period because many mines in the state, and mining companies in general, went from being unprofitable or marginally profitable to being quite profitable, as evidenced by publicly available company reports and financial statements. Since the corporate income and mining license taxes are based on net income, the state has enjoyed a rapid rise in tax revenues from the mining industry.

Although the state's tax revenue may continue to increase if the value of metals production increases, the recent high rate of increase likely will not continue. Since most mines and mining companies are now solidly profitable, the relation between production value and state tax revenue should be more

linear in the future, provided metals prices remain above their historic levels. It is worth noting that since the mining license tax and corporate income tax are based on net income, increases in mining costs could lead to lower tax revenues, even if prices remain high.

Our current tax revenue forecast calls for revenues to decline somewhat in the middle of the next decade for two reasons: first, forecast metals prices are somewhat lower than current lofty levels, and second, two large mines, Fort Knox and Pogo, are projected to end operations. Even with these factors, the forecast calls for mining tax revenues to remain far above their historic levels.

Figure 3-6. State Mining Tax Revenue and Mineral Values (\$ million)



Sources: Alaska Department of Revenue and Alaska Department of Natural Resources

## Industry Overview

The mines surveyed here are those listed by the Large Mines group of the DNR. Figure 3-1 shows the locations of these large mines. There are also many small mines in operation in Alaska. However, our forecast focuses on the larger mines as they contribute most to the state's mining industry revenue.

The large mines covered in this section are presented in three groups: mines currently in operation, mines under development and mines in the exploration phase, which may be developed in the future.

We present the resources of the mines discussed in this section, since we believe that resources give the best indicator of the volumes that will eventually be extracted. There is a hierarchy of resources, with "reserves" being most certain and "inferred resources" the most tenuous. Reserves are legally and economically minable, with permits in place and a reasonable plan for mining. Measured, indicated and inferred reserves are increasingly speculative: they may not have permits in place, may not be economically extractable, and the exploratory work is increasingly incomplete. As mine operations progress, the operator continues exploration and permitting efforts, and it is expected that some or all of their inferred resources will eventually become minable reserves. The resources presented here are inferred resources, unless otherwise indicated.

### Mines Currently in Operation

In 2006, Alaska's metals and coal mines produced minerals worth \$2.86 billion, according to DNR.<sup>(2)</sup> More than 95% of this came from the major mines.

- Fort Knox/True North - Fort Knox and True North gold mines in the Fairbanks North Star Borough produced a total of 0.33 million troy ounces in 2006. The gold claims are on land belonging to several owners, including the Alaska Mental Health Trust Authority, a component of the state. The mines have resources amounting to 1.6 million troy ounces. The Fort Knox mine is currently expected to close in 2014, although recent discoveries there may extend that by as much as four years.
- Greens Creek - Greens Creek mine is located on the North tip of Admiralty Island, in the City and Borough of Juneau. The mineral claims are on Federal land, so the state receives no royalty payments from this mine. In 2005, the mine produced 8.9 million troy ounces of silver, 0.063 million troy ounces of gold, 0.059 million tons of zinc and 0.021 million tons of lead. The mine's resources are 42.8 million troy ounces of silver, 0.35 million troy ounces of gold, 0.31 million tons of zinc and 0.02 million tons of lead. The Greens Creek mine is currently expected to remain in operation for another 13 years, through 2020.
- Nixon Fork<sup>(3)</sup> - Nixon Fork mine is located in the Yukon Koyukuk Census Area, 32 miles north of McGrath. The mine operated from 1918 through 1964, and from 1995 through 1999. Resources amount to 0.16 million troy ounces of gold. It resumed production in 2007. With anticipated production of 0.044 million ounces per year, and reserves of 0.19 million troy ounces, the mine life is expected to be three to five years.
- Pogo - Pogo mine, in the Southeast Fairbanks Census Area, is 145 miles Southeast of Fairbanks. The mineral claims are on state land, and the mine can be expected to pay royalties to the state, assuming that it is profitable. Pogo is a gold mine, which produced 0.045 million troy ounces in 2006. Its resources are 4.0 million troy ounces of gold. The Pogo mine began production in 2006, and is currently in the three and a half year mining license tax exemption period. It will begin paying mining license tax in 2010, assuming that it is profitable. The Pogo mine is currently expected to remain in operation through 2016.
- Red Dog - Red Dog mine is in the Northwest Arctic Borough, north of Kotzebue. The mineral claims are on land owned by the NANA Corporation, so the state receives no royalties from this mine. Red Dog's production in 2006 was

<sup>(2)</sup> Alaska's Mineral Industry 2006: a Summary, D.J. Szumigala and R.A. Hughes, Information Circular 54, Division of Geological and Geophysical Surveys, March 2007.

<sup>(3)</sup> Nixon Fork is not included in the list of operating mines at the beginning of the chapter due to a temporary halt in production.

0.62 million tons of zinc and 0.13 million tons of lead. The mine's resources are 10.3 million tons of zinc and 3.0 million tons of lead, distributed across several adjacent ore bodies. Our forecast assumes that the mine owner will overcome some recent permitting problems and will be able to mine the adjacent ore bodies as the existing ore body is exhausted. The mine is expected to remain in operation through 2028.

- Usibelli - Usibelli coal mine is located near Healy, just north of the Alaska Range. The coal claims are on land held by Usibelli Coal Mine, Inc. The mine's 2006 production was 1.4 million tons of coal, and its resources are 250 million tons. Usibelli is expected to remain in operation throughout the forecast period.

In CY 2006, the large mines operating in Alaska produced 0.67 millions tons of zinc, 0.16 million tons of lead, 1.4 million tons of coal, 8.9 million troy ounces of silver, and 0.49 million troy ounces of gold. The inferred reserves, some or all of which will eventually be mined, include 10.6 million tons of zinc, 1.7 million tons of lead, 250 million tons of coal, 82 million troy ounces of silver, and 6.2 million troy ounces of gold.

### Mines Under Development

Mines under development are not yet producing, but activity has proceeded beyond the exploration phase and significant investments are taking place for future production. These mines typically have an estimated date for initial production, and have some or all of their permits in place. Of these mines, only the Kensington and Rock Creek mines are included in our current revenue forecast.

The Chuitna coal mine is not included because reliable data necessary for modeling is not available.

The resource amounts provided are the "inferred resources," some or all of which may become minable reserves.

- Chuitna – The Chuitna coal mine project is located in the Kenai Peninsula Borough, on the west side of Cook Inlet. The mineral claims are on land owned by several entities, including the state. PacRim Coal, the developer, has stated that the mine could produce three to twelve million tons of coal per year over the 25 year projected life of the mine. There is no definite date for production to begin. The mine currently has resources of 300 million tons of coal. The mine faces opposition from environmental groups. If successfully developed, the Chuitna coal mine will at least double Alaska's coal production, and might increase it by a factor of ten.
- Kensington - Kensington mine is located on the north side of Berners Bay, in the City and Borough of Juneau. The mine has resources of one million troy ounces of gold. Development work is complete, but the mine has been prevented from opening by a court decision which held that its tailings disposal plan was illegal. A new tailings plan has been negotiated between the developer, Coeur Alaska, and environmental groups that opposed the original plan. The mine should be able to begin production if the new tailings disposal plan is legally permitted. Our forecast assumes that Kensington will begin production in 2008 with an output of 0.1 million troy ounces per year, a significant addition to Alaska's current gold production.

- Rock Creek - The Rock Creek project includes the Rock Creek, Nome Gold and Big Hurrah deposits, three open pit gold operations near Nome. The project is in development, with production slated for 2008, with anticipated annual production of 0.1 million troy ounces. The nearby Nome Gold and Big Hurrah deposits are still in the exploration phase but should eventually contribute to the Rock Creek project. Resources for the three properties total 2.6 million troy ounces.

The projected annual production of these under development mines includes at least 3 million tons of coal and 0.2 million troy ounces of gold. The "inferred reserves" of these developing mines, some or all of which may eventually be mined, include 300 million tons of coal and 3.6 million troy ounces of gold.

### Mines in Exploration Phase

Mines in the proposal or exploration stages are indefinite, because their resources are not well-defined. Because of the speculative nature of mines in this category, none of them are included in our revenue forecasts.

The resources presented are "inferred resources," some or all of which may be produced.

- Donlin Creek - The Donlin Creek mine is in the Bethel Census Area on land owned by the Calista and Kuskokwim Native Corporations. It would be one of a few mines in the world which produce more than one million troy ounces of gold per year. This would nearly triple Alaska's current gold production, and could result in significant additional tax revenues for the state. The mine is currently estimated to have 20 million troy ounces of gold.



ounces of resources. The latest publically released timeline calls for development to begin in 2010, and for production to start as early as 2012. The mine life is expected to be 22 years.

- Niblack - Niblack mine is a copper, zinc, silver and gold prospect on Prince of Wales Island. The company is currently driving tunnels to enable exploratory drilling. Current resources include 0.25 million troy ounces of gold, 3.3 million troy ounces of silver, 0.048 million tons of copper and 0.090 million tons of zinc.
- Pebble - The largest project in this category is the Pebble mine, which has the potential to be one of the largest copper and molybdenum mines in the world. Its gold reserves could make it one of the largest gold producers in Alaska. The owners of this mine, Northern Dynasty Minerals and Anglo-American, are nearing the end of their exploration phase. They have plans to build a combined above and underground mine which would extract 0.22 million tons of ore per day. The potential lifespan of the mine is at least 30 years, and potentially far longer. Northern Dynasty's latest publically released timeline calls for development to begin in 2011 and production to begin in 2014. It is anticipated that the owners will produce an updated plan for development in 2008 or 2009, following the conclusion of exploration and analysis of the results. The current resource estimates are 30.1 million tons of copper, 0.5 million tons of molybdenum, and 71 million troy ounces of gold.

There are also at least two other potential large mines in Alaska which have not yet progressed far enough to begin the permitting process which has brought the others mentioned here to the attention of DNR. The Ambler project, northeast of Kotzebue in the southern edge of the Brooks Range, has resources of 0.8 million troy ounces of gold, 64 million troy ounces of silver, 1.6 million tons of copper, 2.2 million tons of zinc and 0.3 million tons of lead. Exploration continues, and there is not yet any timeline for development. The Shotgun project, south of Donlin Creek in southwest Alaska, has resources of 0.98 million troy ounces of gold.

The resources of these mines in the exploration phase include 2.3 million tons of zinc, 0.5 million tons molybdenum, 67.3 million troy ounces of silver, and 91.8 million troy ounces of gold.

If both Pebble and Donlin Creek mines are developed successfully, they would increase Alaska's gold reserves ten-fold. The Pebble mine alone could increase the value of mineral production in the state by about two thirds.

## Alaska's Mineral Potential

The Fraser Institute conducts an annual survey of approximately 3,000 companies in the mining industry, and uses the data to assess the manner in which mineral potential and public policy affect exploration investment. Based on the results of the survey, the Fraser Institute then ranks 65 countries, states and provinces around the world based on their attractiveness to mining exploration companies. The most recent sur-

vey, "Annual Survey of Mining Companies 2006/2007,"<sup>(4)</sup> was published in March 2007. Results presented in this section are from that survey.

The Fraser Institute ranks Alaska's public policy slightly above the median of the jurisdictions covered in the survey. This puts us in good company: our close neighbors in this ranking include Sweden, South Dakota and Mexico. The most attractive jurisdictions worldwide are Manitoba, Alberta and Nevada. Bolivia, Venezuela and Zimbabwe are the least attractive jurisdictions in the world, according to the Fraser Institute survey. Mineral potential puts Bolivia 26th, Venezuela 46th and Zimbabwe 62nd in the Fraser Institute ranking. However, political uncertainty and the threat of nationalization drag Bolivia and Venezuela down to 63rd and 64th respectively in the overall ranking, and Zimbabwe to the lowest ranking in the overall ranking at 65th place.

The Fraser Institute survey finds Alaska's mineral potential to be excellent. The survey found that, under optimal regulatory conditions for the mining industry and in the absence of land use restrictions, Alaska's mineral potential would make it the third most attractive jurisdiction in the world, behind only Canada's Northwest Territories and Brazil. Under our current regulatory environment and with our current land use restrictions, Alaska is the tenth most attractive jurisdiction out of 65.

Some survey respondents expressed concern over Alaska's environmental regulations, lack of infrastructure, and the uncertainty over which areas will be protected as wilderness or parks. At least 20% of the companies surveyed indicated that each of these problems would deter them from investing in

<sup>(4)</sup>The "Annual Survey of Mining Companies 2006/2007" can be found at [http://www.fraserinstitute.org/COMMERCE.WEB/product\\_files/Mining06rv2.pdf](http://www.fraserinstitute.org/COMMERCE.WEB/product_files/Mining06rv2.pdf).

Alaska. Alaska's strong points include political stability, security, labor and taxation, with less than 10% of the respondents saying that these issues would deter them from investing.

Alaska's current regulatory climate and tax laws are not a deterrent to investment for most of the Fraser Institute survey respondents, and Alaska's mineral potential makes it one of the most attractive jurisdictions in the world in which to invest.

## Conclusions

Alaska has five large mines in operation which, in 2006, extracted 0.67 million tons of zinc, 0.16 million tons of lead, 1.4 million tons of coal, 8.9 million troy ounces of silver, and 0.44 million troy ounces of gold worth approximately \$2.7 billion. Adding smaller mines, total minerals production value in Alaska was about \$2.9 billion in 2006.

There are currently three large mines in the development phase, which, if brought into production, would add significantly to Alaska's mineral resources, and could add to the state's mining revenue. These are the Kensington gold mine near Juneau, the Rock Creek gold mine near Nome, and the Chuitna coal mine near Cook Inlet.

There are several large mines in the exploration phase. These include two world class mines, Pebble and Donlin Creek. The Pebble Mine could be the largest mine in the state, and one of the largest in the world. Pebble is located on state land and would pay royalties to the state. The Donlin Creek mine could nearly triple the amount of gold mined in the state, and the Pebble mine has the potential to increase the value of Alaska's mineral production by

about two thirds.

According to the Fraser Institute survey, Alaska's public policies and mineral potential make it one of the most attractive jurisdictions in the world for mining industry investment. Even so, the timing of any eventual production from mines in the development and exploration stages is uncertain, as is shown by the case of the Kensington mine, which would be in operation today if not for its permitting problems. The timing of revenue from new mines is even more uncertain because the potential for loss carry forwards, which means that the starting date for corporate income tax revenue may be years later than the beginning of operations.

Our current forecast calls for state revenue from mining to decrease somewhat in the near future as minerals prices decrease. We expect state revenue from mining to begin to rise by 2012, and reach \$110.9 million by FY 2017, still below the current high of \$151.6 million. We currently forecast that GPUR from mining will reach 5.5% of total GPUR in FY 2017, up from 2.9% in FY 2007.

The number of large mines in development and in exploration, and the substantial resources which might be developed, show that mining could be an increasingly important source of revenue for Alaska. Our current forecast does not include any revenue from the world-class mines currently in the exploration stage. Between mines currently operating and new mines in development and exploration, Alaska's mining industry could provide a meaningful revenue cushion to help the state withstand forecasts for dwindling oil production and falling oil prices.

# 4. Oil Revenue

Figure 4-1. FY 2007 Oil Revenue \$5.2 billion

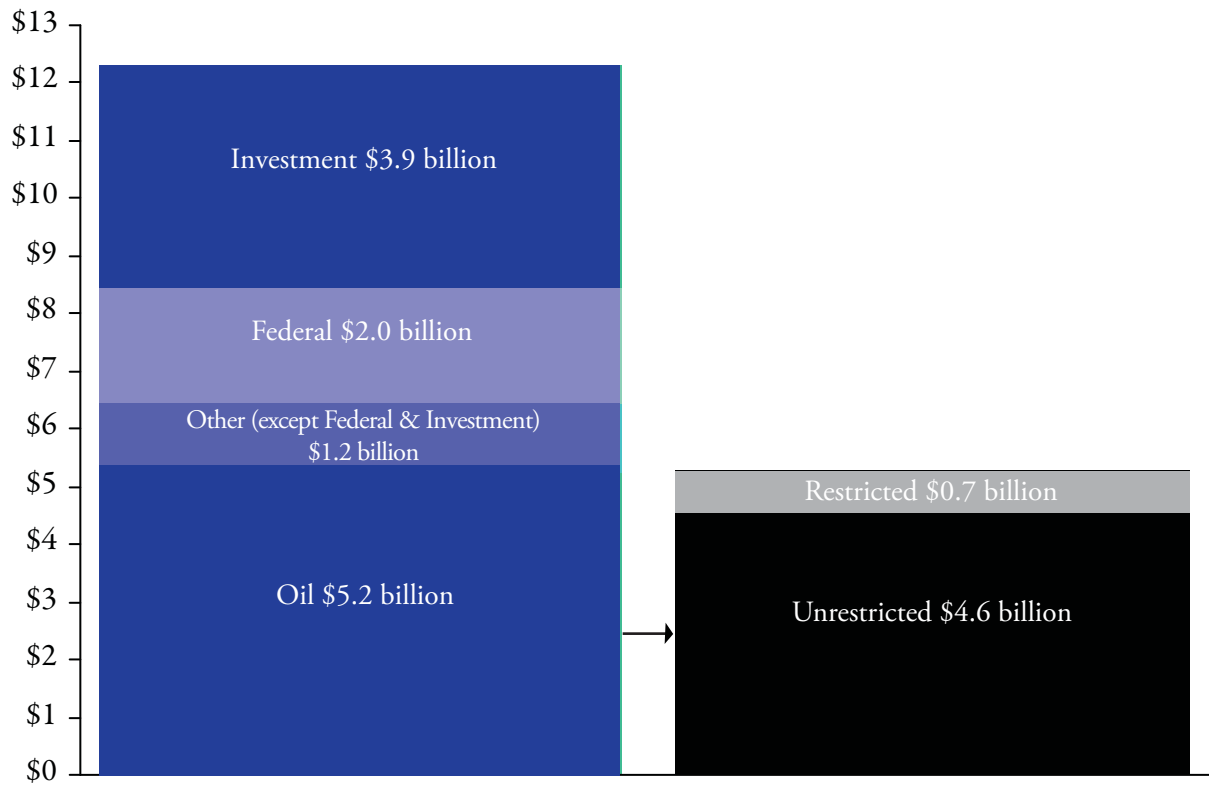


Figure 4-2. Total Oil Revenue, FY 2007 and Forecasted FY 2008-2009 (\$ million)<sup>(1)</sup>

Oil Revenue	History	Forecast	
	FY 2007	FY 2008	FY 2009
<b>Unrestricted</b>			
Property Tax	65.6	53.5	52.4
Petroleum Corporate Income Tax	594.4	598.9	594.6
Production Tax	2,292.3	3,404.3	2,201.2
Royalties (including Bonuses, Rents & Interest)	1,613.0	1,846.3	1,571.9
<b>Subtotal</b>	<b>4,565.3</b>	<b>5,903.0</b>	<b>4,420.0</b>
Increase/Decrease from Prior Period	866.1	1,337.7	(1,483.0)
% Change from Prior Period	23.4%	29.3%	-25.1%
<b>Restricted</b>			
Royalties to Permanent Fund & School Fund	545.7	629.6	537.6
Tax Settlements to CBRF <sup>(1)</sup>	113.6	20.0	20.0
NPR-A Royalties, Rents & Bonuses	12.8	5.2	5.1
<b>Subtotal</b>	<b>672.1</b>	<b>654.8</b>	<b>562.6</b>
Increase/Decrease from Prior Period	12.4	(17.3)	(92.2)
% Change from Prior Period	1.9%	-2.6%	-14.1%
<b>Total Oil Revenue</b>	<b>5,237.4</b>	<b>6,557.8</b>	<b>4,982.7</b>
Increase/Decrease from Prior Period	878.5	1,320.4	(1,575.1)
% Change from Prior Period	20.2%	25.2%	-24.0%

<sup>(1)</sup> The figures in these tables do not include a December 2007 settlement in the amount of \$379 million deposited into the Constitutional Budget Reserve Fund that will significantly increase FY 2008 restricted oil revenue.

## General Discussion

The state receives oil and gas revenue from four sources: oil and gas production tax, property tax, royalties and corporate income tax. The bulk of the revenue goes into the General Fund for general purpose spending. Of the royalties, 25% goes into the principal of the Alaska Permanent Fund and 0.5% goes into the Public School Trust Fund. There also are two other funds that receive specific oil and gas revenues: the National Petroleum Reserve-Alaska (NPR-A) Fund,<sup>(1)</sup> which receives the state's share of all lease bonuses from

sales in the NPR-A; and the Constitutional Budget Reserve Fund (CBRF), which receives settlements of tax and royalty disputes between the state and oil and gas producers.

Figure 4-2 presents the actual amount of oil revenue by source for FY 2007. As can be seen from the figure, royalties and the production tax constitute the largest part—about 85%—of restricted and unrestricted oil revenue combined. Figure 4-3 shows the department's unrestricted oil revenue forecast from the current fiscal year through FY 2017

by revenue category. This section begins with a discussion of these two revenue sources, both of which are driven by price and volume, and to a lesser extent lease expenditures. We then review the price forecasting methodology that underlies this biannual report, and discuss the linkage between market prices and wellhead values. We also review our production forecast, and close this section with a discussion of oil and gas property taxes, oil and gas corporate income taxes and the restricted portions of oil revenue.

<sup>(1)</sup> This fund implements a federal requirement that the state use its share of NPR-A oil revenue to satisfy the need of local communities most affected by development in the NPR-A. For detailed information on this fund, see Section XII-P of Treasury's Investment Policies and Procedure Manual.

## Unrestricted Oil Revenue

Figure 4-3. Unrestricted Oil Revenue, FY 2007 and Forecasted FY 2008-2017 (\$ million)

Fiscal Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Property Tax	65.6	53.5	52.4	51.2	50.0	48.8	47.6	46.5	45.4	44.2	43.1
Petroleum Corporate Income Tax	594.4	598.9	594.6	559.0	549.8	560.9	570.0	577.1	336.1	344.2	351.4
Production Tax	2,292.3	3,404.3	2,201.2	1,998.6	2,015.0	2,106.3	2,193.3	2,071.0	149.7	91.0	156.8
Royalties-Net <sup>(1)</sup>	1,613.0	1,846.3	1,571.9	1,518.2	1,508.9	1,510.5	1,513.1	1,503.4	840.0	838.0	834.9
<b>Total Oil Revenues</b>	<b>4,565.3</b>	<b>5,903.0</b>	<b>4,420.0</b>	<b>4,127.0</b>	<b>4,123.7</b>	<b>4,226.5</b>	<b>4,324.0</b>	<b>4,198.0</b>	<b>1,371.1</b>	<b>1,317.5</b>	<b>1,386.2</b>

Increase/Decrease from Prior Period	866.1	1,337.7	(1,483.0)	(293.1)	(3.3)	102.8	97.6	(126.0)	(2,826.9)	(53.7)	68.7
% Change from Prior Period	23.4%	29.3%	-25.1%	-6.6%	-0.1%	2.5%	2.3%	-2.9%	-67.3%	-3.9%	5.2%

<sup>(1)</sup> Includes bonuses and interest

## Crude Oil and Natural Gas Production Taxes

All oil and gas production in Alaska, except the federal and state royalty share and a small amount used for production, is subject to the state's production tax, and to the hazardous release surcharge, which is levied only on crude oil. Taxes and surcharges are collected on a monthly basis.

### The New Petroleum Tax Titled "Alaska's Clear and Equitable Share" (ACES)

In November 2007, the Alaska Legislature passed the Alaska's Clear and Equitable Share production tax (ACES), which made changes to the state's production tax system, retroactive to July 1, 2007. The previous production tax, entitled the Petroleum Profits Tax

(PPT), had been in place for one year prior to the passage of ACES. ACES is very similar to the PPT where both are based on net income (see Figure 4-4). For more than 20 years prior to the enactment of the PPT, the state used a production tax system that was based on the gross value at the point of production as adjusted by the Economic Limit Factor (ELF).

Figure 4-4. ACES Tax Liability Calculation

$$\text{ACES Tax Liability} = [(\text{Value} - \text{Costs}) * \text{Tax Rate}] - \text{Credits}$$

The terms used in the equation are defined as follows:

**Value** = Volume of Oil and Gas Produced x Wellhead Value

**Costs** = Operating Expenditures + Capital Expenditures

**Tax Rate** = 25% + 0.4% for every \$1 per barrel that this "net income" exceeds \$30

**Credits** = (20% x Capital Expenditures)\* + (20% x Eligible Transition Expenditures)\*\* + Base Allowance

\* spread over two years

\*\*Limited to those credits earned while the PPT was in effect and could not be used

The ACES tax calculation starts with the value at the point of production, and then subtracts upstream costs from this value to arrive at the “production tax value.” Each company that produces oil in Alaska has a production tax value based on this calculation, which is a term very similar in concept to a company’s net income. The production tax value is multiplied by the ACES tax rate—25%—to arrive at the base tax. Should the production tax value exceed \$30 per barrel of oil produced (or the equivalent in gas), the tax rate increases 0.4% for every dollar the per-barrel production tax value is over \$30. At \$92.50 the progressive factor changes to 0.1% for every additional dollar of profit on a barrel of oil. The maximum total tax rate is 75%.

A company’s ACES liability is also reduced to the extent that it invests in equipment, projects, or other items that are deemed “capital expenditures.” Capital expenditures generally include costs related to the purchase of drill rigs or other equipment, infrastructure, exploration, and facility expansion. These costs, which are capitalized on company financial statements, are immediately expensed under ACES to arrive at the production tax value. Capital costs are eligible for a 20% credit against the company’s ACES liability, but they must be spread over two years. The legislature specifically disallowed capital expenses of \$0.30 per barrel under ACES.

The 20% capital expenditure credit is intended to encourage re-investment in Alaska.

One other significant credit rounds out the ACES plan: A base allowance credit of up to \$12 million per year, granted to companies that qualify for the credit.

To paint a “broad brush” picture, both ACES and PPT are similar in that both are based on net income. ACES has a higher base tax rate than PPT, as well as a steeper increase in the progressive surcharge—the tax that increases as the net income per barrel increases. In addition, the “trigger” price at which the progressive surcharge is activated under ACES is lower than the trigger price under PPT. Thus, under ACES the tax rate begins increasing at a lower net income per barrel than under PPT. The higher base tax rate combined with the higher progressive surcharge rate calculates to a higher maximum tax rate than under the PPT, at 75% for ACES and 47.5% for PPT.

With regard to lease expenditures and transportation charges, ACES has more stringent definitions of “reasonable” lease expenditures than PPT. ACES requires a standard deduction for Prudhoe Bay and Kuparuk operating expenditures that is equal to the operating expenditures claimed on 2006 tax returns, increasing at a rate of 3% per year.<sup>(2)</sup> ACES also does not allow expenditures for costs associated with unplanned downtime.

With regard to credits, ACES limits Transition Investment Expenditures (TIE) credits to those companies that, as of December 31, 2007, had no production against which to apply credits earned for capital expenditures made between April 1, 2006 and December 31, 2007. Both ACES and PPT have credits for 20% of qualified capital expenditures, but ACES allocates the credits over a two-year period, whereas PPT allowed the full use of the credits in the years they were earned.

A direct comparison of ACES and PPT is shown in Figure 4-5. In a year when

the price of Alaska North Slope crude sold on the West Coast (ANS WC) is above \$25 per barrel, ACES will generate more production tax revenue for the state than PPT due to a higher base tax rate, steeper progressivity, limited credits and new limitations on lease expenditures.

## Hazardous Release Surcharge

The Oil and Hazardous Substance Release Prevention and Response Fund was created by the legislature in 1986 to provide a “readily available funding source to investigate, contain, and clean up oil and hazardous releases.” An amendment in 1994 divided the fund into two separate accounts comprised of: (1) the Response Account which requires a surcharge on all oil production, except federal and state royalty barrels, that may be used to finance the state’s response to an oil or hazardous substance release declared a disaster by the governor; (2) the Prevention Account which is an additional surcharge on all oil production, except federal and state royalty barrels, that may be used for the clean up of oil and hazardous substance releases not declared a disaster by the governor. This account can also be used to fund oil and hazardous substance release prevention programs in Alaska.

With the passage of the PPT, the Response surcharge (AS 43.55.201) was changed from \$.02 to \$.01 and the Prevention surcharge (AS 43.55.300) was increased from \$.03 to \$.04. Both of these changes were effective April 1, 2006.

The Response surcharge is suspended when the balance of the Response account is equal to or exceeds \$50

<sup>(2)</sup> The standard deduction for the Prudhoe Bay and Kuparuk River units is equal to the amount of operating expenditures claimed, as adjusted by audit, times 137%. The standard deduction is set to sunset at the end of calendar year 2009.

Figure 4-5. Comparing ACES and PPT, Major Points

		<b>ACES</b>	<b>PPT</b>
<b>Estimating Value at Point of Production</b>	Use the price of ANS sold on the West Coast minus transportation charges	<b>Yes</b>	<b>Yes</b>
	Restriction on Transportation Costs	<b>Yes</b>	<b>Yes</b>
		Note: more stringent definition of reasonable than under PPT	Reasonable
<b>Lease Expenditures</b>	Meet IRS rules for "Ordinary & Necessary"	<b>Yes</b>	<b>Yes</b>
		[1] Must be the "direct" costs of exploring for, developing, or producing	[1] Must be the "direct" costs of exploring for, developing, or producing
		[2] Must be affirmatively allowed by regulations	
	Expenditure Exceptions:	<b>Yes</b>	<b>Yes</b>
		[1] items excluded in the 2006 Statutes include depreciation, interest charges, penalties, dismantlement, arbitration charges and other charges.	[1] items excluded in the 2006 Statutes include depreciation, interest charges, penalties, dismantlement, arbitration charges and other charges.
		[2] cannot be for repair or replacement related to unplanned interruptions or for violations of laws, leases, permits or licenses.	
		[3] have a standard deduction for Prudhoe Bay and Kuparuk	
	Capital Expenditure reduction for unplanned downtime	<b>\$0.30 per barrel</b>	<b>\$0.30 per barrel</b>
<b>Tax Rate</b>	Base Rate	<b>25.0%</b>	<b>22.5%</b>
	Calculation of <u>Base</u> Tax Rate	<b>Annual</b>	<b>Annual</b>
	<u>Net</u> Profit per Barrel that triggers additional tax	<b>\$30</b>	<b>\$40</b>
	Increase in tax rate for every \$1 increase in per barrel profit	<b>0.40%</b>	<b>0.25%</b>
		Note: at a <u>net</u> profit of \$92.50 per barrel, the increase in tax rate changes to 0.10%	
	Limit on Tax Rate	<b>75.0%</b>	<b>47.5%</b>
<b>Credits</b>	Capital Expenditures	20% of CAPEX spread over at least two years	20% of CAPEX in first year
	Transitional Investment Expenditure [TIE]	20% of CAPEX credit only available to companies with no production before January 1, 2008, and credit limited to 10% of new investments between April 1, 2006, and Dec. 31, 2007	20% of CAPEX for five year period prior to April 1, 2006
	Exploration	<b>Yes</b>	<b>Yes</b>
		Up to 40% credit for oil & gas exploration wells and extends eligibility to delineation wells.	Up to 40% credit for oil & gas exploration wells.



million. As of September 30, 2007, the cumulative balance of the account was \$44.1 million. The Response Surcharge was re-imposed effective April 1, 2007, by the Department of Revenue.

## Crude Oil Prices, Lease Expenditures, Transportation Costs and Crude Oil Production: Forecasting Methodology & Assumptions

Estimating oil revenue for the state entails projecting four factors:

1. Crude Oil Prices
2. Lease Expenditures
3. Transportation Charges
4. Crude Oil Production

This section reviews each of these factors.

The crude oil price forecast is the product of a price forecasting session that includes professionals from the Department of Revenue, Department of Natural Resources, Department of Labor, the Governor's Office of Management and Budget, the Division of Legislative Finance, the University of Alaska and industry experts.

To forecast lease expenditures, the Department of Revenue uses data from earlier filings for a base and projects future expenditures based on volume forecasts, industry cost trends and confidential taxpayer submitted data. In the future,

the taxpayers will provide projections on expenditures to assist the department in forecasting future lease expenditures.

To forecast transportation charges, the Department of Revenue uses two models—one that estimates tariffs under the Trans Alaska Pipeline Settlement Methodology (TSM) and another model that estimates tariffs under a cost-based model. The ACES allows “reasonable” costs to be subtracted as transportation charges. For our forecast, we assume the tariffs estimated under the TSM and the cost-based models are “reasonable.”

To forecast crude oil production volumes, the Department of Revenue uses an engineering consultant in conjunction with assistance from the Department of Natural Resources and the Alaska Oil and Gas Conservation Commission. The statewide production volume forecast is summed from projections of oil and gas production by field.

Each of these four forecasted items play an important role in determining the level of revenue anticipated from oil. These four items are “plugged in” to the department's official forecast model to produce an official revenue forecast. The basic data from these items are shown in Figure 4-6.

For many years, the levels of revenue accruing to the state from oil production have been contingent primarily on (1) oil prices; and (2) production volumes. With the implementation of the PPT, and now with ACES, a third factor influences the level of revenues anticipated from oil production—costs related to exploring for, developing, and producing oil, which are deductible under the production tax as “lease expenditures.”

Figure 4-7 presents a matrix that shows the sensitivity of oil revenues to various

combinations of oil prices and production costs. Note that as prices increase, revenues also increase, but the increases are smaller if costs also increase. Although the department is still studying the impacts of oil price increases on cost increases, economists have recognized that a relationship exists and have attempted to build this oil price-cost relationship (called “elasticity” in economic terms) into revenue forecasting models. Another challenge for the department will be to forecast petroleum investment trends as oil prices move up and down.

### 1. Crude Oil Prices

#### Methodology

The department uses a modified Delphi technique<sup>(3)</sup> to create its official price forecast. Participants are asked for their projections for West Texas Intermediate (WTI) crude oil for three cases—a Low case, a High case and a Most Likely case. The prices that are forecast are in real 2007 dollars. The Department of Revenue projects the differential between WTI and ANS and uses a projection of inflation to arrive at the nominal dollar forecast used in this publication.

At the Fall 2007 forecasting session, the International Energy Agency (IEA) delivered a presentation on its Medium-Term Oil Market Report that covered a number of topics to assist the participants in making their forecasts. The topics reviewed were worldwide economic growth, oil demand, oil supply for both the countries belonging to the Organization of Petroleum Exporting Countries (OPEC) and non-OPEC countries, geopolitics and refining. In addition, Department of Revenue economists presented information on crude oil prices that included history, forecasts from

<sup>(3)</sup> The Delphi method is a forecasting technique developed by the RAND Corporation that obtains a forecast by eliciting and refining individual forecasts from a group of independent experts. For more information, see the 1967 RAND Corporation paper “Delphi” by N.C. Dalkey, [www.rand.org/pubs/papers/p3704/](http://www.rand.org/pubs/papers/p3704/).

Figure 4-6. Basic Data Used for ANS Oil &amp; Gas Production Taxes

	FY 2007 History	FY 2008 Forecast	FY 2009 Forecast
<b>State Production Tax Revenue from the North Slope</b>			
Millions of Dollars	2,286.3	3,398.0	2,195.0
<b>Key North Slope Assumptions</b>			
Price of ANS WC in dollars per barrel	61.63	72.64	66.32
Transit Costs & Other in dollars per barrel	5.96	6.34	6.80
ANS Wellhead in dollars per barrel	55.67	66.30	59.32
Production in barrels per day	739,702	730,942	700,686
Royalty barrels per day	92,463	91,368	87,586
Taxable barrels per day	647,239	639,574	613,100
Lease Expenditures in Millions of Dollars			
Operating Expenditures [OPEX]	2,081	2,149	2,354
Capital Expenditures [CAPEX]	1,578	2,188	2,002
Total Expenditures	3,659	4,337	4,356
<b>Implied North Slope Data</b>			
Credits from CAPEX in Millions of dollars	315.6	219.0	418.9
Lease Expenditures per barrel of oil produced			
OPEX	7.71	8.05	9.21
CAPEX	5.84	8.20	7.83
Total Expenditures	13.55	16.25	17.03
Average Production Value per Barrel [Pre-Tax]	42.12	50.05	42.49
Production Tax Collected per Taxable Barrel	9.68	14.56	9.81

**Notes**

- 1 Costs for FY 2007 are unaudited and for the entire North Slope. Cost data reported July 2006 through December 2006 are actuals. January 2007 through June 2007 are estimates
- 2 Costs for FY 2008 and FY 2009 are estimated after having reviewed the annual filings from oil companies and incorporating adjustments based on our assessment of future cost increases.
- 3 Assumptions for the transitional credits and the \$12 million credits are not included in the table.
- 4 The average production value per barrel presented in this table would differ from estimates the oil companies would prepare for tax liability purposes for several reasons: [a] the data in the chart are North Slope wide averages; [b] different companies have different cost structures and operate in different fields; [c] a company computing this average for tax liability purposes would only include the barrels it gets to keep, i.e., the company would exclude the barrels it pays in royalty.
- 5 FY 2008 ANS West Coast price forecast is as of November 30, 2007.

Figure 4-7. Sensitivity of State Oil Revenues to Changes in Prices and Costs

Estimated Unrestricted Oil Revenue, at Forecast Levels, and with Price and Cost Sensitivity (\$ millions)							
<i>Fiscal Year 2008</i>				<i>Fiscal Year 2009</i>			
Forecast Costs	Forecast Price <sup>(1)</sup>	High Price <sup>(2)</sup>	Low Price <sup>(2)</sup>	Forecast Costs	Forecast Price	High Price	Low Price
	\$72.64	\$81.45	\$62.80		\$66.32	\$87.60	\$47.35
Royalty (Unrestricted) <sup>(3)</sup>	1,846	2,093	1,571	Royalty (Unrestricted) <sup>(3)</sup>	1,571	2,125	1,087
Production Tax	3,404	4,647	2,368	Production Tax	2,201	4,576	777
Corporate Income Tax	599	652	543	Corporate Income Tax	595	745	415
Property Tax (to State)	54	54	54	Property Tax (to State)	52	52	52
<b>Total Unrestricted Oil Revenue</b>	<b>5,903</b>	<b>7,445</b>	<b>4,536</b>	<b>Total Unrestricted Oil Revenue</b>	<b>4,420</b>	<b>7,498</b>	<b>2,331</b>
<b>High Costs - 110% times forecast costs</b>	<b>Forecast Price</b>	<b>High Price</b>	<b>Low Price</b>	<b>High Costs - 120% times forecast costs</b>	<b>Forecast Price</b>	<b>High Price</b>	<b>Low Price</b>
Royalty (Unrestricted) <sup>(3)</sup>	1,846	2,093	1,571	Royalty (Unrestricted) <sup>(3)</sup>	1,571	2,125	1,087
Production Tax	3,228	4,448	2,236	Production Tax	1,864	4,159	563
Corporate Income Tax	599	652	543	Corporate Income Tax	595	745	415
Property Tax (to State)	54	54	54	Property Tax (to State)	52	52	52
<b>Total Unrestricted Oil Revenue</b>	<b>5,727</b>	<b>7,246</b>	<b>4,404</b>	<b>Total Unrestricted Oil Revenue</b>	<b>4,082</b>	<b>7,081</b>	<b>2,117</b>
<b>Low Costs - 90% times forecast costs</b>	<b>Forecast Price</b>	<b>High Price</b>	<b>Low Price</b>	<b>Low Costs - 80% times forecast costs</b>	<b>Forecast Price</b>	<b>High Price</b>	<b>Low Price</b>
Royalty (Unrestricted) <sup>(3)</sup>	1,846	2,093	1,571	Royalty (Unrestricted) <sup>(3)</sup>	1,571	2,125	1,087
Production Tax	3,584	4,849	2,502	Production Tax	2,575	5,023	986
Corporate Income Tax	599	652	543	Corporate Income Tax	595	745	415
Property Tax (to State)	54	54	54	Property Tax (to State)	52	52	52
<b>Total Unrestricted Oil Revenue</b>	<b>6,083</b>	<b>7,647</b>	<b>4,670</b>	<b>Total Unrestricted Oil Revenue</b>	<b>4,793</b>	<b>7,945</b>	<b>2,540</b>

<sup>(1)</sup> The forecast price for FY 2008 includes five months of actual prices, which raises the forecast price from \$71.65 to \$72.64.

<sup>(2)</sup> The High Price and Low Price are obtained from the department's crude oil price forecasting session

<sup>(3)</sup> Includes Bonuses, Rents and Interest

other organizations and results from the pre-meeting price solicitation.

At the end of the meeting the participants completed the post-meeting price solicitation form and Department of Revenue economists compiled and reviewed all results. The Most Likely case was selected for the official price forecast for the years FY 2008 to FY 2014. The High and Low cases are used to provide sensitivity analysis on potential state revenue (see Figure 4-7)

The long-term forecast begins in FY 2015 and those prices did not change from the Spring 2007 forecast.<sup>(4)</sup>

### Assumptions

Many factors contribute to the pricing of oil on the world market, including the economy, fundamental factors of supply and demand and geopolitical events. Other related issues, such as the impact of the financial sector, refinery capacity and configuration and weather help determine how oil is priced.

These factors have all been considered in establishing our oil price forecast.

The major petroleum-related events of 2007 are described below, followed by an examination of supply and demand projections.

### Oil Price Volatility

For the 12 months ending November 30, 2007, crude oil prices exhibited extreme volatility increasing by almost \$50 per barrel or more than 100% from a low of \$47.72 per barrel in January 2007 to a high of \$96.93 in November 2007 (see Figure 4-8). One day swings were as large as \$3.80 per barrel in November and the basis for some of these large daily changes were changes in sen-

timent. For example, on November 13 prices declined \$3.45 per barrel or 3.7% as three different stories were distributed on various media: (1) The International Energy Agency reduced its global oil demand outlook for 2007 and 2008; (2) Brazil announced a large crude oil discovery varying in size between 5 and 8 billion barrels; and (3) Crude oil contracts of \$100 per barrel for delivery in December 2007 expired worthless on the New York Mercantile Exchange (NYMEX).

This change in sentiment is usually driven by a perception of future fundamentals—the issues of supply and demand. On the demand side, many hold the view that worldwide demand will increase in spite of the high oil prices because the emerging economies—such as China and India—are growing rapidly and the high crude oil prices will not slow their growth, or their use of oil. Thus, there is a perception that oil demand will continue to grow in spite of high oil prices. The press release distributed by the IEA on November 13 helped dispel the notion of demand growing unabated and contributed to a decline in oil prices. When a press report released on November 30 stated that economic growth will decline, crude oil prices fell another \$2.30 per barrel. Thus, information that sheds light on the future impacts prices.

On the supply side, there is a perception that there is limited spare crude oil production capacity; that many countries cannot increase their crude oil production, and the world is nearing its “peak” crude oil production capacity. At the October 17-20 World Oil Conference, the CEO of ConocoPhillips repeated a statement about a permanent ceiling on

oil production when he said: “I don’t think we are going to see the supply going over 100 million barrels a day.”<sup>(5)</sup> (The world is currently producing about 85 million barrels per day). Several people echoed this sentiment and Shoki Ghanem, Chairman of Libya’s National Oil Company said: “There is a real problem that supply may not increase beyond a certain level, say around 100 million barrels (per day). In some countries production is going down and we are not discovering any more of those huge oil wells that we used to discover in the 1960s or the 1950s.”<sup>(6)</sup> For a supply chain that is stretched “thin,” any disruptions that reduce supplies can have an immediate impact on price. The announcement on November 13 that Brazil had another major find in deep water helped dispel the notion of a lack of additional supplies—and that announcement also helped drive crude oil prices lower. When OPEC announces it will—or will not—change its production levels, these statements impact prices because they help people understand the manner in which the future will unfold.

Another part of the puzzle is the trading of crude oil options and futures. The number of contracts being traded on the NYMEX is in the tens of thousands. When an event occurs that provides information on future crude oil supplies or future crude oil demand, traders can react to that news and buy or sell contracts based on the news and their interpretation of what it means for future prices. Thus, the volatility is, in part, a function of the NYMEX and the electronic media that allows news to travel worldwide in seconds. But the drivers behind news are the fundamentals—the

<sup>(4)</sup> According to the department’s price forecasting protocol, long-run crude oil price projections can only be changed every two years if Delphi forecasting participants agree to a change over the prior two consecutive fall forecasting sessions.

<sup>(5)</sup> See [http://www.aspo-usa.com/index.php?option=com\\_content&task=view&id=252&Itemid=91](http://www.aspo-usa.com/index.php?option=com_content&task=view&id=252&Itemid=91)

<sup>(6)</sup> Ibid

future volume of available supplies and the future volume of demand. These perceived future volumes are shaped by current events and translated into action by traders on the NYMEX.

### Oil Price Scenarios

With our official price scenario we believe that global economic growth is slowing but remains strong. We assume that oil will continue to be a competitive energy resource. And finally, we forecast that the current high price environment will encourage OPEC and non-OPEC oil-producing countries to continue to explore ways to increase production from existing facilities and to seek out new production opportunities. Figure 4-9 charts historical ANS WC prices along with the High, Official, and Low price scenarios.

### What can we expect looking forward?

For the next few years, we can expect ANS WC prices to remain volatile and probably above \$60 per barrel on an average annual basis. Suggesting that volatility will remain high means that for any given year, prices could vary between \$30 and \$120 per barrel. The reasons we expect prices to remain high by historical standards are the fundamentals. We do not expect a recession, which means economic growth will continue—and this implies higher incomes and higher oil demand. For the Official Price Forecast, we see moderate economic growth with most of the growth in oil demand occurring outside of the industrial world in countries like China, India, the United Arab Emirates and Malaysia. Due to the slower growth in the industrial world (such as the United States and Europe) there will be a reduction in exports from countries such as China—and that is the reason their economies will not grow at the

rapid pace of the last five years. Also, the higher prices will continue to put downward pressure on oil demand in the industrial countries.

On the supply side, the limited spare crude oil production capacity means that whenever there is a problem (cold snap, supply outage from weather or geopolitical event), crude oil prices could “spike” higher. Because the nations belonging to OPEC are monitoring and adjusting their production volumes, it is not apparent they will allow crude oil prices to decline for a prolonged period. That is to say, if prices fell to \$35 per barrel, the members of OPEC would likely reduce production to increase prices. Overall, crude oil supplies will be fairly “tight” during the next few years.

In the longer term, we see the high prices coming down to historical levels as “all things can change.” The availability of alternative sources to create transportation fuels combined with rapid advances in technology mean that other options will likely become available before 2020—especially if prices remain relatively high through 2014.

On the demand side, high prices do matter. By historical standards, the prices seen today are higher than any time since 1862 in constant dollars. U.S. consumption of transportation fuels declined in 2006 and high current prices may extend the trend. High prices will limit economic growth—not only in the U.S. but worldwide. Due to the lower level of energy intensity, the time frame for having an impact on oil demand is not clear.

What is clear is that people perceive there is a shortage of crude oil and people perceive economic growth and growth of oil demand will outstrip the

available resources. Until those perceptions change, prices will remain high.

### Forecast

Since our Spring 2007 forecast, ANS crude prices have broken record after record, most recently closing at \$96.93 per barrel on November 20, 2007. The Department of Revenue’s fiscal year end forecast for ANS crude for 2008 is \$71.65. The price of benchmark West Texas Intermediate is forecasted to average \$71.25 in FY 2008, implying an average premium for ANS of \$.40 per barrel for the fiscal year. For most of the calculations throughout this forecast, we incorporate actual prices for the first five months of the fiscal year which increases our ANS crude price forecast for FY 2008 to \$72.64.”

In fall 2006, we increased our WTI oil prices for the period FY 2015 and beyond, from \$25.50 per barrel in real terms to \$36 per barrel.<sup>(7)</sup> This follows the department’s protocol that participants in the forecasting session elected to change long-run prices in the prior two consecutive fall forecasts. Our long-run forecast will not change until fall 2008 at the earliest. The inflation rate is 2.75% per year based on Callan Associates Inc. 5-year capital market assumptions.

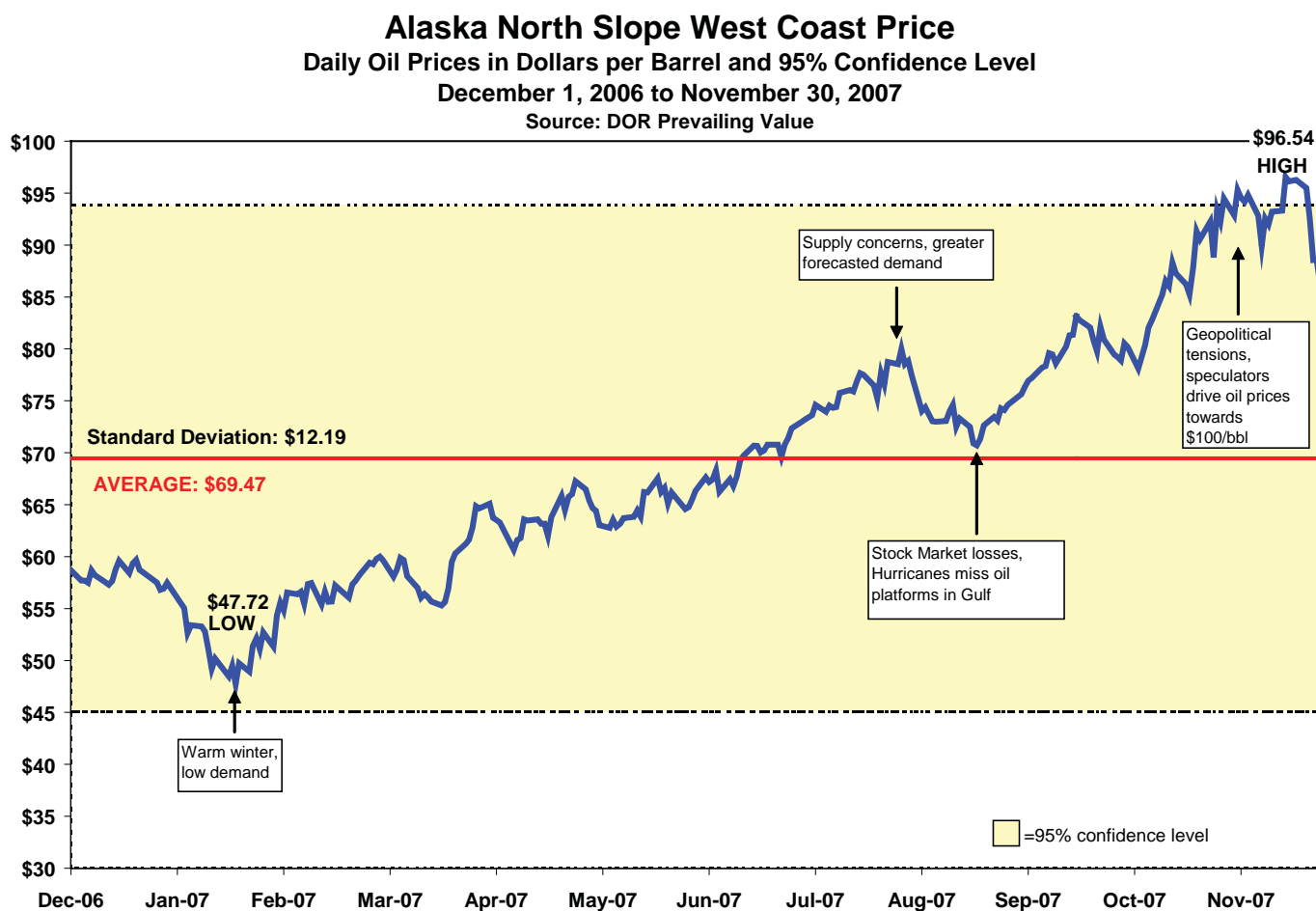
Factors that could lead to lower or higher prices are:

### Low-Price Scenario

- A recession that starts in the U.S. and spreads worldwide. Since China is a major exporter to the United States, a contraction in the U.S. economy would have repercussions for China and other developing nations that export to the industrial world.

<sup>(7)</sup> This translates to \$43.55 per barrel in nominal terms in FY 2015, and then increases at 2.75% per year with inflation.

Figure 4-8. ANS Crude Price Volatility



Note: 95% confidence level equals two standard deviations, or +/- \$24.38 from the average of \$69.47 per barrel

- Decreased oil demand due to several factors. First is the reduction in oil demand associated with a reduction in economic activity. Second is a reduction in demand associated with more energy efficient equipment—both at the household level and at the business level. The movement to greater energy efficiency is not new and the high prices of recent years are accelerating the trend.
- Increased oil supplies from several areas. First, investments made by many oil companies to increase crude oil supplies in Non-OPEC coun-

tries in the last few years are about to begin “bearing fruit” and additional supplies should be forthcoming. Second, as demand decreases, OPEC will decrease its crude oil production—which means spare crude oil production capacity will increase. It is not clear OPEC can maintain discipline reducing supplies, thus, there could be more than ample supplies from OPEC. Should the additional supplies from non-OPEC countries come on-line at the same time demand is declining and OPEC struggles to reduce production, there could be more supplies

than needed—and prices could come down rapidly.

- The financial markets could amplify the downward trend if traders believe prices will fall. In this scenario, traders buy “puts” for prices to decline and accelerate the downward trajectory.
- Geopolitical unrest, but no major disruptions.

#### High-Price Scenario

- Robust economic growth. In this scenario there is no recession in the

US and worldwide economic growth continues at the rapid pace seen during the last five years. The constraints are on factors of production such as labor, and resources such as steel.

- Not only does oil demand increase but it does so at an accelerated pace. The developing countries of China, India, Saudi Arabia, Qatar, the United Arab Emirates and others struggle to produce enough energy for their expanding economies and new petrochemical plants, and also enough fuel for all the new automobiles that are being sold in the developing world. While there are technological improvements to improve energy efficiency, those improvements are dwarfed by the magnitude of additional demand from increased economic activity and additional automobiles and air transport demand.
- On the supply side, the investments made by oil companies during the last few years do not provide the additional supplies initially envisioned. Lower productivity and additional nationalizations limit non-OPEC volume increases. At the same time, OPEC nations limit their production to ensure prices remain fairly high.
- The financial markets play their part by amplifying the trends set by the fundamentals. In this scenario, traders buy “call” options on the expectation that prices would rise.
- There is geopolitical instability with unanticipated supply disruptions.
- The U.S. Dollar continues to weaken vs. world currencies. This translates to higher oil prices.

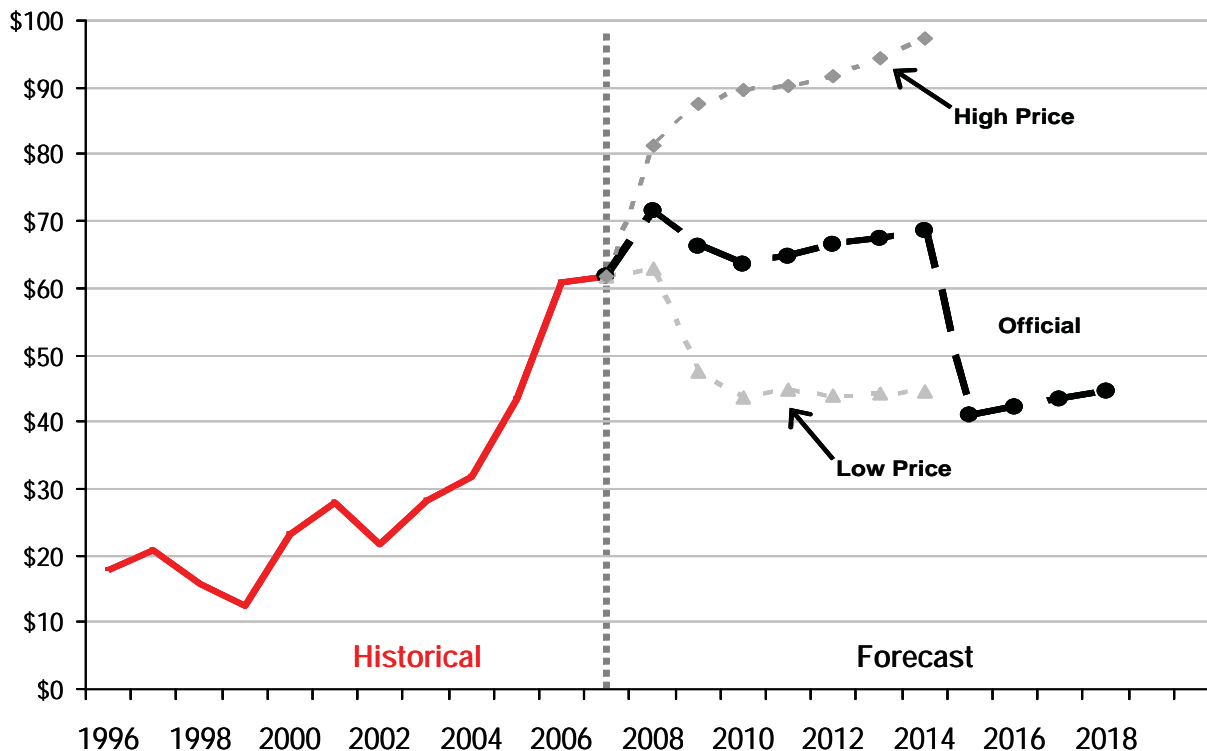
## 2. Lease Expenditures

The passage of the PPT required the Department of Revenue to forecast lease expenditures, a task the department had never before undertaken for tax purposes. Lease expenditures are defined in part as the upstream costs that are the direct costs of exploring for, developing, or producing oil or gas deposits. When the department undertook this task for the first time in 2006, it had very little information on which to base its forecast.

### Methodology

The first annual filing of the PPT provided the department with much needed data for the purpose of forecasting lease expenditures. In addition to having more accurate information about the magnitude of spending on

Figure 4-9. Fall 2007 Official, Low and High ANS Oil Price Scenarios (nominal \$ per barrel)



oil and gas production, the tax returns provided insight into whether the costs were capital or operating expenditures. Forecast models were adjusted to take into account this new information.

The department also uses several other means to forecast lease expenditures, including consulting other taxpayer-submitted information, such as plans of development, federal partnership returns, and other documentation. Production profiles are reviewed, as well as publicly available information on estimated costs to bring new fields online and projected start-up dates.

With the passage of ACES, the department will also require taxpayers to submit forward-looking lease expenditure information twice annually. We expect this requirement will greatly enhance the department's forecasting ability.

### Forecast

We forecast Operating Expenditures of \$2.1 billion for FY 2008 and \$2.4 billion for FY 2009. Capital Expenditures are estimated at \$2.2 billion and \$2.0 billion for FY 2008 and FY 2009,

respectively. Total forecasted lease expenditures are \$4.3 billion for FY 2008 and \$4.4 billion for FY 2009.

## 3. Transportation Charges and Other Production Costs

Taxpayers subtract marine transportation costs, the Trans Alaska Pipeline System (TAPS) tariff, feeder pipeline tariffs and an adjustment for quality bank charges from the appropriate destination value to arrive at a wellhead value. This wellhead value calculation shown in Figure 4-10 for FY 2007-2018 is the basis for state royalty and production tax payments.

### Marine Transportation Costs

Crude oil deliveries to Valdez are shipped to Washington and California refineries by tanker. State-of-the-art double-hulled tankers known as "Alaska Class" vessels are now the standard. The mandated replacement of vessels without double hulls with new, more expensive double-hulled vessels, and the continued use of smaller qualified vessels to replace larger vessels retired by compliance with the Federal Pollution

Act of 1990 have increased tanker transportation costs. We forecast a modest increase in tanker transportation costs will be necessary in order to maintain the integrity of the fleet.

### Trans Alaska Pipeline System (TAPS) Tariff

The TAPS tariff for FY 2008 is calculated according to the methodology established in the 1985 settlement agreement. A cost-based tariff model is used to forecast the rates for FY 2009 and subsequent years.

In 1985, the TAPS Settlement Agreement (TSA) established the TAPS Settlement Methodology (TSM) for each carrier to use to calculate their annual TAPS tariff. The TSA expires at the end of 2011, but the agreement has a provision that allows parties to open negotiations on a follow-on agreement after December 31, 2006. That provision was triggered on January 1, 2007, and negotiations are on-going.

If an agreement is not reached within a two-year period, any party has the right to terminate the agreement. It is thus

**Figure 4-10. Fall 2007 Forecast Assumptions, FY 2007 and Forecasted FY 2008-2018 (nominal \$ per barrel)**

Fiscal Year	2007	2008 <sup>(1)</sup>	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
ANS West Coast Price	61.63	72.64	66.32	63.40	64.75	66.35	67.45	68.55	41.05	42.25	43.45	44.72
ANS Marine Transportation	1.79	1.34	1.39	1.44	1.49	1.54	1.59	1.64	1.69	1.74	1.79	1.84
TAPS Tariff	4.37	5.11	5.08	3.13	3.26	3.36	3.42	3.44	3.47	3.56	3.73	3.83
Other Deductions & Adjustments <sup>(2)</sup>	-0.20	-0.11	0.34	0.34	0.35	0.42	0.48	0.52	0.58	0.61	0.65	0.73
ANS Wellhead Price	55.67	66.30	59.52	58.49	59.65	61.03	61.96	62.95	35.31	36.34	37.28	38.32

<sup>(1)</sup> FY 2008 includes reported information through October 2007.

<sup>(2)</sup> Includes other adjustments such as quality bank charges, location differentials and company-amended information.



possible that use of the TSM will terminate as soon as January 1, 2009, and that new tariffs from that date forward will be filed in conformance with either a new settlement methodology, or with the Federal Energy Regulatory Commission (FERC) cost-based rate methodology.

The TSM rates filed for 2005, 2006, 2007, and 2008 have been protested. At this point it is not clear if rates applicable from 2009 forward will use the TSM, a new settlement methodology, or the FERC cost-based rate methodology. For this forecast, we have chosen to use a TSM calculated tariff for 2008, and then a cost-based methodology to project rates for 2009 forward.

## Methodology

### TSM Approach

The TSM specifies the model for carriers to calculate maximum tariffs (rate ceil-

ings) for their annual rate filings. Each carrier files its own separate tariff at the beginning of every year and is free to charge rates below the calculated rates. Carriers file an estimated tariff for the upcoming year, a preliminary actual tariff for the current year and a revised actual tariff for the previous year.

TSM provides for the recovery of operation and maintenance costs, a depreciation component for the recovery of the capital rate base, and an after-tax margin, which includes a non-cost based "allowance per barrel." The maximum rate for the upcoming year for each carrier is the estimated total revenue requirement for the pipeline divided by the expected deliveries for the upcoming year. Annual adjustments are allowed to "true up" the former year estimates with actual throughput and cost data.

The department developed a model to forecast TAPS tariffs from the historical weighted average data provided to the

state by the carriers. The model simulates the TSM ratemaking approach and then projects the major components to forecast the total revenue requirements. The tariff is calculated by dividing the forecasted total revenue requirement by projected deliveries which are derived from the department's forecast of crude oil production (see Figure 4-11).

In 1985, when the settlement was negotiated, operating expense was a minor component of the total revenue requirement. Today operating expense is the major component in the total revenue requirement. After the allowance per barrel and related income tax allowance are removed from the TSM calculation, operating expense accounts for about 75% of the total revenue requirement. Calculation of a tariff on a thirty-year old pipeline with declining throughput will be dominated by operating costs and the declining number of barrels over which to spread the costs.

**Figure 4-11. TSM Tariff Calculation**

**Tariff= Total Revenue Requirement / Deliveries**

Total Revenue Requirement= Operating Expense + Dismantle Removal & Restoration + Depreciation + Recovery of Deferred + Return + After-tax margin + Income Tax Allowance — Non-transportation Revenues — Net carryover

Deliveries = Production throughput

**Figure 4-12. Cost-Based Tariff Calculation****Tariff= Total Revenue Requirement / Deliveries**

Total Revenue Requirement= Operating Expense + Depreciation + Amortized Deferred Cost + Return\*  
+ Property Tax + Income Tax Allowance + Net carryover

Deliveries = Production throughput

\* A trended original cost methodology and straight line depreciation is used to derive the rate base to calculate the Return component in the total revenue requirement.

**Cost-Based Rate Methodology**

A cost-based methodology allows a pipeline to recover all prudently incurred costs of providing the transportation service, including a fair return on investment. Determining the rate base and the cost of service for a base year is loaded with accounting assumptions and conventions. To forecast revenue requirements, all the financial and accounting machinations must be brought forward in addition to projections for each of the cost components. The merit of forecasting with such a complicated, detailed model that duplicates history is easily overshadowed by the gross assumptions that are required to use it as a forecasting tool.

We have opted for a simplified cost-based method as a forecasting tool. The model is a work in progress and will be refined as ratemaking events unfold and better guidance from the FERC decision becomes available next year.

This simplified cost-based model is

designed to calculate a total revenue requirement for operating and maintaining the pipeline while providing a rate of return for the investment in the pipeline (see Figure 4-12).

Since the total revenue requirement is divided by deliveries, the tariff is sensitive to the production profile and the inherent uncertainties of estimating throughput. The tariff forecast in Figure 4-10 uses the throughput projection from the Fall 2007 crude oil production forecast discussed below.

The base year of the model is calibrated with data from the trended original cost model developed by Lukens Energy for the state proceedings and parameters from the initial decision by FERC Administrative Law Judge Cintron. Projections of the components use relationships developed from historical TSM data and assumptions regarding future costs and investments. Additional capital expenditures are input for the Strategic Reconfiguration (SR) project.

The SR project is a massive upgrade of the 30-year-old pipeline system that began in 2001 and is expected to be completed in 2010. Installation of electrically driven crude oil pumps, increased automation and upgraded control systems should make the pipeline operations more efficient and more flexible to handle future increases and decreases in throughput. The more efficient and cost effective transportation system is expected to reduce overall operating costs by about 10 percent annually.

TAPS carriers initially claimed the SR project would cost \$250 million. Current estimates are closer to \$750 million and the state is in the early stages of litigation challenging the TAPS carriers' anticipated inclusion of the increased costs in the rate base. The state has filed protests of imprudent SR expenditures included in the 2005, 2006, and 2007 rates, and will file protests of the 2008 rates on imprudence grounds. As the carriers roll more dol-

lars into the rate base, the likely results will be increasing overcharges (under any formula) for the years until a settlement is reached or until litigation requires refunding those “imprudent” expenditures.

### Forecast

The TSM calculated tariff for FY 2008 and the forecasted tariffs for FY 2009-2018 using the simplified cost-based model are shown in Figure 4-10. TAPS tariffs are filed on a calendar year basis and new tariffs take effect January 1 of each year. The weighted average tariff filed for calendar year 2008 is estimated to be about \$5.00 per barrel. Both the timing and the ultimate outcome of the pending protests and litigation will establish future tariffs and refunds. This forecast does not attempt to predict the outcome of the litigation or estimate the level and timing of the protested tariffs. Corrections between filed rates and allowed rates will be made through the refund process and are beyond the scope of this forecast. Guidance from the pending FERC decision is likely next year.

### Feeder Pipeline Tariffs and Other Adjustments

These costs include both feeder pipeline charges and other cost adjustments to account for the different qualities of oil entering the pipelines, as well as market-location differentials for intrastate sales. Transportation costs for feeder pipelines are incurred to move the crude oils from the various North Slope production fields to Pump Station No. 1 of the TAPS. A tariff is calculated for each of the feeder pipelines according to the particular settlement agreement. Inflation and cost-based factors are used to project the tariffs, which are weighted by each pipeline’s throughput volume to estimate a weighted-average feeder pipeline tariff.

### Wellhead Price

The combination of ANS wellhead value and production volumes forms the basis for both state production taxes and royalties. The wellhead value is calculated by subtracting the relevant marine transportation and pipeline tariff costs (as well as adjustments for North Slope feeder pipelines and pipeline Quality Bank) from the appropriate destination value. Figure 4-10 reflects this calculation for FY 2008-2018.

## 4. Crude Oil Production

### Methodology

For the production forecasting process, we use a petroleum engineering consultant who performs a “bottom-up” evaluation on each of the individual fields that yields a forecast of three types of oil production: (1) oil that is currently being produced; (2) oil production that we expect to realize from projects currently under development; and (3) oil production that we expect to realize from projects under evaluation. The engineering consultant employs decline curve analysis, augmented by generally accepted engineering principals, discussions with field operators, and public and private information in order to assemble our long range production forecast.

We continue to make adjustments to our production expectations from the North Slope in this Fall 2007 forecast. As always, we examined reservoir performance, reviewed the uncertainty associated with the pace and scope of development of new fields and new projects within existing fields, and re-evaluated planned and unplanned downtime for all fields. Our review indicates that, with minor exceptions, and notwithstanding planned and unplanned surface disruptions, all

reservoirs are performing at or above expectations. Through fiscal year 2040, we expect to produce 6.1 billion barrels of oil.

### Assumptions

In a hydrocarbon rich basin such as the North Slope of Alaska, any discussion regarding production forecasting methodology should begin with identifying those resources that are NOT included in our estimates. We do not include any estimates for undiscovered oil, including future potential from the Arctic National Wildlife Refuge (ANWR), the National Petroleum Reserve-Alaska (NPR-A), the federal Outer Continental Shelf (OCS) or onshore lands within the state of Alaska. We exclude from our estimates production from most of the known heavy or viscous oil deposits; in fact we consider none of the approximately 20 billion barrels from the giant Ugnu deposit, although the operator is actively pursuing a pilot project there to evaluate new technology termed CHOPS (Cold Heavy Oil Production with Sand). We exclude 96% of the viscous/heavy oil from the large West Sak field, projecting roughly 400 million barrels recovery out of roughly 10 billion barrels in place. We also exclude 88% of the heavy oil at Schrader Bluff, projecting roughly 250 million barrels recovery out of over 2 billion barrels in place. Additionally, none of the known oil discoveries in the Federal Outer Continental Shelf, in fields such as Sivilluq, Kuvlum and Sandpiper, potentially totaling hundreds of millions of barrels of recoverable oil, are considered in the forecast. None of the known discoveries west of the small NPR-A accumulations in the vicinity of the Alpine field are included. Finally, we limit any production attributed to a promising new enhanced oil recovery technology termed ‘low salinity waterflood’ to a small demonstration project under evaluation at En-

dicott. Laboratory tests using Endicott rock show low salinity waterflood can increase ultimate recovery by 10-15%, or approximately 150 million barrels. Successful slope wide implementation of low salinity waterflood would result in incremental recovery measured in the billions of barrels.

We exclude the aforementioned resources, both known and unknown, in order to avoid speculation and to reduce the uncertainty typically associated with the commercialization, timing and magnitude of resource development.

### **New Developments**

In the next ten years, we anticipate new developments on state and federal lands, both of which benefit the state. Most of the opportunities to add production from state lands are from expanded heavy/viscous oil development (West Sak, Orion, Schrader Bluff fields), continued satellite development at Alpine (Fiord, Fiord-West, Nanuq, Qannik, Alpine West fields), and new developments at Oooguruk and Nikaitchuq. We anticipate Oooguruk to begin production in the second quarter of 2008 and we anticipate project sanctioning for Nikaitchuq to be imminent. Although we forecast expanded development at West Sak, we have again slowed the pace of heavy oil development there to allow the operator to fully evaluate technical and commercial issues associated with the development. We have also increased our forecast of heavy/viscous oil at Orion to reflect Phase 2 development there. For the Milne Point Unit, which includes both the Kuparuk pool and the heavier Schrader Bluff pool, we have slowed the pace of development to allow for reprioritized spending on infrastructure renewal projects. We have delayed the development of

Point Thomson and associated satellites one year in keeping with our 10 year development lead time, which may be conservative. The development of Point Thomson has not been tied to any gas pipeline project or gas contract. Our review of Alpine satellite field development yielded expanded development at Alpine West, the addition of new satellite Fiord West, increased expectations from Fiord and reduced expectations from Nanuq. We still expect new satellite Qannik to come on production during late 2008. Finally, we show an increase in production from the Alpine field beginning in fiscal year 2013, which we attribute to Alpine West development, formerly considered part of the federal NPR-A. Accordingly, we show a decrease in our estimates for the NPR-A during the same time period.

### **Production on Federal Lands**

Our forecast includes production from state lands as well as from federal lands. From a revenue standpoint, the State of Alaska benefits in at least five ways from new developments on federal lands: (1) shared royalties (27.5% of federal share) from federal OCS fields such as Liberty; (2) production taxes on federal oil produced onshore within Alaska (NPR-A); (3) increased property tax on any infrastructure on state lands required to produce and transport federal oil; (4) corporate income taxes; and (5) lower pipeline transportation tariffs, which increase wellhead prices. In addition, any oil processed through the Endicott facility (Liberty field) may increase net profits payments to the state. Federal oil produced within the State of Alaska can return up to 75% of the revenue generated by oil produced on state lands. Federal oil produced from non-state lands provides a revenue benefit limited to decreased transportation tariffs and increased property taxes.

For the fall forecast we have reevaluated the scope and pace of development of projects within the federal NPR-A to better reflect the timing of competing projects at Alpine. The end result is a two year delay in development at known accumulations Lookout, Moose's Tooth and Spark. Additionally, we have reduced our expectations from each of the NPR-A pools pending further evaluation planned for this winter. We have also adjusted our production profile for the Liberty field, now expected to be produced through Endicott facilities, to reflect a multi-year staged development using ultra extended reach drilling. The rate profile we use for Liberty is adapted from the plan of development recently filed with the Minerals Management Service and should be considered a base case scenario with upside potential. We do not consider any production from the Kupcake prospect, which is adjacent to Liberty, and scheduled for testing this winter.

### **Planned and Unplanned Downtime**

Although we anticipate new developments from state and federal lands over the next 10 years to contribute to overall production and partially mitigate base decline, we believe they will not be sufficient to offset the temporary production interruptions due to integrity management and infrastructure renewal. Much of the new production we forecast relies upon the continued use of aging wells, flowlines, facilities and pipelines, as does at least 500,000 barrels per day of existing production. We anticipate increased planned activity to replace aging equipment and to repair aging equipment as required. To account for unforeseen production interruptions slope-wide, as well as anticipated scheduled interruptions attributed to renewal projects, we have increased our estimates of downtime at the Greater Prudhoe Bay Area, the

Greater Kuparuk Area, the Milne Point Unit and Endicott for the next 6-8 years, depending on the field. The impact of this deferred production is significant in the near term, ranging from 30,000 – 70,000 barrels of oil per day slopewide. This is in addition to rate impacts attributed to reevaluating the scope and timing of projects under development and under evaluation.

### Forecast

The three categories of North Slope production—Currently Producing, Currently Under Development and Currently Under Evaluation—are illustrated graphically in Figure 4-13 and in table format in Figure 4-14. We do this so that the reader will have an understanding about the uncertainty associated with the production forecast. We forecast production of only those reserves that have already been

discovered and at a minimum are being evaluated for development.

### Currently Producing

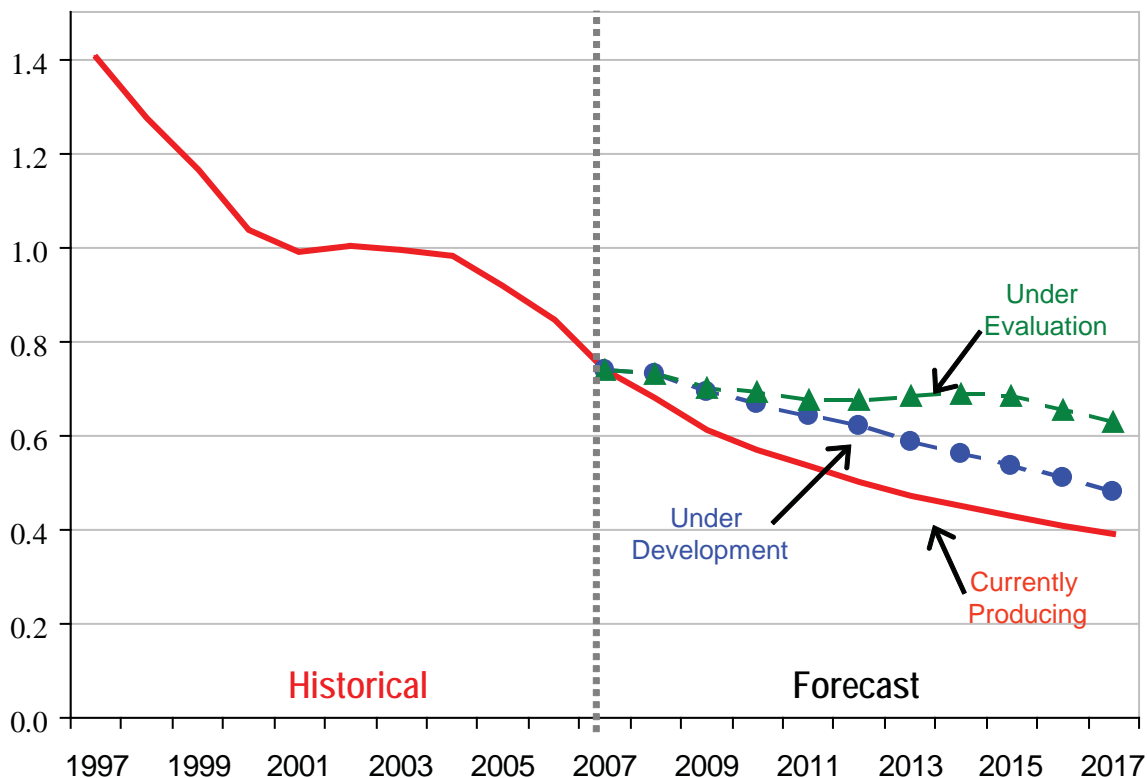
Production characterized as “currently producing” includes baseline production and presumes a continued level of expenditure sufficient to promote safe, environmentally sound operations. Such expenditures include the following: well diagnostic and remedial work, data acquisition and rate-enhancing expenditures such as perforating, acid stimulation, well workovers, fracture treatments, artificial lift optimization and production profile optimization. This category of production also presumes continued gas and water injection for pressure support. We exclude 10% of the barrels currently producing at Kuparuk and 15% of the barrels currently producing at Prudhoe Bay

to reflect future development drilling, opting instead to characterize these barrels as “under development.” Based on historical forecasting performance, we assign a 98% confidence level for the current fiscal year and a 95% confidence level for the second fiscal year forward.

### Currently Under Development

Production characterized as “currently under development” is based on new projects either currently funded or awaiting project sanctioning in the very near future. It includes projects that may be in the design/construction phase, as well as development drilling and enhanced oil recovery (miscible or immiscible injection) projects, currently funded or underway, but not included in the “currently producing” category. It also includes incremental oil expected from the long-term gas cap

Figure 4-13. Alaska North Slope Production, FY 1997-2007 and Forecasted FY 2008-2018 (million barrels/day)



**Figure 4-14. Alaska North Slope Production, FY 2007 and Forecasted FY 2008-2018<sup>(1)</sup>**  
(million barrels per day)

Fiscal Year	Currently Producing	Under Development	Under Evaluation	Total ANS
2007	0.715	0.025	0.000	0.740
2008	0.680	0.051	0.000	0.731
2009	0.611	0.079	0.010	0.701
2010	0.569	0.100	0.023	0.693
2011	0.537	0.104	0.034	0.676
2012	0.501	0.120	0.054	0.675
2013	0.473	0.113	0.099	0.685
2014	0.451	0.110	0.126	0.687
2015	0.428	0.107	0.149	0.684
2016	0.408	0.103	0.145	0.656
2017	0.390	0.092	0.146	0.628
2018	0.373	0.086	0.221	0.680

<sup>(1)</sup> Some of the oil forecasted in the Under Development and Under Evaluation categories are from new projects in fields currently producing.

water injection project at Prudhoe Bay and the low salinity waterflood at Endicott. Examples of production currently under development include the Fiord, Nanuq, Alpine West and Qannik satellites at Alpine; the Aurora, Orion and Polaris satellites at Prudhoe Bay; J-pad and 3K-pad at West Sak; development drilling at Tarn; Oooguruk; and 10% of existing Kuparuk production and 15% of existing Prudhoe Bay production to reflect future developmental drilling that will be necessary.

Because of timing and scope uncertainty, our subjective confidence for this category of production is 85% to 90%.

### Currently Under Evaluation

Production characterized as “currently under evaluation” includes technically viable projects currently in the “pencil sharpening” stage where engineering, cost, risk and reward are all being actively evaluated. These projects are all

currently unfunded by the operators but have a high chance of being brought to fruition. Examples include heavy oil development outside of the core areas at West Sak and Schrader Bluff, Alpine satellite Fiord West, Liberty, Nikaitchuq, Point Thomson and associated satellites, and pools within the NPR-A.

Confidence levels vary for this category of production. Certain heavy oil development drilling for Schrader Bluff, Orion or West Sak in FY 2009 might have confidence levels approaching that of “production under development”. Potentially high cost, scope-challenged developments such as Point Thomson probably deserve lower confidence, not necessarily attributed to volumes or rates, but to the timing of first production.

As Figure 4-14 shows, by FY 2012 one-quarter of our projected oil production will come from projects requiring significant new investment.

## Oil Royalties

Almost all Alaska oil and gas production occurs on state lands leased for exploration and development. As the land owner, the state earns revenue from leasing as: (1) upfront bonuses, (2) annual rent charges and (3) a retained royalty interest in oil and gas production.

Generally, the state issues leases based on a competitive bonus bid system. It has always retained a royalty interest of at least 12.5%. The vast majority of current production is from leases that carry that rate. Some currently producing leases carry rates as high as 20%, and some leases also have a net profit-share production agreement.

State oil and gas leases provide that the state may take its oil royalty in barrels (in-kind) or as a percentage of the production value (in-value). In FY 2007, the state took approximately 60,000 barrels per day of North Slope

**Figure 4-15. New Oil as a Percentage of Total Oil (million barrels per day)**

Fiscal Year	Total New Oil	ANS Total	Percent New Oil
2008	0.051	0.731	7.0%
2009	0.089	0.701	12.7%
2010	0.123	0.693	17.8%
2011	0.138	0.676	20.5%
2012	0.174	0.675	25.8%
2013	0.212	0.685	31.0%
2014	0.236	0.687	34.4%
2015	0.256	0.684	37.4%
2016	0.248	0.656	37.8%
2017	0.239	0.628	38.0%
2018	0.307	0.680	45.1%

production in-kind and sold it to Flint Hills Resources Alaska, LLC for their refinery at North Pole.

The royalty oil taken in-value is valued according to a formula using a market basket of spot crude oil prices closely approximating the ANS West Coast spot price of oil less a transportation allowance back to the lease. Royalties are based on a destination price—the higher of the actual sales price or the prevailing value.<sup>6)</sup> The pipeline and marine transportation costs are deducted from the destination value to derive the taxable netback value of the oil or gas.

## Petroleum Property Tax

An annual tax is levied each year on the full and true value of property

taxable under AS 43.56. The tax on oil and gas property is the only statewide property tax. The valuation procedure for three distinct classes of property—exploration, production and pipeline transportation—is described below.

### Exploration Property

Value is based on the estimated price that the property would bring in an open market under prevailing market conditions in a sale between a willing seller and a willing buyer, both conversant with the property and with prevailing general price levels.

The state petroleum property assessor gathers raw data for determining market value by reviewing the details of equipment sales, attending auctions and reviewing trade journals. This data is then applied to the taxable property, taking into account age, capacity, and

physical and functional obsolescence.

### Production Property

Value is determined on the basis of replacement cost less depreciation, based on the economic life of the proven reserves.

In the case of an offshore oil or gas platform or onshore facility, the number of years of useful life is determined by estimating the date the facility reaches its economic limit, not on the basis of the projected physical life of the property. The time period until the estimated operating revenue would equal operating expenses plus the current age of the facility equals the total life. The factor used in the depreciation calculation for the facility typically equals the years of remaining life divided by the total life.

<sup>6)</sup> ANS West Coast prevailing value per 15 AAC 55,171, is the monthly average of daily spot market prices reported by Platt's Oilgram, Reuters and Dow Jones Energy reporting services. This price is published monthly on the Tax Division website at [www.tax.state.ak.us](http://www.tax.state.ak.us).

**Figure 4-16. Distribution of Petroleum Property Tax, FY 2007 (\$ million)<sup>(1)</sup>**

Municipalities	Gross Tax	Local Share	State Share
North Slope	228.3	211.2	17.1
Unorganized	39.1	0.0	39.1
Valdez	19.9	19.9	0.0
Kenai	12.1	6.9	5.2
Fairbanks	7.4	5.2	2.2
Anchorage	5.3	3.9	1.4
Other Municipalities <sup>(2)</sup>	0.2	0.1	0.1
<b>Total</b>	<b>312.3</b>	<b>247.2</b>	<b>65.1</b>

<sup>(1)</sup> Amounts shown here do not include the supplemental property tax roll and as a result may not exactly match data presented elsewhere in this forecast

<sup>(2)</sup> Includes Matanuska-Susitna Borough, Cordova and Whittier.

## Pipeline Transportation Property

The full and true value of taxable pipeline property is determined with due regard to the economic value of the property based on the estimated life of the proven reserves of gas or unrefined oil that will be transported by the pipeline. We rely upon several standard appraisal techniques to value Alaska pipelines. When market rents are available, we analyze the income method under which the value is the net present worth of all future income streams of the pipeline. We primarily rely on replacement cost new less depreciation based on the economic life of the reserves that feed the pipeline. This is especially useful when rents are constrained by the regulatory process or when market rents cannot be obtained for use in the income method. The Trans-Alaska Pipeline from Prudhoe Bay represents more than 95% of Alaska's taxable pipeline transporta-

tion property. Figure 4-16 illustrates the property tax distribution between local communities and the state for FY 2007. The property value is assessed by the state. A local tax is levied on the state's assessed value for oil and gas property within a city or borough, and is subject to the local property tax limitations established in AS 29.45.080 and AS 29.45.100. The state's mill rate is effectively 20 mills minus the local rate.

## Petroleum Corporate Income Tax

Alaska levies two types of corporate income tax. This section focuses on the oil and gas corporate income tax. Forecasts and discussion of the corporate income tax as applied to corporations other than oil and gas corporations can be found in the Other Revenue section of this forecast.

An oil and gas corporation's Alaska income tax liability depends on the relative size of its Alaska and worldwide activities and the corporation's total worldwide net earnings. The corporation's Alaska taxable income is derived by apportioning its worldwide taxable income to Alaska based on the average of three factors as they pertain to the corporation's Alaska operations: (1) tariffs and sales, (2) oil and gas production and (3) oil and gas property.

Historically, oil and gas corporate income tax revenue has varied greatly along with oil prices and oil industry profits. In FY 1982, revenue from this tax was \$668.9 million. As recently as FY 1994, the oil and gas corporate income tax generated a mere \$17.8 million. For the past several years, revenues from the oil and gas corporate income tax have benefitted from high oil prices and oil industry profits, generating \$594.4 million in FY 2007. This is a 10% decrease from the \$661.1



generated in FY 2006, which was the highest level for collections since the early 1980s.

We produce our forecast of oil and gas corporate income tax collections by using an economic model that employs the statistical relationships between historical tax payments, crude oil prices, North Slope oil production and refinery margins. We then adjust for refunds and carry-forwards which cause actual collections to differ from estimated payments.

We forecast oil and gas corporate income tax collections of \$598.9 in FY 2008 and \$594.6 in FY 2009, similar to FY 2007 collections. This is due in part to the positive effects of historically high crude oil prices and fewer refining bottlenecks roughly offsetting the declines in Alaska production.

## Restricted Oil Revenue

According to Article IX, Section 15 of the Alaska Constitution, a minimum of 25% of all mineral lease rentals, royalties, royalty sale proceeds, federal mineral revenue sharing payments and bonuses received by the state must be deposited into the Alaska Permanent Fund. In addition, AS 37.14.110 requires a contribution of 0.5% of all royalties and bonuses to the Public School Fund Trust. Settlements with, or judgments against, the oil industry involving tax and royalty disputes must be deposited in the Constitutional Budget Reserve Fund (CBRF).

The state is entitled to 50% of all bonuses, rents and royalties from oil development activity in the federal NPR-A, all of which flows into the

NPR-A Special Revenue Fund. Revenue in the fund each year is available for appropriation in the form of grants to municipalities that demonstrate present or future impact from NPR-A oil development. Of the revenue not appropriated to the municipalities, 25% goes to the Permanent Fund, 0.5% goes to the Public School Trust Fund, and the rest may be appropriated to the Power Cost Equalization and Rural Electric Capitalization Fund. Any remaining revenue after these appropriations lapses into the General Fund.

Figure 4-17 reflects restricted oil and gas revenue.

**Figure 4-17. Restricted Oil Revenue, FY 2007 and Forecasted FY 2008-2009 (\$ million)<sup>(1)</sup>**

Restricted	History	Forecast	
	FY 2007	FY 2008	FY 2009
Royalties to Permanent Fund & School Fund			
Royalties, Bonuses & Rents to the Permanent Fund	535.0	617.2	527.0
Royalties, Bonuses & Rents to the School Fund	10.6	12.3	10.5
<b>Subtotal</b>	<b>545.7</b>	<b>629.6</b>	<b>537.6</b>
Settlements to CBRF <sup>(1)</sup>			
	113.6	20.0	20.0
NPRA Royalties, Rents & Bonuses	12.8	5.2	5.1
<b>Total Restricted</b>	<b>672.1</b>	<b>654.8</b>	<b>562.6</b>

<sup>(1)</sup> The figures in this table do not include a December 2007 settlement in the amount of \$379 million deposited into the Constitutional Budget Reserve Fund that will significantly increase FY 2008 restricted oil revenue.

# Revenue Sources Book

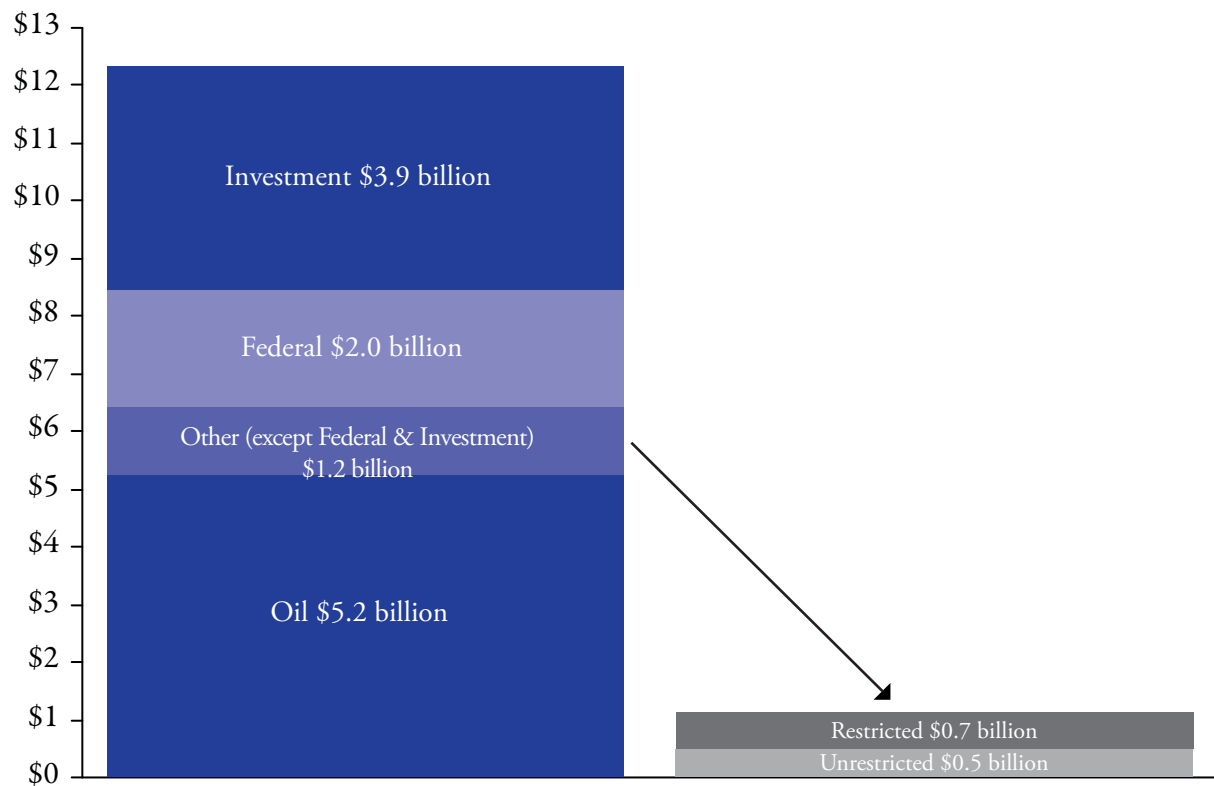
*Alaska Department of Revenue – Tax Division*

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# FALL 2007

# 5. Other Revenue (except Federal & Investment)

Figure 5-1. FY 2007 Other Revenue (except Federal & Investment) \$1.2 billion



**Figure 5-2. Total Other Revenue (except Federal & Investment), FY 2007 and Forecasted FY 2008-2009 (\$ million)**

	History	Forecast	
	FY 2007	FY 2008	FY 2009
<b>Unrestricted</b>			
Taxes	437.3	406.6	390.0
Charges for Services	28.5	28.5	28.5
Fines & Forfeitures	7.2	8.4	8.4
Licenses & Permits	42.0	42.4	43.0
Rents & Royalties	11.8	10.0	10.0
Other	9.7	23.4	14.4
<b>Total Unrestricted</b>	<b>536.5</b>	<b>519.3</b>	<b>494.3</b>
<b>Restricted</b>			
Taxes	105.9	132.9	134.8
Charges for Services	228.2	246.3	248.0
Fines & Forfeitures	22.7	34.4	34.6
Licenses & Permits	35.6	36.6	36.9
Rents & Royalties	5.8	5.3	5.3
Other	286.7	122.5	181.8
<b>Total Restricted</b>	<b>684.9</b>	<b>578.0</b>	<b>641.4</b>
<b>Total Other Revenue</b>	<b>1,221.4</b>	<b>1,097.3</b>	<b>1,135.7</b>

## General Discussion

Income from sources other than oil, state investments and federal receipts includes non-oil taxes, charges for services, fines and forfeitures, licenses and permits, rents and royalties and other revenue sources. These revenue sources are divided between unrestricted and restricted revenues; the amounts of each are reflected in Figures 5-2 through 5-8 throughout this chapter. Restricted revenue includes money deposited in funds other than the General Fund, as well as receipts that are restricted by statute or that the legislature customarily appropriates for a particular purpose or program, such as sharing of fish tax revenue with municipalities.

## Taxes

### Alcoholic Beverages Tax

Alcoholic beverage taxes are collected primarily from wholesalers and distributors of alcoholic beverages sold in Alaska. The per-gallon tax rates on alcoholic beverages are \$1.07 for beer, \$2.50 for wine and \$12.80 for liquor. Qualifying small brewers pay tax at a rate of \$0.35 per gallon for beer. Revenue is deposited into the General Fund. Fifty percent of the revenue is deposited into a subfund of the General Fund, the Alcohol and Other Drug Abuse Treatment and Prevention Fund, and is treated as restricted in this forecast.

Over the past 10 years, alcohol consumption has grown at an average annual rate of 0.9% for beer, 3.9% for wine, and 3.2% for liquor. We forecast that consumption will continue to grow at these historical average rates.

### Charitable Gaming

Under Alaska law, municipalities and qualified nonprofit organizations may conduct certain charitable gaming activities. The purpose of these activities is to derive public benefit in the form of money for the charities and revenues for the state. The Department of Revenue collects permit and license fees, a 1% net proceeds fee and a 3% pull-tab tax. We

forecast that revenues from charitable gaming activity will remain constant over the next two fiscal years.

## Commercial Passenger Vessel Taxes

In August 2006, Alaska voters approved an initiative that imposed new taxes and fees on commercial passenger vessels including:

- A per-passenger tax of \$46 on commercial passenger vessels with 250 or more berths. Revenues are deposited into a subfund of the General Fund, the Commercial Vessel Passenger Tax Account. Five dollars of the tax is distributed to each of the first five ports of call, and an additional 25% of the tax is designated for other local governments impacted by the cruise ship industry. The entire passenger tax is considered restricted for purposes of this forecast. We forecast that 980,000 passengers per year will be subject to the tax.
- An additional per-berth fee of \$4 to operate the Ocean Ranger program, which provides for independent observers of engineering, sanitation and health practices. This fee is considered restricted and is included in the “Charges for Services” section of this forecast.
- A tax of 33% on the adjusted gross income from gaming or gambling activities aboard large passenger vessels in the state. Revenues are deposited into a subfund of the General Fund, the Commercial Vessel Passenger Tax Account, and will be considered restricted for purposes of this forecast. We have not produced a forecast for this revenue source because calculations are dependent upon regulations that are not final.
- Large commercial passenger vessels are now subject to the Alaska cor-

porate income tax. This is included in our forecast of corporate income taxes.

- New penalties for false reporting, violating environmental regulations and failing to make proper disclosures on promotions and shore side activity sales. Any revenue from these provisions is included in the “Fines and Forfeitures” section of this forecast.

## Corporate Income Tax

Alaska taxes the net income of corporations doing business in the state. The exceptions are insurance companies that pay an insurance premium tax instead of income tax, and S-corporations are exempt. Alaska also exempts Limited Liability Companies.

Alaska imposes the corporate net income tax at graduated rates from 1% to 9.4% on the income the corporation earns in Alaska. Alaska statutes adopt the Internal Revenue Code by reference, both to determine the corporation’s taxable income, and for many tax administration rules.

Like most other states, Alaska uses combination and formulary apportionment to determine the Alaska taxable income of multistate and multinational corporations. Combination means that corporations that are under common ownership and that operate as a single business, a part of which is conducted in Alaska, are treated as a single corporation. In combination, the separate federal taxable incomes of each corporation are combined and intercompany transactions eliminated, to arrive at the company’s total business income that is subject to apportionment.

Formulary apportionment means that Alaska uses a formula to determine the amount of income earned and taxable in Alaska. The formula uses an average of certain ratios (“apportionment factors”) that reflect income-producing activity in

Alaska as compared to activity everywhere. Most corporations use a formula based upon property, payroll and sales. Oil and Gas corporations use a modified formula.

Taxpayers multiply total business income by the apportionment factor to determine Alaska taxable income.

Since 1991, Alaska has applied combination and apportionment on a “water’s edge” basis to corporations other than oil and gas corporations. Generally, this means that only corporations doing business in the U.S. are combined. Oil and gas corporations continue to combine on a worldwide basis.

We produce our forecast of non-petroleum corporate income tax collections by using two economic models: one for the largest sector in terms of collections (mining) and one for all other sectors.

The mining sector model is based on the statistical relationship between historical tax payments, corporate profits and zinc prices. Zinc prices are used because zinc accounts for over half of Alaska minerals production. The model for all sectors other than mining is based on the statistical relationship between historical tax payments, corporate profits and crude oil prices. Crude oil prices are used because the price of oil influences company profitability in many economic sectors in Alaska. After forecasting estimated payments, we then adjust for refunds, carry-forwards and other payments that cause actual collections to differ from estimated payments.

Over the past few years, income tax revenue from corporations other than oil and gas corporations has increased significantly. In FY 2004, revenue from the tax was \$39.6 million. In FY 2007, revenue increased to \$176.9 million. Much of the growth came from mining, with collections from that sector growing from \$0.4 million in FY 2004 to

\$71.3 million in FY 2007. We forecast that total revenues will decline from FY 2007 levels as commodity prices fall, but still remain above historical levels. Collections are expected to total \$139.4 million in FY 2008 and \$129.1 million in FY 2009.

### **Electric Cooperative and Telephone Cooperative Taxes**

The electric cooperative tax is based on kilowatt hours furnished by qualified electric cooperatives recognized under Title 10 of the Alaska Statutes. The telephone cooperative tax is levied on gross revenue of qualified telephone cooperatives under Title 10. Revenue from cooperatives located in municipalities is treated as restricted revenue in this forecast because it is shared 100% with the municipalities. The small amount of revenue collected from cooperatives outside municipalities is retained by the state. We forecast that revenues from the electric and telephone cooperative taxes will grow according to the overall rate of inflation.

### **Estate Tax**

The estate tax is levied on the transfer of an estate upon death. The Alaska estate tax is tied to the federal tax, with the amount of the state tax equaling the maximum state credit allowed on the estate's federal return. All revenue derived from estate taxes is deposited in the General Fund.

As a result of changes to the federal estate tax, the Alaska estate tax was phased out completely beginning January 1, 2005. However, revenues continued in FY 2006 and FY 2007 because of the 15-month filing period and collections activity. The federal estate tax changes that caused the state tax to phase out are currently scheduled to sunset after December 31, 2010. We forecast no revenue from the estate tax until FY 2012.

### **Fisheries Business Tax**

The fisheries business tax is levied on businesses that process fisheries resources in or export fisheries resources from Alaska. Although the tax usually is levied on the act of processing, the tax is often referred to as a "raw fish tax" because it is based on the value of the raw fishery resource. Tax rates vary from 1% to 5%, depending on whether a fishery resource is classified as "established" or "developing," and whether it was processed by a shore-based or floating processor. Revenue from the tax is deposited in the General Fund. Fifty percent of the revenue (before credits) is shared to qualified municipalities and is treated as restricted in this forecast.

We forecast fisheries business tax revenues based on estimated taxable values of the major fisheries in the state and historical effective tax rates. Fisheries business tax revenue retained by the state is adjusted by a forecast of tax credits, including Salmon Product Development credits, which apply only to the state portion of the tax.

### **Fishery Resource Landing Tax**

The fishery resource landing tax is levied on fishery resources processed outside of and first landed in Alaska, and is based on the unprocessed statewide average price of the resource. The tax is collected primarily from factory trawlers and floating processors that process fishery resources outside the state's 3-mile limit and bring their products into Alaska for shipment. The tax rates vary from 1% to 3%, based on whether the resource is classified as "established" or "developing." All revenue derived from the tax is deposited in the General Fund. Fifty percent of the revenue (before credits) is shared to qualified municipalities, and is treated as restricted in this forecast.

We forecast fisheries resource landing

tax revenues based on estimated taxable values of the major fisheries in the state and historical effective tax rates. Fisheries business tax revenue retained by the state is adjusted by a forecast of tax credits which apply only to the state's share of the tax.

### **Insurance Premium Tax**

Insurance companies in Alaska pay an insurance premium tax instead of corporate income tax, sales or other excise taxes. Revenue is deposited into the General Fund and for most types of insurance, the tax is treated as unrestricted revenue. Insurance premium taxes on worker's compensation insurance are deposited into a subfund of the General Fund, the Workers Safety and Compensation Fund, and are reflected as restricted in this forecast. The restricted component also includes service fees paid into the Workers Safety and Compensation Fund by employers who are uninsured or self-insured.

We forecast insurance premium tax revenues based on estimates provided by the Department of Commerce, Community and Economic Development's Division of Insurance, which administers the insurance premium tax, and the Department of Labor and Workforce Development's Workers Compensation Division, which collects worker's compensation service fees.

### **Mining License Tax**

The mining license tax is a tax ranging from 0% to 7% on the net income of all mining operations in the state. Except for sand and gravel operations, new mining operations are exempt from the mining license tax for a period of 3½ years after production begins.

Our forecast is produced using a bottom-up approach that estimates tax payments for each of the major mines in the state based on expected minerals

prices and production.

Mining license tax revenues set a record in FY 2007, benefiting from strong minerals prices in calendar year 2006. Like oil prices, minerals prices have soared in recent years, with average gold prices increasing 123% from 2001 to 2006 and average zinc prices surging 308% from 2002 to 2006 (zinc accounts for more than half of Alaska's non-petroleum mineral production).

Section 3 of this forecast presents historical and forecast minerals prices. Our minerals price forecasts assume that minerals prices will remain at historically high levels, while declining somewhat from recent records. These assumptions are based on analysis of expert forecasts and commodities futures markets.

We forecast that FY 2008 will be another record year for the mining license tax, with nearly \$80 million in collections. Expected moderation in minerals prices should lead to somewhat lower collections in future years. However, mining license tax revenue could decrease significantly if minerals prices return to historical levels.

## Motor Fuel Tax

The motor fuel tax is imposed on all motor fuel sold, transferred or used within Alaska. Per gallon rates are 8 cents for highway use, 5 cents for marine fuel, 4.7 cents for aviation gasoline, 3.2 cents for jet fuel, and 8 cents or 2 cents for gasohol, depending on the season, location and EPA mandate. Motor fuel taxes are collected primarily from wholesalers and distributors licensed as qualified dealers. Various uses of fuel are exempt from tax, including fuel used for heating or flights to or from a foreign country. All revenue derived from motor fuel taxes is deposited in the General Fund. Sixty percent of the taxes attributable to aviation fuel sales at municipal airports are shared with the respective

municipalities, and are treated as restricted for purposes of this forecast.

We forecast motor fuel tax revenue based on Energy Information Agency projections for U.S. motor fuel consumption growth.

## Tire Fee

The tire fee has two components. The first component is a tax of \$2.50 on all new tires sold in Alaska for motor vehicles intended for highway use. The second component is an additional \$5 fee per tire on all new tires with heavy studs sold in Alaska, and a \$5 fee per tire on the installation of heavy studs on a previously un-studded tire.

We forecast tire fee revenue based on the expected number of vehicle registrations in the state.

## Seafood Assessments and Taxes

The Department of Revenue administers five different programs that raise money through seafood assessments and taxes. The rates for these assessments and taxes are determined by a vote of the appropriate association within the seafood industry, by members of the Alaska Seafood Marketing Institute, or by the Department of Revenue.

The five programs are:

- The seafood marketing assessment, which applies to all seafood products made or first landed in Alaska and all unprocessed products exported from Alaska.
- The dive fishery management assessment, which is levied on the value of fishery resources taken using dive gear in a designated management area.
- The regional seafood development tax, which is levied on the value of fishery resources in a designated management area.

- The salmon enhancement tax, which is levied on salmon sold or exported from designated aquaculture regions.
- The cost recovery fisheries assessment, a new program authorized in 2006. This program allows hatcheries to establish a common property fishery and recoup costs through an assessment on fishery resources taken in the terminal harvest area. So far, no hatcheries have elected to use this program as a funding source.

Although revenue received under these assessments is deposited in the General Fund, funds are treated as restricted revenue in this forecast because they are set aside for the legislature to appropriate for the benefit of the seafood industry, either in marketing or in management and development of the industry.

We forecast salmon enhancement tax revenue based on the estimated taxable value of Alaska's salmon fishery and historical effective tax rates. All other seafood assessments are reflected as receipt supported services under the Charges for Services section of this forecast and are not forecast individually.

## Tobacco Tax

The tobacco tax is levied on cigarettes and tobacco products sold, imported or transferred into Alaska. Tobacco taxes are collected primarily from licensed wholesalers and distributors. There are two components to the tobacco tax: the cigarette tax and the other tobacco products tax.

The tax rate on cigarettes was increased from \$1.60 to \$1.80 per pack on July 1, 2006, and from \$1.80 to \$2.00 per pack on July 1, 2007. Of the cigarette tax, \$0.76 per pack is deposited into the School Fund, and is considered restricted revenue. All cigarette and tobacco products license fees are also deposited in the School Fund. The

remainder of the cigarette tax revenue is deposited into the General Fund, with incremental revenues as a result of the 2006 and 2007 tax rate increases going entirely to the General Fund (the \$0.76 per pack to the School Fund did not change). Of the General Fund portion, 8.9% is deposited into a subfund of the General Fund, the Tobacco Use Education and Cessation Fund, and is treated as restricted in this forecast.

We forecast cigarette tax revenue based on projected average consumption declines of 4% annually. We also expect some reduction in consumption due to the effects of higher prices caused by the July 1, 2007, tax increase. Our forecast does not include the effects of any possible increase in the federal excise tax on cigarettes.

The tax rate on other tobacco products,

such as cigars and chewing tobacco, is 75% of the wholesale price and is deposited entirely in the General Fund.

We forecast that moderate increases in wholesale prices and consumption will result in other tobacco products tax revenue continuing to increase at the 10-year average rate of about 4% annually.

**Figure 5-3. Other Taxes, FY 2007 and Forecasted FY 2008-2009 (\$ million)**

Unrestricted	History	Forecast	
	FY 2007	FY 2008	FY 2009
Sales & Use Tax			
Alcoholic Beverage	17.1	18.5	18.5
Tobacco Products – Cigarettes	35.3	36.5	36.5
Tobacco Products – Other	8.5	8.9	9.5
Electric & Telephone Cooperative	0.2	0.2	0.2
Insurance Premium	46.5	48.1	48.5
Motor Fuel Tax	39.2	39.4	39.8
Tire Fee	1.5	1.5	1.5
Vehicle Rental	8.0	8.2	8.5
<b>Subtotal</b>	<b>156.3</b>	<b>161.3</b>	<b>163.0</b>
<b>Corporate Income Tax (non oil and gas)</b>	<b>176.9</b>	<b>139.4</b>	<b>129.1</b>
Fish Tax			
Fisheries Business	17.1	18.0	18.6
Fishery Resource Landing	5.3	5.6	5.8
<b>Subtotal</b>	<b>22.4</b>	<b>23.6</b>	<b>24.4</b>
Other Tax			
Mining	79.1	79.8	71.0
Estate	0.1	0.0	0.0
Charitable Gaming	2.5	2.5	2.5
<b>Subtotal</b>	<b>81.7</b>	<b>82.3</b>	<b>73.5</b>
<b>Total Unrestricted Taxes</b>	<b>437.3</b>	<b>406.6</b>	<b>390.0</b>



Figure 5-3. Continued

Restricted	History	Forecast	
	FY 2007	FY 2008	FY 2009
Sales & Use Tax			
Alcoholic Beverage (alcohol & drug treatment)	18.0	17.6	18.5
Insurance Premium/Other (worker's safety & compensation) <sup>(1)</sup>	9.4	8.0	8.1
Electric & Telephone Cooperative (municipal share)	3.9	4.0	4.1
Tobacco – Cigarettes (school fund)	27.0	24.6	24.6
Tobacco – Cigarettes (tobacco use cessation)	3.3	3.6	3.6
Motor Fuel Tax – Aviation (municipal share)	0.1	0.1	0.1
<b>Subtotal</b>	<b>61.7</b>	<b>57.9</b>	<b>59.0</b>
Fish Tax			
Fisheries Business (municipal share)	17.9	18.9	19.4
Fishery Resource Landing (municipal share)	5.9	6.2	6.4
Salmon Enhancement (aquaculture association share)	4.4	4.8	4.9
<b>Subtotal</b>	<b>28.2</b>	<b>29.9</b>	<b>30.7</b>
Other Taxes & Fees			
Commercial Passenger Vessel Tax (state share)	12.0	33.8	33.8
Commercial Passenger Vessel Tax (municipal & region share)	4.0	11.3	11.3
<b>Subtotal</b>	<b>16.0</b>	<b>45.1</b>	<b>45.1</b>
<b>Total Restricted Taxes</b>	<b>105.9</b>	<b>132.9</b>	<b>134.8</b>
<b>Grand Total</b>	<b>543.2</b>	<b>539.5</b>	<b>524.8</b>

<sup>(1)</sup> In addition to the worker's compensation insurance premiums for the Insurance Premium Tax, this amount also includes services fees from employers who are self-insured.

## Vehicle Rental Tax

The vehicle rental tax is a 10% tax on most passenger vehicle rentals of 90 days or less, and a 3% tax on rentals of recreational vehicles for 90 days or less. The vehicle rental tax provisions became effective January 1, 2004.

We forecast that vehicle rental tax revenue will increase with the overall rate of inflation.

## Charges for Services

The charges for services category includes fees and other program charges for state services. Revenues reported in this category do not include all charges for state services—just those that do not fit into other categories in this report.

Most of these receipts are considered restricted revenue because they are returned to the program where they were generated. The only unrestricted revenues listed in this category come from charges that do not have program receipt designations, or are not otherwise segregated and appropriated back to a program. Many of the charges for services are small amounts that we have grouped into the broad categories “General Government,” “Natural Resources” and “Other.” Most revenue from these categories is forecast as constant over the next two fiscal years. FY 2007 restricted “General Government” revenue was much higher than prior years, and we forecast a return to the average for the past five years. The largest categories of charges for services are listed separately and are discussed below.

## Marine Highway Fund

The Alaska Marine Highway Fund is a subfund of the General Fund and receives revenue from state ferry system operations. The legislature has discretion over how the revenue is allocated. Because revenues are customarily appropriated for Alaska Marine Highway operations, they are considered restricted for this forecast. We forecast Marine Highway Fund receipts based on revenue expectations in the Alaska Marine Highway System business plan.

## Commercial Passenger Vessel Fees

Commercial passenger vessel fees paid into the Environmental Compliance Fund come from two sources: ocean ranger fees and environmental compliance fees. All fees paid into the fund are considered restricted for purposes of this forecast. We forecast Environmental Compliance Fund receipts based on an estimated 980,000 passengers per year.

The ocean ranger fee is a per-berth fee of \$4 that applies to commercial passenger vessels with 250 or more berths. The fee is levied to support the Ocean Ranger program, which provides for independent observers of engineering, sanitation and health practices aboard the vessels. This fee was imposed as part of an initiative passed by voters in August 2006, and is covered in more detail in the “Taxes” section of this forecast. Our forecast is based on the current \$4 per-berth ocean ranger fee and does not account for any possible increase in the fee.

Environmental compliance fees are

levied on commercial passenger vessels with over 50 berths. Fees range from \$75 to \$3,750 per vessel based on the number of berths, and funds are used to support environmental compliance programs.

## Program Receipts

Under AS 37.05.142 – 37.05.146, receipts from authorized state programs are accounted for separately and appropriated to administer the source program, implement laws related to the program, or cover costs associated with collecting the receipts. Some programs with program receipt authority are not included in our Charges for Services category because they are reported elsewhere in this forecast or because they do not generate revenue available for general appropriation.

We forecast program receipt revenues based on discussions with the Governor’s Office of Management and Budget and analysis of the most recent budget expectations for these categories.

Program receipts listed in this section are:

- Receipt supported services, which includes state services such as Alaska Pioneer Homes and occupational licensing that are funded by program receipts. Some seafood assessments are included in this category.
- Statutorily designated program receipts, which include money received from sources other than the state or federal government and restricted by the terms of a gift, grant, bequest or contract.
- Regulatory Commission of Alaska (RCA) receipts, which are regulatory

**Figure 5-4. Charges for Services, FY 2007 and Forecasted FY 2008-2009 (\$ million)**

<b>Unrestricted</b>	History	Forecast	
	FY 2007	FY 2008	FY 2009
General Government	26.1	26.1	26.1
Natural Resources	2.1	2.1	2.1
Other	0.3	0.3	0.3
<b>Total Unrestricted</b>	<b>28.5</b>	<b>28.5</b>	<b>28.5</b>
<b>Restricted</b>			
General Government	7.4	2.9	2.9
Natural Resources	0.5	0.5	0.5
Cruise Ship Ranger Fee	3.5	4.8	4.8
Marine Highway Receipts	48.4	53.2	54.9
Receipt Supported Services	112.9	99.4	99.4
Statutorily Designated	33.9	61.2	61.2
RCA Receipts	7.7	8.9	8.9
Test Fisheries Receipts	1.6	2.5	2.5
Timber Sale Receipts	1.2	0.8	0.8
Oil & Gas Conservation	4.4	4.8	4.8
DCCED Business Licenses	6.7	7.3	7.3
<b>Total Restricted</b>	<b>228.2</b>	<b>246.3</b>	<b>248.0</b>
<b>Grand Total</b>	<b>256.7</b>	<b>274.8</b>	<b>276.5</b>

- cost charges and user fees levied on utilities and pipelines to fund costs of regulation.
- Test fisheries receipts, generated by the Department of Fish and Game from selling fish caught during testing the commercial viability of fisheries.
- Timber sale receipts, which are used to fund the timber disposal program of the Department of Natural Resources.
- Oil and Gas Conservation Commission receipts, which are fees and charges for regulation of oil and gas

wells and pipelines.

- Business license fees collected by the Department of Commerce, Community and Economic Development.

## Fines and Forfeitures

Fines and forfeitures include civil and criminal fines and forfeitures and money received by the state from the settlement of civil lawsuits. The largest single source of receipts under this category is the multi-state tobacco settlement. Other

sources are forecast either as constant with FY 2006 (unrestricted) or at the 4-year average (restricted).

## Tobacco Settlement

The Tobacco Master Settlement Agreement was signed by 46 states (including Alaska) in November 1998 and dictates annual payments to each of the states. All tobacco settlement revenue is considered restricted for purposes of this forecast. Eighty percent of the settlement revenue is earmarked for the Northern Tobacco Securitization Corporation for payments on bonds that were

sold based on the future revenue stream. The remaining 20% of the revenue is deposited into the Tobacco Use Education and Cessation Fund, a subfund of the General Fund.

The tobacco settlement includes a “non-participating manufacturer adjustment” provision that allows for a reduction in payments to the settling states if an arbitrator determines that: (a) the Original Participating Manufacturers lose a specified amount of market share to Non-

Participating Manufacturers (NPM) in a calendar year; (b) the disadvantages experienced as a result of the settlement were a significant factor contributing to this market share loss; and (c) a settling state did not have in effect and diligently enforce a Qualifying Statute during that calendar year. Alaska’s tobacco settlement payments were reduced under this provision in FY 2007. We forecast that FY 2008 and FY 2009 payments will include reductions of \$3.6 million and

\$3.1 million, respectively, for this NPM adjustment. The state plans to litigate this issue and expects that the payment reductions will be returned to the state at the conclusion of the litigation.

Tobacco settlement payments are based on a complex formula that takes into account several factors including declines in cigarette consumption and inflation. We forecast that cigarette consumption will decline at an annual rate of 4% and inflation will be 2.75%. In FY 2008,

**Figure 5-5. Fines & Forfeitures, FY 2007 and Forecasted FY 2008-2009 (\$ million)**

	History	Forecast	
	FY 2007	FY 2008	FY 2009
<b>Unrestricted</b>			
Fines & Forfeitures	7.2	8.4	8.4
<b>Total Unrestricted</b>	<b>7.2</b>	<b>8.4</b>	<b>8.4</b>
<b>Restricted</b>			
Tobacco Settlement (North Tobacco Securitization Corporation)	16.8	26.3	26.5
Tobacco Settlement (Tobacco Use Education & Cessation Fund)	4.2	6.6	6.6
Other	1.7	1.5	1.5
<b>Total Restricted</b>	<b>22.7</b>	<b>34.4</b>	<b>34.6</b>
<b>Grand Total</b>	<b>29.9</b>	<b>42.8</b>	<b>43.0</b>

payments will increase because Alaska will receive the first of ten incremental payments that compensate for expenses in executing the litigation that led to the tobacco settlement. We forecast that payments will continue to be reduced by the non-participating manufacturer adjustment described above.

## Licenses and Permits

Licenses and permits represent government revenue derived from charges for participating in activities regulated by the state. The majority of the receipts under this category are from motor vehi-

cle registration and fishing and hunting license fees. Alcoholic beverage license fees are also forecast separately. There are several other small license and permit fees which are forecast as constant in coming years; these are summarized in the “Other Fees” category.

### Alcoholic Beverage Licenses

Alcoholic beverage licenses are required to manufacture or sell alcoholic beverages in Alaska. Licenses are issued by the Alcoholic Beverage Control Board and revenue is deposited into the General

Fund. All of the revenue from biennial license fees collected within municipalities, excluding annual wholesale fees and biennial wholesale license fees, is shared with the municipalities and treated as restricted for purposes of this forecast. We forecast little change in revenue because alcoholic beverage license issuance is limited based on population.

### Fishing and Hunting License Fees

Fishing and hunting licenses are issued by the Alaska Department of Fish and Game for participation in various fishing, hunting and related activities. The

majority of these fees are appropriated to a special revenue fund called the Fish and Game Fund. Money in the fund may only be spent for fish and game management purposes. Beginning with 2006 licenses, a surcharge is in effect on certain sport fishing licenses with the revenue funding new sport fishing facilities in the state. We forecast fishing and

hunting license fee revenue based on expectations of the Alaska Department of Fish and Game.

### Motor Vehicle Registration Fees

Motor vehicle registration fees are collected by the Division of Motor Vehicles within the Department of Administration. Most are considered unrestricted

license and permit revenue; however, some registration fees are considered restricted receipt supported services and are reflected in the Charges for Services section of this forecast. We forecast motor vehicle registration fee revenue based on expectations of the Division of Motor Vehicles.

**Figure 5-6. Licenses & Permits, FY 2007 and Forecasted FY 2008-2009 (\$ million)**

Unrestricted	History	Forecast	
	FY 2007	FY 2008	FY 2009
Alcoholic Beverage Licenses	1.0	1.0	1.0
Motor Vehicles	38.5	38.9	39.5
Other Fees	2.5	2.5	2.5
<b>Total Unrestricted</b>	<b>42.0</b>	<b>42.4</b>	<b>43.0</b>
<b>Restricted</b>			
Hunting & Fishing			
Hunting & Fishing Fees (fish & game fund)	31.4	32.3	32.6
Sanctuary Fees (fish & game fund)	0.3	0.4	0.4
<b>Subtotal</b>	<b>31.7</b>	<b>32.7</b>	<b>33.0</b>
Other Fees	3.1	3.1	3.1
Alcoholic Beverage License (municipal share)	0.8	0.8	0.8
<b>Subtotal</b>	<b>3.9</b>	<b>3.9</b>	<b>3.9</b>
<b>Total Restricted</b>	<b>35.6</b>	<b>36.6</b>	<b>36.9</b>
<b>Grand Total</b>	<b>77.6</b>	<b>79.0</b>	<b>79.9</b>

## Rents and Royalties

Rents and royalties from sources other than oil and gas fall into three categories: cabin rentals, coal royalties and other non-petroleum rents and royalties.

All rents and royalties from oil and gas are reported in the Oil Revenue section of this forecast.

### Cabin Rentals

The Department of Natural Resources operates over 50 public use cabins in Alaska's state parks and elsewhere. Rental and other fees generated from these cabins are deposited in the General Fund. We forecast that revenue will remain steady unless there are significant changes in fees or cabin usage.

### Coal Royalties

As with oil and gas production, the state earns revenue from coal production that occurs on state lands leased for exploration and development. As the landowner, the state earns revenue from leases as: (1) upfront bonuses, (2) annual rent charges and (3) retained royalty interest in coal production.

Of the total revenue received from coal royalties, 74.5% is deposited into the General Fund, 25% is deposited into the Permanent Fund and the remaining 0.5% goes to the School Fund. The Permanent Fund and School Fund portions are treated as restricted in this forecast.

We forecast coal royalties based on the estimated value of coal production in Alaska. The value is estimated based on constant production volumes and coal price forecasts from the U.S. Department of Energy, Energy Information Agency.

### Other Non-petroleum Rents and Royalties

The state receives revenue from the leasing, rental and sale of state land. While all of these revenues are deposited into the General Fund, some are deposited in subfunds of the General Fund and are treated as restricted for purposes of this

forecast. This category includes revenue from minerals royalties that do not fall into the oil and gas or coal royalties categories. We forecast other non-petroleum rents and royalties based on the average revenue over the past five years.

### Other

This category includes unclaimed property transfers, transfers to the state from component organizations and miscellaneous revenues. Miscellaneous revenues, which include contributions to the state and other revenues, are projected at the four-year average. Unclaimed property and transfers from component organizations are discussed below.

### Unclaimed Property

Alaska's Unclaimed Property statutes require businesses and corporations to report unclaimed intangible property

to the state. Property is reportable if an owner cannot be located, the owner has not cashed a property check, or an account has not had any owner-initiated activity for at least three years. Unclaimed property may include checking accounts, customer deposits and over payments, gift certificates, unpaid wages, and security related accounts. The state holds the property in trust until the owner or his or her legal heir claims it. Each year, the unclaimed property trust account is evaluated and the excess of the working trust balance is transferred to the General Fund.

No transfer was processed during FY 2007. Instead, the \$10 million transfer planned for FY 2007 was processed in FY 2008. We anticipate an additional \$5.5 million transfer in FY 2008, bringing the total transfer to \$15.5

**Figure 5-7. Rents & Royalties, FY 2007 and Forecasted FY 2008-2009 (\$ million)**

	History		Forecast	
	FY 2007	FY 2008	FY 2008	FY 2009
<b>Unrestricted</b>				
Other Non-Petroleum Rents and Royalties	10.2	8.4	8.4	8.4
Coal Royalties	1.3	1.3	1.3	1.3
Cabin Rentals	0.3	0.3	0.3	0.3
<b>Total Unrestricted</b>	<b>11.8</b>	<b>10.0</b>	<b>10.0</b>	<b>10.0</b>
<b>Restricted</b>				
Other Non-Petroleum Rents and Royalties	5.3	4.8	4.8	4.8
Coal Royalties	0.5	0.5	0.5	0.5
<b>Total Restricted</b>	<b>5.8</b>	<b>5.3</b>	<b>5.3</b>	<b>5.3</b>
<b>Grand Total</b>	<b>17.6</b>	<b>15.3</b>	<b>15.3</b>	<b>15.3</b>

million. Transfers in following years are expected to be \$6.5 million per year. We forecast unclaimed property revenue based on estimates prepared by the Unclaimed Property Group of the Department of Revenue.

## Transfers from Component Organizations

Each year, the state receives money in the form of transfers from component organizations, such as the Alaska Housing Finance Corporation, frequently in the form of dividends. Component organizations are covered in more detail in the Public Corporations & the University of Alaska section of this forecast. Some component organizations do not make

transfers to the state, and as a result not all component organizations are listed here.

Actual transfers for FY 2007 are reflected in draft tables from the Comprehensive Annual Financial Report. Forecasts for FY 2008 and FY 2009 transfers are based on discussions with the Governor's Office of Management and Budget and analysis of the most recent budget expectations for these categories.

Transfers from component organizations presented here may differ from those presented in the Public Corporations & University of Alaska section for two reasons. First, the amounts presented here account differently for funds paid

over time for multi-year capital projects. Second, amounts presented here include funds that are transferred to the state and then appropriated to the component unit for operations.

**Figure 5-8. Other Revenue, FY 2007 and Forecasted FY 2008-2009 (\$ million)**

	History	Forecast	
	FY 2007	FY 2008	FY 2009
<b>Unrestricted</b>			
Miscellaneous	9.7	7.9	7.9
Unclaimed Property	0.0	15.5	6.5
<b>Total Unrestricted</b>	<b>9.7</b>	<b>23.4</b>	<b>14.4</b>
<b>Restricted</b>			
Alaska Housing Finance Corporation	38.0	75.3	59.8
Alaska Industrial Development & Export Authority	57.6	10.0	22.0
Alaska Municipal Bond Bank Authority	0.4	1.1	1.0
Alaska Student Loan Corporation	40.0	1.2	64.1
Alaska Energy Authority	0.0	0.0	0.0
Miscellaneous <sup>(1)</sup>	150.7	34.9	34.9
<b>Total Restricted</b>	<b>286.7</b>	<b>122.5</b>	<b>181.8</b>
<b>Grand Total</b>	<b>296.4</b>	<b>145.9</b>	<b>196.2</b>

<sup>(1)</sup> Revenue shown under account codes for "other" or "contributions" in the Alaska State Accounting System for General Fund subfunds and special revenue funds.

# Revenue Sources Book

*Alaska Department of Revenue – Tax Division*

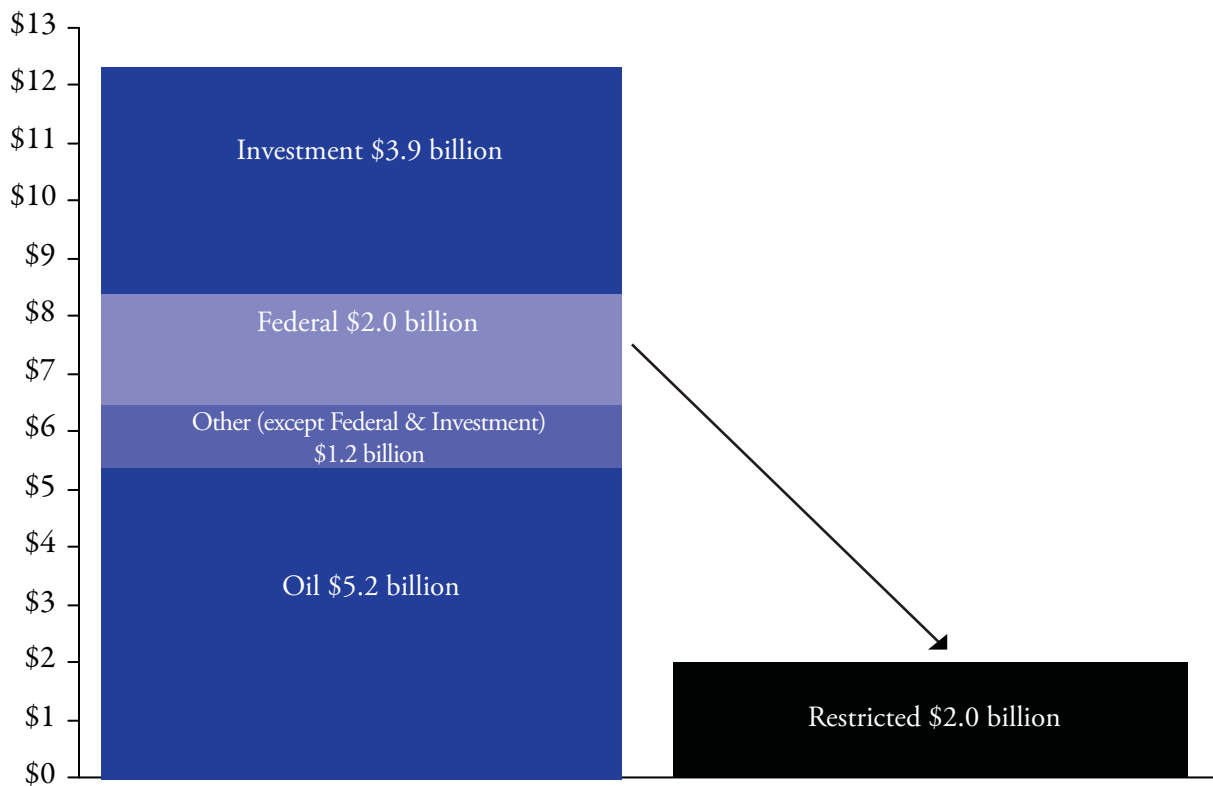
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# FALL 2007



# 6. Federal Revenue

Figure 6-1. FY 2007 Federal Revenue \$2.0 billion



**Figure 6-2. Total Federal Revenue to the State, FY 2007 and Forecasted FY 2008-2009 (\$ million)**

	History	Forecast	
	FY 2007	FY 2008	FY 2009
<b>Unrestricted</b>			
Federal Receipts	0.0	0.0	0.0
<b>Restricted</b>			
Federal Receipts	1,971.9	2,524.1	2,524.1
<b>Grand Total</b>	<b>1,971.9</b>	<b>2,524.1</b>	<b>2,524.1</b>

The federal government continues to play a significant role in Alaska's economy. In Federal Fiscal Year (FFY) 2005 (the most recent data available) the federal government spent \$9.2 billion in total direct expenditures in Alaska.<sup>(1)</sup> The majority of that spending came from the activities of various federal agencies, including defense spending, procurement contracts, retirement and disability payments, wages, loans and grants. Another \$1.3 billion was spent on other federal assistance, such as loan guarantees and insurance.

In FFY 2005, Alaska received \$1.84 for every dollar paid in federal taxes.<sup>(2)</sup> On a per capita basis, more federal money is spent in Alaska than in any other state (see Figure 6-3). For FFY 2005, federal direct expenditures in Alaska increased by 9.7% from FFY 2004.

Among federal agencies, the Department of Defense spends the most in Alaska, followed by the Department of Health and Human Services (see Figure

6-4). Together, these two departments account for about half (53%) of all federal direct spending in the state. Not surprisingly, a large portion of federal money flows into Alaska through salaries of federal employees. However, 34% of all federal direct spending comes in the form of grants, mostly to state and municipal governments, and to nonprofit organizations.

In FY 2007, the State of Alaska received and spent nearly \$2 billion in federal funds. This federal funding is generally restricted to specific uses such as road improvements, Medicaid payments and aid to schools. Potential changes to federal law, differing federal and state fiscal years and varying numbers of eligible Alaskans in certain programs make forecasting federal revenue difficult. The estimates we present for FY 2008 and FY 2009 are from the Office of Management and Budget and are based on state agency projections of potential federal revenues.

For FY 2008, the state is budgeted to receive more than \$2.5 billion in federal receipts. The same amount is predicted for FY 2009. Most federal funding requires state-matching money. The budgeted state match and the top three budgeted categories for federal spending in Alaska are included in Figure 6-5.

It is important to note that the state routinely budgets for federal funds in excess of expected allotments. The legislature authorizes state agencies to receive and spend the maximum that federally funded programs might receive, while the actual appropriation amounts are generally less. In addition, some of the funding granted for multi-year capital projects is received and spent in years following the one in which the money is procured. All federal funds, whether spent in the operating or capital budget, are restricted by legislative appropriation to specific uses.

<sup>(1)</sup> U.S. Census Bureau Consolidated Federal Funds Report for FY 2005, U.S. Department of Commerce, Washington, D.C. 20233, <http://harvester.census.gov/cffr/asp/Reports.asp>.

<sup>(2)</sup> Tax Foundation's "Federal Spending in Each State per Dollar of Federal Taxes," [www.taxfoundation.org/research/show/266.html](http://www.taxfoundation.org/research/show/266.html).

Figure 6-3. FFY 2005 Federal Spending per Capita, Top Six States

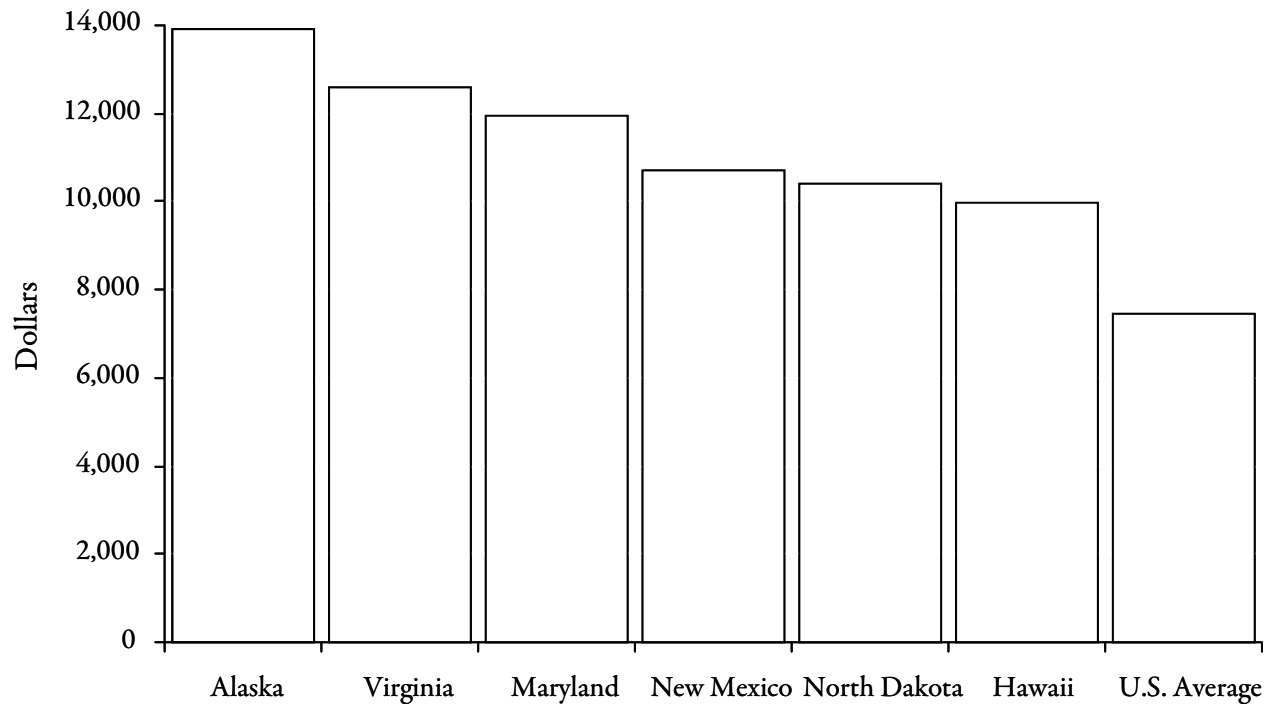


Figure 6-4. Total Federal Spending in Alaska, FFY 2005

## By Distributing Agency

	\$ Million	Percent
Defense	3,217.3	35%
Health & Human Services	1,633.9	18%
Social Security	705.4	8%
Other Agencies	3,673.1	40%
<b>Total</b>	<b>9,229.7</b>	<b>100%</b>

## By Appropriation Category

	\$ Million	Percent
Grants	3,131.2	34%
Salaries & Wages	1,848.0	20%
Procurement	2,412.0	26%
Retirement & Disability	1,154.2	13%
Other Direct Payments	684.3	7%
<b>Total</b>	<b>9,229.7</b>	<b>100%</b>

**Figure 6-5. Federal Spending, FY 2007 and Forecasted FY 2008 - 2009 (\$ million)**

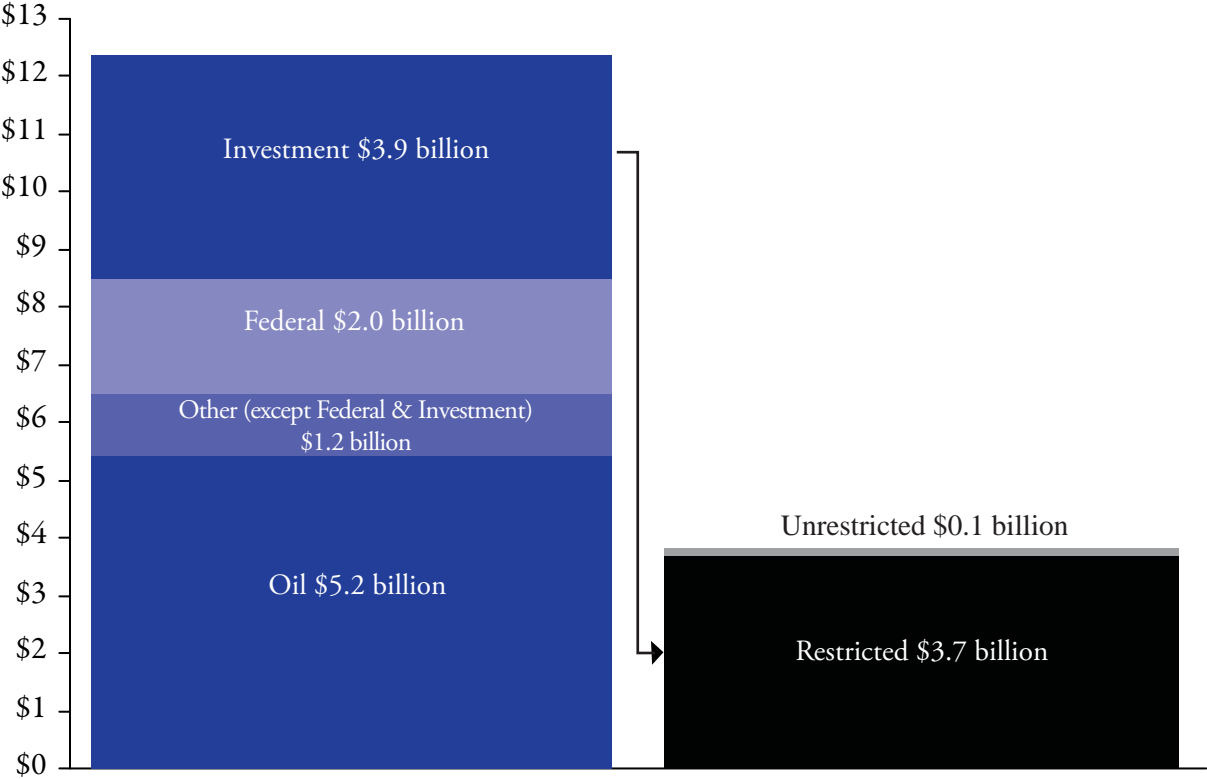
	History FY 2007	Budgeted FY 2008	Budgeted FY 2009
<b>State Match Requirement</b>			
Operating Budget	404.2	428.2	428.2
Capital Budget	99.8	77.9	77.9
<b>Total</b>	<b>504.0</b>	<b>506.1</b>	<b>506.1</b>

**Top Spending Categories**

Transportation Projects	1,087.3	542.0	542.0
Medicaid	810.8	749.2	749.2
Education (K-12, University of Alaska)	365.9	382.4	382.4

# 7. Investment Revenue

Figure 7-1. FY 2007 Investment Revenue \$3.9 billion



**Figure 7-2. Total Investment Revenue, FY 2007 and Forecasted FY 2008-2009 (\$ million) <sup>(1)</sup>**

<b>Unrestricted</b>	History	Forecast	
	FY 2007	FY 2008	FY 2009
Investments	137.1	180.6	106.9
Interest Paid by Others	1.6	1.6	1.6
<b>Total Unrestricted</b>	<b>138.7</b>	<b>182.2</b>	<b>108.5</b>
<b>Restricted</b>			
Investments	44.7	48.2	32.6
Constitutional Budget Reserve Fund <sup>(2)</sup>	180.7	167.7	160.5
Other Treasury Managed Funds	41.2	25.1	26.9
Alaska Permanent Fund	3,471.2	2,570.3	2,557.1
<b>Total Restricted</b>	<b>3,737.8</b>	<b>2,811.3</b>	<b>2,777.1</b>
<b>Grand Total</b>	<b>3,876.5</b>	<b>2,993.5</b>	<b>2,885.6</b>

<sup>(1)</sup> Governmental Accounting Standards Board (GASB) principles require the recognition of changes in the value of investments as income or losses at the end of each trading day, whether the investment is actually sold or not.

<sup>(2)</sup> The figures in this table do not include a December 2007 settlement in the amount of \$379 million deposited into the Constitutional Budget Reserve Fund that will significantly increase FY 2008 restricted oil revenue.

## Investment Forecast

To forecast investment revenue for the current fiscal year—FY 2008—we combine actual performance through September 30, 2007, with a projection for the remainder of the year. Forecasts and estimated capital market median returns are based on information supplied by the state's investment consultant, Callan Associates Inc., and their 5-year capital market estimated returns.

## Unrestricted Investment Revenue

Unrestricted investment revenue is earned on the General Fund non-segregated investments managed by the Treasury Division. Interest Paid by Others is interest received by the state other than on its investments. Oil and gas royalty interest, production tax interest, and corporate income tax interest are included in the Oil Revenue section of this forecast.

## Restricted Investment Revenue

Restricted investment revenue consists of earnings from governmental funds, the Constitutional Budget Reserve Fund (CBRF), other Treasury-managed governmental funds and the Alaska Permanent Fund.

**Figure 7-3. Unrestricted Investment Revenue, FY 2007 and Forecasted FY 2008-2009 (\$ million)**

<b>Unrestricted</b>	History	Forecast	
	FY 2007	FY 2008	FY 2009
Investments	137.1	180.6	106.9
Interest Paid by Others	1.6	1.6	1.6
<b>Total</b>	<b>138.7</b>	<b>182.2</b>	<b>108.5</b>

**Figure 7-4. Restricted Investment Revenue, FY 2007 and Forecasted FY 2008-2009 (\$ million)**

<b>Restricted</b>	History	Forecast	
	FY 2007	FY 2008	FY 2009
Investments	44.7	48.2	32.6
Constitutional Budget Reserve Fund	180.7	167.7	160.5
Other Treasury Managed Funds	41.2	25.1	26.9
Alaska Permanent Fund <sup>(1)</sup>	3,471.2	2,570.3	2,557.1
<b>Total</b>	<b>3,737.8</b>	<b>2,811.3</b>	<b>2,777.1</b>

<sup>(1)</sup> The figures in this table do not include a December 2007 settlement in the amount of \$379 million deposited into the Constitutional Budget Reserve Fund that will significantly increase FY 2008 restricted oil revenue.

<sup>(2)</sup> Annual unrealized and realized earnings from Permanent Fund Figure 7-11.

Figure 7-5. Callan Associates Inc.'s 5-year Capital Market Estimated Returns

Asset Class	Benchmark for Asset Class	%/Year Median Expected Return	%/Year Expected Risk
Equities			
U.S. Broad	Callan Associates Inc. (CAI) Broad	9.00%	16.90%
U.S. Large Cap	Standard & Poors (S&P) 500	8.85%	16.40%
U.S. Small Cap	CAI small	9.85%	22.70%
International Equity	Morgan Stanley Capital international EAFE	9.20%	20.10%
Fixed Income			
Domestic Broad Market	Lehman Brothers Aggregate	5.25%	4.50%
Domestic Short Term (cash equivalent)	Three-month U.S. Treasury Bill	4.00%	0.80%
Domestic Intermediate	Merrill Lynch 1- to 5-year government	4.40%	3.10%
International	Salomon Brothers non-U.S. Government	5.15%	9.60%
Other			
Real Estate	CRES	7.60%	16.50%
Inflation	CPI-U	2.75%	1.40%

As of November 1, 2007

The continued volatility in the world's financial markets makes focus on the "Expected Risk" column (far right in the table above) particularly appropriate. The numbers in the Expected Risk column represent a statistical measure called standard deviation, which is the most commonly used measure of risk in the investment world. The standard deviation is a measure of the dispersion of data around its mean. The analyst can use this measure of dispersion to provide a range of possible outcomes at any desired level of confidence. In the data in this table, the level of confidence is set at 67% or one standard deviation. A higher level of confidence would require a broader range. For example, Callan estimates an average annual return for the domestic broad market fixed-income asset class of 5.25% and an expected risk for that asset class of 4.5%. That means Callan is forecasting that two-thirds of the time the annual return for the domestic broad fixed-income asset class will fall between 0.75% (the median expected average annual return of 5.25% minus the expected risk of 4.5%) and 9.75% (the median expected return plus the expected risk). A prediction at 95% confidence would run from -3.75% to 14.25%, too broad a range to be useful.

The probability that a particular asset class or portfolio will have a negative return over a given period of time is another way to reflect the riskiness of that asset class or portfolio.



**Figure 7-6. Investment Revenue Summary, FY 2007 and Forecasted FY 2008-2009 (\$ million)****Asset Allocation**

Treasury Pool	Percent Allocation	Performance Benchmark
Short-term, Fixed-income Pool	33%	Three-month U.S. Treasury Bill
Intermediate-term, Fixed-income Pool	67%	Merrill Lynch 1- to 5-year government index

Investment Balance September 30, 2007	\$4,414.0 million
Projected Annual Rate of Return	4.3%
Probability of Negative Return Over 1 Year	2.5%

Actual Total Investment Income, FY 2007	\$66.3 million
Actual Total Investment Income, FY 2008	\$181.8 million
Projected Total Investment Income, FY 2009	\$119.8 million

	History	Forecast	
	FY 2007	FY 2008	FY 2009
Investment Revenue Unrestricted	137.1	180.6	106.9
Investment Revenue Restricted <sup>(1)</sup>	44.7	48.2	32.6
<b>Total</b>	<b>181.8</b>	<b>228.8</b>	<b>139.5</b>

<sup>(1)</sup> Includes subfunds of the General Fund.

**Figure 7-7. Constitutional Budget Reserve Fund Cash Flows Investment Revenue Summary, FY 2007 and Forecasted FY 2008-2009<sup>(1)</sup>****Asset Allocation Regular Account**

Treasury Pool	Percent Allocation	Performance Benchmark
Short-term, Fixed-income pool	4%	Three-month U.S. Treasury Bill
Intermediate-term, Fixed-income Pool	76%	Merrill Lynch 1- to 5-year government index
Broad Market Fixed-income Pool	20%	Lehman Brothers aggregate bond index

Regular Balance September 30, 2007	\$2,079.3 million
Projected Annual Rate of Return	4.6%
Probability of Negative Return Over 1 Year	8.0%

**Asset Allocation Special Subaccount**

Treasury Pool	Percent Allocation	Performance Benchmark
Broad Market Fixed-income Pool	36%	Lehman Brothers aggregate bond index
Domestic Equity Pool	45%	Russell 3000 Index
International Equity Pool	19%	MSCI EAFE Index

Special Subaccount Balance September 30, 2007	\$578.8 million
Projected Annual Rate of Return	7.7%
Probability of Negative Return Over 1 Year	24.3%

<b>Total Investment Income</b>	History	Forecast	
	FY 2007	FY 2008	FY 2009
Regular Account	105.6	122.3	111.7
Special Subaccount	75.1	45.4	48.8
<b>Total</b>	<b>180.7</b>	<b>167.7</b>	<b>160.5</b>

<sup>(1)</sup> The figures in this table do not include a December 2007 settlement in the amount of \$379 million deposited into the Constitutional Budget Reserve Fund that will significantly increase FY 2008 restricted oil revenue.

**Figure 7-8. Constitutional Budget Reserve Fund Cash Flows, FY 2007 and Forecasted FY 2008-2009<sup>(1)</sup>**  
 (\$ million)

	History	Forecast	
	FY 2007	FY 2008	FY 2009
Beginning Cash Balance CBRF	2,235.7	2,548.2	2,942.2
Beginning Main Account Balance	1,774.6	1,980.6	2,329.2
Earnings on Main Account Balance <sup>(2)</sup>	105.6	122.3	111.7
Petroleum Tax, Royalty Settlements <sup>(3)</sup>	101.1	20.0	20.0
Loan to GF (prior year)	(0.7)	0.0	0.0
Loan to GF (current year)	0.0	206.3	141.1
<b>Ending Main Account Balance</b>	<b>1,980.6</b>	<b>2,329.2</b>	<b>2,602.0</b>
Beginning Special Subaccount Balance	492.5	567.6	613.0
Earnings on Special Subaccount Balance <sup>(2)</sup>	75.1	45.4	48.8
Loan to GF from Special Subaccount	0.0	0.0	0.0
<b>Ending Special Subaccount Balance</b>	<b>567.6</b>	<b>613.0</b>	<b>661.8</b>
<b>Total CBRF Balance</b>	<b>2,548.2</b>	<b>2,942.2</b>	<b>3,263.8</b>

<sup>(1)</sup> The figures in this table do not include a December 2007 settlement in the amount of \$379 million deposited into the Constitutional Budget Reserve Fund that will significantly increase FY 2008 restricted oil revenue.

<sup>(2)</sup> The earnings estimate for the main account is 4.558% and the earnings estimate for the special subaccount is 7.486%. These projections are based on 2006 Callan's capital market assumptions and Department of Revenue, Treasury Division's asset allocation.

<sup>(3)</sup> Settlement estimates are provided by the Department of Revenue and Department of Law, net of annual Federal Minerals Management Service payments.

**Figure 7-9. Public School Trust Investment Revenue Summary, FY 2007 and Forecasted FY 2008-2009 (\$ million)****Asset Allocation**

Treasury Pool	Percent Allocation	Performance Benchmark
Broad Market Fixed-income Pool	55%	Lehman Brothers aggregate index
Domestic Equity Pool	45%	Russell 3000 Index

Public School Fund Balance September 30, 2007	\$381.3 million
Projected Annual Rate of Return	6.9%
Probability of Negative Return Over 1 Year	20.5%

**Total Investment Income & Distributable Income (\$ million)**

Unrestricted	History	Forecast	
	FY 2007	FY 2008	FY 2009
Public School Trust Total Investment Income	40.8	24.8	26.5
Public School Trust Distributable Income	14.6	13.9	14.3

**Figure 7-10. Alaska Children's Trust Investment Revenue Summary, FY 2007 and Forecasted FY 2008-2009 (\$ million)****Asset Allocation**

Treasury Pool	Percent Allocation	Performance Benchmark
Broad Market Fixed-income Pool	18%	Lehman Brothers aggregate index
International Equity Pool	24%	Morgan Stanley Capital International (EAFE)
Domestic Equity Pool	58%	Russell 3000 Index

Alaska Children's Fund Balance September 30, 2007	\$12.9 million
Projected Annual Rate of Return	8.4%
Probability of Negative Return Over 1 Year	27.2%

**Total Investment Income & Distributable Income (\$ million)**

Unrestricted	History	Forecast	
	FY 2007	FY 2008	FY 2009
Alaska Children's Trust Total Investment Income	1.9	1.0	1.1
Alaska Children's Trust Distributable Income	0.4	0.3	0.4

**Figure 7-11. Permanent Fund Managed by the Permanent Fund Corporation, FY 2007 and Forecasted FY 2008-2009<sup>(1)</sup> (\$ million)**

Reserved Assets — Principal	History	Forecast	
	FY 2007	FY 2008	FY 2009
<b>Total Reserved Assets – Beginning Balance</b>	30,324.9	33,694.5	35,443.2
Contributions & Appropriations			
Contributions & Appropriations – Beginning Balance	26,104.2	27,496.9	28,879.5
Dedicated Petroleum Revenue	532.3	609.7	530.7
Inflation Proofing Transfer from Realized Earnings <sup>(2)</sup>	860.4	772.9	808.8
Deposits to Principal and Settlement Earnings	0.0	0.0	0.0
<b>Subtotal Contributions &amp; Appropriations</b>	<b>27,496.9</b>	<b>28,879.5</b>	<b>30,219.0</b>
Unrealized Appreciation/Depreciation			
Appreciation/Depreciation – Beginning Balance	4,220.7	6,197.6	6,563.7
Annual Unrealized Gain/Loss	1,976.9	366.1	552.9
<b>Subtotal Unrealized Appreciation/Depreciation</b>	<b>6,197.6</b>	<b>6,563.7</b>	<b>7,116.6</b>
<b>Total Reserved Assets – Ending Balance</b>	<b>33,694.5</b>	<b>35,443.2</b>	<b>37,335.5</b>
<b>Realized Earnings Account</b>			
Realized Earnings Account – Beginning Balance	2,584.8	4,131.6	4,648.5
Annual Realized Earnings	3,471.2	2,570.3	2,557.1
Dividend Payment to State of Alaska <sup>(3)</sup>	(1,021.7)	(1,251.1)	(1,359.0)
Inflation Proofing Transfer to Reserved Assets	(860.4)	(772.9)	(808.8)
Other Transfers to Reserved Assets	0.0	0.0	0.0
Other Appropriations Out of Fund	(42.3)	(29.4)	(27.7)
<b>Realized Earnings Account – Ending Balance</b>	<b>4,131.6</b>	<b>4,648.5</b>	<b>5,010.2</b>
<b>Market Value – Total Fund Invested Assets Value</b>			
Contributions & Appropriations – End-of-year Balance	27,496.9	28,879.5	30,219.0
Unrealized Appreciation/Depreciation End-of-year Balance	6,197.6	6,563.7	7,116.6
Realized Earnings End-of-year Balance (statutory earnings)	4,131.6	4,648.5	5,010.2
<b>Fund Balance (market value) End-of-year Balance</b>	<b>37,826.1</b>	<b>40,091.6</b>	<b>42,345.7</b>
<b>Total Reported Earnings</b>			
Annual Unrealized Gain/Loss	1,976.9	366.1	552.9
Annual Realized Earnings	3,471.2	2,570.3	2,557.1
<b>Reported Earnings</b>	<b>5,448.1</b>	<b>2,936.4</b>	<b>3,110.1</b>

<sup>(1)</sup> Data projected using September 30, 2007, financial statements and the fall 2007 revenue forecast. Callan Associates Inc.'s 2007 capital market assumptions result in 7.77% median expected total return for FY 2008 and FY 2009. <sup>(2)</sup> Inflation proofing is required by statute AS 37.13.145(c). The inflation rate used for FY 2007 is 3.23%; Callan Associates Inc.'s inflation rate of 2.75% was used to project inflation proofing for FY 2008. <sup>(3)</sup> The Permanent Fund dividend payment is recorded as a liability at fiscal year end and is paid out the following month.

# Revenue Sources Book

*Alaska Department of Revenue – Tax Division*

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# FALL 2007

## 8. State Endowment Funds

This section compares important attributes of six endowment funds. The University of Alaska endowment is included in this comparison because it is one of Alaska's public endowment funds that uses the annual distribution calculation method typical of the vast majority of endowments in the United States and Canada.<sup>(1)</sup>

The fiduciary for each of these endowment funds has the responsibility for establishing an asset-allocation policy for the fund. Figure 8-1 on the next page compares the asset-allocation policies for these endowments.

Under the standards adopted by the Governmental Accounting Standards

Board (GASB), public funds calculate and report their income by recognizing changes in the value of securities as income, or losses, as they occur at the end of each trading day. They do this regardless of whether the securities are actually sold and the income, or losses, are taken or realized. All six of these endowments report annual income on this basis. However, as reflected in Figure 8-2 on the next page, four of them use other measures of annual income for determining their distributions. These include the Alaska Permanent Fund and the Mental Health Trust Fund, both administered by the Alaska Permanent Fund Corporation, the Public School Trust and the Alaska

Children's Trust.

In determining the amount of income available for distribution each year for the two funds managed by the Alaska Permanent Fund Corporation, gains or losses on individual investments are not recognized until the investment is sold. For calculating distributable income for the Public School Trust and the Alaska Children's Trust, only interest earned and dividends received are treated as income. Gains and losses in the value of individual investments are never recognized as income. By law, those gains and losses remain with the principal of the fund.

<sup>(1)</sup> The predominant practice, making annual distributions of 4% to 5% of the market value of the endowment, developed following a 1968 Ford Foundation study. See *The Ford Foundation Managing Educational Endowments* (New York, New York; 1968).

**Figure 8-1. Target Percent Asset Allocation—State Endowment Funds**

	Cash	U.S. Bonds	International Bonds	U.S. Equities	International Equities	Global Equities	Real Estate	Alternative Investments	Total
Alaska Permanent Fund	0	23	3	27	13	14	10	10	100
Mental Health Trust	0	23	3	27	13	14	10	10	100
Public School Trust	0	55	0	45	0	0	0	0	100
Alaska Children’s Trust	0	20	0	58	22	0	0	0	100
Power Cost Equalization	0	41	0	42	17	0	0	0	100
University of Alaska Endowment	3	17.5	0	26	11	10	8.5	24	100

**Figure 8-2. Calculation of Annual Income—State Endowment Funds**

	Financial Reporting of Income	Distributable Income
Alaska Permanent Fund	GASB (recognize gains and losses based on change in market value)	Interest earnings + dividends paid + gains and losses on investments actually sold
Mental Health Trust	GASB (recognize gains and losses based on change in market value)	Interest earnings + dividends paid + gains and losses on investments actually sold
Public School Trust	GASB (recognize gains and losses based on change in market value)	Interest earnings + dividends paid; gains and losses on value of securities are never income, they become part of principal
Alaska Children’s Trust	GASB (recognize gains and losses based on change in market value)	Interest earnings + dividends paid; gains and losses on value of securities are never income, they become part of principal
Power Cost Equalization Endowment	GASB (recognize gains and losses based on change in market value)	GASB (recognize gains and losses based on change in market value)
University of Alaska Endowment	GASB (recognize gains and losses based on change in market value)	GASB (recognize gains and losses based on change in market value)



**Figure 8-3. Distributable Income Determination—State Endowment Funds****Alaska Permanent Fund**

The annual distribution for the Permanent Fund Dividend follows the formula in AS 37.13.140-.150, which specifies that 10.5% of the past five years' total realized income shall be paid out as dividends but also sets the limitation that the annual distribution may never exceed 50% of the balance in the fund's Realized Earning Account (REA). The 50% limitation has never been triggered.

**Mental Health Trust**

The Mental Health Trust Board adopted a policy, beginning in FY 2001, to distribute 3.5% a year of the market value of the fund's total assets. The distribution rate had been 3% for FY 1996-1998 and 3.25% for FY 1999-2000. Because of recent declines in market value, the board is exploring a redefinition of "principal" so that losses in market value would be proportionally allocated to the principal account and the earnings account rather than assigning the entire value of any losses to the earning account.

**Public School Trust**

The annual distribution is 4.75% of a five-year moving average of the fund's principal market value so long as that amount does not exceed the interest and dividend earnings available in the earnings account. The trust has accumulated a sizable earnings account balance, providing a cushion for the fund to maintain its annual distributions in a sustained bear market.

**Alaska Children's Trust**

The annual distribution is 4.75% of a five-year moving average of the fund principal's market value so long as that amount does not exceed the interest and dividend earnings available in the earnings account. The trust has accumulated a sizable earnings account balance, providing a cushion for the fund to maintain its annual distributions in a sustained bear market.

**Power Cost Equalization Endowment**

The annual distribution is 7% of the fund's market value. For the initial transition years, state statute specifies that the fund shall use the market value on February 1 for the subsequent fiscal year's distribution. Thereafter, the fund is to distribute each year 7% of the monthly average market value for a specified 36-month period.

**University of Alaska Endowment**

The annual distribution is 5% of a 5-year moving average of the market value of the fund.

#### **Figure 8-4. Inflation-Proofing Procedures—State Endowment Funds**

##### **Alaska Permanent Fund**

An annual appropriation is needed to inflation proof the principal of the Permanent Fund (but not the accumulated earnings) pursuant to AS 37.13.145. The legislative appropriation requires a transfer from the Realized Earnings Account to the fund's principal an amount equal to the calculated U.S. Consumer Price Index's effect on the value of the principal, comprised of oil and gas royalty contributions and legislative appropriations. The Alaska Permanent Fund Corporation's Trustees have proposed a constitutional amendment that would inflation proof the entire fund—the principal and accumulated earnings—by limiting the annual distribution of earnings to 5% of a five-year moving average of the market value of the fund.

##### **Mental Health Trust**

The Mental Health Trust Authority has adopted two policies to inflation proof the fund. First, it limits distributions to 3.5% of the fund's market value. (The authority's ultimate goal, after further building up the principal, is to distribute 5% of the fund's market value each year, which would still allow enough retained earnings to inflation proof the fund.) Second, the authority also has adopted a policy transferring money from the reserve account to the principal whenever the reserve exceeds four times the annual income distribution, to help build up the fund's principal.

##### **Public School Trust**

The asset-allocation policy is such that—when combined with the requirement that the fund's capital gains and losses remain part of the principal—the retained capital gains are adequate to inflation proof the fund.

##### **Alaska Children's Trust**

The asset-allocation policy is such that—when combined with the requirement that the fund's capital gains and losses remain part of the principal—the retained capital gains are adequate to inflation proof the fund.

##### **Power Cost Equalization Endowment**

The legislature, in selecting a 7% distribution policy, expressly elected not to inflation proof this fund, but rather to distribute all, or almost all, of its anticipated annual earnings.

##### **University of Alaska Endowment**

The university's distribution policy of 5% of the moving five-year average of the fund's market value should allow for retained earnings to inflation proof the fund.

# 9. Public Corporations & University of Alaska

## Public Corporations

The state has established the following public corporations to carry out certain public policies:

- Alaska Housing Finance Corporation (AHFC)
- Alaska Industrial Development and Export Authority (AIDEA)
- Alaska Energy Authority (AEA)
- Alaska Student Loan Corporation (ASLC)
- Alaska Municipal Bond Bank Authority (AMBBA)
- Alaska Aerospace Development Corporation (AADC)
- Alaska Railroad Corporation (ARC)

These seven corporations and the University of Alaska are components of state government whose activities

are accounted for in the state's Comprehensive Annual Financial Report separately from the activities of primary state government. Information in this section is provided by these corporations.

Four of these corporations pay some portion of their income as an annual "dividend" to the state. They include the Alaska Housing Finance Corporation, Alaska Industrial Development Authority, Alaska Student Loan Corporation and Alaska Municipal Bond Bank Authority.

The members of the AIDEA Board of Directors also serve as Board of Directors of AEA, though AIDEA and AEA continue to exist as separate legal entities. AEA has no employees, and AEA contracts to have AIDEA employ-

ees administer AEA programs. Other corporations have their own staffs and boards. While neither the sale of bonds nor the expenditure of bond proceeds by these corporations are subject to the state's Executive Budget Act, expenditures for the day-to-day administration of all of these corporations except the Alaska Railroad are subject to the Executive Budget Act.

The Alaska Commission on Postsecondary Education (ACPE) administers the ASLC programs. The ASLC has no employees, and the executive director of the ACPE serves as the executive officer of the ASLC.

The six figures that follow in this section summarize the activities of these corporations.

**Figure 9-1. Public Corporations—Missions****Alaska Housing Finance Corporation**

Using proceeds from the sale of bonds backed by its corporate assets, AHFC purchases home mortgages from Alaska banks. Income from payments on these mortgages repays bond holders and adds to the corporation's income, thereby enabling the corporation, since FY 1991, to pay an annual dividend and/or return of capital to the state. In addition to ensuring that Alaskans, especially Alaskans of low and moderate income and those in remote and underdeveloped areas of the state, have adequate housing at reasonable cost, the corporation administers federally and state funded multi-residential, senior and low-income housing, residential energy and home weatherization programs. In recent years, the legislature has authorized AHFC to finance the construction of schools, University of Alaska housing and other capital projects identified by the legislature.

**Alaska Industrial Development and Export Authority**

By lending money, guaranteeing loans or becoming an owner, AIDEA makes financing available for industrial, export and other business enterprises in Alaska. The corporation earns money from interest on its loans, investments, leases and operations of its properties. The corporation has paid an annual dividend to the state since FY 1997.

**Alaska Energy Authority**

AEA provides loans to utilities, communities and individuals to pay for the purchase or upgrade of equipment and for bulk fuel purchases. Additionally, the agency administers the Power Cost Equalization program, subsidizing rural electric costs with the Power Cost Equalization Endowment. AEA also receives federal and state money to provide technical advice and assistance in energy planning, emergency response management, energy infrastructure construction and conservation in rural Alaska. AEA owns and, under contractual agreements, operates and maintains state-owned power projects, such as Bradley Lake and the Alaska Intertie.

**Alaska Student Loan Corporation**

The Alaska Student Loan Corporation uses proceeds from bond sales to finance education loans made by the Alaska Commission on Postsecondary Education. Loan repayments satisfy bond obligations and enhance the corporation's capital asset base. Alaska statutes authorize the board of directors to annually declare a return to the state of a portion of its net income. The board has declared return of capital payments for each year beginning in FY 2001 through FY 2007. Alaska statutes also authorize the corporation to issue bonds for the purpose of financing projects of the state. Those bonds in aggregate may not exceed \$280 million.

**Alaska Municipal Bond Bank Authority**

The Bond Bank loans money to Alaska municipalities for capital improvement projects. The bank's larger capital base, its reserve funds and its credit rating enable it to sell bonds at lower interest rates than the municipalities could obtain on their own. The Bond Bank earns interest on the money it holds in reserve and has returned a dividend to the state every year since 1977.

**Alaska Aerospace Development Corporation**

The corporation operates and maintains a commercial spaceport in Kodiak, Alaska and provides commercial rocket vehicle launch support services. It promotes space-related business, research, education and economic growth in the State of Alaska.

**Alaska Railroad Corporation**

The corporation operates freight and passenger rail services between Seward and Fairbanks, including a spur line to Whittier. In addition, the corporation generates revenues from real estate it owns.

**Figure 9-2. Public Corporations—State Capitalization****Alaska Housing Finance Corporation**

The legislature appropriated \$739.9 million in cash and \$292.5 million in mortgages held by the General Fund to the corporation between 1976 and 1984. The payments on those mortgages and additional mortgages purchased with the cash have helped build the corporation's asset base and allow it to return some capital to the state each year. In 1993, AHFC received an additional \$27.7 million in cash and \$9.3 million in equity when the legislature merged the Alaska State Housing Authority with this corporation.

**Alaska Industrial Development and Export Authority**

Between 1981 and 1991, the State of Alaska transferred various loan portfolios worth \$297.1 million and \$69.2 million in cash to this corporation.

**Alaska Energy Authority**

The legislature established the AEA in 1976 to finance and operate power projects. This corporation has also administered rural energy programs at various times, including the present. As a result of legislatively mandated reorganizations, capital has moved into and out of the corporation. At the end of FY 2001, this corporation reported contributed capital of \$963.5 million.

**Alaska Student Loan Corporation**

In FY 1988, the state transferred \$260 million of existing student loans to this corporation. Additional appropriations of cash between FY 1988 and FY 1992 totaled \$46.7 million.

**Alaska Municipal Bond Bank Authority**

Between 1976 and 1986, the legislature appropriated \$18.6 million to the Bond Bank to be used for backing bond issues. In addition, the legislature gave the Bond Bank \$2.5 million in 1981 to fund a direct loan by a municipality. The municipality repaid the loan and the Bond Bank retained the appropriation.

**Alaska Aerospace Development Corporation**

Since 1993, the state has contributed \$10.9 million from the Science and Technology Endowment.

**Alaska Railroad Corporation**

The state bought the railroad from the federal government in 1985. The purchase price of \$22.7 million was recorded as the state's capitalization.

**Figure 9-3. Public Corporations—Financial Facts, FY 2007 (\$ million)** <sup>(1)</sup>

	Total Assets	Assets Less Liabilities Book Value	Unrestricted Net Assets	FY 2007 Operating Budget	Total Positions <sup>(2)</sup>
Alaska Housing Finance Corporation	\$4,896.9	\$1,684.5	\$832.2	\$47.7	291
Alaska Industrial Development & Export Authority <sup>(3)</sup>	\$1,196.1	\$898.7	\$895.6	\$8.0	66
Alaska Energy Authority <sup>(3)</sup>	\$791.6	\$629.3	\$450.2	\$31.2	See AIDEA <sup>(4)</sup>
Alaska Student Loan Corporation	\$1,050.7	\$181.2	\$33.3	\$11.3	112
Alaska Municipal Bond Bank Authority	\$510.9	\$39.8	\$4.9	\$0.5	1
Alaska Aerospace Development Corporation <sup>(5)</sup>	\$108.0	\$93.7	\$5.5	\$24.1	38
Alaska Railroad Corporation <sup>(6)</sup>	\$714.2	\$183.6	\$97.1	\$95.7	807

<sup>(1)</sup> All figures are effective as of June 30, 2007, except for the Alaska Railroad which reports on a calendar year basis.

<sup>(2)</sup> Permanent Full Time (PFT), Permanent Part Time (PPT) and Temporary (TMP) are included in total positions.

<sup>(3)</sup> The Alaska Industrial Development and Export Authority (AIDEA) and Alaska Energy Authority (AEA) report financial data on a fiscal year basis. Assets, liabilities and net assets in the table are from audited June 30, 2007 financial statements.

<sup>(4)</sup> AIDEA provides staff for the activities of AEA. A significant portion of AIDEA's 66 member staff is engaged in AEA programs.

<sup>(5)</sup> Unaudited.

<sup>(6)</sup> The Alaska Railroad reports financial data on a calendar year basis. Assets and book value shown in this table are from audited December 31, 2006, financial statements. The operating budget figure shown here is for CY 2006.

**Figure 9-4. Public Corporations—Revenue & Net Income, FY 2007 (\$ million)**

	Revenue	Operating Income	Net Income
Alaska Housing Finance Corporation	\$345.0	\$40.5	(\$305.6)
Alaska Industrial Development & Export Authority <sup>(1)</sup>	\$84.4	\$47.5	\$43.1
Alaska Energy Authority <sup>(1)</sup>	\$287.0	(\$17.8)	\$214.1
Alaska Student Loan Corporation	\$40.3	\$23.3	\$12.0
Alaska Municipal Bond Bank Authority	\$22.2	\$0.9	\$0.9
Alaska Aerospace Development Corporation <sup>(2)</sup>	\$20.6	(\$4.0)	(\$3.8)
Alaska Railroad Corporation <sup>(3)</sup>	\$147.7	\$4.3	\$10.4

<sup>(1)</sup> The Alaska Industrial Development and Export Authority and Alaska Energy Authority report financial data on a fiscal year basis, and are increases (decreases) in Net Assets.

<sup>(2)</sup> The Alaska Aerospace Development Corporation operating income includes \$4.2 million of depreciation expense. Financial data is reported on a fiscal year basis and the reported financial data is from audited June 30, 2007 financial statements.

<sup>(3)</sup> The Alaska Railroad reports financial data on a calendar year basis. Revenue and Operating Income shown in this table are for CY 2006. Revenue, operating income and net income in the table are from audited June 30, 2006 financial statements.

### **Figure 9-5. Public Corporations—Dividends to the State**

#### **Alaska Housing Finance Corporation**

The Twenty-Third Legislature, in 2003, enacted SCSHB 256 (the "2003 Act") which added language to the Alaska Statutes to modify and incorporate the Transfer Plan. As approved and signed into law by the Governor, the Transfer Plan calls for annual transfers as follows: FY 2005, \$103 million; FY 2006, \$103 million; FY 2007, the lesser of 95% net income or \$103 million; FY 2008, the lesser of 85% net income or \$103 million; FY 2009 and thereafter, the lesser of 75% of the corporation's net income or \$103 million.

#### **Alaska Industrial Development and Export Authority**

By statute, AIDEA must make available to the state each year not less than 25% and not more than 50% of its total net income for a base year, defined as the year two years prior to the dividend year. The dividend is further limited to no more than the total amount of its unrestricted net income in the base year (AS 44.88.088). Net income is defined in the statutes.

#### **Alaska Energy Authority**

AEA does not pay a dividend or return capital to the state on a regular basis. However, in FY 2000 this corporation returned \$55.6 million of contributed capital to the Railbelt Energy Fund and the General Fund.

#### **Alaska Student Loan Corporation**

This corporation, at the discretion of its board of directors, may make available to the state a return of contributed capital or dividend for any base year in which the net income of the corporation is \$2 million or more. A base year is defined as the year two years before the payment year. If the board authorizes a payment, it must be between 10% and 35% of net income for the base year (AS 14.42.295). The corporation may also issue bonds in an aggregate amount not to exceed \$280 million, for the purpose of financing projects of the state as those projects may be identified by law (AS 14.42.220).

#### **Alaska Municipal Bond Bank Authority**

By statute, the Bond Bank annually returns earnings or income of its reserve fund, in excess of expenses, to the state.

#### **Alaska Aerospace Development Corporation**

AADC does not pay a dividend or return capital to the state.

#### **Alaska Railroad Corporation**

The corporation does not pay a cash dividend to the General Fund.



**Figure 9-6. Public Corporations—Operating Expenses & Dividends (\$ million)**

	Expenses		Dividends	
	Actual FY 2007	Budget FY 2008	Actual FY 2007	Budget FY 2008
Alaska Housing Finance Corporation <sup>(1)</sup>	\$40.5	\$48.2	\$45.5	\$81.4
Alaska Industrial Development & Export Authority	\$7.4	\$7.8	\$16.7	\$10.0
Alaska Energy Authority <sup>(2)</sup>	\$29.4	\$31.4	N/A	N/A
Alaska Student Loan Corporation	\$11.3	\$11.3	\$1.9	\$1.2
Alaska Municipal Bond Bank Authority	\$0.5	\$0.7	\$0.5	\$0.8
Alaska Aerospace Development Corporation <sup>(3)</sup>	\$20.2	\$24.1	N/A	N/A
Alaska Railroad Corporation	N/A	N/A	N/A	N/A

<sup>(1)</sup> Actual cash transfers in any given year may vary because some of this money is earmarked for multi-year capital projects.

<sup>(2)</sup> The Alaska Industrial Development and Export Authority and Alaska Energy Authority report financial data on a fiscal year basis. Actual operating expenses and dividends are for the fiscal year ended June 30, 2007.

<sup>(3)</sup> Alaska Aerospace Development Corporation report financial data on a fiscal year basis and the reported data is from audited June 30, 2007 financial statements. Expenses on schedule excludes \$4.2 million in depreciation expense that is included in reported operating income on Schedule 9-4.

## University of Alaska

**Figure 9-7. University of Alaska (\$ million)**

Lands & Facilities June 30, 2007	Total Assets June 30, 2007	Unrestricted Net Assets	FY 2008 Operating Budget	FY 2008 Total Positions
\$736.9 <sup>(1)</sup>	\$1,134.8	\$60.9	\$798.8	4,871

<sup>(1)</sup> Includes depreciation of \$634.9 million.

# Revenue Sources Book

*Alaska Department of Revenue – Tax Division*

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# FALL 2007

# 10. Appendices

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# Revenue. A-1

## Glossary of Terms

### Constitutional Budget Reserve Fund (CBRF)

Created by voters in 1990, the Constitutional Budget Reserve Fund receives proceeds from settlements of oil, gas, and mining tax and royalty disputes. The legislature may, with a three-quarters majority vote in each chamber, withdraw money from the fund.

### Federal Revenue

When the federal government gives money to states, it restricts how that money can be used. Highway and airport construction funds, Medicaid and education funding cannot be used for other purposes. In addition to restricting how the money is spent, the federal government often requires states to put up matching funds to qualify for the federal funding.

### General Fund Revenue

General Fund Revenue has different meanings in different contexts. In the state's official financial reports, General Fund Revenue is used to designate the sum of General Purpose Unrestricted Revenue, General Fund sub-account revenue, program receipts and federal dollars spent through the General Fund. In budget-writing context, General Fund revenue has a definition similar to General Purpose Unrestricted Revenue.

### Permanent Fund GASB (or Market) Income

Under standards adopted by the Governmental Accounting Standards Board (GASB), the Permanent Fund's income—and that of any other government fund—is the difference between the purchase price of the investments and their market value at a given point in time, plus any dividends, interest or rent earned on those investments.

Under GASB standards, the Permanent Fund does not have to sell the investment to count the gain or loss as it changes value. It is called “marking to market,” that is, measuring the value of the fund's investments by the current market price. This can produce a much different picture than Permanent Fund statutory income, which does not reflect fluctuating investment values until the assets are sold.

### Permanent Fund Statutory Income

The annual Permanent Fund dividend is based on statutory income. This is the sum of realized gains and losses of all Permanent Fund investment transactions during the year, plus interest, dividends and rents earned by the fund. Though the legislature may appropriate the earnings for any purpose it chooses, the historical practice has been to restrict the use of realized income to dividends and inflation proofing, and then either leave the excess in the Realized Earnings Account or transfer it to the principal of the Permanent Fund.

Restricted Program Receipts Revenue is earmarked in state statute or by contract for specific purposes and is usually appropriated back to the program that generated the revenue. Examples include University of Alaska tuition payments, marine highway receipts, payments to various revolving loan funds and public corporation receipts. Some of this revenue is actually dedicated as a consequence of the provisions of Article 18, Section 11 of the Alaska Constitution. The remainder, while statutorily earmarked, may be appropriated to purposes other than those reflected in statute if the legislature so chooses.

### Restricted Revenue

Restricted revenue represents any revenues that are not considered General Purpose Unrestricted Revenue. Revenue restricted by the constitution, state or federal law, trust or debt restrictions, or by customary practice. The legislature can at any time remove restrictions that are solely imposed by either Alaska statute or customary practice. Program receipts, revenues allocated to sub-accounts of the General Fund, and General Fund revenues customarily shared with other entities, are all considered restricted revenues for the purposes of this report.

### General Purpose Unrestricted Revenue

Revenue not restricted by the constitution, state or federal law, trust or debt restrictions or customary practice. Most legislative and public debate over the budget each year centers on this category of revenue. In deriving this figure from General Fund revenues, we have excluded General Fund sub-account revenue, as well as customarily restricted revenues such as shared taxes and marine highway receipts.

# Revenue. A-2

## General Fund Unrestricted Revenue Matrices, with Price and Cost Sensitivity, FY 2008-2010

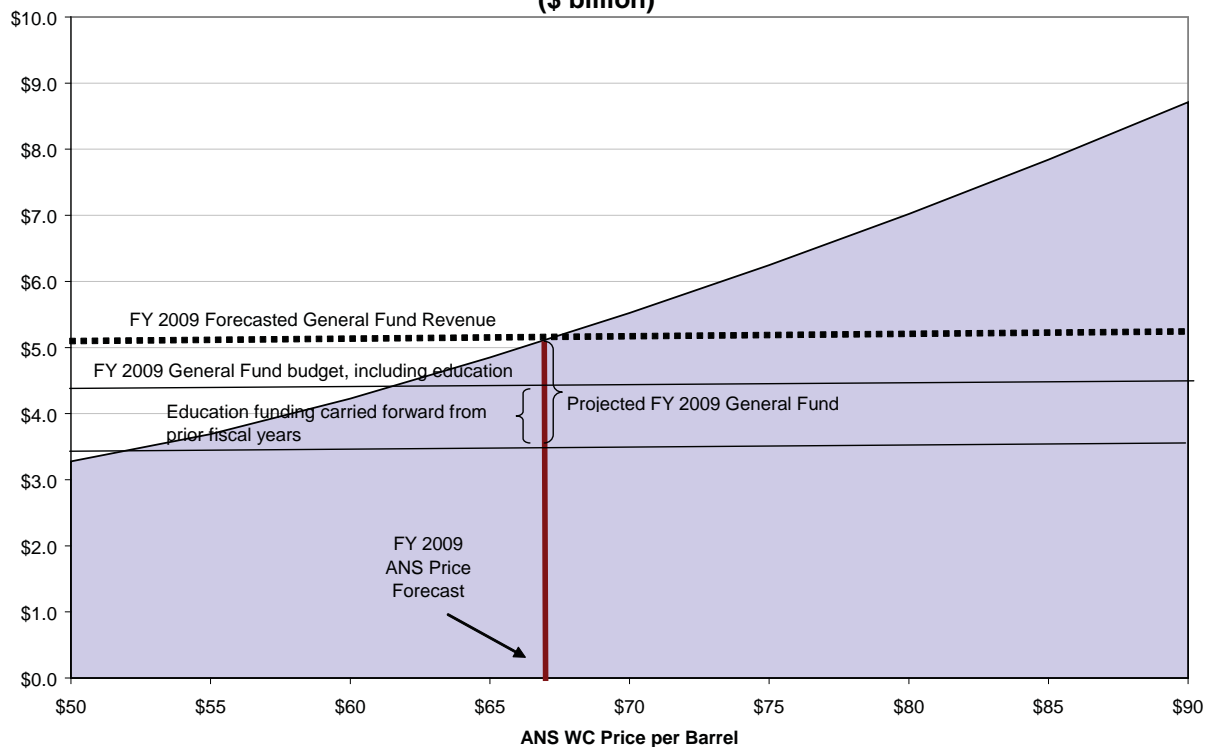
(\$ million)

FY 2008*				FY 2009				FY 2010			
At forecasted production of 0.731 mmbbls/day				At forecasted production of 0.701 mmbbls/day				At forecasted production of 0.693 mmbbls/day			
ANS \$/barrel	Total capital & operating costs In dollars/barrel			ANS \$/barrel	Total capital & operating costs In dollars/barrel			ANS \$/barrel	Total capital & operating costs In dollars/barrel		
	\$15	\$18	\$21		\$15	\$18	\$21		\$15	\$18	\$21
	\$50	N/A	N/A		N/A	\$50	3,356		3,044	2,743	\$50
\$55	N/A	N/A	N/A	\$55	3,862	3,505	3,204	\$55	3,940	3,581	3,313
\$60	5,105	4,747	4,386	\$60	4,509	4,060	3,663	\$60	4,594	4,200	3,807
\$65	5,737	5,311	4,938	\$65	5,202	4,718	4,275	\$65	5,296	4,869	4,442
\$70	6,408	5,950	5,498	\$70	5,942	5,423	4,946	\$70	6,042	5,583	5,121
\$75	7,253	6,758	6,269	\$75	6,728	6,174	5,664	\$75	6,835	6,343	5,847
\$80	8,087	7,560	7,038	\$80	7,562	6,974	6,430	\$80	7,673	7,149	6,618
\$85	9,116	8,554	7,994	\$85	8,440	7,817	7,240	\$85	8,558	8,001	7,436
\$90	10,244	9,646	9,049	\$90	9,367	8,709	8,099	\$90	9,490	8,900	8,301

\*FY 2008 is unusual in that companies will receive a 20% credit for only half of the capital costs incurred. This is due to the 2-year capital credit "spread" required under the ACES tax plan. The remainder of the year's credits will be taken in the following fiscal year.

In addition to price and production, revenue estimates under the Petroleum Profits Tax are dependent on annual spending by petroleum producers and explorers. Estimates for these spending plans will likely change from those anticipated in this forecast as new information becomes available. The above estimates also do not consider how company investment decisions would change with an increase or a decrease in oil price.

**FY 2009 General Fund Unrestricted Revenue, with Price Sensitivity, (\$ billion)**



# Revenue. A-3

## General Purpose Unrestricted Revenue—History<sup>(1)(2)</sup>

(\$ million)

FY	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
<b>TAX REVENUE</b>										
<b>Property Tax</b>	<b>51.3</b>	<b>48.8</b>	<b>45.0</b>	<b>45.1</b>	<b>49.6</b>	<b>48.7</b>	<b>47.3</b>	<b>42.5</b>	<b>54.5</b>	<b>65.6</b>
<b>Sales/Use</b>										
Alcoholic Beverages	11.8	12.2	12.7	12.0	12.9	14.1	16.4	17.3	17.6	17.1
Tobacco Products	15.4	15.2	16.3	16.3	15.5	16.3	16.0	25.1	35.4	43.8
Insurance Premium	33.7	28.4	28.7	32.2	34.1	39.0	43.7	45.9	44.3	46.5
Electric and Telephone Cooperative	2.3	3.7	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2
Motor Fuel Tax	35.6	37.8	41.9	37.5	40.2	37.2	41.2	39.4	42.0	39.2
Vehicle Rental tax	0.0	0.0	0.0	0.0	0.0	0.0	2.7	7.5	7.7	8.0
Tire Fee	0.0	0.0	0.0	0.0	0.0	0.0	0.8	1.6	1.6	1.5
<b>Total</b>	<b>98.8</b>	<b>97.3</b>	<b>99.8</b>	<b>98.2</b>	<b>102.8</b>	<b>106.8</b>	<b>121.0</b>	<b>137.0</b>	<b>148.8</b>	<b>156.3</b>
<b>Income Tax</b>										
General Corporate	53.4	53.8	56.3	59.5	53.4	47.7	39.6	61.8	138.0	176.9
Petroleum Corporate	200.1	145.1	162.7	338.1	178.4	151.1	298.8	524.0	661.1	594.4
<b>Total</b>	<b>253.5</b>	<b>198.9</b>	<b>219.0</b>	<b>397.6</b>	<b>231.8</b>	<b>198.8</b>	<b>338.4</b>	<b>585.8</b>	<b>799.1</b>	<b>771.3</b>
<b>Severance Tax</b>										
Oil and Gas Production	564.4	358.6	693.2	694.4	486.7	589.8	642.7	854.9	1,191.7	2,282.2
Oil and Gas Conservation	1.6	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Oil and Gas Hazardous Release	11.8	11.1	9.5	9.4	9.6	9.2	9.2	8.3	7.8	10.1
<b>Total</b>	<b>577.8</b>	<b>371.1</b>	<b>702.7</b>	<b>703.8</b>	<b>496.3</b>	<b>599.0</b>	<b>651.9</b>	<b>863.2</b>	<b>1,199.5</b>	<b>2,292.3</b>
<b>Fish Tax</b>										
Fisheries Business Tax	28.5	25.9	18.2	15.4	12.7	13.8	14.9	10.7	15.4	17.1
Fish Landing	3.8	5.9	2.2	4.1	2.6	6.9	2.5	3.9	4.7	5.3
Other <sup>(3)</sup>	9.8	9.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total</b>	<b>42.1</b>	<b>41.0</b>	<b>20.4</b>	<b>19.5</b>	<b>15.3</b>	<b>20.7</b>	<b>17.4</b>	<b>14.6</b>	<b>20.1</b>	<b>22.4</b>
<b>Other Tax</b>										
Estate	5.5	1.7	2.5	2.7	3.1	1.2	2.3	1.5	0.6	0.1
Mining <sup>(4)</sup>			3.4	1.7	0.5	0.4	3.2	10.3	18.6	79.1
Charitable Gaming <sup>(4)</sup>			2.3	2.4	2.5	2.6	2.4	2.5	2.4	2.5
Other <sup>(4)</sup>	3.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total</b>	<b>9.4</b>	<b>4.6</b>	<b>8.2</b>	<b>6.8</b>	<b>6.1</b>	<b>4.2</b>	<b>7.9</b>	<b>14.3</b>	<b>21.6</b>	<b>81.7</b>
<b>TOTAL TAX REVENUE</b>	<b>1,032.9</b>	<b>761.7</b>	<b>1,095.1</b>	<b>1,271.0</b>	<b>901.9</b>	<b>978.2</b>	<b>1,183.9</b>	<b>1,657.4</b>	<b>2,243.6</b>	<b>3,389.6</b>

(continued on next page)

## General Purpose Unrestricted Revenue—History (continued from prior page)

(\$ million)

FY	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
<b>NON TAX REVENUE</b>										
<b>Licenses and Permits</b>	<b>74.6</b>	<b>63.7</b>	<b>68.4</b>	<b>37.3</b>	<b>42.2</b>	<b>33.6</b>	<b>41.8</b>	<b>42.7</b>	<b>41.0</b>	<b>42.0</b>
<b>Intergovernmental Receipts</b>										
Federal Shared Revenues	2.2	0.8	1.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
<b>Charges for Services</b>	<b>72.0</b>	<b>70.6</b>	<b>43.7</b>	<b>27.0</b>	<b>19.1</b>	<b>13.9</b>	<b>11.1</b>	<b>17.9</b>	<b>21.8</b>	<b>28.5</b>
<b>Fines and Forfeitures</b>	<b>37.7</b>	<b>12.5</b>	<b>46.2</b>	<b>33.6</b>	<b>6.6</b>	<b>7.0</b>	<b>16.0</b>	<b>9.4</b>	<b>8.5</b>	<b>7.2</b>
<b>Rents and Royalties</b>										
Oil and Gas Royalties-Net	480.4	322.6	727.8	781.0	575.7	825.7	1,042.8	1,401.1	1,772.2	1,583.8
Oil and Gas Bonuses, Rents, Interest <sup>(5)</sup> (6)	23.0	25.6	4.1	18.3	20.1	14.6	13.3	18.8	11.9	29.2
Non-petroleum Rents and Royalties	8.9	10.6	9.7	10.9	9.3	6.2	7.8	9.3	8.8	11.8
Other	0.8	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total</b>	<b>512.3</b>	<b>359.1</b>	<b>741.6</b>	<b>810.2</b>	<b>605.1</b>	<b>846.5</b>	<b>1,063.9</b>	<b>1,429.2</b>	<b>1,792.9</b>	<b>1,624.8</b>
<b>Investment Earnings<sup>(6)</sup></b>	<b>60.6</b>	<b>46.5</b>	<b>48.1</b>	<b>67.6</b>	<b>43.1</b>	<b>59.0</b>	<b>9.7</b>	<b>24.7</b>	<b>53.3</b>	<b>138.7</b>
<b>Miscellaneous Revenue</b>	<b>33.5</b>	<b>37.3</b>	<b>37.6</b>	<b>34.9</b>	<b>42.3</b>	<b>9.4</b>	<b>19.2</b>	<b>7.5</b>	<b>39.3</b>	<b>9.7</b>
<b>Sub-Total NON-TAX REVENUE</b>	<b>792.9</b>	<b>590.5</b>	<b>986.6</b>	<b>1,010.9</b>	<b>758.4</b>	<b>969.4</b>	<b>1,161.7</b>	<b>1,531.4</b>	<b>1,956.8</b>	<b>1,850.9</b>
Petroleum Special Settlements	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>TOTAL NON-TAX REVENUE</b>	<b>792.9</b>	<b>590.5</b>	<b>986.6</b>	<b>1,010.9</b>	<b>758.4</b>	<b>969.4</b>	<b>1,161.7</b>	<b>1,531.4</b>	<b>1,956.8</b>	<b>1,850.9</b>
<b>TOTAL TAX REVENUE</b>	<b>1,032.9</b>	<b>761.7</b>	<b>1,095.1</b>	<b>1,271.0</b>	<b>901.9</b>	<b>978.2</b>	<b>1,183.9</b>	<b>1,657.4</b>	<b>2,243.6</b>	<b>3,389.6</b>
<b>TOTAL GENERAL PURPOSE UNRESTRICTED REVENUE</b>	<b>1,825.8</b>	<b>1,352.2</b>	<b>2,081.7</b>	<b>2,281.9</b>	<b>1,660.3</b>	<b>1,947.6</b>	<b>2,345.6</b>	<b>3,188.8</b>	<b>4,200.4</b>	<b>5,240.5</b>

<sup>(1)</sup> General Purpose Unrestricted Revenue includes those revenues that are not restricted by statute or custom, as reported elsewhere in this publication. A summary of historical General Purpose Unrestricted Revenue can be found on the Tax Division's web site at: [www.tax.alaska.gov/sourcesbook/GeneralFund-UnrestrictedRevenueHistory.pdf](http://www.tax.alaska.gov/sourcesbook/GeneralFund-UnrestrictedRevenueHistory.pdf)

<sup>(2)</sup> Prior to FY 2000, data presented are for General Fund unrestricted revenue. This amount is higher than General Purpose Unrestricted Revenue because the data include certain revenues that are restricted by custom, such as fisheries tax revenues shared.

<sup>(3)</sup> Prior to FY 2000, other fish tax included certain customarily restricted fisheries tax revenues.

<sup>(4)</sup> Prior to FY 2000, mining license tax and charitable gaming receipts are included in "Other."

<sup>(5)</sup> These categories are primarily composed of petroleum.

<sup>(6)</sup> Starting in FY 2001, interest earnings are included in oil and gas royalties and excluded from investment earnings.

## Revenue. A-4a

### General Purpose Unrestricted Petroleum Revenue—History<sup>(1)</sup>

(\$ million)

<b>FY</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>
Petroleum Corporate Income Tax	200.1	145.1	162.7	338.1	178.4	151.1	298.8	524.0	661.1	594.4
Production Tax	577.8	371.1	702.7	703.8	496.3	599.0	651.9	863.2	1,199.5	2,292.3
Petroleum Property Tax	51.3	48.8	45.0	45.1	49.6	48.7	47.3	42.5	54.5	65.6
Oil and Gas Royalties-Net <sup>(2)</sup>	480.4	322.6	727.8	781.0	575.7	825.7	1,042.8	1,401.1	1,772.2	1,583.8
Bonuses, Rents & Interest-Net <sup>(2)(3)</sup>	23.0	25.6	4.1	18.3	20.1	14.6	13.3	18.8	11.9	29.2
Petroleum Special Settlements	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total Petroleum Revenue</b>	<b>1,332.6</b>	<b>913.2</b>	<b>1,642.3</b>	<b>1,886.3</b>	<b>1,320.1</b>	<b>1,639.1</b>	<b>2,054.1</b>	<b>2,849.6</b>	<b>3,699.2</b>	<b>4,565.3</b>
<b>Cumulative Total Petroleum Revenue<sup>(4)</sup></b>	<b>45,182.3</b>	<b>46,095.5</b>	<b>47,737.8</b>	<b>49,624.1</b>	<b>50,944.2</b>	<b>52,583.3</b>	<b>54,637.4</b>	<b>57,487.0</b>	<b>61,186.2</b>	<b>65,751.5</b>
<b>Total General Purpose Unrestricted Revenue</b>	<b>1,825.8</b>	<b>1,352.2</b>	<b>2,081.7</b>	<b>2,281.9</b>	<b>1,660.3</b>	<b>1,947.6</b>	<b>2,345.6</b>	<b>3,188.8</b>	<b>4,200.4</b>	<b>5,240.5</b>
% Petroleum of Total GP Unrestricted Revenue	73%	68%	79%	83%	80%	84%	88%	89%	88%	87%

<sup>(1)</sup> Historical General Purpose Unrestricted petroleum revenue can be found on the Tax Division's web site at: <http://www.tax.alaska.gov/sourcesbook/PetroleumRevenueHistory.pdf>. Table on Tax web site includes historical Reserve Tax (FY 1976-1977) and Petroleum Special Settlements (FY 1986-1995) which are reflected as current zero totals in Appendix A-4a.

<sup>(2)</sup> Royalties, bonuses, rents and interest are net of Permanent Fund contribution and Constitutional Budget Reserve Fund (CBRF) deposits.

<sup>(3)</sup> This category is primarily composed of petroleum revenue.

<sup>(4)</sup> The cumulative petroleum revenue total is based on revenue beginning in FY 1959.



## Revenue. A-4b

### General Purpose Unrestricted Petroleum Revenue—Forecast <sup>(1)</sup>

(\$ million)

<b>FY</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
Petroleum Corporate Income Tax	598.9	594.6	559.0	549.8	560.9	570.0	577.1	336.1	344.2	351.4
Production Tax	3,404.3	2,201.2	1,998.6	2,015.0	2,106.3	2,193.3	2,071.0	149.7	91.0	156.8
Petroleum Property Tax	53.5	52.4	51.2	50.0	48.8	47.6	46.5	45.4	44.2	43.1
Oil and Gas Royalties-Net <sup>(2)</sup>	1,833.6	1,566.1	1,511.7	1,501.2	1,503.7	1,504.4	1,496.3	832.6	830.6	827.5
Bonuses, Rents & Interest-Net <sup>(2)(3)</sup>	12.7	5.8	6.5	7.7	6.8	8.7	7.1	7.4	7.4	7.4
Petroleum Special Settlements	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total Petroleum Revenue</b>	<b>5,903.0</b>	<b>4,420.0</b>	<b>4,127.0</b>	<b>4,123.7</b>	<b>4,226.5</b>	<b>4,324.0</b>	<b>4,198.0</b>	<b>1,371.1</b>	<b>1,317.5</b>	<b>1,386.2</b>
<b>Cumulative Total Petroleum Revenue<sup>(4)</sup></b>	<b>71,654.6</b>	<b>76,074.6</b>	<b>80,201.6</b>	<b>84,325.3</b>	<b>88,551.8</b>	<b>92,875.8</b>	<b>97,073.8</b>	<b>98,445.0</b>	<b>99,762.5</b>	<b>107,517.4</b>
<b>Total General Purpose Unrestricted Revenue</b>	<b>6,604.5</b>	<b>5,022.8</b>	<b>4,713.6</b>	<b>4,706.7</b>	<b>4,813.5</b>	<b>4,919.9</b>	<b>4,803.9</b>	<b>1,984.8</b>	<b>1,942.4</b>	<b>2,018.8</b>
% Petroleum of Total GP Unrestricted Revenue	89%	88%	88%	88%	88%	88%	87%	69%	68%	69%

<sup>(1)</sup> Historical General Purpose Unrestricted petroleum revenue can be found on the Tax Division's web site at: <http://www.tax.alaska.gov/sourcesbook/PetroleumRevenueHistory.pdf>. Table on Tax web site includes historical Reserve Tax (FY 1976-1977) and Petroleum Special Settlements (FY 1986-1995) which are reflected as current zero totals in Appendix A-4a.

<sup>(2)</sup> Royalties, bonuses, rents and interest are net of Permanent Fund contribution and Constitutional Budget Reserve Fund (CBRF) deposits.

<sup>(3)</sup> This category is primarily composed of petroleum revenue.

<sup>(4)</sup> The cumulative petroleum revenue total is based on revenue beginning in FY 1959.

## Revenue. A-5a

### Petroleum Production Tax and Royalty Revenue—History<sup>(1)</sup>

(\$ million)

FY	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
<b>Alaska North Slope</b>										
Oil Royalty-Net <sup>(2)</sup>	441.2	297.9	658.4	797.4	546.5	827.5	959.1	1,300.4	1,652.1	1,461.2
Production Tax <sup>(3)</sup>										
Oil Production Tax	545.2	328.0	632.6	667.1	444.5	549.6	594.5	787.3	1,162.6	2,108.2
Gas Production Tax (includes gas NGL's)	18.6	11.4	22.3	20.3	9.3	12.7	17.6	30.5	31.0	0.0
Total Production Tax	563.8	339.4	654.9	687.3	453.8	562.3	612.1	817.9	1,193.6	2,108.2
Conservation Tax/ Exploration Incentive	1.5	1.4	0.1	0.0	0.0	0.0	0.0	(30.0)	(50.0)	0.0
Hazardous Release Fund	11.3	10.5	9.4	9.0	9.0	9.0	9.6	8.2	7.6	9.8
Gas Royalty-Net	0.8	0.8	0.9	1.0	1.3	3.2	6.6	6.7	6.6	6.9
<b>Subtotal</b>	<b>1,018.7</b>	<b>650.0</b>	<b>1,323.8</b>	<b>1,494.8</b>	<b>1,010.6</b>	<b>1,402.0</b>	<b>1,587.3</b>	<b>2,103.2</b>	<b>2,809.9</b>	<b>3,586.0</b>
<b>Cook Inlet</b>										
Oil Royalty-Net <sup>(2)</sup>	13.5	10.2	19.5	27.4	18.8	24.2	26.0	29.2	32.9	27.1
Production Tax <sup>(3)</sup>										
Oil Production Tax <sup>(4)</sup>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gas Production Tax	18.4	13.2	16.0	17.9	23.4	23.0	24.7	24.4	33.2	6.0
Total Production Tax	18.4	13.2	16.0	17.9	23.4	23.0	24.7	24.4	33.2	6.0
Conservation Tax/ Exploration Incentive	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hazardous Release Fund	0.3	0.3	0.3	0.2	0.3	0.3	0.2	0.2	0.2	0.2
Gas Royalty-Net	20.9	18.3	19.4	30.5	25.2	23.4	39.2	31.1	46.9	46.8
<b>Subtotal</b>	<b>53.2</b>	<b>42.2</b>	<b>55.2</b>	<b>75.9</b>	<b>67.7</b>	<b>70.9</b>	<b>90.1</b>	<b>85.0</b>	<b>113.1</b>	<b>80.1</b>
<b>Total Alaska</b>										
Oil Royalty-Net <sup>(2)</sup>	454.8	308.1	678.0	824.7	565.3	851.8	985.0	1,329.6	1,684.9	1,488.3
Production Tax <sup>(3)</sup>										
Oil Production Tax	545.2	328.0	632.6	667.1	444.5	549.6	594.5	787.3	1,162.6	2,108.2
Gas Production Tax (includes gas NGL's)	37.0	24.7	38.3	38.1	32.7	35.7	42.3	55.0	64.2	6.0
Total Production Tax	582.2	352.7	670.9	705.2	477.2	585.3	636.8	842.3	1,226.8	2,114.2
Conservation Tax/ Exploration Incentive	1.6	1.5	0.1	0.0	0.0	0.0	0.0	(30.0)	(50.0)	0.0
Hazardous Release Fund	11.6	10.9	9.7	9.2	9.3	9.2	9.8	8.4	7.8	10.0
Gas Royalty-Net	21.7	19.1	20.3	31.5	26.4	26.6	45.7	37.8	53.5	53.7
<b>Total</b>	<b>1,071.9</b>	<b>692.2</b>	<b>1,379.0</b>	<b>1,570.7</b>	<b>1,078.3</b>	<b>1,472.9</b>	<b>1,677.4</b>	<b>2,188.2</b>	<b>2,923.0</b>	<b>3,666.1</b>

<sup>(1)</sup> Appendix A-5a provides a breakout of Alaska North Slope and Cook Inlet revenues which may not exactly match Alaska State Accounting System (AKSAS) numbers in tables throughout the Revenue Sources Book. This detailed revenue is from the Department of Revenue's Forecast Model. This table can be found on the Tax Division's web site at: [www.tax.alaska.gov/sourcesbook/ProductionTax&RoyaltyRevenue.pdf](http://www.tax.alaska.gov/sourcesbook/ProductionTax&RoyaltyRevenue.pdf).

<sup>(2)</sup> Unrestricted oil and gas royalty revenue is net of Permanent Fund (PF) and Public School Fund (PSF) contributions.

<sup>(3)</sup> Due to enactment of the Alaska's Clear and Equitable Share (ACES) in 2007, oil and gas production taxes are combined and based on company profits. See Section 4. Oil Revenue for ACES detail.

<sup>(4)</sup> Cook Inlet production is afforded special treatment under the ACES. Taxation is based on the lower of ACES or Economic Limit Factor (ELF) calculated production tax.

# Revenue. A-5b

## Petroleum Production Tax and Royalty Revenue—Forecast<sup>(1)</sup>

(\$ million)

FY	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
<b>Alaska North Slope</b>										
Oil Royalty-Net <sup>(2)</sup>	1,758.6	1,479.0	1,426.5	1,415.5	1,417.2	1,442.3	1,434.0	779.4	776.4	772.1
Production Tax <sup>(3)</sup>										
Oil Production Tax	3,386.5	2,183.9	1,981.4	2,000.2	2,091.5	2,178.3	2,056.1	134.8	76.5	142.6
Gas Production Tax (includes gas NGL's)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Production Tax	3,386.5	2,183.9	1,981.4	2,000.2	2,091.5	2,178.3	2,056.1	134.8	76.5	142.6
Conservation Tax/ Exploration Incentive	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hazardous Release Fund	11.6	11.1	11.0	8.6	8.6	8.8	8.8	8.8	8.4	8.1
Gas Royalty-Net	4.9	3.2	3.0	3.1	3.2	3.2	3.3	1.9	1.9	2.0
<b>Subtotal</b>	<b>5,161.5</b>	<b>3,677.1</b>	<b>3,421.9</b>	<b>3,427.4</b>	<b>3,520.4</b>	<b>3,632.6</b>	<b>3,502.1</b>	<b>924.9</b>	<b>863.3</b>	<b>924.8</b>
<b>Cook Inlet</b>										
Oil Royalty-Net <sup>(2)</sup>	26.8	28.3	24.8	23.4	22.3	21.2	20.1	11.1	10.8	10.5
Production Tax <sup>(3)</sup>										
Oil Production Tax <sup>(4)</sup>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gas Production Tax	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Total Production Tax	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Conservation Tax/ Exploration Incentive	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hazardous Release Fund	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1
Gas Royalty-Net	43.4	55.6	57.4	59.2	61.1	37.8	39.0	40.2	41.5	42.9
<b>Subtotal</b>	<b>76.4</b>	<b>90.2</b>	<b>88.4</b>	<b>88.8</b>	<b>89.5</b>	<b>65.1</b>	<b>65.2</b>	<b>57.4</b>	<b>58.4</b>	<b>59.5</b>
<b>Total Alaska</b>										
Oil Royalty-Net <sup>(2)</sup>	1,785.4	1,507.3	1,451.3	1,439.0	1,439.4	1,463.5	1,454.1	790.5	787.2	782.6
Production Tax <sup>(3)</sup>										
Oil Production Tax	3,386.5	2,183.9	1,981.4	2,000.2	2,091.5	2,178.3	2,056.1	134.8	76.5	142.6
Gas Production Tax (includes gas NGL's)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Total Production Tax	3,392.5	2,189.9	1,987.4	2,006.2	2,097.5	2,184.3	2,062.1	140.8	82.5	148.6
Conservation Tax/ Exploration Incentive	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hazardous Release Fund	11.8	11.3	11.2	8.8	8.8	8.9	8.9	8.9	8.5	8.2
Gas Royalty-Net	48.2	58.8	60.4	62.3	64.3	41.0	42.2	42.1	43.5	44.9
<b>Total</b>	<b>5,237.9</b>	<b>3,767.3</b>	<b>3,510.3</b>	<b>3,516.2</b>	<b>3,610.0</b>	<b>3,697.7</b>	<b>3,567.3</b>	<b>982.3</b>	<b>921.7</b>	<b>984.3</b>

<sup>(1)</sup> Appendix A-5b provides a breakout of Alaska North Slope and Cook Inlet revenues which may not exactly match Alaska State Accounting System (AKSAS) numbers in tables throughout the Revenue Sources Book. This detailed revenue is from the Department of Revenue's Forecast Model. This table can be found on the Tax Division's web site at: [www.tax.alaska.gov/sourcesbook/ProductionTax&RoyaltyRevenue.pdf](http://www.tax.alaska.gov/sourcesbook/ProductionTax&RoyaltyRevenue.pdf).

<sup>(2)</sup> Unrestricted oil and gas royalty revenue is net of Permanent Fund (PF) and Public School Fund (PSF) contributions.

<sup>(3)</sup> Due to enactment of the Alaska's Clear and Equitable Share (ACES) in 2007, oil and gas production taxes are combined and based on company profits. See Section 4. Oil Revenue for ACES detail.

<sup>(4)</sup> Cook Inlet production is afforded special treatment under the ACES. Taxation is based on the lower of ACES or Economic Limit Factor (ELF) calculated production tax.

## Revenue. A-6a

### ANS and Cook Inlet Royalty Revenue—History<sup>(1)</sup>

(\$ million)

FY	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
<b>ALASKA NORTH SLOPE</b>										
<u>ANS Royalty Revenue</u>										
Oil (does not include NPR-A royalty)	602.2	402.4	897.0	1,099.5	761.1	1,142.0	1,287.3	1,745.6	2,217.3	2,054.3
Gas	1.1	1.0	1.2	1.4	1.8	4.4	8.8	9.0	12.2	11.6
<b>Total</b>	<b>603.3</b>	<b>403.4</b>	<b>898.2</b>	<b>1,100.9</b>	<b>762.8</b>	<b>1,146.4</b>	<b>1,296.1</b>	<b>1,754.5</b>	<b>2,229.6</b>	<b>2,065.9</b>
<u>ANS Royalty Revenue to Permanent Fund &amp; Public School Fund</u>										
Oil	160.9	104.5	238.5	302.1	214.6	314.5	328.3	445.1	565.4	523.8
Gas	0.3	0.3	0.3	0.4	0.5	1.2	2.2	2.3	3.1	3.0
<b>Total</b>	<b>161.2</b>	<b>104.8</b>	<b>238.9</b>	<b>302.5</b>	<b>215.1</b>	<b>315.7</b>	<b>330.5</b>	<b>447.4</b>	<b>568.5</b>	<b>526.8</b>
<u>ANS General Fund Royalty Revenue-Net</u>										
Oil	441.2	297.9	658.4	797.4	546.5	827.5	959.1	1,300.4	1,651.9	1,530.4
Gas	0.8	0.8	0.9	1.0	1.3	3.2	6.6	6.7	9.1	8.6
<b>Total</b>	<b>442.1</b>	<b>298.6</b>	<b>659.4</b>	<b>798.4</b>	<b>547.8</b>	<b>830.7</b>	<b>965.6</b>	<b>1,307.1</b>	<b>1,661.0</b>	<b>1,539.1</b>
<b>COOK INLET</b>										
<u>Cook Inlet Royalty Revenue</u>										
Oil	18.2	13.7	26.2	36.7	25.3	32.5	34.9	39.2	41.4	37.7
Gas	28.1	24.6	26.0	40.9	33.8	31.4	52.6	41.8	55.0	56.8
<b>Total</b>	<b>46.2</b>	<b>38.3</b>	<b>52.3</b>	<b>77.6</b>	<b>59.1</b>	<b>63.9</b>	<b>87.4</b>	<b>81.0</b>	<b>96.4</b>	<b>94.5</b>
<u>Cook Inlet Royalty Revenue to Permanent Fund &amp; Public School Fund</u>										
Oil	4.6	3.5	6.7	9.4	6.4	8.3	8.9	10.0	10.6	9.6
Gas	7.2	6.3	6.6	10.4	8.6	8.0	13.4	10.7	14.0	14.5
<b>Total</b>	<b>11.8</b>	<b>9.8</b>	<b>13.3</b>	<b>19.8</b>	<b>15.1</b>	<b>16.3</b>	<b>22.3</b>	<b>20.7</b>	<b>24.6</b>	<b>24.1</b>
<u>Cook Inlet General Fund Royalty Revenue-Net</u>										
Oil	13.5	10.2	19.5	27.4	18.8	24.2	26.0	29.2	30.8	28.1
Gas	20.9	18.3	19.4	30.5	25.2	23.4	39.2	31.1	41.0	42.3
<b>Total</b>	<b>34.5</b>	<b>28.6</b>	<b>38.9</b>	<b>57.8</b>	<b>44.0</b>	<b>47.6</b>	<b>65.1</b>	<b>60.3</b>	<b>71.8</b>	<b>70.4</b>

<sup>(1)</sup> Appendix A-6a provides royalty revenue which may not match the Alaska State Accounting System (AKSAS) numbers in tables throughout this Revenue Sources Book. Revenue is from the Department of Revenue's Forecast Model. This table is available on the Tax Division web site at: [www.tax.alaska.gov/sourcesbook/RoyaltyRevenueDetail.pdf](http://www.tax.alaska.gov/sourcesbook/RoyaltyRevenueDetail.pdf)

# Revenue. A-6b

## ANS and Cook Inlet Royalty Revenue—Forecast <sup>(1)</sup>

(\$ million)

<b>FY</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
<b>ALASKA NORTH SLOPE</b>										
<u>ANS Royalty Revenue</u>										
Oil (does not include NPR-A royalty)	2,360.5	1,985.2	1,914.8	1,900.1	1,902.2	1,935.9	1,924.8	1,046.2	1,042.1	1,036.4
Gas	6.5	4.2	4.0	4.1	4.2	4.3	4.4	2.5	2.6	2.7
<b>Total</b>	<b>2,367.0</b>	<b>1,989.4</b>	<b>1,918.8</b>	<b>1,904.2</b>	<b>1,906.5</b>	<b>1,940.3</b>	<b>1,929.2</b>	<b>1,048.7</b>	<b>1,044.7</b>	<b>1,039.1</b>
<u>ANS Royalty Revenue to Permanent Fund &amp; Public School Fund</u>										
Oil	601.9	506.2	488.3	484.5	485.1	493.7	490.8	266.8	265.7	264.3
Gas	1.7	1.1	1.0	1.1	1.1	1.1	1.1	0.6	0.7	0.7
<b>Total</b>	<b>603.6</b>	<b>507.3</b>	<b>489.3</b>	<b>485.6</b>	<b>486.1</b>	<b>494.8</b>	<b>491.9</b>	<b>267.4</b>	<b>266.4</b>	<b>265.0</b>
<u>ANS General Fund Royalty Revenue-Net</u>										
Oil	1,758.6	1,479.0	1,426.5	1,415.5	1,417.2	1,442.3	1,434.0	779.4	776.4	771.1
Gas	4.9	3.2	3.0	3.1	3.2	3.2	3.3	1.9	1.9	2.0
<b>Total</b>	<b>1,763.4</b>	<b>1,482.1</b>	<b>1,429.5</b>	<b>1,418.6</b>	<b>1,420.3</b>	<b>1,445.5</b>	<b>1,437.2</b>	<b>781.3</b>	<b>778.3</b>	<b>774.1</b>
<b>COOK INLET</b>										
<u>Cook Inlet Royalty Revenue</u>										
Oil	36.0	38.0	33.3	31.4	29.9	28.4	27.0	14.9	14.5	14.1
Gas	58.2	74.7	77.0	79.5	82.0	50.7	52.3	54.0	55.7	57.5
<b>Total</b>	<b>94.2</b>	<b>112.7</b>	<b>110.3</b>	<b>110.9</b>	<b>111.9</b>	<b>79.1</b>	<b>79.3</b>	<b>68.9</b>	<b>70.2</b>	<b>71.6</b>
<u>Cook Inlet Royalty Revenue to Permanent Fund &amp; Public School Fund</u>										
Oil	9.2	9.7	8.5	8.0	7.6	7.3	6.9	3.8	3.7	3.6
Gas	14.8	19.0	19.6	20.3	20.9	12.9	13.3	13.8	14.2	14.7
<b>Total</b>	<b>24.0</b>	<b>28.7</b>	<b>28.1</b>	<b>28.3</b>	<b>28.5</b>	<b>20.2</b>	<b>20.2</b>	<b>17.6</b>	<b>17.9</b>	<b>18.3</b>
<u>Cook Inlet General Fund Royalty Revenue-Net</u>										
Oil	26.8	28.3	24.8	23.4	22.3	21.2	20.1	11.1	10.8	10.5
Gas	43.4	55.6	57.4	59.2	61.1	37.8	39.0	40.2	41.5	42.9
<b>Total</b>	<b>70.2</b>	<b>84.0</b>	<b>82.2</b>	<b>82.6</b>	<b>83.4</b>	<b>59.0</b>	<b>59.1</b>	<b>51.3</b>	<b>52.3</b>	<b>53.4</b>

<sup>(1)</sup> Appendix A-6b provides royalty revenue which may not match the Alaska State Accounting System (AKSAS) numbers in tables throughout this Revenue Sources Book. Revenue is from the Department of Revenue's Forecast Model. This table is available on the Tax Division web site at: [www.tax.alaska.gov/sourcesbook/RoyaltyRevenueDetail.pdf](http://www.tax.alaska.gov/sourcesbook/RoyaltyRevenueDetail.pdf)

## Revenue. A-7a

### Total Alaska Government Petroleum Revenue—History<sup>(1)</sup>

(\$ million)

<b>FY</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>
Petroleum Corporate Income Tax	200.1	145.1	162.7	338.1	178.4	151.1	298.8	524.0	661.1	594.4
Production Tax	577.8	371.1	702.7	703.8	496.3	599.0	651.9	863.2	1,199.5	2,292.3
Petroleum Property Tax	51.3	48.8	45.0	45.1	49.6	48.7	47.3	42.5	54.5	65.6
Oil & Gas Royalties- gross <sup>(2)</sup>	649.5	441.7	950.5	1,178.5	821.9	1,210.3	1,383.6	1,835.5	2,325.9	2,069.7
Bonuses, Rents & Interest <sup>(2)</sup>	30.9	34.4	5.5	24.6	27.0	19.6	17.9	25.2	16.0	29.2
CBRF Deposits <sup>(3)</sup>	343.2	55.3	448.3	48.9	90.2	22.3	8.4	27.4	43.7	113.6
<b>Total Petroleum Revenue</b>	<b>1,852.8</b>	<b>1,096.4</b>	<b>2,314.7</b>	<b>2,339.0</b>	<b>1,663.4</b>	<b>2,051.0</b>	<b>2,407.8</b>	<b>3,317.9</b>	<b>4,300.7</b>	<b>5,164.8</b>

<sup>(1)</sup> Total does not include NPR-A royalties, rents and bonuses. Revenue numbers (except for royalties, bonuses, rents and interest) are from the Alaska State Accounting System (AKSAS). AKSAS revenue is reported for the period oil and gas is produced; when amended, revenue is different than when it was actually collected. Gross royalties, bonuses, rents & interest are from DOR's Forecast Model. A complete summary of historical General Purpose petroleum revenue can be found on the Tax Division's web site at: [www.tax.alaska.gov/sourcesbook/TotalGovernmentRevenue.pdf](http://www.tax.alaska.gov/sourcesbook/TotalGovernmentRevenue.pdf)

<sup>(2)</sup> Includes all royalty payments allocated to Permanent Fund, Public School Fund and General Fund.

<sup>(3)</sup> Oil and Gas Settlements from DOR Mineral Payments Fund Allocation Detail.

## Revenue. A-7b

### Total Alaska Government Petroleum Revenue—Forecast <sup>(1)</sup>

(\$ million)

<b>FY</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
Petroleum Corporate Income Tax	598.9	594.6	559.0	549.8	560.9	570.0	577.1	336.1	344.2	351.4
Production Tax	3,404.3	2,201.2	1,998.6	2,015.0	2,106.3	2,193.3	2,071.0	149.7	91.0	156.8
Petroleum Property Tax	53.5	52.4	51.2	50.0	48.8	47.6	46.5	45.4	44.2	43.1
Oil & Gas Royalties- gross <sup>(2)</sup>	2,461.3	2,102.2	2,029.2	2,015.1	2,018.4	2,019.4	2,008.5	1,117.6	1,114.9	1,235.1
Bonuses, Rents & Interest <sup>(2)</sup>	12.7	5.8	6.5	7.7	6.8	8.7	7.1	7.4	7.4	7.4
CBRF Deposits <sup>(3)</sup>	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
<b>Total Petroleum Revenue</b>	<b>6,550.7</b>	<b>4,976.1</b>	<b>4,664.4</b>	<b>4,657.5</b>	<b>4,761.2</b>	<b>4,859.0</b>	<b>4,730.2</b>	<b>1,676.1</b>	<b>1,621.8</b>	<b>1,813.8</b>

<sup>(1)</sup> Total does not include NPR-A royalties, rents and bonuses. Revenue numbers (except for royalties, bonuses, rents and interest) are from the Alaska State Accounting System (AKSAS). AKSAS revenue is reported for the period oil and gas is produced; when amended, revenue is different than when it was actually collected. Gross royalties, bonuses, rents & interest are from DOR's Forecast Model. A complete summary of historical General Purpose petroleum revenue can be found on the Tax Division's web site at: [www.tax.alaska.gov/sourcesbook/TotalGovernmentRevenue.pdf](http://www.tax.alaska.gov/sourcesbook/TotalGovernmentRevenue.pdf)

<sup>(2)</sup> Includes all royalty payments allocated to Permanent Fund, Public School Fund and General Fund.

<sup>(3)</sup> Oil and Gas Settlements from DOR Mineral Payments Fund Allocation Detail.

## Prices. B-1a

### Crude Oil and Natural Gas Prices—History<sup>(1)</sup>

#### NOMINAL<sup>(2)</sup>

##### WTI, ANS West Coast, ANS and Cook Inlet Wellhead Prices (\$ per barrel)

FY	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
WTI	18.04	14.13	24.82	30.41	23.87	29.47	33.12	47.19	63.01	63.63
ANS West Coast Spot	15.86	12.64	23.27	27.86	21.78	28.16	31.74	43.44	60.80	61.63
ANS Wellhead Wtd Average All Destinations	11.70	8.50	18.94	22.81	17.09	23.10	26.71	38.82	55.33	55.67
Cook Inlet Wellhead	13.76	10.51	21.00	25.88	19.64	24.93	27.85	40.24	57.06	57.31

##### Henry Hub Natural Gas Prices (\$ per million Btu)

FY	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Henry Hub	2.43	1.97	2.64	5.47	2.80	4.62	5.37	6.18	9.20	6.64

#### REAL 2007 \$<sup>(3)</sup>

##### WTI, ANS West Coast, ANS and Cook Inlet Wellhead Prices (\$ per barrel)

FY	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
WTI	22.83	17.59	30.30	35.79	27.21	33.24	36.58	50.47	65.73	63.63
ANS West Coast Spot	20.07	15.73	28.41	32.78	24.83	31.76	35.06	46.46	63.43	61.63
ANS Wellhead Wtd Average All Destinations	14.80	10.58	23.13	26.85	19.48	26.05	29.50	41.52	57.72	55.67
Cook Inlet Wellhead	17.42	13.09	25.64	30.46	22.39	28.12	30.76	43.04	59.53	57.31

##### Henry Hub Natural Gas Prices (\$ per million Btu)

FY	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Henry Hub	3.07	2.45	3.23	6.44	3.19	5.21	5.93	6.61	9.60	6.64

<sup>(1)</sup> Data from Platt's Oilgram Price Report, Wood McKenzie and Alaska Department of Revenue's prevailing value and tax return data. Historical nominal crude oil and natural gas prices can be found on the Tax Division's web site at: [www.tax.alaska.gov/sourcesbook/OilGasPrices.pdf](http://www.tax.alaska.gov/sourcesbook/OilGasPrices.pdf).

<sup>(2)</sup> Adjustment to "nominal" dollars is required to prepare the crude oil and natural gas price forecasts. Callan Associates Inc.'s inflation rate of 2.75% was used for FY 2008 and beyond. A summary of nominal crude oil and natural gas prices can be found in at the Tax Division's web site at: [www.tax.alaska.gov/sourcesbook/OilGasPrices.pdf](http://www.tax.alaska.gov/sourcesbook/OilGasPrices.pdf).

<sup>(3)</sup> Adjustment to "real 2007" dollars is useful to compare prices across time excluding inflation. These prices data are adjusted to real 2007 dollars based on inflation rates provided by the U.S. Department of Labor, Bureau of Labor Statistics. The data series used is the Consumer Price Index for all Urban Consumers (CPI-U) which can be found at: [www.bls.gov/cpi/home.htm](http://www.bls.gov/cpi/home.htm). A summary of real 2007 crude oil and natural gas prices can be found in at the Tax Division's web site at: [www.tax.alaska.gov/sourcesbook/OilGasPrices.pdf](http://www.tax.alaska.gov/sourcesbook/OilGasPrices.pdf).



## Prices. B-1b

### Crude Oil and Natural Gas Prices—Forecast

#### NOMINAL<sup>(2)</sup>

##### WTI, ANS West Coast, ANS and Cook Inlet Wellhead Prices (\$ per barrel)

FY	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
WTI	72.43	68.07	65.90	67.25	68.85	69.95	71.05	43.55	44.75	45.95
ANS West Coast Spot	72.64	66.32	63.40	64.75	66.35	67.45	68.55	41.05	42.25	43.45
ANS Wellhead Wtd Average All Destinations	66.30	59.52	58.49	59.65	61.03	61.96	62.95	35.31	36.34	37.28
Cook Inlet Wellhead	61.17	64.26	61.35	62.70	64.31	65.41	66.51	39.02	40.22	41.42

##### Henry Hub Natural Gas Prices (\$ per million Btu)

FY	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Henry Hub	6.85	6.82	6.97	7.16	7.30	7.50	4.62	4.75	4.88	5.01

#### REAL 2007 \$<sup>(3)</sup>

##### WTI, ANS West Coast, ANS and Cook Inlet Wellhead Prices (\$ per barrel)

FY	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
WTI	70.49	64.48	60.75	60.33	60.12	59.44	58.76	36.00	36.00	36.00
ANS West Coast Spot	70.69	62.82	58.44	58.09	57.93	57.32	56.69	33.94	33.99	34.05
ANS Wellhead Wtd Average All Destinations	64.52	56.38	53.92	53.52	53.28	52.66	52.06	29.19	29.23	29.21
Cook Inlet Wellhead	59.53	60.87	56.55	56.25	56.15	55.58	55.01	32.25	32.35	32.45

##### Henry Hub Natural Gas Prices (\$ per million Btu)

FY	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Henry Hub	6.66	6.46	6.43	6.43	6.38	6.38	3.82	3.82	3.82	3.82

<sup>(2)</sup> Adjustment to "nominal" dollars is required to prepare the crude oil and natural gas price forecasts. Callan Associates Inc.'s inflation rate of 2.75% was used for FY 2008 and beyond. A summary of nominal crude oil and natural gas prices can be found in at the Tax Division's web site at: [www.tax.alaska.gov/sourcesbook/OilGasPrices.pdf](http://www.tax.alaska.gov/sourcesbook/OilGasPrices.pdf).

<sup>(3)</sup> Adjustment to "real 2007" dollars is useful to compare prices across time excluding inflation.

## Prices. B-2a

### Nominal Netback Costs—History<sup>(1)</sup>

#### Marine Costs, TAPS Tariff, Feeder Pipeline and Other Adjustment Charges

(\$ per barrel)

<b>FY</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>
Marine Costs	1.51	1.52	1.59	1.39	1.55	1.71	1.69	1.79	1.63	1.79
TAPS Tariff	2.73	2.74	2.86	3.27	3.50	3.40	3.16	3.28	3.58	4.37
TAPS Quality Bank + Loss	0.00	0.00	0.00	0.00	(0.02)	(0.05)	(0.13)	(0.27)	(0.27)	(0.80)
Feeder Pipe + Other Upstream Costs	0.07	0.03	(0.01)	(0.09)	0.09	0.30	0.26	0.23	0.40	0.90
Location Differential	(0.14)	(0.16)	(0.11)	0.47	(0.42)	(0.29)	0.05	(0.41)	0.13	(0.30)
<b>Total</b>	<b>4.16</b>	<b>4.14</b>	<b>4.32</b>	<b>5.04</b>	<b>4.69</b>	<b>5.06</b>	<b>5.04</b>	<b>4.62</b>	<b>5.47</b>	<b>5.96</b>

<sup>(1)</sup> Historical netback costs can be found on the Tax Division web site: [www.tax.alaska.gov/sourcesbook/NetbackCosts.pdf](http://www.tax.alaska.gov/sourcesbook/NetbackCosts.pdf).

## Prices. B-2b

### Nominal Netback Costs—Forecast <sup>(1)</sup>

#### Marine Costs, TAPS Tariff, Feeder Pipeline and Other Adjustment Charges

(\$ per barrel)

<b>FY</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
Marine Costs	1.34	1.39	1.44	1.49	1.54	1.59	1.64	1.69	1.74	1.79
TAPS Tariff	5.11	5.08	3.13	3.26	3.36	3.42	3.44	3.47	3.56	3.73
TAPS Quality Bank + Loss	(0.63)	(0.44)	(0.45)	(0.47)	(0.48)	(0.49)	(0.51)	(0.52)	(0.53)	(0.55)
Feeder Pipe + Other Upstream Costs	0.53	0.78	0.80	0.81	0.90	0.97	1.03	1.10	1.15	1.19
Location Differential	(0.00)	0.00	(0.00)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total</b>	<b>6.34</b>	<b>6.80</b>	<b>4.91</b>	<b>5.10</b>	<b>5.32</b>	<b>5.49</b>	<b>5.60</b>	<b>5.74</b>	<b>5.91</b>	<b>6.17</b>

<sup>(1)</sup> Data from the Department of Revenue's Forecast Model.

## Prices. B-3

### Price Changes from Spring 2007 Forecast

(nominal \$ per barrel)

FY	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
<b>Fall 2007 Forecast</b>										
WTI	72.43	68.07	65.90	67.25	68.85	69.95	71.05	43.55	44.75	45.95
ANS West Coast	72.64	66.32	63.40	64.75	66.35	67.45	68.55	41.05	42.25	43.45
ANS Wellhead Wtd Average All Destinations	66.30	59.52	58.49	59.65	61.03	61.96	62.95	35.31	36.34	37.28
Cook Inlet Wellhead	61.17	64.26	61.35	62.70	64.31	65.41	66.51	39.02	40.22	41.42
<b>Spring 2007 Forecast</b>										
WTI	57.22	56.36	56.62	57.80	58.52	59.40	43.53	44.73	45.96	47.00
ANS West Coast	54.72	53.86	54.12	55.30	56.02	56.90	41.03	42.23	43.46	44.50
ANS Wellhead Wtd Average All Destinations	47.50	47.79	49.06	50.18	50.68	51.36	35.23	36.18	37.23	38.34
Cook Inlet Wellhead	52.66	51.80	52.07	53.26	53.98	54.86	38.99	40.19	41.43	42.53
<b>\$ change from prior forecast</b>										
WTI	15.20	11.71	9.28	9.45	10.33	10.55	27.52	(1.18)	(1.21)	(1.05)
ANS West Coast	17.92	12.46	9.28	9.45	10.33	10.55	27.52	(1.18)	(1.21)	(1.05)
ANS Wellhead Wtd Average All Destinations	18.80	11.73	9.43	9.47	10.35	10.61	27.72	(0.87)	(0.90)	(1.05)
Cook Inlet Wellhead	8.51	12.46	9.28	9.44	10.33	10.55	27.52	(1.18)	(1.21)	(1.10)
<b>% change from prior forecast</b>										
WTI	26.6%	20.8%	16.4%	16.3%	17.7%	17.8%	63.2%	-2.6%	-2.6%	-2.2%
ANS West Coast	32.7%	23.1%	17.2%	17.1%	18.4%	18.5%	67.1%	-2.8%	-2.8%	-2.4%
ANS Wellhead Wtd Average All Destinations	39.6%	24.5%	19.2%	18.9%	20.4%	20.7%	78.7%	-2.4%	-2.4%	-2.7%
Cook Inlet Wellhead	16.2%	24.0%	17.8%	17.7%	19.1%	19.2%	70.6%	-2.9%	-2.9%	-2.6%

# Production. C-1

## Production Differences from Spring 2007 Forecast

(million barrels per day)

<b>FY</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
<b>Fall 2007 Forecast</b>										
ANS	0.731	0.701	0.693	0.676	0.675	0.685	0.687	0.684	0.656	0.628
Cook Inlet	0.014	0.013	0.012	0.011	0.010	0.010	0.009	0.008	0.008	0.008
ALASKA	0.745	0.714	0.705	0.687	0.685	0.694	0.696	0.693	0.664	0.636
<b>Spring 2007 Forecast</b>										
ANS	0.764	0.749	0.751	0.754	0.807	0.776	0.755	0.722	0.682	0.730
Cook Inlet	0.014	0.013	0.012	0.011	0.010	0.010	0.009	0.008	0.008	0.010
ALASKA	0.778	0.762	0.763	0.765	0.817	0.786	0.764	0.731	0.690	0.740
<b>Volume change from prior forecast</b>										
ANS	(0.034)	(0.048)	(0.058)	(0.078)	(0.132)	(0.091)	(0.068)	(0.038)	(0.026)	(0.102)
Cook Inlet	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	(0.002)
ALASKA	(0.034)	(0.048)	(0.058)	(0.078)	(0.132)	(0.091)	(0.068)	(0.038)	(0.026)	(0.104)
<b>Percent change from prior forecast</b>										
ANS	-4.4%	-6.5%	-7.8%	-10.4%	-16.3%	-11.8%	-9.0%	-5.3%	-3.8%	-13.9%
Cook Inlet	1.3%	2.8%	2.3%	1.9%	1.7%	1.4%	1.2%	1.1%	0.9%	-21.2%
ALASKA	-4.3%	-6.3%	-7.6%	-10.2%	-16.1%	-11.6%	-8.8%	-5.2%	-3.7%	-14.0%

## Production. C-2a

### Crude Oil Production—History<sup>(1)</sup>

(million barrels per day)

FY	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Prudhoe Bay <sup>(2)</sup>	0.713	0.636	0.571	0.540	0.487	0.433	0.419	0.381	0.340	0.274
PBU Satellites <sup>(3)</sup>		0.003	0.005	0.007	0.026	0.045	0.052	0.044	0.041	0.043
GPMA <sup>(4)</sup>	0.192	0.159	0.118	0.089	0.075	0.065	0.061	0.056	0.049	0.037
Kuparuk	0.259	0.240	0.212	0.197	0.176	0.160	0.155	0.142	0.134	0.122
Kuparuk Satellites <sup>(5)</sup>	0.001	0.025	0.037	0.031	0.039	0.052	0.049	0.051	0.041	0.045
Milne Point <sup>(6)</sup>	0.053	0.055	0.053	0.052	0.052	0.051	0.051	0.050	0.041	0.033
Endicott <sup>(7)</sup>	0.062	0.052	0.048	0.037	0.033	0.029	0.029	0.021	0.020	0.017
Liberty										
Alpine <sup>(8)</sup>				0.038	0.096	0.098	0.099	0.104	0.123	0.105
Fiord <sup>(9)</sup>										0.009
Nanuq <sup>(10)</sup>										0.009
NPR-A										
Offshore <sup>(11)</sup>										
Northstar <sup>(12)</sup>					0.020	0.059	0.066	0.069	0.056	0.046
<b>Total ANS</b>	<b>1.279</b>	<b>1.170</b>	<b>1.044</b>	<b>0.991</b>	<b>1.004</b>	<b>0.993</b>	<b>0.980</b>	<b>0.917</b>	<b>0.845</b>	<b>0.740</b>
<b>Cook Inlet</b>	<b>0.032</b>	<b>0.032</b>	<b>0.029</b>	<b>0.029</b>	<b>0.033</b>	<b>0.028</b>	<b>0.023</b>	<b>0.019</b>	<b>0.018</b>	<b>0.018</b>
<b>Total Alaska</b>	<b>1.311</b>	<b>1.202</b>	<b>1.073</b>	<b>1.020</b>	<b>1.037</b>	<b>1.021</b>	<b>1.004</b>	<b>0.936</b>	<b>0.863</b>	<b>0.758</b>

<sup>(1)</sup> A summary of historical crude oil production can be found on the Tax Division's web site at: [www.tax.alaska.gov/sourcesbook/AlaskaProduction.pdf](http://www.tax.alaska.gov/sourcesbook/AlaskaProduction.pdf).

<sup>(2)</sup> Includes NGLs from Central Gas Facility shipped to TAPS.

<sup>(3)</sup> Aurora, Borealis, Midnight Sun, Orion and Polaris.

<sup>(4)</sup> Lisburne, Niakuk, North Prudhoe Bay State, Point McIntyre, Raven, West Beach and West Niakuk.

<sup>(5)</sup> Meltwater, Tabasco, Tarn and West Sak.

<sup>(6)</sup> Includes Sag River and Schrader Bluff.

<sup>(7)</sup> Includes Badami, Eider and Sag Delta.

<sup>(8)</sup> Includes Alpine-West and Qannik.

<sup>(9)</sup> Fiord and Fiord-Kuparuk.

<sup>(10)</sup> Nanuq and Nanuq-Kuparuk.

<sup>(11)</sup> Known Offshore includes Nikaitchuq and Oooguruk.

<sup>(12)</sup> Includes Outer Continental Shelf (OCS) production.

## Production. C-2b

### Crude Oil Production—Forecast <sup>(1)</sup>

(million barrels per day)

FY	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Prudhoe Bay <sup>(2)</sup>	0.292	0.279	0.272	0.262	0.250	0.243	0.240	0.233	0.226	0.219
PBU Satellites <sup>(3)</sup>	0.038	0.048	0.058	0.067	0.069	0.074	0.073	0.069	0.064	0.061
GPMA <sup>(4)</sup>	0.046	0.042	0.039	0.038	0.035	0.033	0.031	0.029	0.028	0.026
Kuparuk	0.114	0.108	0.103	0.100	0.096	0.092	0.088	0.085	0.082	0.079
Kuparuk Satellites <sup>(5)</sup>	0.038	0.039	0.041	0.039	0.045	0.051	0.047	0.052	0.057	0.062
Milne Point <sup>(6)</sup>	0.034	0.030	0.030	0.030	0.032	0.034	0.037	0.039	0.039	0.038
Endicott <sup>(7)</sup>	0.015	0.014	0.014	0.014	0.014	0.014	0.015	0.015	0.016	0.017
Liberty					0.022	0.032	0.041	0.032	0.027	0.022
Alpine <sup>(8)</sup>	0.084	0.072	0.065	0.057	0.049	0.050	0.050	0.056	0.051	0.045
Fiord <sup>(9)</sup>	0.018	0.020	0.020	0.017	0.015	0.013	0.011	0.009	0.008	0.007
Nanuq <sup>(10)</sup>	0.016	0.008	0.009	0.008	0.007	0.006	0.006	0.005	0.005	0.004
NPR-A						0.002	0.010	0.025	0.022	0.019
Offshore <sup>(11)</sup>		0.013	0.020	0.025	0.027	0.028	0.027	0.025	0.024	0.022
Northstar <sup>(12)</sup>	0.037	0.028	0.022	0.018	0.015	0.013	0.011	0.009	0.008	0.007
<b>Total ANS</b>	<b>0.731</b>	<b>0.701</b>	<b>0.693</b>	<b>0.676</b>	<b>0.675</b>	<b>0.685</b>	<b>0.687</b>	<b>0.684</b>	<b>0.656</b>	<b>0.628</b>
<b>Cook Inlet</b>	<b>0.014</b>	<b>0.013</b>	<b>0.012</b>	<b>0.011</b>	<b>0.010</b>	<b>0.010</b>	<b>0.009</b>	<b>0.008</b>	<b>0.008</b>	<b>0.008</b>
<b>Total Alaska</b>	<b>0.745</b>	<b>0.714</b>	<b>0.705</b>	<b>0.687</b>	<b>0.685</b>	<b>0.694</b>	<b>0.696</b>	<b>0.693</b>	<b>0.664</b>	<b>0.636</b>

<sup>(1)</sup> A summary of historical crude oil production can be found on the Tax Division's web site at: [www.tax.alaska.gov/sourcesbook/AlaskaProduction.pdf](http://www.tax.alaska.gov/sourcesbook/AlaskaProduction.pdf).

<sup>(2)</sup> Includes NGLs from Central Gas Facility shipped to TAPS.

<sup>(3)</sup> Aurora, Borealis, Midnight Sun, Orion and Polaris.

<sup>(4)</sup> Lisburne, Niakuk, North Prudhoe Bay State, Point McIntyre, Raven, West Beach and West Niakuk.

<sup>(5)</sup> Meltwater, Tabasco, Tarn and West Sak.

<sup>(6)</sup> Includes Sag River and Schrader Bluff.

<sup>(7)</sup> Includes Badami, Eider and Sag Delta.

<sup>(8)</sup> Includes Alpine-West and Qannik.

<sup>(9)</sup> Fiord and Fiord-Kuparuk.

<sup>(10)</sup> Nanuq and Nanuq-Kuparuk.

<sup>(11)</sup> Known Offshore includes Nikaitchuq and Oooguruk.

<sup>(12)</sup> Includes Outer Continental Shelf (OCS) production.

## Production. C-3a

### Economic Limit Factors (for Fields with Positive ELF)—History<sup>(1)</sup>

(percent)

FY	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Prudhoe Bay	0.963	0.949	0.931	0.917	0.896	0.870	0.855	0.843	0.859	0.793
Aurora								0.295	0.859	0.793
Borealis					0.079	0.114	0.084	0.301	0.859	0.793
Midnight Sun								0.295	0.859	0.793
Orion								0.296	0.859	0.793
Polaris								0.295	0.859	0.793
Point McIntyre	0.922	0.851	0.630	0.431	0.206	0.160	0.108	0.320	0.859	0.793
Kuparuk	0.758	0.702	0.598	0.493	0.353	0.229	0.180	0.051	0.005	0
Tarn		0.071	0.048	0.004	0.042	0.100	0.060	0.010	0.000	0.001
West Sak										
Milne Point	0.031	0.043	0.025	0.011	0.001	0	0	0	0	0
Endicott	0.303	0.086	0.049	0.009	0.001	0	0	0	0	0
Liberty										
Alpine				0.346	0.878	0.857	0.843	0.829	0.857	0.787
Fiord										0.005
Fiord-Kuparuk										0.001
Nanuq-Kuparuk										0.177
NPR-A										
Northstar					0.420	0.864	0.847	0.834	0.728	0.546
<b>Volume Weighted ELF</b>	<b>0.823</b>	<b>0.763</b>	<b>0.693</b>	<b>0.644</b>	<b>0.609</b>	<b>0.576</b>	<b>0.556</b>	<b>0.530</b>	<b>0.583</b>	<b>0.501</b>

<sup>(1)</sup> A summary of historical ELF's can be found on the Tax Division's web site at [www.tax.alaska.gov/sourcesbook/ELFs.pdf](http://www.tax.alaska.gov/sourcesbook/ELFs.pdf).

Under the ELF production tax system, the tax rate for oil depended on the age of the field and the Economic Limit Factor (ELF). The ELF was calculated based on total daily oil production and average daily per well production from each producing field. The statutory production tax rate on oil was 12.25% of its value at the point of production for the first five years of field production and 15% thereafter. There was a minimum tax of 80 cents per taxable barrel. The effective tax rate was calculated by multiplying the statutory tax rate, even if it was the minimum 80 cents per barrel, times the ELF. The ELF formula resulted in lower effective tax rates for smaller, low-production fields and higher tax rates for larger, highly productive fields. There was a unique combination of total daily field production and average daily per well production.

In January 2005, the department aggregated seven fields in the Prudhoe Bay Unit. The decision to aggregate focused on, among other things, the increasing interdependence found in the engineering and operation of the fields.



## Production. C-3b

### Economic Limit Factors (for Fields with Positive ELF)—Forecast <sup>(1)</sup>

(percent)

<b>FY</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>
Prudhoe Bay	0.809	0.790	0.793	0.794
Aurora	0.809	0.790	0.793	0.794
Borealis	0.809	0.790	0.793	0.794
Midnight Sun	0.809	0.790	0.793	0.794
Orion	0.809	0.790	0.793	0.794
Polaris	0.809	0.790	0.793	0.794
Point McIntyre	0.809	0.790	0.793	0.794
Kuparuk	0.000	0.000	0.000	0.000
Tarn	0.000	0.000	0.000	0.000
West Sak				
Milne Point	0.000	0.000	0.000	0.000
Endicott	0.000	0.000	0.000	0.000
Liberty				
Alpine	0.659	0.485	0.336	0.210
Fiord	0.007	0.000	0.000	0.000
Fiord-Kuparuk	0.014	0.190	0.207	0.062
Nanuq-Kuparuk	0.157	0.000	0.000	0.000
NPR-A				
Northstar	0.457	0.118	0.023	0.002
<b>Volume Weighted ELF</b>	<b>0.487</b>	<b>0.441</b>	<b>0.426</b>	<b>0.420</b>

<sup>(1)</sup> ELF is projected through FY 2011 to assist in the comparison of ACES revenues and revenue under the old ELF-based system. This comparison is required under the new statute.

# Revenue Sources Book

*Alaska Department of Revenue – Tax Division*

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# FALL 2007

# 11. Index

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# Revenue Sources Book

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In accordance with AS 37.07.060 (b)(4), the Revenue Sources book is compiled biannually by the Alaska Department of Revenue to assist the governor in formulating a proposed comprehensive financial plan for presentation to the Alaska State Legislature. Within the publication are shown prior year actuals, revised current year estimates and future year projections.

Anticipated state income is projected through the use of a number of data sources:

- (1) econometric models developed by the Department of Revenue to forecast unrestricted non-petroleum revenues;
- (2) a petroleum revenue model created by the department's Tax Division;
- (3) estimates from individual state agencies.

The Department of Revenue thanks the various state agencies for their cooperation in computing anticipated revenues for publication in this Fall 2007 Revenue Sources Book.

The Department of Revenue complies with Title II of the Americans With Disabilities Act of 1990. This publication is available in alternative communication formats upon request. Please contact the division's representative at 907-465-3692 or 907-465-3678 (TDD) to make necessary arrangements.

This publication, required by law (AS 37.07.060), was printed in Juneau, Alaska at a cost of about \$11 per copy.

# Revenue Sources Book

*Alaska Department of Revenue – Tax Division*

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# FALL 2007

## **Forecast & Historical Data**

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