



Revenue Sources Book Spring 2017

Revenue Sources Book Spring 2017

Department of Revenue
Randall Hoffbeck, Commissioner
Jerry Burnett, Deputy Commissioner
Dona Keppers, Deputy Commissioner

Tax Division Contacts

Ken Alper, Director
(907) 465-8221
Ken.Alper@alaska.gov

Brandon Spanos, Deputy Director
(907) 269-6736
Brandon.Spanos@alaska.gov

Dan Stickel, Chief Economist
(907) 465-3279
Dan.Stickel@alaska.gov

David Herbert, Revenue Sources Book Editor
Economist
(907) 269-1024
David.Herbert@alaska.gov

Contacts for Specific Topics

Alaska Permanent Fund:
Valerie Mertz, Chief Financial Officer
Alaska Permanent Fund Corporation
(907) 796-1530
VMertz@apfc.org

Investment Revenue and
Constitutional Budget Reserve Fund:
Ryan S. Williams, Operations Research Analyst
Department of Revenue, Treasury Division
(907) 465-2893
Ryan.Williams@alaska.gov



THE STATE
of **ALASKA**
GOVERNOR BILL WALKER

Department of Revenue

COMMISSIONER'S OFFICE
State Office Building
333 Willoughby Avenue, 11th Floor
PO Box 110400
Juneau, Alaska 99811-0400
Main: 907.465.2300
Fax: 907.465.2389

April 14, 2017

The Honorable Bill Walker, Governor of Alaska
P.O. Box 110001
Juneau, Alaska 99811-0001

Dear Governor Walker,

Attached is the Department of Revenue's spring 2017 forecast. The spring 2017 forecast is based on additional information and data received since publishing last fall's forecast of state revenues. This update is a collaborative effort among the Department of Revenue, the Department of Natural Resources, the Alaska Permanent Fund Corporation, and the Office of Management and Budget.

Unrestricted General Fund (UGF) revenue is now forecasted to be \$1.6 billion in fiscal year FY 2017 and \$1.8 billion in FY 2018. The FY 2018 forecast represents an increase in expected UGF revenue of about \$208 million, or 13%, compared to the projection in the Fall 2016 forecast.

The revenue forecast is based on an annual ANS oil price of \$50.05 per barrel for FY 2017 and \$54.00 for FY 2018. The revenue forecast is also driven by an expectation for North Slope oil production to average 523,700 barrels per day in FY 2017 before declining to an average of 459,900 barrels per day in FY 2018.

The department has not changed its long term view on oil price since the fall forecast. However, the department has received an updated assessment on future production which slightly reduced production expectations after FY 2018. These changes along with other revisions to the non-petroleum revenue streams, have caused a small effect on ten-year revenue projections with UGF FY 2026 projections decreasing by \$44 million.

I hope you find the information provided in the spring 2017 forecast to be interesting and useful. We look forward to providing you with a full forecast in the fall of 2017.

Sincerely,

A handwritten signature in blue ink, appearing to read "Randall Hoffbeck".

Randall Hoffbeck,
Commissioner

Page intentionally left blank

Contents

Executive Summary	2
Forecast Tables	4
Table 1-1: Current Year Revenue Subject to Appropriation, FY 2016 and FY 2017-2026 Forecast	4
Table 2-1: Total State Revenue, by restriction and type.....	5
Table 2-2: Unrestricted General Fund Revenue, by type and detail.....	6
Table 2-3: Restricted Revenue, by type and category	8
Table 2-5: Total Unrestricted General Fund Revenue, FY 2016 and FY 2017-2026 Forecast	10
Table 4-4: ANS Oil & Gas Production Tax Data Summary.....	11
Table 8-4: Historical Production Tax Credits and Forecast Detail, FY 2007-2026	12
Table A-3: Petroleum Revenue, by restriction and type.....	14
Table B-2: Price Difference, Fall 2016 forecast and Spring 2017 forecast.....	16
Table C-1: Production Difference, Fall 2016 forecast and Spring 2017 forecast.....	17

Executive Summary

General Discussion

The spring forecast is an annual update of the fall forecast of state revenues for use by the Governor, the Alaska Legislature, and the Alaska public. This update is a collaborative effort between the Department of Revenue, the Department of Natural Resources, the Alaska Permanent Fund Corporation, and the Office of Management and Budget.

State revenue comes from four major sources:

1) petroleum revenue; 2) non-petroleum revenue from sources such as taxes, charges for services, licenses, permits, fines and forfeitures; 3) federal revenue; and 4) investment revenue, primarily from the Alaska Permanent Fund and the Constitutional Budget Reserve Fund (CBRF).

Unrestricted general fund (UGF) revenue is now forecast to be \$1.6 billion in fiscal year (FY) 2017 and \$1.8 billion in FY 2018. Compared to the fall 2016 forecast, this spring forecast represents an increase in expected UGF revenue of \$200 million for FY 2017 and \$208 million for FY 2018. For the remainder of the ten-year forecast, adjustments are relatively small, totaling no more than \$50 million in any given year.

The spring forecast for North Slope crude oil production revises expected production in FY 2017 from 490,300 barrels per day to 523,700 barrels per day; a meaningful increase of over 33,000 barrels per day from the fall 2016 forecast. This change reflects nine months of preliminary actual daily

production levels as well as revised production estimates for the remainder of the year that take into account recent strong production trends. For FY 2018 and beyond, North Slope production is expected to drop as the result of reduced investment. North Slope production is forecast to average 459,900 barrels per day in FY 2018, declining to 326,900 barrels per day by FY 2026. It is important to note that new production from several potential new developments, including Pikka, Willow, and Smith Bay, do not currently meet the criteria for inclusion in the production forecast. The department will continue to monitor these projects for potential inclusion in future forecasts.

The spring forecast is based on a revised average ANS oil price forecast of \$50.05 per barrel for FY 2017, up from \$46.81 per barrel in the fall 2016 forecast, based on higher than forecasted prices over the past several months. The forecast prices over the next ten years are unchanged from the fall forecast, with nominal per-barrel ANS prices expected to average \$54.00 in FY 2018 increasing to \$88.00 by FY 2026.

Expenditures for cash repurchase of tax credits are not included in revenue numbers presented in the forecast but are separately estimated. In FY 2016, the state purchased \$498 million in tax credits through the Oil and Gas Tax Credit Fund (AS 43.55.028), and will purchase \$33 million in FY 2017. For FY 2018, an estimated \$1.04 billion in tax credits will be available for state repurchase, with the majority of these being credits earned in prior years.

These credits are shown on pages 12 and 13. The statutory appropriation to the Oil and Gas Tax Credit Fund for FY 2018 credit purchases is \$76 million, an amount that would fund only a fraction of the outstanding credit certificates.

In FY 2016, total state revenue from all sources amounted to an estimated \$5.9 billion. Total state revenue for FY 2017 is expected to increase to \$10.2 billion, due primarily to a rebound in the performance of the Alaska Permanent Fund and other investments. In FY 2018, total state revenue is again expected to be \$10.2 billion.

In addition to unrestricted and restricted revenue, the department also provides information on current-year revenue subject to appropriation, as this provides an accurate depiction of the state's ability to meet its obligations to outside analysts who may not be familiar with Alaska's budget conventions. In addition to unrestricted revenue, "current-year revenue available for appropriation" also includes designated general fund revenue, realized earnings of the Permanent Fund accounted for in the Earnings Reserve, earnings of the CBRF, various royalty and tax deposits to the Constitutional Budget Reserve, and various royalty and tax deposits in excess of the constitutional minimum into the Permanent Fund. Current-year revenue subject to appropriation was \$4.5 billion in FY 2016 and is expected to be \$5.4 billion in FY 2017 and \$5.8 billion in FY 2018.

Forecast Method Notes

In March 2017, the Department of Revenue issued an advisory bulletin regarding application of certain credits in calculating oil and gas production tax. In particular, this advisory bulletin clarified existing regulations regarding per-taxable-barrel credits for North Slope oil production from areas not eligible for the gross value reduction (GVR).

The regulations implement the statutory requirement that a company may not use non-GVR per-taxable-barrel credits to reduce their tax liability below the minimum tax. The advisory bulletin clarified that if a company chooses to apply non-GVR per-taxable-barrel credits, they may not use other credits to reduce taxes paid below the minimum tax. The regulation further clarified that if a taxpayer chooses to forgo use of the non-GVR per-taxable-barrel credits, then other credits may be used to reduce a taxpayer's liability below the minimum tax, but not to an amount that is less than zero.

This clarification has been incorporated into the department's forecast models for this spring forecast update. Production tax revenue estimates have increased somewhat as a result, due to the limitations on credit usage that were not previously incorporated into the forecast modeling. Additionally, the department foresees that there will likely not be any significant transfers of credits between companies under this clarified guidance, which increases the outstanding amount of credits available for state purchase in FY 2018.

The FY 2016 historic numbers in this document have been updated from the *Fall 2016 Revenue Sources Book* to reflect the latest available information about actual expenditures and collections. This change is most noticeable in the numbers for federal revenue and non-petroleum revenue.

Deposits into the CBRF shown in Table A-3 are now distinguished between tax deposits and royalty deposits. In addition, historic values for FY 2013 and FY 2014 previously did not include the royalty deposits for those years.

When comparing forecasts provided by the department, numbers may vary between analyses, even if they came from the same data source. This can happen for many reasons and does not necessarily discount other analyses, nor should it be considered an error.

One example is in petroleum revenue forecasting, where results can differ depending on whether the department uses confidential company-specific data or statewide aggregated summary data. Another instance where differences can occur is in how uncertainty is incorporated. Depending on the analysis, uncertainties can be addressed by applying risk factors to the data, incorporating probability into the analysis and results, or providing narrative disclaimer about the uncertainty.

Therefore, even though all the department's models start with the same set of data, the results can differ depending on the aggregation of data and the handling of uncertainty.

Table 1-1: Current Year Revenue Subject to Appropriation, FY 2016 and FY 2017-2026 Forecast

(\$ millions)

Fiscal Year	History	Forecast									
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Petroleum Revenue											
Unrestricted General Fund	1,109.5	1,158.5	1,279.0	1,352.1	1,348.5	1,366.3	1,416.3	1,417.1	1,418.4	1,476.1	1,492.5
Royalties to Alaska Permanent Fund beyond 25% dedication ¹	73.6	64.0	63.2	67.7	73.6	80.1	78.6	78.1	78.5	77.9	75.8
Tax and Royalty Settlements to CBRF ²	119.1	350.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Subtotal Petroleum Revenue	1,302.3	1,572.5	1,442.2	1,519.8	1,522.1	1,546.4	1,594.9	1,595.2	1,596.9	1,654.0	1,668.3
Non-Petroleum Revenue											
Unrestricted General Fund	400.7	468.3	508.4	514.8	512.7	526.7	533.5	542.2	553.1	564.4	576.8
Designated General Fund	391.0	410.2	394.0	400.3	405.0	409.4	413.4	417.5	421.8	426.3	431.1
Royalties to Alaska Permanent Fund beyond 25% dedication ¹	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
Tax and Royalty Settlements to CBRF ²	3.7	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
Subtotal Non-Petroleum Revenue	797.5	882.0	906.0	918.7	921.2	939.7	950.5	963.3	978.4	994.3	1,011.4
Investment Revenue											
Unrestricted General Fund	22.5	19.5	44.5	52.9	61.3	69.7	78.1	86.4	94.8	103.2	111.6
Designated General Fund	14.3	42.2	41.8	42.6	43.3	44.0	44.7	45.4	46.2	46.9	47.6
Constitutional Budget Reserve Fund	138.3	77.5	61.5	13.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alaska Permanent Fund – Realized Earnings ³	2,216.3	2,757.7	3,322.7	3,474.0	3,637.0	3,808.0	3,980.0	4,157.0	4,340.0	4,530.0	4,729.0
Subtotal Investment Revenue	2,391.4	2,896.9	3,470.5	3,583.1	3,741.6	3,921.7	4,102.8	4,288.8	4,481.0	4,680.1	4,888.2
Total Revenue Subject to Appropriation	4,491.2	5,351.4	5,818.7	6,021.5	6,185.0	6,407.7	6,648.1	6,847.3	7,056.4	7,328.4	7,568.0

¹ Estimate based on deposit to Permanent Fund minus 25% of total royalties.² CBRF is an acronym for Constitutional Budget Reserve Fund.³ Investment revenue from the Permanent Fund available for appropriation is based on realized gains, a portion of which has been used to inflation-proof the fund historically.

Table 2-1: Total State Revenue, by restriction and type

	(\$ millions)		
	History	Forecast	
	FY 2016	FY 2017	FY 2018
Unrestricted Revenue Sources			
Unrestricted General Fund Revenue			
Petroleum Revenue	1,109.5	1,158.5	1,279.0
Non-Petroleum Revenue	400.7	468.3	508.4
Investment Revenue	22.5	19.5	44.5
Federal Revenue	0.0	0.0	0.0
Unrestricted General Fund Revenue	1,532.7	1,646.4	1,831.9
Restricted Revenue Sources			
Designated General Fund Revenue			
Non-Petroleum Revenue	391.0	410.2	394.0
Investment Revenue	14.3	42.2	41.8
Subtotal Designated General Fund Revenue	405.3	452.4	435.8
Other Restricted Revenue			
Petroleum Revenue	516.0	685.9	420.2
Non-Petroleum Revenue	256.5	257.2	250.9
Investment Revenue	541.7	3,511.2	3,783.1
Subtotal Other Restricted Revenue	1,314.2	4,454.3	4,454.2
Federal Revenue			
Petroleum Revenue ¹	1.8	4.3	4.3
Federal Receipts	2,640.1	3,611.0	3,462.4
Subtotal Federal Revenue	2,641.9	3,615.3	3,466.7
Total Restricted Revenue	4,361.4	8,522.0	8,356.8
Total State Revenue	5,894.1	10,168.3	10,188.7

¹ Petroleum revenue shown in the Federal category includes the state share of rents, royalties, and bonuses received from the National Petroleum Reserve - Alaska, as provided by federal law.

Table 2-2: Unrestricted General Fund Revenue, by type and detail

	(\$ millions)		
	History	Forecast	
	FY 2016	FY 2017	FY 2018
Unrestricted Petroleum Revenue			
Petroleum Taxes			
Petroleum Property Tax	111.7	115.8	109.7
Petroleum Corporate Income Tax ¹	-58.8	122.6	239.3
Oil & Gas Production Tax	186.0	189.5	242.2
Subtotal Petroleum Taxes	238.9	427.9	591.2
Royalties (including Bonuses, Rents, & Interest)			
Mineral Bonuses & Rents	25.1	14.8	14.8
Oil & Gas Royalties	840.3	711.1	668.2
Interest	5.2	4.8	4.8
Subtotal Royalties	870.6	730.7	687.8
Unrestricted Petroleum Revenue	1,109.5	1,158.5	1,279.0
Unrestricted Non-Petroleum Revenue			
Non-Petroleum Taxes			
Excise Tax			
Alcoholic Beverage	22.2	21.7	22.2
Tobacco Product – Cigarette	32.5	28.6	27.7
Tobacco Product – Other	13.0	14.6	15.5
Electric and Telephone Cooperative	0.2	0.2	0.2
Marijuana	0.0	1.0	5.3
Motor Fuel Tax ²	37.7	35.8	36.1
Motor Fuel Tax (conservation surcharge)	6.5	7.6	7.7
Tire Fee	1.5	1.5	1.5
Subtotal Excise Tax	113.6	111.1	116.2
Corporate Income Tax	90.2	128.0	154.9
Fisheries Tax			
Fisheries Business	22.3	15.4	18.2
Fishery Resource Landing	0.3	6.3	6.2
Subtotal Fisheries Tax	22.6	21.7	24.3
Other Tax			
Charitable Gaming	2.6	2.7	2.7
Estate	0.0	0.0	0.0
Large Passenger Vessel Gambling	7.7	8.0	8.1
Mining	10.7	31.1	35.7
Subtotal Other Tax	21.1	41.8	46.5
Subtotal Non-Petroleum Taxes	247.5	302.5	341.9

Table 2-2: Unrestricted General Fund Revenue, by type and detail (continued from previous page)

	(\$ millions)		
	History	Forecast	
	FY 2016	FY 2017	FY 2018
Charges for Services			
General Government	12.8	12.8	12.8
Natural Resources	1.4	1.4	1.4
Other	7.3	7.3	7.3
Subtotal Charges for Services	21.5	21.5	21.5
Fines & Forfeitures	11.4	11.4	11.4
Licenses & Permits			
Motor Vehicle	38.0	35.5	35.5
Other	3.2	3.2	3.2
Subtotal Licenses & Permits	41.2	38.7	38.7
Rents & Royalties			
Mining Rents & Royalties	12.7	15.4	15.4
Other Non-Petroleum Rents & Royalties	12.0	15.5	15.5
Subtotal Rents & Royalties	24.7	30.9	30.9
Miscellaneous Revenues and Transfers			
Miscellaneous	21.6	21.6	21.6
Alaska Housing Finance Corporation	-0.1	13.5	18.4
Alaska Industrial Development & Export Authority	24.3	6.3	12.9
Alaska Municipal Bond Bank Authority	0.2	0.9	0.9
Alaska Student Loan Corporation	0.2	0.0	1.2
Alaska Energy Authority	0.1	1.0	1.0
Alaska Natural Gas Development Authority	0.2	0.0	0.0
Mental Health Trust	0.0	0.0	0.0
Unclaimed Property	8.0	20.0	8.0
Subtotal Miscellaneous Revenues and Transfers	54.4	63.3	64.0
Unrestricted Non-Petroleum Revenue, except Federal and Investment	400.7	468.3	508.4
Investment Revenue			
Investments	20.9	17.9	42.9
Interest Paid by Others	1.6	1.6	1.6
Unrestricted Investment Revenue	22.5	19.5	44.5
Total Unrestricted Revenue	1,532.7	1,646.4	1,831.9

¹ Petroleum Corporate Income Tax collections for FY 2016 were negative due to large refunds of prior-year estimated taxes and low estimated taxes for FY 2016.

² Starting with FY 2016, the aviation portion of the motor fuel tax is considered restricted revenue.

Table 2-3: Restricted Revenue, by type and category

	(\$ millions)		
	History	Forecast	
	FY 2016	FY 2017	FY 2018
Designated General Fund Revenue			
Non-Petroleum Revenue			
Taxes	98.0	101.6	107.7
Charges for Services	258.4	274.1	253.8
Fines and Forfeitures	9.4	9.3	7.4
Licenses and Permits	1.5	1.5	1.5
Rents and Royalties	4.2	4.2	4.2
Other	19.5	19.5	19.5
Subtotal	391.0	410.2	394.0
Investment Revenue			
Investments - Designated GF	2.4	1.7	3.5
Other Treasury Managed Funds	11.9	40.5	38.3
Subtotal	14.3	42.2	41.8
<hr/>			
Restricted Designated General Fund Revenue	405.3	452.4	435.8
<hr/>			
Other Restricted Revenue			
Petroleum Revenue			
Royalties to Alaska Permanent Fund & School Fund (includes Bonuses & Rents)	396.9	335.9	320.2
Tax and Royalty Settlements to CBRF	119.1	350.0	100.0
Subtotal	516.0	685.9	420.2
Non-Petroleum Revenue			
Taxes	96.9	92.2	97.2
Charges for Services	89.1	89.9	80.0
Fines and Forfeitures	24.7	24.3	16.8
Licenses and Permits	34.3	38.3	44.4
Rents and Royalties	4.7	5.7	5.7
Other	6.8	6.8	6.8
Subtotal	256.5	257.2	250.9
Investment Revenue			
Investments - Other Restricted	4.8	3.3	7.2
Constitutional Budget Reserve Fund	138.3	77.5	61.5
Alaska Permanent Fund (GASB)(realized earnings) ¹	2,216.3	2,757.7	3,322.7
Alaska Permanent Fund (GASB)(unrealized earnings) ¹	-1,817.7	672.7	391.7
Subtotal	541.7	3,511.2	3,783.1
<hr/>			
Other Restricted Revenue	1,314.2	4,454.3	4,454.2

Table 2-3: Restricted Revenue, by type and category (continued from previous page)

	(\$ millions)		
	History	Forecast	
	FY 2016	FY 2017	FY 2018
Federal Revenue			
Federal Receipts	2,640.1	3,611.0	3,462.4
Petroleum Revenue			
NPR-A Royalties, Rents and Bonuses	1.8	4.3	4.3
Restricted Federal Revenue	2,641.9	3,615.3	3,466.7
Total Restricted Revenue	4,361.4	8,522.0	8,356.8

¹ Both realized and unrealized gains and losses are included per Government Accounting Standards Board (GASB) Statement 34 as interpreted by the Finance Division of the Department of Administration in its *Comprehensive Annual Financial Report*.

Table 2-5: Total Unrestricted General Fund Revenue, FY 2016 and FY 2017-2026 Forecast

Fiscal Year	(\$ millions)											
	History	Forecast										
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	
Unrestricted Petroleum Revenue	1,109.5	1,158.5	1,279.0	1,352.1	1,348.5	1,366.3	1,416.3	1,417.1	1,418.4	1,476.1	1,492.5	
Unrestricted Other Revenue (except Federal & Investment)	400.7	468.3	508.4	514.8	512.7	526.7	533.5	542.2	553.1	564.4	576.8	
Unrestricted Investment Revenue	22.5	19.5	44.5	52.9	61.3	69.7	78.1	86.4	94.8	103.2	111.6	
Total Unrestricted General Fund Revenue	1,532.7	1,646.4	1,831.9	1,919.8	1,922.5	1,962.7	2,027.9	2,045.7	2,066.3	2,143.7	2,180.9	
Total Unrestricted General Fund Revenue from Petroleum	72%	70%	70%	70%	70%	70%	70%	69%	69%	69%	68%	

Table 4-4: ANS Oil & Gas Production Tax Data Summary

	History	Forecast	
	FY 2016	FY 2017	FY 2018
North Slope Price (dollars per barrel)			
ANS West Coast	43.18	50.05	54.00
Transit Costs & Other	9.88	9.26	9.79
ANS Wellhead	33.30	40.79	44.21
North Slope Production (thousand barrels per day)			
Total ANS Production	514.9	523.7	459.9
Royalty and Federal ¹	67.2	68.9	56.4
Taxable Barrels	447.7	454.8	403.4
North Slope Lease Expenditures^{2,3} (millions of dollars)			
Total North Slope Lease Expenditures			
Operating Expenditures [OPEX]	3,267.2	2,788.0	2,984.0
Capital Expenditures [CAPEX]	3,387.0	1,966.1	2,513.9
Total North Slope Expenditures	6,654.1	4,754.0	5,497.9
Deductible North Slope Lease Expenditures			
Operating Expenditures [OPEX]	2,707.7	2,742.4	2,871.4
Capital Expenditures [CAPEX]	2,411.1	1,776.8	2,078.7
Deductible North Slope Expenditures	5,118.9	4,519.2	4,950.2
State Production Tax Revenue⁴			
Tax Revenue (millions of dollars)	186.0	189.5	242.2
Production Tax Collected per Taxable Barrel (dollars per barrel)	1.1	1.1	1.6
Statewide Production Tax Credits^{2,5} (millions of dollars)			
Credits Used against Tax Liability	99.8	611.0	271.0
Credits for Potential Purchase	498.5	32.7	1,043.0

¹ Royalty and Federal barrels represent the Department of Revenue's best estimate of barrels that are not taxed. This estimate includes both state and federal royalty barrels, and barrels produced from federal offshore property.

² Lease expenditures and credits used against tax liability for FY 2016 were prepared using unaudited company-reported estimates.

³ Expenditure data for FY 2017 and FY 2018 are compiled from company-submitted expenditure forecast estimates and other documentation as provided to the Department of Revenue. Expenditures shown here in two ways: (1) total estimated expenditures including for those companies with no tax liability; and (2) estimated deductible expenditures for only those companies with a tax liability.

⁴ Production tax is calculated on a company specific basis, therefore the aggregated data reported here will not generate the total tax revenue shown. For an illustration of the tax calculation, see Appendix E in the 2016 Fall Revenue Sources Book.

⁵ Production tax credits shown include all production tax credits and all areas of the state. Assumptions for the \$12 million credits for small Alaska producers are included in the table. Per-taxable-barrel credits for oil not eligible for the gross value reduction may not reduce a producer's liability below the minimum tax; that limitation is reflected in these estimates.

Table 8-4: Historical Production Tax Credits and Forecast Detail, FY 2007-2026

Fiscal Year	(\$ millions)									
	History									
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016 ¹
Credits Purchased by the State of Alaska²										
North Slope										
Qualified Capital Expenditure, AS 43.55.023(a); Carry-Forward, AS 43.55.023(b)	55	*	173	223	399	267	*	*	203	*
Credits under AS 43.55.025 ³	0	*	14	23	12	53	*	*	21	*
Total North Slope	55	53	187	246	411	320	261	281	224	212
Non-North Slope										
Qualified Capital Expenditure, AS 43.55.023(a); Carry-Forward, AS 43.55.023(b); Well Lease Expenditure, AS 43.55.023(l)	0	*	*	*	*	29	*	*	384	*
Credits under AS 43.55.025 ³	0	*	*	*	*	4	*	*	21	*
Credits under AS 43.20 ⁴	0	*	*	*	*	0	*	15	0	0
Total Non-North Slope	0	1	7	4	39	33	108	312	404	287
Total Credits Purchased by the State	55	54	193	250	450	353	369	592	628	498
Credits Used Against Tax Liability^{5,6}										
North Slope										
Qualified Capital Expenditure, AS 43.55.023(a); Carry-Forward, AS 43.55.023(b)	292	219	279	339	313	306	486	332	0	*
Transitional Investment Credit: AS 43.55.023(i) ⁷	171	73	0	0	0	*	*	0	0	0
Per-Taxable-Barrel Credit, AS 43.55.024(i)-(j) ⁸	0	0	0	0	0	0	0	516	523	56
Small-Producer Credit, AS 43.55.024(a) and (c)	*	*	*	*	*	*	*	*	*	*
Credits under AS 43.55.025 ³	*	*	*	*	*	*	*	*	*	*
Total North Slope	541	368	328	402	345	347	536	907	569	91
Non-North Slope										
Qualified Capital Expenditure, AS 43.55.023(a); Carry-Forward, AS 43.55.023(b); Well Lease Expenditure, AS 43.55.023(l)	*	*	0	*	11	*	*	*	*	*
Small-Producer Credit, AS 43.55.024(a) and (c)	*	*	6	*	6	*	*	*	*	*
Total Non-North Slope	16	10	6	10	17	16	14	12	14	9
Total Credits Used Against Tax Liability	557⁹	378	334	412	361	363	550	919	583	100
Total Credits North Slope	596	421	*	647	756	667	797	1,188	792	302
Total Credits Non-North Slope	16	11	*	14	56	49	122	323	418	296
Total Statewide Production Tax Credits	612	432	526	662	811	716	918	1,511	1,211	598
Carried-Forward Credits Balance for Companies Not Eligible for State Purchase¹⁰	0	0	0	0	0	0	0	0	0	114

* Data cannot be reported due to confidential constraints.

¹ These numbers are preliminary pending annual returns.

² Forecasted credits purchased by the state in the near-term are based on known projects and company activities. For FY 2020 and beyond, the forecast of credits available to be purchased by the state is held constant at \$150 million per year.

³ Credits under AS 43.55.025 include the Alternative Credit for Exploration, the Frontier Basin Credit, and, for Cook Inlet only, the Cook Inlet Jack-up Rig Credit.

⁴ Credits under AS 43.20 include the Gas Exploration and Development Credit, Gas Storage Facility Credit, In-State Gas Refinery Credit, and the LNG Storage Facility Credit.

⁵ The Education Credit, AS 43.55.019, though not reported in its own credit category in the summary, was less than \$1 million in each year reported and is calculated in the total.

Table 8-4: Historical Production Tax Credits and Forecast Detail, FY 2007-2026 (continued)

Fiscal Year	(\$ millions)									
	Forecast									
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Credits Purchased by the State of Alaska²										
North Slope										
Qualified Capital Expenditure, AS 43.55.023(a); Carry-Forward, AS 43.55.023(b)	1	432	128	187	180	152	138	141	144	144
Credits under AS 43.55.025 ³	0	161	0	0	0	0	0	0	0	0
Total North Slope	1	592	128	187	180	152	138	141	144	144
Non-North Slope										
Qualified Capital Expenditure, AS 43.55.023(a); Carry-Forward, AS 43.55.023(b); Well Lease Expenditure, AS 43.55.023(l)	32	352	41	11	5	5	5	6	6	6
Credits under AS 43.55.025 ³	0	85	10	7	7	7	7	3	0	0
Credits under AS 43.20 ⁴	0	15	35	20	20	0	0	0	0	0
Total Non-North Slope	32	451	86	38	32	12	12	9	6	6
Total Credits Purchased by the State	33	1043	213	225	212	163	150	150	150	150
Credits Used Against Tax Liability^{5,6}										
North Slope										
Qualified Capital Expenditure, AS 43.55.023(a); Carry-Forward, AS 43.55.023(b)	54	0	0	0	0	0	0	0	7	23
Transitional Investment Credit: AS 43.55.023(i) ⁷	0	0	0	0	0	0	0	0	0	0
Per-Taxable-Barrel Credit, AS 43.55.024(i)-(j) ⁸	475	242	180	163	226	328	395	453	565	594
Small-Producer Credit, AS 43.55.024(a)(c)	42	15	10	9	10	7	1	1	1	0
Credits under AS 43.55.025 ³	20	0	0	0	0	0	0	0	0	0
Total North Slope	591	257	189	172	235	335	396	454	572	617
Non-North Slope										
Qualified Capital Expenditure, AS 43.55.023(a); Carry-Forward, AS 43.55.023(b); Well Lease Expenditure, AS 43.55.023(l)	17	11	6	0	0	0	0	0	0	0
Small-Producer Credit, AS 43.55.024(a)(c)	3	4	7	6	6	0	0	0	0	0
Total Non-North Slope	20	14	13	6	6	0	0	0	0	0
Total Credits Used Against Tax Liability	611	271	202	178	241	335	396	454	572	617
Total Credits North Slope	592	849	317	359	415	487	534	595	716	761
Total Credits Non-North Slope	52	465	98	43	37	12	12	9	6	6
Total Statewide Production Tax Credits	644	1314	415	403	453	499	545	604	722	767
Carried-Forward Credits Balance for Companies Not Eligible for State Purchase¹⁰	64	64	56	56	56	56	56	56	49	26

⁶ For historical credits against tax liability, geographic location was determined by attributing all .023(l) credits to Non-North Slope, and all .025 Credits to North Slope. The other credits were placed according to where the taxpayer primarily operated. Since multiple taxpayers had operations in multiple areas, these numbers should be treated as rough estimates.

⁷ The Transitional Investment Expenditure Credit sunset date was Dec 31, 2013.

⁸ For FY 2014, the Per-Taxable-Barrel Credit is for only the last six months of the fiscal year. Credits applied against liability in the forecast are reduced because of the 4% minimum gross tax.

⁹ Three months of 2006 credits data are included in the FY 2007 Credits Used Against Tax Liability number.

¹⁰ This row includes estimates of Carried-Forward Credits for previous calendar years for companies with over 50,000 barrels of oil equivalent (BOE) of production, plus an estimate of credits that will be earned on activity through June 30 of the fiscal year. Carried-Forward Credits are primarily for net operating losses under AS 43.55.023(b).

Table A-3: Petroleum Revenue, by restriction and type

(\$ millions)

History

Fiscal Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Unrestricted Petroleum Revenue										
Petroleum Property Tax	65.6	81.5	111.2	118.8	110.6	111.2	99.3	128.1	125.2	111.7
Petroleum Corporate Income Tax	594.4	605.8	492.2	446.1	542.1	568.8	434.6	307.6	94.8	-58.8
Oil and Gas Production Tax	2,198.3	6,810.9	3,100.9	2,860.7	4,543.2	6,136.7	4,042.5	2,605.9	381.6	176.8
Oil and Gas Hazardous Release	10.1	11.7	11.1	10.3	9.7	9.4	7.8	8.8	8.1	9.2
Oil and Gas Conservation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Oil and Gas Royalties-Net ¹	1,583.8	2,420.6	1,451.2	1,469.0	1,821.3	2,022.8	1,748.4	1,685.0	1,052.1	840.3
Bonuses, Rents & Interest-Net ^{1,2}	29.2	25.5	14.4	8.0	22.0	8.9	19.4	27.4	26.1	30.3
Petroleum Special Settlements	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Unrestricted Petroleum Revenue	4,481.4	9,956.0	5,181.0	4,912.9	7,048.9	8,857.8	6,352.0	4,762.8	1,687.9	1,109.5
Cumulative Unrestricted Petroleum Revenue ³	66,291	76,247	81,428	86,340	93,389	102,247	108,599	113,362	115,050	116,159
Restricted Petroleum Revenue										
NPR-A Rents, Royalties, Bonuses	12.8	5.2	14.8	21.3	3.0	4.8	3.6	6.8	3.2	1.8
Royalties to AK Permanent Fund	535.0	834.0	659.8	696.1	857.3	904.9	842.1	773.7	510.4	390.5
Royalties to Public School Fund	10.6	16.5	11.0	11.1	13.6	14.7	13.8	12.5	7.9	6.4
CBRF Tax Deposits ⁴	101.9	437.9	121.1	505.5	147.4	101.4	176.6	141.4	148.2	105.8
CBRF Royalty Deposits ⁴	0.0	38.5	81.5	47.2	19.9	0.7	180.8	36.1	1.7	13.3
Restricted Petroleum Revenue	660.3	1,332.1	888.2	1,281.2	1,041.2	1,026.5	1,216.9	970.4	671.4	517.8
Total Petroleum Revenue	5,141.7	11,288.1	6,069.2	6,194.1	8,090.1	9,884.3	7,568.9	5,733.2	2,359.3	1,627.4

¹ Net of Permanent Fund Contribution and CBRF deposits.² Primarily composed of petroleum revenue.³ Based on revenue beginning in FY 1959.⁴ CBRF Tax and Royalty Deposits were combined in prior versions of this table. Historical values have been revised as of the *Spring 2017 Revenue Sources Book*.

Table A-3: Petroleum Revenue, by restriction and type (continued)

(\$ millions)

Forecast

Fiscal Year	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Unrestricted Petroleum Revenue										
Petroleum Property Tax	115.8	109.7	107.1	105.0	103.1	101.2	99.0	96.9	94.7	92.4
Petroleum Corporate Income Tax	122.6	239.3	250.5	245.3	238.1	243.5	244.9	239.7	254.5	257.2
Oil and Gas Production Tax	180.9	234.6	257.2	258.9	272.9	304.3	295.5	302.1	318.8	324.9
Oil and Gas Hazardous Release	8.6	7.6	7.3	7.0	6.7	6.4	6.1	5.9	5.6	5.4
Oil and Gas Conservation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Oil and Gas Royalties-Net ¹	711.1	668.2	710.4	712.6	725.8	741.4	752.0	754.2	783.0	793.0
Bonuses, Rents & Interest-Net ^{1,2}	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6
Petroleum Special Settlements	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Unrestricted Petroleum Revenue	1,158.5	1,279.0	1,352.1	1,348.5	1,366.3	1,416.3	1,417.1	1,418.4	1,476.1	1,492.5
Cumulative Unrestricted Petroleum Revenue ³	117,318	118,597	119,949	121,298	122,664	124,080	125,497	126,916	128,392	129,884
Restricted Petroleum Revenue										
NPR-A Rents, Royalties, Bonuses	4.3	4.3	8.9	25.7	40.4	36.5	36.9	41.3	38.3	35.2
Royalties to AK Permanent Fund	330.6	315.2	335.4	344.1	357.1	360.3	363.2	364.5	373.3	374.0
Royalties to Public School Fund	5.3	5.0	5.4	5.4	5.5	5.6	5.7	5.7	5.9	6.0
CBRF Tax Deposits ⁴	270.0	85.0	85.0	85.0	85.0	85.0	85.0	85.0	85.0	85.0
CBRF Royalty Deposits ⁴	80.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
Restricted Petroleum Revenue	690.2	424.5	449.6	475.2	503.0	502.4	505.8	511.5	517.6	515.1
Total Petroleum Revenue	1,848.8	1,703.5	1,801.7	1,823.7	1,869.3	1,918.8	1,922.9	1,930.0	1,993.7	2,007.6

¹ Net of Permanent Fund Contribution and CBRF deposits.² Primarily composed of petroleum revenue.³ Based on revenue beginning in FY 1959.⁴ CBRF Tax and Royalty Deposits were combined in prior versions of this table.

Table B-2: Price Difference, Fall 2016 forecast and Spring 2017 forecast

	(\$ per barrel of oil)									
Fiscal Year	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Fall 2016 Forecast										
ANS West Coast	46.81	54.00	60.00	63.00	67.00	71.00	75.00	78.00	84.00	88.00
ANS Wellhead Weighted Average All Destinations	37.48	44.23	49.81	52.36	55.85	59.33	62.79	65.21	70.59	73.97
Spring 2017 Forecast										
ANS West Coast	50.05	54.00	60.00	63.00	67.00	71.00	75.00	78.00	84.00	88.00
ANS Wellhead Weighted Average All Destinations	40.79	44.21	49.72	52.24	55.72	59.18	62.64	65.09	70.53	74.05
Dollar Amount Change from Prior Forecast										
ANS West Coast	3.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ANS Wellhead Weighted Average All Destinations	3.31	-0.02	-0.09	-0.12	-0.14	-0.16	-0.15	-0.12	-0.05	0.08
Percent Change from Prior Forecast										
ANS West Coast	6.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
ANS Wellhead Weighted Average All Destinations	8.8%	0.0%	-0.2%	-0.2%	-0.2%	-0.3%	-0.2%	-0.2%	-0.1%	0.1%

Table C-1: Production Difference, Fall 2016 forecast and Spring 2017 forecast

	(thousands of barrels per day)									
Fiscal Year	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Fall 2016 Forecast										
Alaska North Slope	490.3	455.6	442.1	428.6	413.5	398.2	380.4	363.4	345.9	331.0
Non-North Slope	15.5	14.2	15.7	14.6	13.0	11.7	10.6	9.7	8.9	8.2
Total	505.8	469.8	457.8	443.2	426.5	409.9	391.0	373.1	354.8	339.2
Spring 2017 Forecast										
Alaska North Slope	523.7	459.9	437.3	420.2	405.9	389.2	371.8	356.5	340.7	326.9
Non-North Slope	14.9	17.4	16.3	13.7	11.9	10.6	9.5	8.6	7.9	7.4
Total	538.6	477.3	453.6	433.9	417.8	399.8	381.3	365.1	348.6	334.3
Volume Change From Prior Forecast										
Alaska North Slope	33.4	4.3	-4.8	-8.4	-7.6	-9.0	-8.6	-6.9	-5.2	-4.1
Non-North Slope	-0.6	3.2	0.6	-0.9	-1.1	-1.1	-1.1	-1.1	-1.0	-0.8
Total	32.8	7.5	-4.2	-9.3	-8.7	-10.1	-9.7	-8.0	-6.2	-4.9
Percent Change From Prior Forecast										
Alaska North Slope	6.8%	0.9%	-1.1%	-2.0%	-1.8%	-2.3%	-2.3%	-1.9%	-1.5%	-1.2%
Non-North Slope	-3.9%	22.5%	3.8%	-6.2%	-8.5%	-9.4%	-10.4%	-11.3%	-11.2%	-9.8%
Total	6.5%	1.6%	-0.9%	-2.1%	-2.0%	-2.5%	-2.5%	-2.1%	-1.7%	-1.4%