

Revenue Sources Book
FALL 2014

Revenue Sources Book

Alaska Department of Revenue

FALL 2014

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December 9, 2014

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

Dear Governor Walker,

I am pleased to present to you the Department of Revenue's Fall 2014 *Revenue Sources Book*.

The *Revenue Sources Book* is the annual publication that provides a history and projection of state revenues. This publication is a collaborative effort among the Department of Revenue, the Permanent Fund Corporation, and the Office of Management and Budget.

Briefly, total state revenue was \$17.2 billion in FY 2014, and of this total, general fund unrestricted revenues (GFUR) totaled \$5.4 billion. Oil based revenue continues to dominate the state's unrestricted general fund revenue. In FY 2014, approximately 88% of all unrestricted revenue could be attributed to oil revenue.

The RSB reflects two changes from prior forecasts that will impact the near term revenue forecast. First, there is slightly higher production in the near term than previously forecast. North Slope oil production between FY 2013 and FY 2014 held steady, and it is expected to increase by approximately 15,000 barrels per day and 10,000 barrels per day in FY 2016 and 2017, following decline of 22,000 barrels per day in FY 2015. Given the forecasted investment trends, we expect that oil production should remain above 500,000 barrels per day for the next three fiscal years.

The second change is significantly lower oil prices in the near term than were previously forecast. ANS West Coast daily prices have declined to below \$65 per barrel in November 2014 from \$110 per barrel in July 2014, a decline of about 40%. Based on the lower oil price forecasts, we expect unrestricted revenue of \$2.6 billion and \$2.2 billion for FY 2015 and FY 2016, respectively. After FY 2016, we believe that oil prices will recover above \$90 per barrel and remain higher throughout our forecast period to FY 2024.

Chapter Three, the specialty chapter of the *Revenue Sources Book*, is entitled "The Arctic and Alaskan Economic Thinking", and it addresses the importance of the Arctic to Alaska.

We hope you find the information provided in the Fall 2014 *Revenue Sources Book* to be interesting and useful. The department will provide a forecast update in the spring of 2015.

Sincerely,

A handwritten signature in blue ink that reads "Marcia Davis".

Marcia Davis
Acting Commissioner



Dedication

The Fall 2014 *Revenue Sources Book* is dedicated to Dr. Arlon Rex Tussing, one of Alaska's great economists.

Dr. Tussing pursued an extraordinarily broad-ranging career as an academic and consulting economist, distinguishing himself as a brilliant thinker, writer and an active and effective participant in government and industry. He was a premier authority in the fields of energy, public utilities, marine fisheries and other natural-resource industries; environmental policy, national and regional economic development; and corporate and governmental finance.

Born in 1933, Arlon Tussing graduated from the University of Chicago in 1950 at age sixteen. During graduate study at the University of Washington, he specialized in economic development and Japanese studies, and spent two years in Japan. After receiving his Ph.D. in 1965, he was appointed to the Department of Economics at the University of Alaska Fairbanks, and became the first staff economist for the Institute of Social, Economic and Government Research, known today as the Institute of Social and Economic Research.

From 1966 until 1970, Dr. Tussing served as economic advisor to the Director of the US Geological Survey and staff economist for the Federal Field Committee for Development Planning. Through the 1970s he commuted between Alaska and Washington DC, serving as chief economist or as economic consultant to the U.S. Senate Committee on Interior and Insular Affairs (now Energy and Natural Resources) under the Chairmanship of U.S. Senator Henry M. Jackson of Washington State. In these capacities, he organized and participated in investigations and hearings and the drafting of the Federal legislation that settled Alaska Native land claims, authorized construction of the TransAlaska oil pipeline and an Alaska natural-gas transport system, and structured the disposition and management of National Interest Lands (parks, wildlife refuges, etc.) in Alaska. He had an influential role in creation of Alaska's Permanent Fund and the Permanent Fund Dividend Program.

From the early 1980s until 2008, Dr. Tussing was extensively engaged in consulting to the energy industry. He is one of the few analysts in

North America who successfully anticipated the restructuring of national and global markets for natural gas and electricity during the 1970s and 1980s. His related work included drafting, interpretation, and reformation of natural-gas sales contracts, and attendant negotiation, arbitration and litigation, particularly during the mid-1980s competitive reformation of gas markets throughout North America. He was the chief architect of market reform during this period at the State level in California and Montana, and devised the strategy for restructuring, buying down, or buying out uneconomic gas-purchase contracts on behalf of some of the largest U.S. interstate pipe-lines. He also played a central role in the New York Mercantile Exchange's establishment of natural-gas futures trading at Henry Hub, Louisiana.

In September 2005, Dr. Tussing received the 2005 Senior Fellow Award of the United States Association for Energy Economics "in recognition of his . . . outstanding insight and foresight regarding the evolution of U.S. and global energy markets." In 2007 he was awarded an honorary doctorate by the University of Alaska Anchorage. He is now retired and resides in California.

Dr. Tussing was blunt and was well-known for his characteristically barbed assessments of the prospects for Alaska's economy and development schemes. However, read decades later, his assessments are remarkable for their correctness, prescience and continued relevance. He had the rare ability to both think brilliantly and write lucidly. It is with pleasure that we dedicate this *Revenue Sources Book* to him.

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Introduction

Purpose

The *Revenue Sources Book* (RSB) is intended to provide Alaskans with a report of historic, current, and estimated future state revenue. The information in this publication assists the Governor to formulate a comprehensive financial plan to present to the Alaska State Legislature. Over the years, the RSB has become an educational tool to inform the general public of how the State's revenues are structured. The RSB also provides in-depth coverage on a topic relevant to current or future state revenues each year. This year's chapter is entitled *The Arctic and Alaskan Economic Thinking*.

This publication is prepared primarily by the Economic Research Group, a part of the Tax Division in the Department of Revenue, in accordance with AS 37.07.060 (b) (4). Forecasts of state revenue are made using models developed by the Department of Revenue's Economic Research Group and other state agencies. The department expresses its gratitude to those state agencies and the individuals in those agencies who have provided information, assistance and analysis for this RSB.

Forward Looking Statements

All figures and narratives in this document that are not based on events that have already occurred, constitute forecasts or "forward-looking statements." These numbers are projections based on assumptions regarding uncertain future events and the responses to those events. Such figures are, therefore, subject to uncertainties and actual results will differ, potentially materially, from those anticipated. The Department of Revenue attempts to capture these uncertainties in order to provide policymakers and the general public with a general understanding of the scale and scope of future revenue streams. The official forecast process takes into account many possible outcomes and attempts to minimize deviations from what is likely to happen. These figures do not necessarily represent a single scenario of a future path.

Readers are cautioned to take uncertainty into account when considering forward-looking statements in making decisions. The department will update the estimates in this RSB in the spring of 2015, as more

information is received. This forecast supersedes all prior estimates or forecasts as the official forecast of the department. Therefore, all prior forecasts should be used only for comparison purposes.

Changes

Quick response (QR) codes have been added to the first page of each chapter so that the data tables are accessible online in Microsoft Excel format. To access them, use a QR code recognition application with your mobile phone, smart phone, or tablet to take a picture of the QR code, which looks similar to Figure 1-A. The QR code within Figure 1-A will take you to the *Revenue Sources Book* Fall 2013 on the Tax Division website. The device will display a website with the link to download the Microsoft Excel workbook containing the tables found in the corresponding chapter.

Defining Revenue Categories

Throughout the RSB, revenues are divided into categories in two ways: by revenue source (where the revenue comes from), and spending restriction (how they may be used). There are three basic revenue

Figure 1-A: QR code sample



sources: 1) funds collected from In-State Activities, 2) funds received from the federal government, and, 3) earnings from investments (interest and payments earned on assets owned by the State). Due to the importance of revenues from oil production, In-State Activities are further divided into a) petroleum revenue and b) non-petroleum revenue. A graphic depiction of how the revenues are categorized by revenue

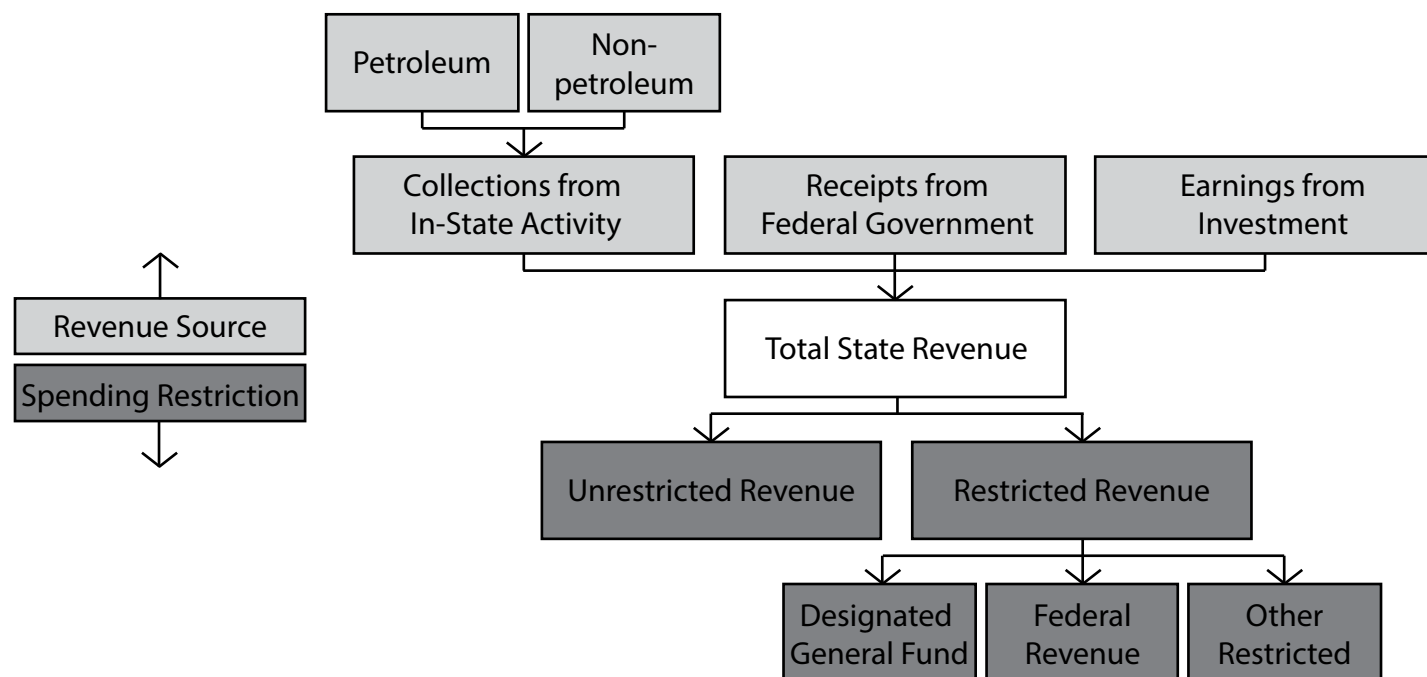
collection type is shown in Figure 1-B.

Revenue is also categorized by where it can be spent. Those categories are “unrestricted” (available to fund general state activities and capital projects) or “restricted” (required to be used for a specific purpose). Any revenue that is not restricted by the constitution, state or federal law, trust or debt restrictions, or customary practice is considered “general fund unrestricted revenue” or simply “unrestricted revenue.”

Most legislative and public discussion centers on the unrestricted category of revenue, and it is the figure most commonly referenced in budget discussions.

Restricted revenues are divided into three types: “designated general fund,” “other restricted revenue,” and “federal revenue” to aid in the budget process.

Figure 1-B: Revenue categories



Executive Summary



Introduction

The State of Alaska received a total \$17.2 billion in FY 2014 from all sources, making the second highest revenue year in Alaska's history. Of this total, general fund unrestricted state revenues totaled \$5.4 billion, with oil revenues accounting for approximately 88% of all unrestricted revenue. The department forecasts total revenue as \$10.1 billion in FY 2015 and \$9.9 billion in FY 2016. For comparison, total state revenues were \$15.8 billion and GFUR totaled \$6.9 billion in FY 2013. FY 2014 is the second highest total state revenue ever for Alaska.

Figure 1-B graphically illustrates the composition of the revenue by restriction and type. Table 2-1 is a summary table of total state revenue, by revenue restriction and type of revenue. The Department of Revenue is forecasting unrestricted revenue of \$2.6 billion and \$2.2 billion for FY 2015 and FY 2016, respectively. This is a significant revision to our unrestricted revenue from the previous forecast. The single-most influential contributor to the revision is a reduced price expectation. Alaska North Slope (ANS) oil West Coast daily prices have declined to below \$70 per barrel in November 2014 from above \$110 per barrel in July 2014, a decline of about 36%.

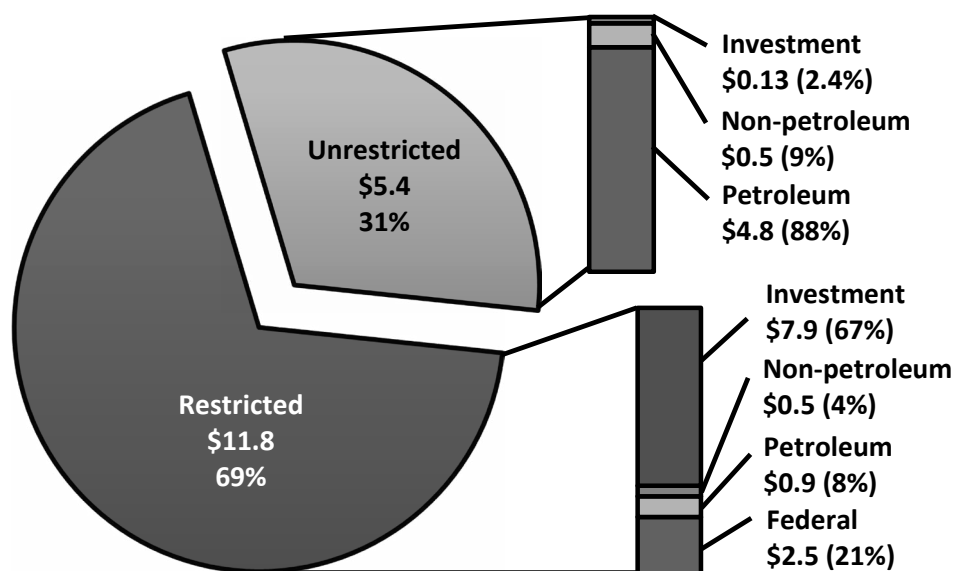


Figure 2-A: FY 2014 total state revenue, by restriction and type (\$ billions)

The FY 2015 revenue forecast is based on an annual average ANS oil price of about \$76 per barrel for FY 2015 and for FY 2016 about \$66 per barrel. The forecast oil price is considerably less than the last several years. Actual Alaska North Slope oil prices averaged \$107.57 in FY 2014, remarkably exactly the same as in FY 2013. The Department of Revenue projects that annual average prices will increase over \$100 (nominal) within several years, based on fundamental analysis of the structure of oil markets.

Another change is that we now have a trend for higher production than

previously forecast. Between FY 2013 and FY 2014, North Slope oil production stayed steady and for the first time since 2002. We expect a small increase in production over the next two years given the investment trends we forecast that over next three years oil production should remain above 500,000 barrels per day. Additionally, there is a 30% effective increase in oil production in Cook Inlet since last year with production coming in at almost 16 thousand barrels per day.

Lease expenditures are expected to increase over the next two years. While increases in lease expenditures are

Table 2-1: Total state revenue, by restriction and type

	(\$ millions)		
	History	Forecast	
	FY 2014	FY 2015	FY 2016
Unrestricted Revenue Sources			
Unrestricted General Fund Revenue			
Petroleum Revenue	4,755.3	2,019.2	1,636.1
Non-petroleum Revenue	508.5	502.3	528.2
Investment Revenue	130.2	30.0	32.4
Federal Revenue	0.0	0.0	0.0
Unrestricted General Fund Revenue	5,394.0	2,551.5	2,196.7
Restricted Revenue Sources			
Designated General Fund Revenue			
Non-petroleum Revenue	289.6	323.1	322.1
Investment Revenue	66.3	20.4	35.8
Subtotal Designated General Fund Revenue	355.9	343.5	357.9
Other Restricted Revenue			
Petroleum Revenue	927.6	512.9	465.6
Non-petroleum Revenue	183.9	229.2	230.4
Investment Revenue	7,861.4	3,319.2	3,537.2
Subtotal Other Restricted Revenue	8,972.9	4,061.3	4,233.2
Federal Revenue			
Petroleum Revenue ⁽¹⁾	6.8	5.0	5.0
Federal Receipts	2,511.9	3,126.4	3,126.4
Subtotal Federal Revenue	2,518.7	3,131.4	3,131.4
Total Restricted Revenue	11,847.5	7,536.2	7,722.5
Total State Revenue	17,241.5	10,087.7	9,919.2

considered good news for long-term production rates, they result in lower near-term total revenue.

General Fund Unrestricted Revenue

Generally, general fund unrestricted revenue is not restricted by the constitution, state or federal law, trust

or debt restrictions, or customary practice. Table 2-2 provides an overview of the FY 2014 composition of general fund unrestricted revenue as well as forecasts for FY 2015 and FY 2016.

In FY 2014, the State received \$5.4

billion in revenue from unrestricted sources, \$4.8 billion of which came from petroleum related activities. For FY 2015, the department is forecasting a significant decrease in unrestricted general fund revenue to \$2.6 billion. This projection is the result of lower

⁽¹⁾ Oil 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: General fund unrestricted revenue, by type and detail

	(\$ millions)		
	History	Forecast	
	FY 2014	FY 2015	FY 2016
Unrestricted Petroleum Revenue			
Petroleum Taxes			
Petroleum Property Tax	128.1	128.9	125.2
Petroleum Corporate Income Tax	316.6	249.2	195.4
Oil & Gas Production Tax	2,598.2	523.6	308.4
Subtotal Petroleum Taxes	3,042.9	901.7	629.0
Royalties (including Bonuses, Rents, & Interest)			
Mineral Bonuses & Rents	15.0	12.5	13.0
Oil & Gas Royalties	1,685.0	1,100.8	989.9
Interest	12.4	4.2	4.2
Subtotal Royalties	1,712.4	1,117.5	1,007.1
Unrestricted Petroleum Revenue	4,755.3	2,019.2	1,636.1
Unrestricted Non-petroleum Revenue			
Non-petroleum Taxes			
Excise Tax			
Alcoholic Beverage	18.3	20.0	20.4
Tobacco Product – Cigarette	30.0	30.5	28.2
Tobacco Product – Other	12.8	13.7	14.2
Insurance Premium	55.4	57.4	58.5
Electric and Telephone Cooperative	0.2	0.2	0.2
Motor Fuel	39.3	39.9	39.7
Vehicle Rental	8.3	8.4	8.5
Tire Fee	1.3	1.3	1.3
Subtotal Excise Tax	165.6	171.4	171.0
Corporate Income Tax	104.1	114.4	125.2
Fisheries Tax			
Fisheries Business	25.1	21.2	18.8
Fishery Resource Landing	7.1	5.5	5.9
Subtotal Fisheries Tax	32.2	26.7	24.7
Other Tax			
Charitable Gaming	2.5	2.5	2.5
Estate	0.0	0.0	0.0
Large Passenger Vessel Gambling	6.7	6.7	6.7
Mining	23.6	33.2	34.6
Subtotal Other Tax	32.8	42.4	43.8
Subtotal Non-petroleum Taxes	334.7	354.9	364.7

Table 2-2: General fund unrestricted revenue, by type and detail *(continued from previous page)*

	(\$ millions)		
	History	Forecast	
	FY 2014	FY 2015	FY 2016
Charges for Services			
General Government	13.7	13.5	13.5
Natural Resources	2.4	2.4	2.4
Other	8.1	7.5	7.5
Subtotal Charges for Services	24.2	23.4	23.4
Fines & Forfeitures	11.3	10.9	10.9
Licenses & Permits			
Alcoholic Beverage Licenses	1.0	1.0	1.0
Motor Vehicle	38.6	38.0	38.0
Other	3.1	3.0	3.0
Subtotal Licenses & Permits	42.7	42.0	42.0
Rents & Royalties			
Mining Rents & Royalties	16.2	15.9	16.3
Other Non-petroleum Rents & Royalties	16.8	11.8	11.8
Subtotal Rents & Royalties	33.0	27.7	28.1
Miscellaneous Revenues and Transfers			
Miscellaneous	33.1	26.8	26.8
Alaska Housing Finance Corporation	1.0	0.0	8.7
Alaska Industrial Development & Export Authority	20.7	10.7	17.7
Alaska Municipal Bond Bank Authority	0.0	0.9	0.9
Alaska Student Loan Corporation	0.7	0.0	0.0
Alaska Energy Authority	0.1	0.0	0.0
Alaska Natural Gas Development Authority	0.0	0.0	0.0
Mental Health Trust	0.0	0.0	0.0
Unclaimed Property	7.0	5.0	5.0
Subtotal Transfers	62.6	43.4	59.1
Unrestricted Non-petroleum Revenue, except federal and investment	508.5	502.3	528.2
Investment Revenue			
Investments	129.9	28.5	30.9
Interest Paid by Others	0.3	1.5	1.5
Unrestricted Investment Revenue	130.2	30.0	32.4
Total Unrestricted Revenue	5,394.0	2,551.5	2,196.7

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

	(\$ millions)		
	History	Forecast	
	FY 2014	FY 2015	FY 2016
Designated General Fund Revenue			
Non-petroleum Revenue			
Taxes	48.9	46.8	45.4
Charges for Services	206.4	241.3	241.8
Fines and Forfeitures	7.8	9.5	9.4
Licenses and Permits	0.4	0.2	0.2
Rents and Royalties	4.7	4.5	4.5
Other	21.4	20.8	20.8
Subtotal	289.6	323.1	322.1
Investment Revenue			
Investments - Designated GF	3.8	1.1	2.4
Other Treasury Managed Funds	62.5	19.3	33.4
Subtotal	66.3	20.4	35.8
Restricted Designated General Fund Revenue	355.9	343.5	357.9
Other Restricted Revenue			
Oil Revenue			
Royalties to Alaska Permanent Fund & School Fund (includes Bonuses & Rents)	786.2	492.9	445.6
Tax and Royalty Settlements to CBRF	141.4	20.0	20.0
Subtotal	927.6	512.9	465.6
Non-petroleum Revenue			
Taxes	77.2	74.3	75.8
Charges for Services	36.9	86.4	86.4
Fines and Forfeitures	26.3	23.9	23.6
Licenses and Permits	31.6	31.3	31.3
Rents and Royalties	6.6	6.8	6.8
Other	5.3	6.5	6.5
Subtotal	183.9	229.2	230.4
Investment Revenue			
Investments - Other Restricted	7.6	2.3	4.9
Constitutional Budget Reserve Fund	1,006.1	270.5	357.0
Alaska Permanent Fund (GASB) ⁽¹⁾	6,847.7	3,046.4	3,175.3
Subtotal	7,861.4	3,319.2	3,537.2
Other Restricted Revenue	8,972.9	4,061.3	4,233.2

⁽¹⁾ 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*.

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

	(\$ millions)		
	History	Forecast	
	FY 2014	FY 2015	FY 2016
Federal Revenue			
Federal Receipts	2,511.9	3,126.4	3,126.4
Oil Revenue			
NPR-A Royalties, Rents and Bonuses	6.8	5.0	5.0
Restricted Federal Revenue	2,518.7	3,131.4	3,131.4
Total Restricted Revenue	11,847.5	7,536.2	7,722.5

global oil prices because of ample supplies on the market and low demand, especially in China. While North Slope oil production is forecasted to increase, for the first time in over a decade, tax deductible company spending projections decrease the amount of tax collections in the short-term. The combination of these factors reduce the expectations for general fund unrestricted revenue.

Petroleum Revenues

Petroleum revenue is projected to provide at least 79% of FY 2015 and 74% of FY 2016 unrestricted revenues and 83% of forecast general fund unrestricted revenue through FY 2024 as shown in Table 2-4 on page 12. These revenues come from four components – production tax, royalties, corporate income tax, and petroleum property tax. In turn, four elements are critical to the determination of these revenues: price, production, lease expenditures, and transportation costs. These components are explained briefly below and in greater detail in Chapter 4. Details regarding the remaining petroleum revenue sources can also be found in Chapter 4.

Crude Oil Price

By regulation, the department uses several different reporting and assessment services to estimate the “prevailing value” for ANS oil. Because there is no spot market for ANS crude and it is not traded on an exchange, Alaska crude oil is assessed based on purchases of crude oil in the West Coast markets, where it is sold primarily to Washington State and California refiners. The average prevailing value of ANS in FY 2014 was \$107.57 – the exact same as FY 2013.

In the past, ANS crude was valued against the West Texas Intermediate (WTI) benchmark. However, since the WTI benchmark has decoupled from ANS and other crude markers, assessment of ANS is now more comparable to other waterborne crude oils such as Brent. Since 2012, the department forecasts ANS crude oil price directly, rather than forecasting WTI and creating an ANS-WTI differential.

The department considered various oil price forecasts of WTI and Brent oil in deriving the fall 2014 ANS oil price forecast and relied on a panel of experts in determining the price expectations

for ANS. This year, because of significantly increased price volatility following the 2014 price forecast session, prices for FY 2015 and FY 2016 were derived from a probabilistic forecast model based on daily price changes. The department projects ANS oil prices will average around \$76 per barrel in FY 2015 and \$66 per barrel in FY 2016. In the longer-term, the department forecasts ANS to increase over \$100 starting in FY 2018. Details about oil price forecast methodology are provided in Chapter 4.

Crude Oil Production

In the 37th full fiscal year of North Slope production, FY 2014 averaged 531.1 thousand barrels of oil per day. Between FY 2013 and FY 2014, North Slope oil production essentially did not decline. Production in FY 2015 is forecast to be 509.5 thousand barrels of oil per day; by FY 2017, production is forecast to peak to around 534.1 thousand barrels per day. FY 2016 and FY 2017 are forecast to be the first fiscal year-to-fiscal year increases in over a decade.

Cook Inlet, in its 56th fiscal year of production, saw a fourth consecutive

Table 2-4: Ten-year forecast of total unrestricted general fund revenue

Fiscal Year	History	(\$ millions)									
		Forecast									
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Unrestricted Petroleum Revenue	4,755.3	2,019.2	1,636.1	3,070.3	3,678.6	4,175.0	4,197.2	3,947.9	3,857.6	3,822.5	3,725.1
Unrestricted Non-petroleum Revenue	508.5	502.3	528.2	539.4	550.2	554.0	560.9	569.1	571.8	583.2	590.3
Unrestricted Investment Revenue	130.2	30.0	32.4	47.6	63.3	79.1	94.8	110.6	126.3	142.1	157.8
Total Unrestricted Revenue	5,394.0	2,551.5	2,196.7	3,657.3	4,292.1	4,808.1	4,852.9	4,627.6	4,555.7	4,547.8	4,473.2
Percent from Oil	88%	79%	74%	84%	86%	87%	86%	85%	85%	84%	83%

increase in its annual oil production rate.⁽¹⁾ At 15,838 barrels per day, a 30% effective increase in production rates over FY 2013, Cook Inlet is now producing more oil than its FY 2008 level. Early indications suggest that this production growth will continue next year in response to increases in investment.

Lease Expenditures

Under Alaska's net tax system, companies are allowed to deduct certain lease expenditures from the gross value of their production before applying the tax rate. Future tax collections, therefore, are dependent not only on the oil price and the level of production, but also on the cost of that production. Costs of production may include operating expenses, such as the costs of labor or the expense to run a facility, and they may include costs to acquire production equipment or to drill a well—usually deemed to be capital expenses.

North Slope lease expenditures totaled approximately \$7.0 billion in FY

2014. The department projects total North Slope spending to increase to \$7.7 billion in FY 2015 and \$8.2 billion in FY 2016, before tapering off thereafter. Compared to the spring 2014 revenue forecast this represents a decrease of about \$400 million for FY 2015 and an increase of about \$300 million for FY 2016. This forecast reflects company plans to increase spending at legacy fields, as evidenced by recent announcements of rig additions and investment in new drilling areas. However, these increased spending estimates are subject to many uncertainties, including oil prices and other economic factors.

Transportation Costs

As the volume of oil flowing through a pipeline decreases, the costs of maintaining that pipeline are spread over fewer barrels of oil. The result is that the average cost of delivery for each barrel of oil increases as production declines. Additionally, changes in marine shipping rates include changes in labor costs, capital investment, and cost of fuel. The latter two factors are directly tied to oil prices. The

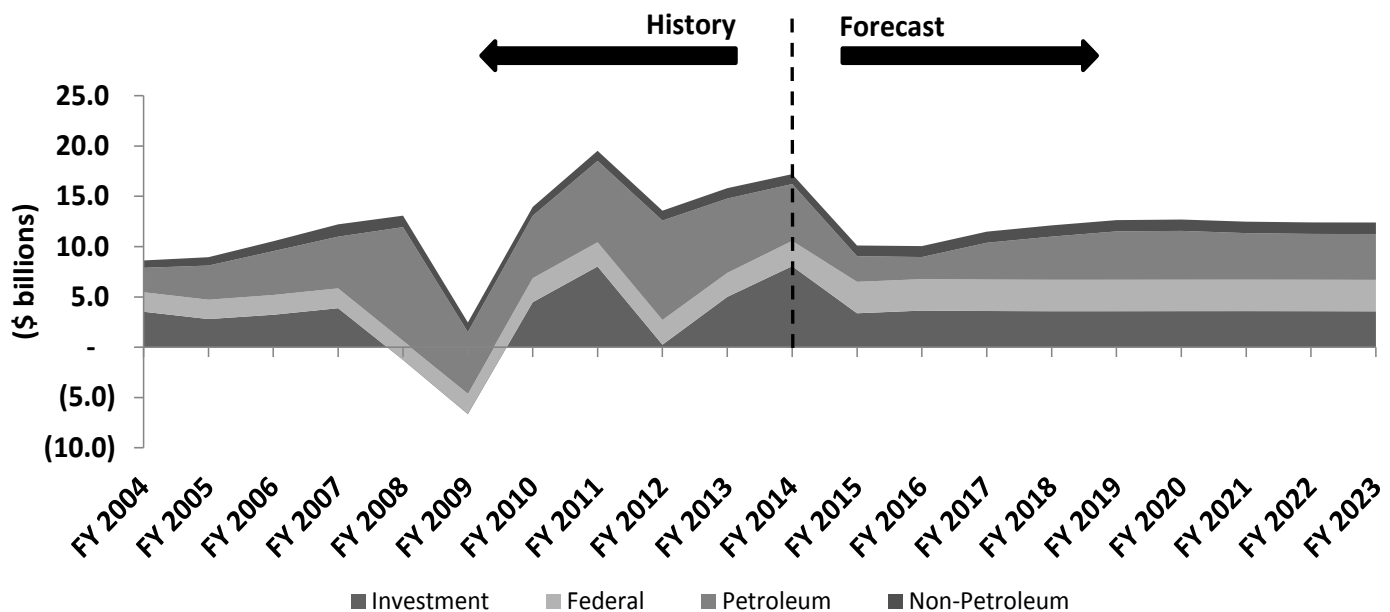
department is now forecasting that the average cost of delivering oil from the Alaska North Slope to the West Coast will be about \$9 per barrel in FY 2015 and increase to nearly \$15 per barrel by FY 2024.

Non-Petroleum Revenue from In-State Activity

Other unrestricted revenue includes corporate income taxes from non-petroleum related businesses, excise taxes, consumption taxes, charges for services, fines, forfeitures, licenses, permits, rents, royalties, transfers, and other miscellaneous revenue. These revenues are referred to as “non-petroleum revenues from in-state activity,” and do not include federal and investment revenues. Details regarding these revenue sources can be found in Chapter 5. Unrestricted non-petroleum revenues from in-state activities are expected to be over \$500 million in FY 2015, representing 20% of all unrestricted revenues. By FY 2024, these revenues are projected to rise to about \$590 million.

⁽¹⁾ Cook Inlet oil production and Alaska's Statehood started almost at the same time. Production in Cook Inlet began in 1958 and Alaska's Statehood began January 3, 1959.

Figure 2-B: Total state revenue look back and forecast



Unrestricted Investment Revenue

Unrestricted investment revenues are primarily earnings on the general fund, as well as the statutory budget reserve fund. Unrestricted investment revenue is expected to be \$30 million in FY 2015. This represents only a small portion of total investment revenue. The majority of investment revenue is restricted and discussed below.

Restricted Revenues

Restricted revenue includes revenue restricted by the constitution, state or federal law, trust or debt restrictions, customary practice, or other restriction. Restricted revenue reported in Table 2-3 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 deposited in 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. The largest

sources of restricted revenue are royalty contributions to the permanent fund, receipts from federal government, and earnings from investments, as well as other restricted non-petroleum revenues. FY 2014 brought \$11.8 billion in total restricted revenues to the State. The FY 2015 projection for total state restricted revenues is \$7.5 billion. Details regarding these sources can be found in chapters 4, 5, 6, and 7.

Restricted Royalties

The FY 2015 projection for royalty, bonus, and rents contributions to the permanent fund is \$484.8 million. This figure tracks expected changes in price, transportation costs, and production over time. By FY 2024, the department forecasts that permanent fund contributions will be \$531.1 million, as lower oil production is offset by higher prices.

Restricted Investment Revenue

Investment income is the earnings generated from certain assets such as the permanent fund, the statutory budget reserve, and the constitutional budget

reserve. FY 2014 returned \$7.9 billion on total state assets of about \$67 billion. The department is forecasting \$3.3 billion in restricted investment revenue in FY 2015. More information about investment revenue can be found in Chapter 7.

Federal Revenue

All federal funds to the State are considered restricted for purposes of this forecast. Federal funds include revenues for highways, medical care, education, and other designated purposes. Over recent years, this revenue source has contributed between \$2 billion and \$2.5 billion annually. The State received \$2.5 billion in FY 2014 and is forecasting \$3.1 billion in federal payments to the State for pre-determined uses in FY 2015. However, consistent with practice in prior years, the forecast represents the maximum possible federal revenue contribution, while actual revenues routinely come in below that forecast. More detail regarding federal revenue can be found in Chapter 6.

3

The Arctic and Alaskan Economic Thinking



Alaska's economy is inextricably intertwined with the Arctic. Since statehood, the vast majority of Alaska's considerable revenue has been derived from the extraction and export of arctic resources for sale in global markets. The Arctic has shaped Alaska's economy and how Alaskans approach economic issues. Understanding how the arctic experience has shaped Alaska's economic thinking provides insight into how Alaska can best position itself to transition to a "next generation" economy that blends our existing reliance on arctic resources with new methods of revenue generation.

In this chapter, we will primarily discuss the historical development of the Arctic's non-renewable resources. Equally important are issues related to the Arctic's renewable resources, especially the crucial relationship arctic indigenous people have with renewable resources. However, these issues are beyond the scope of this chapter.

What exactly is the Arctic?

There are at least three definitions for "the Arctic." The first definition is the area of land and water that is north of the Arctic Circle

(66°33' North). The Arctic Circle is the southernmost latitude in the Northern Hemisphere where the sun can remain continuously above the horizon at the summer solstice or below the horizon for the winter solstice. The second definition is related to the "arctic tree line," or the northern limit of tree growth, although the tree line is notably moving northward in recent decades. The third definition is "the 10 degrees Celsius (50 degree Fahrenheit) isotherm," where the daily summer temperature does not rise above 10 degrees Celsius, and this definition is also being affected by recent trends in global climate change. For purposes of this discussion, we will not include the Bering Sea area, which would be considered Arctic under the third definition. We have already discussed the dominant economy of the Bering Sea fisheries in the Fall 2012 *Revenue Sources Book*.

The nations that are considered Arctic nations are the United States of America (because of Alaska), Canada, Russian Federation, Denmark (because of its sovereignty over Greenland), Norway, Sweden, Finland and Iceland.

Why is there significant national and international discussion about the Arctic?

The last several years, global climate change has driven the topic of "the Arctic" to the top of the discussion list for policy makers. However, many years before the wide-spread recognition of global climate change, "the Arctic" was nationally and globally important because of the value that could be derived from its non-renewable resources. This was especially true for Alaska, where resources found in the Arctic were the foundation of Alaska's economic success in the 20th Century through the development of North Slope oil. The development of the largest (Prudhoe Bay) and second-largest (Kuparuk River) oil fields in North America has dominated Alaska's economy and defined Alaska's economic thinking over the last 40 years.

Substantial oil resources have been produced, and remain to be produced in Alaska's Arctic. The remaining resources are likely to be more costly and technically challenging to develop. In addition, much of the remaining energy resources are not located entirely on state lands and thus, the state will

Figure 3-A: Mapping the three definitions of the Arctic



Source: https://nsidc.org/sites/nsidc.org/files/images/arctic_map.gif. Accessed 3 December 2014.

receive less royalty and tax revenues from these resources if they are developed under current laws.

Alaska's "Staples" Economy

George Rogers, one of Alaska's first economists, used the "staples approach," first developed by Harold Innis in 1915, to explain Alaska's development. This theoretical and policy framework explained how the exploitation and export of a natural resource, that Innis called "staples," became major drivers that transformed remote economies.⁽¹⁾ In Innis' case, he used this theory to explain how the export of furs, fish and wheat, financed modernization and economic diversification in his native Canada. The "staples theory" became a useful tool in analyzing the development of other so-called "empty lands" or "regions of recent settlement" similar to 1915 Canada.⁽²⁾

The staples approach looks at a region or country that has a significant advantage in a resource that it exports to the larger domestic or global economy. The export brings a relatively large amount of money and wealth compared to the general economy

and this becomes the major engine of growth for the economy. The staples approach is an explanation of how export-led economies begin and are sustained.

Dr. Rogers presented his ideas and research in two major books about Alaska's economy right around the time of Alaska statehood, *Alaska in Transition*, *The Southeast Region*, and *The Future of Alaska, Economic Consequences of Statehood*. His work was timely in capturing the first years of the new state and his analysis framed how Alaskan economists and advisors would view North Slope oil development for the next fifty years.⁽³⁾

In 1978, Dr. Rogers described Alaska's staples economic development in the definitive study about the Arctic entitled *The Circumpolar North*.⁽⁴⁾ This was one of the first comprehensive studies of the social and economic development of the global Arctic. State government officials and University of Alaska economists have utilized this economic approach at various times since 1978 to support resource-based economic policies. The importance

of this body of work is that it analyzed Alaska's economy in the context of other arctic nations facing many similar economic challenges. This broader context set the stage for Alaska policy makers to evaluate and manage Alaska's economic strategies in comparison to other resource-based arctic economies, rather than with a view to what other US states might be doing.

Ideas Matter: An Economic Context for talking about Arctic Alaska

The Alaska Arctic experience is unique, to the degree to which Alaskans and particularly the Alaska Inupiat, have consciously chosen globalism and markets as central tools for enhancing the sustainability of their livelihoods and communities.

Arlon Tussing was one of the first economists to suggest that Alaska's size and sparse population are precisely the elements that have aided Alaska in its phenomenal growth.⁽⁵⁾ Alaska, according to Tussing, is relatively unproductive per unit of area, but because it is large, "[r]elative to its present small

⁽¹⁾Innis, Harold Adams. 1933. Problems of staple production in Canada. Toronto: Ryerson Press.

⁽²⁾Fogel, Robert William. 1964. Railroads and American economic growth: essays in econometric history. Baltimore: Johns Hopkins Press.; North, 1961.; Kuznets, Simon. 1961. Capital in the American economy; its formation and financing. Princeton, N.J.: Princeton University Press.; North, Douglass C. 1961. The economic growth of the United States, 1790-1860. Englewood Cliffs, N.J.: Prentice-Hall.; Ōkawa, Kazushi, and Henry Rosovsky. 1973. Japanese economic growth; trend acceleration in the twentieth century. Stanford, Calif: Stanford University Press.; Tiebout, Charles M. 1956. "Exports and Regional Economic Growth". Journal of Political Economy. 64 (2): 160-164.

⁽³⁾Rogers, George William. 1960. Alaska in transition: the southeast region. Baltimore: Published for Resources for the Future by Johns Hopkins Press.; Rogers, George William. 1962. The future of Alaska; economic consequences of statehood. Baltimore: Published for Resources for the Future by the Johns Hopkins Press.

⁽⁴⁾Armstrong, Terence E., George William Rogers, and Graham Rowley. 1978. The circumpolar north: a political and economic geography of the Arctic and Sub-Arctic. London: Methuen.

⁽⁵⁾Tussing, Arlon Rex. 1984 "Alaska's petroleum-based economy," IN: MOREHOUSE, T. Alaska Resources Development, Issues of the 1980s, Boulder, Colorado: Westview Press, pp. 51-78.; Tichotsky, John. 2000. Russia's diamond colony: the Republic of Sakha. [Amsterdam, the Netherlands]: Harwood Academic.

population [about half a million people throughout the 1980s and 1990s], Alaska is indisputably resource-rich.”⁽⁶⁾

Arlon Tussing explains this phenomenon in terms of overall development:

The larger economy outside Alaska has supported a non-Native population in Alaska chiefly because it makes global economic sense to identify and “high-grade” natural resource anywhere if it is sufficiently large or sufficiently valuable to overcome the high costs of production and transportation.”⁽⁷⁾

The transformation from a colony to a wealthy region occurred because Alaska gained statehood in 1959. This entitled it to the same rights as the other 48 states. Tussing argues that Alaska’s success is due not only to Alaska’s association with the US, one of the “...biggest and richest of the democratic capitalist nations...”⁽⁸⁾ but specifically, being an equal member of the United States. This equality and what may be called a degree of “sovereignty” immediately gave Alaska two “...immense economic advantages”⁽⁹⁾

First, Alaska became a part of:

... this greatest of customs and monetary unions, and subject to its laws and business practices, is an awesome economic advantage, particularly for a huge, sparsely populated land mass. All kinds of productive input-capital equipment, skilled labor, technology, information and ideas, communications media, entrepreneurship, and financial capital are readily abundant or instantly accessible for any enterprise that has promise of economic success.”⁽¹⁰⁾

Added to the “instant” opportunities afforded by association to the US, Alaska reaps the benefits of the relatively extensive rights states have within the federal republic. The US developed a complex balance between states’ rights and federalism molded by over 200 years of experience and even civil war.

Second, as part of Alaska becoming a state, the federal government gave Alaska outright 104 million acres (about a third of the state), including all the rights to collect royalties and taxes to capture economic rents from resource development. Since a non-renewable resource, like oil, is a “gift of nature,” all of the income the exploitation generates is economic rent. Alaska’s wealth after statehood was generated from capturing economic rents of an extremely valuable “gift of nature.” As part of its land grant Alaska was fortunate to choose land where the Prudhoe Bay oil field, the largest deposit of oil ever found in North America, was found.

In managing the revenues from this world class resource, Alaska has:

...access to a number of powerful fiscal and regulatory tools, invented earlier in other states, with which they can capture or redirect an even bigger share of the economic rents associated with comparatively rich natural resources.”⁽¹¹⁾

Alaska, armed with all the tools of a US state, was able to capture some of the economic rent from the development of oil at Prudhoe Bay, redirect the revenue flow and hold a

large part within its own economy or put it in savings. Although Alaska was the resource owner, the actual exploration, development, and production was carried out by private multi-national oil and their subcontractors. While there are specific examples where the benefits of resource revenues were squandered by state government, much of the benefit of the economic rents from petroleum development reached the Alaska public, in the form of employment, infrastructure, state services and even a direct disbursement of cash in the form of a dividend.

Alaska created a successful solution to the fundamental problem of capturing and managing economic rent from a non-renewable resource located in a remote or peripheral region. It managed to maximize the benefits for its inhabitants. Alaska did this by focusing on the primary export economy and by saving and managing financial wealth.

Arctic Alaska has generated a significant amount of Alaska’s wealth within the last 45 years.

Alaska’s North Slope has produced about 17 billion barrels of oil since the discovery of Prudhoe Bay.

Oil production on the North Slope has been the engine of economic growth for Alaska. It constitutes (a) at least a third of the gross regional product; (b) over 90% of the general fund unrestricted revenue for most years; (c) over \$150 billion (2013\$) in total revenue since statehood; and (d) the source of almost all the original principal of state’s savings (in excess of \$100 billion in FY 2014).

⁽⁶⁾ ⁽⁷⁾ ⁽⁸⁾ ⁽⁹⁾ ⁽¹⁰⁾ ⁽¹¹⁾ Tussing, 1984

Figure 3-B: Production of North Slope oil

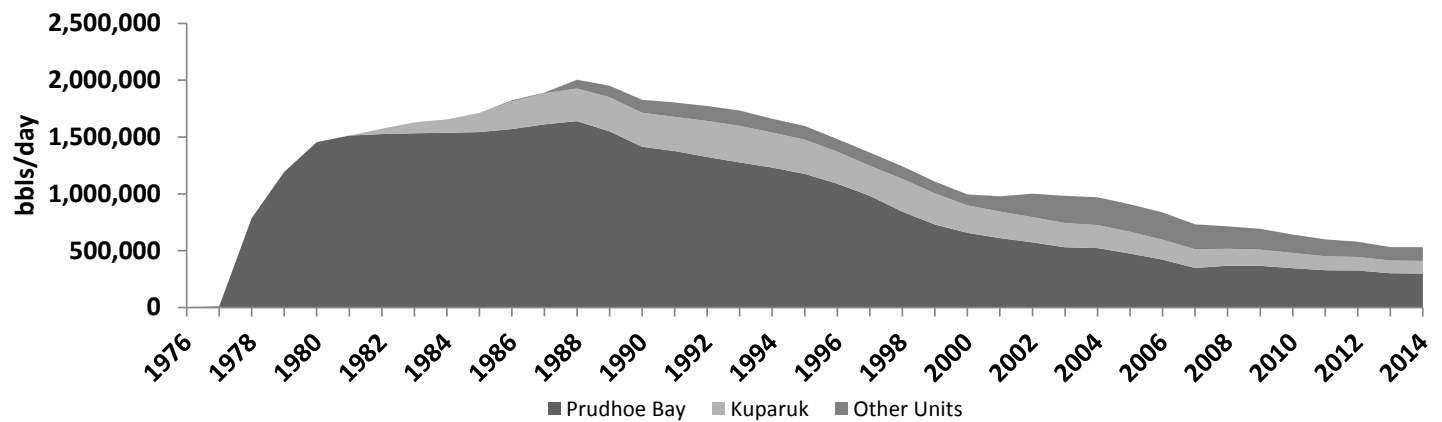


Figure 3-C: Total state petroleum revenue, nominal and real (2013\$) comparison

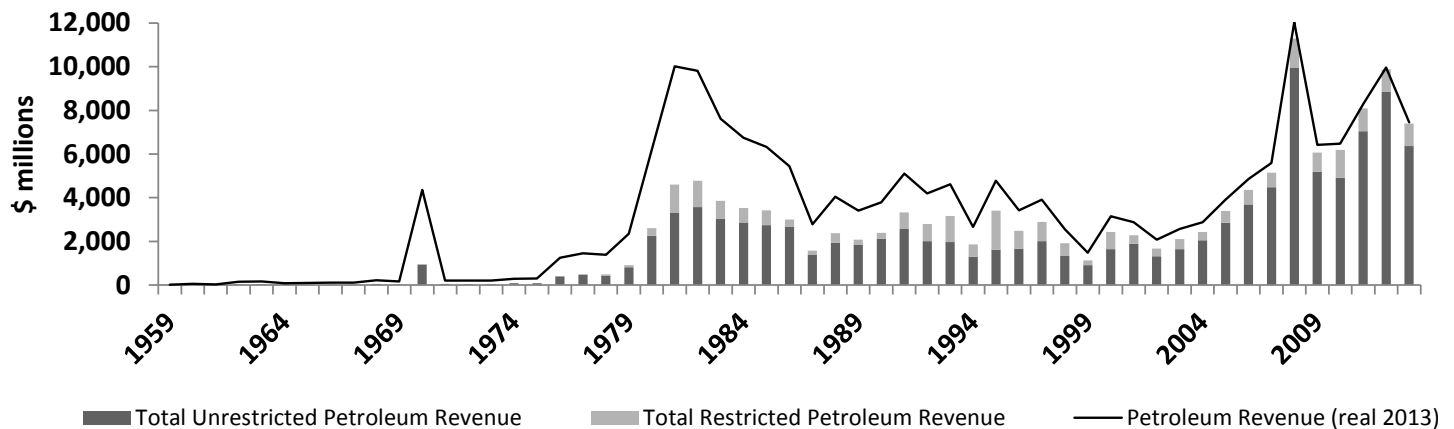
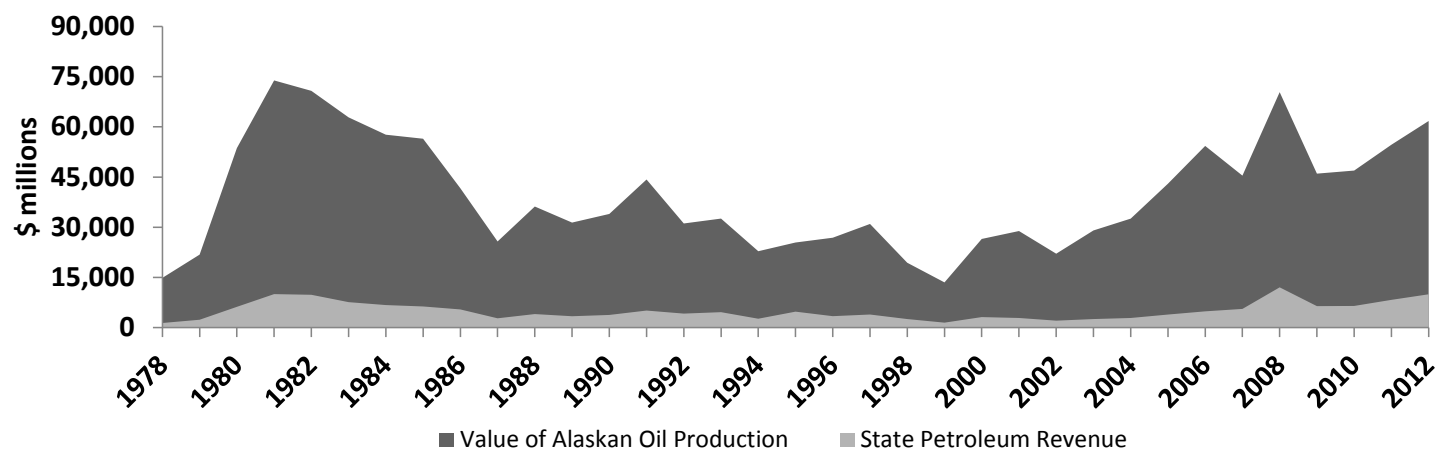
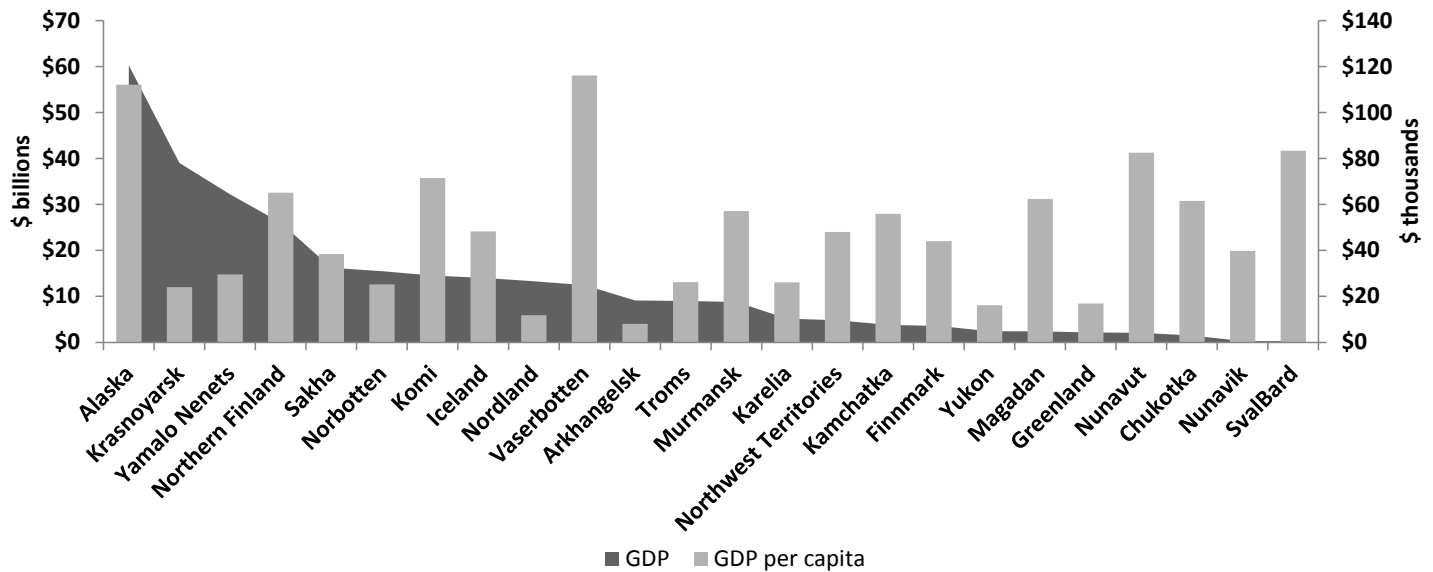


Figure 3-D: Total petroleum value vs state revenue



Source: Alaska Department of Revenue

Figure 3-E: Gross domestic product and gross domestic product per capita in arctic territories



Source: Alaska Department of Revenue

Total value of oil production exceeds \$2 trillion in nominal dollars and is about \$3.4 trillion in today's dollars. For comparison, \$3.4 trillion is equal to the yearly US budget in 2014.

Besides oil production, arctic Alaska is home to Red Dog mine, one of the most successful mining joint-ventures between a Native-owned corporation and a mining producer. Red Dog mine is a large-scale zinc-lead mine located in the Northwest Arctic Borough, near the regional center of Kotzebue and is one of the world's largest producers of zinc concentrate. The mine has been in production since 1989, has been recently expanded, and has generated over \$20 billion in revenue over the life of the project.

How does Alaska's Arctic based income compare to other Arctic nations?

Historically, thanks to the state government's policies together with the success of the private sector,

Alaska produced a structure that could generate revenue effectively and resulted in superior outcomes compared to those achieved by other Arctic nations. Alaska leads in all categories of economic wealth, both in absolute terms and on per capita Gross Domestic Production GDP, a basic indicator by which arctic regions are often compared. Alaska's financial resources are significantly superior to the assets of most other Arctic regions, of most US states, and even of many countries, especially when considered on a per capita basis. The bottom line message is powerful – Alaska has done as well or better than any other Arctic region in directly generating economic benefits.

How have the economies of arctic local governments fared?

Two borough, or county level, governments are located in Alaska's Arctic: the North Slope Borough

and the Northwest Arctic Borough. In 2013, about 9,700 people lived in the North Slope Borough and about 7,700 lived in the Northwest Arctic Borough. The growth of these populations has been significant since the advent of petroleum production. After 40 years of industrial development, most of the communities in the Alaska Arctic remain predominately indigenous - Alaska Native. Most Alaska Native people in the Alaska Arctic are Inupiat, a distinct cultural-linguistic group within the Inuit (Eskimo) group. The culture of the Inupiat relies heavily on marine mammal subsistence.

The economic success of arctic local governments parallels that of the success of State government. The Northwest Arctic Borough and the North Slope Borough have successfully developed infrastructure, schools, and utilities through taxation policies that maintain strong workforces and communities.

These same arctic residents have also produced extremely successful commercial enterprises organized under the Alaska Native Claims Settlement Act (ANCSA) (1972) known as regional and village corporations. The Arctic based regional corporations are multi-billion dollar corporations, in terms of gross income, and several of the arctic village corporations have generated hundreds of millions of dollars in income. For the Arctic, and probably globally, they are a premier example of an indigenous people that have successfully maintained their subsistence culture, while successfully navigating modern global markets with direct participation in large-scale industrial development.

One clear way that wealth generation in the Arctic benefits local residents is in wages and the labor market that has been created on the local level is impressive. The wages for Arctic residents are significant and consistently high. Further, the population and wages continue to grow over time.

How will Arctic resource development change in the near future?

The largest discovered oil fields of the North Slope are now mature. In 1988, at its peak, the North Slope produced 2 million barrels a day. Today, the same fields produce about a quarter of this production. Fortunately, the “legacy fields” are producing considerably more than originally expected thanks to new technology and enhanced recovery systems. While additional reserves are being accrued and new fields are being developed to maintain production,

it is a slower, costlier and more complicated process.

The next mega-project for Alaska is anticipated to be a large scale, liquefied natural gas system to export North Slope gas to Asian markets. See “Liquefied Natural Gas: Alaska’s Once and Future Export?” within *Revenue Sources Book Fall 2013* for details. Three main North Slope oil producers and the State of Alaska are working on a preliminary project concept whose current estimated cost is at least \$40 billion for a 42-inch pipeline from the North Slope and an LNG export facility in Nikiski on the Kenai Peninsula. A project of this scale would likely subject the Alaska economy to growth rates that are unprecedented, even taking into account the previous North Slope oil boom. A large-scale LNG project will be different from an oil project and this has significant implications for the Alaskan economy. A gas LNG project typically has a constant throughput of volume over time, whereas, an oil field is typically depleted along a decline curve. In addition, natural gas is usually sold under large-volume, long-term contracts that are often decades in length. In contrast, oil is sold under much shorter contract-periods, and can even be sold relatively easily to multiple markets into an on-demand (spot) market.

Exploratory drilling on the Arctic Outer Continental Shelf (OCS) may bring a oil boom, with one catch: the state will not directly benefit under the current arrangement. The Prudhoe

Bay and Kuparuk fields were discovered on state lands and the associated royalties and production taxes accrued solely to the state budget. Even oil on federal lands within the near-shore (beyond the state three-mile zone to six miles), provides some direct financial benefit to the State of Alaska through shared royalties and/or taxes with the federal government. OCS development, however, under current federal law promises no such direct economic benefit.

How will state and local governments retool their economic policies to survive these changes?

The Arctic’s indigenous people are taking steps to engage directly as partners in the resource development. Shell Oil Company and Arctic Slope Regional Corporation, along with six North Slope ANCSA village corporations signed an agreement in mid-2014 giving the Native companies an option of acquiring an overriding royalty interest from production of Shell’s OCS leases in the Chukchi Sea. This new business structure will enable the sharing of revenue with the Arctic communities impacted by development. This is an important development since otherwise there would be no direct sharing of economic benefit from the OCS resource development within the state.

The state’s policy makers are considering economic strategies that will enable them to bridge a state economy dominated by revenue generated from oil development to one that also relies upon gas development, as well as other revenue sources. The state is

Figure 3-F: Employment count in Alaska Arctic boroughs

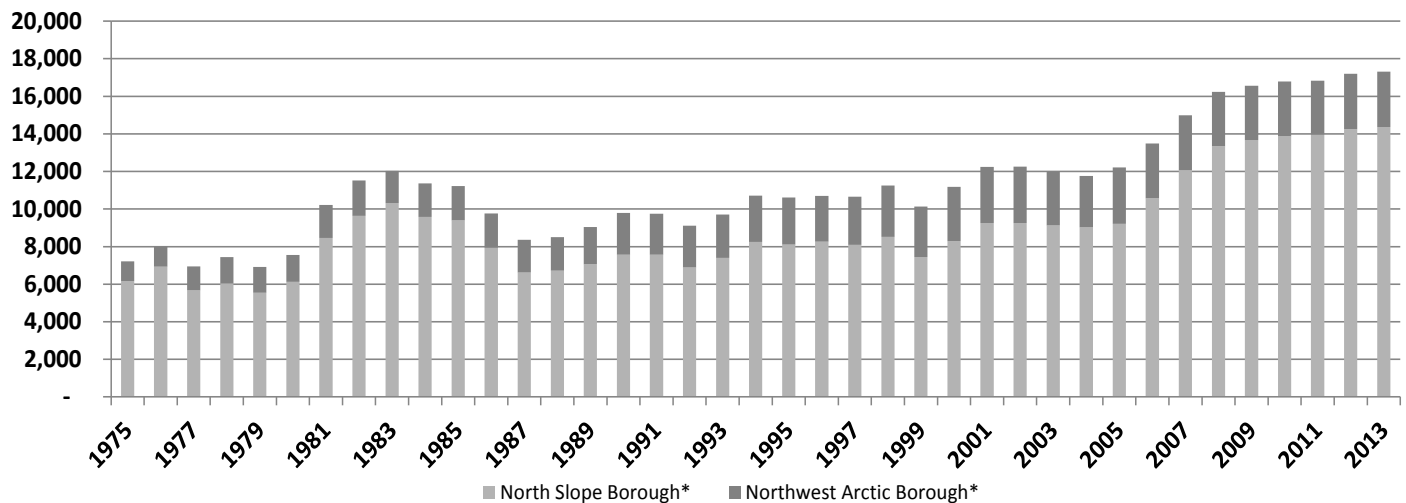
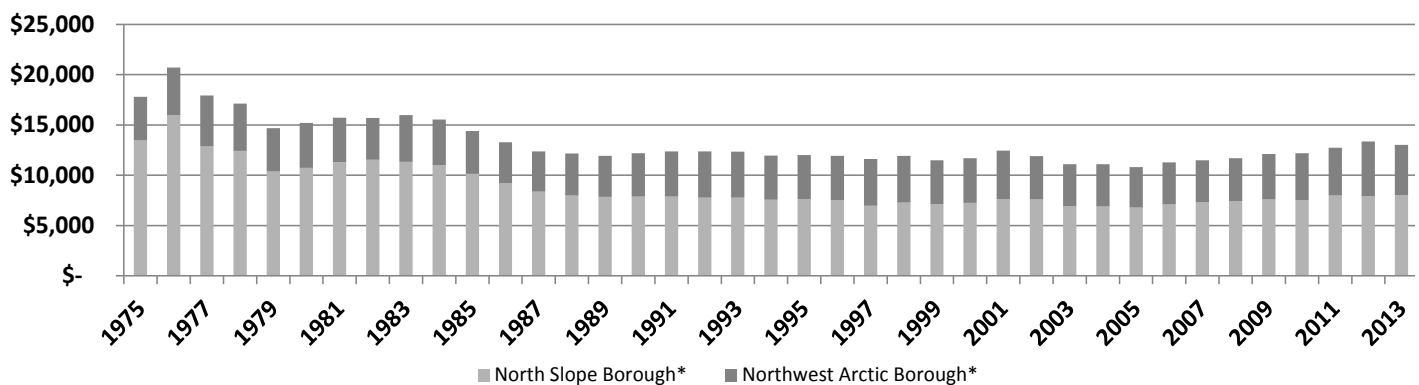


Figure 3-G: Monthly salary count in Alaska Arctic boroughs



Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section Quarterly Census of Employment and Wages

fortunate to have savings accounts that can buy time to sustain a stable economy and state government spending, while the state determines the policies that will achieve a successful transition.

The Alaska Legislature in 2012, established the Alaska Arctic Policy Commission to study changes in the Arctic environment and their impact on economic development opportunities as well as the physical and economic well-being of local

communities.⁽¹²⁾ Alaska's private sector has even established an arctic-focused investment fund.

The US government is also responding to the changes in the Arctic and their possible impacts to the nation's economy and security. The US will take the Chairmanship of the Arctic Council from 2015-2017. The Arctic Council is a high-level intergovernmental forum that addresses primarily "environmental protection" and

"sustainable development" issues in the Arctic region and is the main international national government forum focused on the Arctic. Another international effort is the Conference of Parliamentarians of the Arctic Regions and it provides a forum for delegations appointed by the national parliaments (legislative bodies) of the Arctic states and the European Union.

For the US, the national policy on the Arctic is generally organized

⁽¹²⁾<http://www.akarctic.com/>. Accessed 3 December 2014.

Table 3-1: Federal Taxation and Spending 2009-2013

	2009	2010	2011	2012	2013
Federal Spending	\$8,358,872,009	\$7,783,731,082	\$7,080,929,704	\$6,937,693,742	\$5,034,969,129
Internal Revenue Gross Collections**	\$4,670,157,000	\$4,685,206,000	\$4,860,572,000	\$4,898,780,000	\$5,292,703,000
Net	\$3,688,715,009	\$3,098,525,082	\$2,220,357,704	\$2,038,913,742	-\$257,733,871
Population	697,828	713,865	723,424	731,827	736,399
Per capita spending	\$11,978	\$10,904	\$9,788	\$9,480	\$6,837
Per capita collections	\$6,692	\$6,563	\$6,719	\$6,694	\$7,187
Per capita net	\$5,286	\$4,340	\$3,069	\$2,786	-\$350
Federal Spending through Alaska budget	\$2,088,400,000	\$2,387,900,000	\$2,407,900,000	\$2,455,500,000	\$2,383,200,000
Per Capita Federal Spending through Alaska budget	\$2,993	\$3,345	\$3,328	\$3,355	\$3,236

Source: USAspending.gov, IRS yearly data book

around three themes ⁽¹³⁾: (1) advance United States security interests, (2) pursue responsible arctic region stewardship, (3) strengthen international cooperation.

There is a resurgence of federal involvement in the Arctic and it includes planned Coast Guard infrastructure, as well as investment in Alaska military infrastructure, most notably the stationing of about \$10 billion of jet fighters in Fairbanks. It is this military spending that results in a significant level of federal dollars invested in Alaska. However, non-military federal spending has dropped significantly in Alaska. Alaska, on a per capita basis, has become a net per capita donor in 2013. If in 2009, Alaska received over \$5,000 dollars per capita in net federal non-military spending; in 2013,

Alaskans paid \$350 per capita. See Table 3-1. Federal Taxation and Spending 2009 through 2013.

Conclusion

Alaska's 40 years of economic success in Arctic oil development have engrained the current economic policies and structures deeply into the Alaskan psyche. Alaskans are experts at deriving revenue and creating wealth from a single large resource. However, the State's diminishing oil-based revenue streams and the associated shortfall in the state's ability to meet current expenditures, has led to a consensus realization that the status quo is no longer an option. But change will be difficult and Alaska has much to learn about building wealth from a portfolio of diverse revenue generating activities.

Alaska's past economic success has shaped citizens' expectations

and leaders now are held to very high standards of economic performance. Therefore, Alaska's "next generation" economic policies will require substantial study and analysis to assure decision makers that the proposed changes will have a high probability of resulting in the desired economic results. The process will require courage in leadership, and skillful, open collaboration and communication among all of Alaska's stakeholders. With these attributes, Alaska should succeed in developing economic policies to guide a more diversified economy that are equally resilient and successful over the next 40 years.

⁽¹³⁾http://www.whitehouse.gov/sites/default/files/docs/nat_arctic_strategy.pdf

Petroleum Revenue



General Discussion

There are four sources of state revenue that come from oil and gas production (severance tax, royalties, property tax, and corporate income tax). Often referred to as a production tax, the severance tax is imposed on a producer as the resource is severed (or extracted) from the leased land. Royalties are payments to the owner of the land and represent a percentage of production. Property taxes are charged as a percentage of the value of the property and improvements on it. Finally, corporate income tax is levied on oil and gas C-corporations as a percentage of their worldwide net income apportioned to Alaska.

The majority of revenues collected from oil production go to the general fund. This revenue is available for appropriation by the Legislature to support the general operation of government and for capital improvements across the state. A portion of royalty revenue is placed into other funds that are more restricted. The constitution requires that 25% of royalty revenue be deposited into the permanent fund, however, state law (AS 37.13.010(a)) requires that 50% of royalty revenue from certain mineral leases be deposited into the

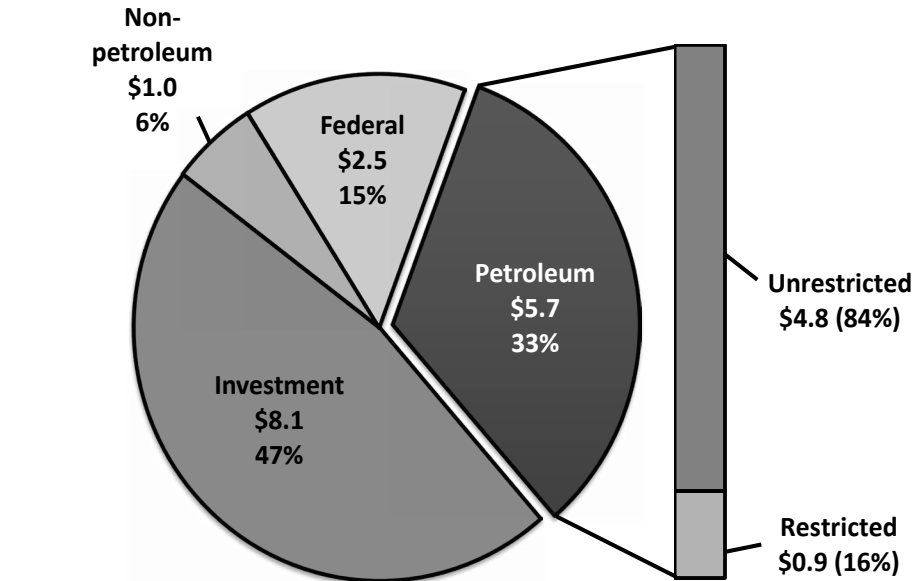


Figure 4-A: FY 2014 oil revenue, by restriction and type (\$ billions)

permanent fund. Therefore, roughly 30% of royalty revenues are deposited into the permanent fund, which represents a weighted average of the contributions from the various leases. The Permanent Fund Corporation, a wholly state-owned corporation, invests this revenue, and pays a dividend to Alaska residents from the earnings on those investments. Another 0.5% of royalties are deposited into the public school trust fund.

Additionally, the State receives some payments from the Federal government for bonuses, rents, and royalties derived from oil and gas

leases in the National Petroleum Reserve – Alaska (NPR-A). These funds are deposited into a special NPR-A fund and are counted as “federal revenue.”

Finally, “offshore” leases three to six nautical miles from shore are federal leases, under which the State is entitled to 27% of the amount the federal government collects in bonuses, rents, and royalties. The authority for this revenue sharing is the federal Outer Continental Shelf Lands Act, Section 8(g), and this 3-mile band is referred to as the “8(g) zone.” These funds are also counted as “federal revenue.”

Table 4-1: Total petroleum revenue, by restriction and type

	(\$ millions)		
	History	Forecast	
	FY 2014	FY 2015	FY 2016
Unrestricted Petroleum Revenue			
Petroleum Property Tax	128.1	128.9	125.2
Petroleum Corporate Income Tax	316.6	249.2	195.4
Oil & Gas Production Tax	2,598.2	523.6	308.4
Royalties (including Bonuses, Rents & Interest)	1,712.4	1,117.5	1,007.1
Unrestricted Petroleum Revenue	4,755.3	2,019.2	1,636.1
Increase/(Decrease) from Prior Period	(1,596.7)	(2,736.1)	(383.1)
% Change from Prior Period	-25.1%	-57.5%	-19.0%
Restricted			
Other Restricted			
Royalties, Bonuses & Rents to the Alaska Permanent Fund	773.7	484.8	438.3
Royalties, Bonuses & Rents to the School Fund	12.5	8.1	7.3
Tax Settlements to CBRF	141.4	20.0	20.0
Subtotal Other Restricted	927.6	512.9	465.6
Federal			
NPR-A Royalties, Rents & Bonuses	6.8	5.0	5.0
Restricted Petroleum Revenue	934.4	517.9	470.6
Increase/(Decrease) from Prior Period	(101.7)	(416.5)	(47.3)
% Change from Prior Period	-9.8%	-44.6%	-9.1%
Total Petroleum Revenue	5,689.7	2,537.1	2,106.7
Increase/(Decrease) from Prior Period	(1,698.4)	(3,152.6)	(430.4)
% Change from Prior Period	-23.0%	-55.4%	-17.0%

Occasionally, the State also receives settlements from tax and royalty disputes between the State and taxpayers. When these payments are received, they are deposited directly into the constitutional budget reserve fund (CBRF). Table 4-1 shows the dollar value of each revenue source collected in FY 2014 and a forecast of

revenues for FY 2015 and FY 2016.

Production tax represents the largest portion of total unrestricted oil revenue, totaling 54.6% in FY 2014. Unrestricted royalty payments represent the next largest portion at 36% while property taxes (2.7%) and corporate income taxes (6.7%) are much smaller contributors.

Oil revenues are especially important to Alaska's revenue picture as these four sources contributed 88% of the total deposits to the unrestricted general fund in FY 2014. Table 4-2 shows the ten-year forecast of revenues from these sources.

This chapter describes each of the four oil revenue sources, provides a

Table 4-2: FY 2014 Unrestricted petroleum revenue and 10-year forecast

Fiscal Year	(\$ millions)										
	History	Forecast									
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Petroleum Property Tax	128.1	128.9	125.2	124.6	123.8	122.7	121.1	119.2	117.3	115.2	112.9
Petroleum Corporate Income Tax	316.6	249.2	195.4	276.7	282.9	289.3	295.8	302.5	309.3	316.3	323.4
Oil & Gas Production Tax	2,598.2	523.6	308.4	1,197.7	1,729.8	2,171.2	2,236.3	2,062.3	2,051.9	2,057.0	2,019.8
Royalties-Net ⁽¹⁾	1,712.4	1,117.5	1,007.1	1,471.3	1,542.0	1,591.7	1,543.9	1,463.9	1,379.1	1,334.0	1,268.9
Total Oil Revenue	4,755.3	2,019.2	1,636.1	3,070.3	3,678.6	4,175.0	4,197.2	3,947.9	3,857.6	3,822.5	3,725.1
Increase/ (Decrease) from Prior Period	(1,596.7)	(2,736.1)	(383.1)	1,434.2	608.2	496.4	22.2	(249.3)	(90.4)	(35.0)	(97.5)
% Change from Prior Period	-25.1%	-57.5%	-19.0%	87.7%	19.8%	13.5%	0.5%	-5.9%	-2.3%	-0.9%	-2.5%

forecast of each source, and contains a discussion on the methodology used to create these forecasts. The chapter concludes with a discussion of the restricted portions of oil revenue.

Production Tax Regimes

All oil and natural gas that is produced and sold from lands within the State of Alaska is subject to a severance tax as it leaves the leased land. This includes lands that are owned by the State of Alaska, the Federal government (like NPR-A), or private parties, such as Native corporations. State ownership of submerged lands extends three miles from the shore. Production tax applies only to oil and gas that the producer sells, so it excludes state royalties, gas used in lease operations or flared for safety reasons, and any production that is re-injected into a reservoir.

Legislation passed in the 2013

legislative session as Senate Bill 21 (later coined “More Alaska Production Act” or MAPA), is the current production tax applicable to North Slope oil production. The prior production tax law, known as “Alaska’s Clear and Equitable Share” (ACES) was in place through the first half of FY 2014, and MAPA was in place through the second half of FY 2014 for North Slope oil production. ACES, along with its ceilings and credits, is still in place for oil and gas production in other parts of the state. Because the method for calculating production taxes for the majority of oil production changed within the report year, a brief discussion of each follows.

ACES Tax Law

For North Slope (FY 2008- CY 2013)

ACES is a net value severance tax, as opposed to a gross value severance tax. A net value tax allows certain costs of production, defined by

the state as “lease expenditures,” to be deducted in the taxable value calculation. Alaska changed its production tax from a gross value tax to a net value tax in 2006. Under ACES, the tax rate that is paid on oil production is 25% of the taxable value with an additional progressive surcharge based on a company’s average net value of the oil. The surcharge is calculated on a monthly basis by subtracting the average transportation and lease expenses per taxable barrel from the prevailing value of ANS crude at its point of delivery. That per-barrel value, known as the per-barrel production tax value (PTV), is used to determine the rate of additional tax that is applied to the barrels of oil produced by that company. The surcharge is 0.4% per \$1 of per-barrel PTV greater than \$30 and less than \$92.50 and at which point a lower rate of 0.1% per \$1 is applied until the total base tax and surcharge reaches the

Table 4-3: ANS oil and gas production tax data summary

	History	Forecast	
	FY 2014	FY 2015	FY 2016
North Slope Price and Production			
Price of ANS WC (in \$/barrel)	107.57	76.31	66.03
Transit Costs & Other (in \$/barrel)	10.42	9.31	9.17
ANS Wellhead (in \$/barrel)	97.15	67.00	56.86
North Slope Production			
Total ANS Production (in mbbls/day)	531.1	509.5	524.1
Royalty and federal (in mbbls/day) ⁽¹⁾	77.8	64.6	66.6
Taxable Barrels (in mbbls/day)	453.3	445.0	457.5
North Slope Lease Expenditures⁽²⁾⁽³⁾			
Total North Slope Lease Expenditures (in \$ millions)			
Operating Expenditures [OPEX]	3,253.9	3,253.9	3,294.9
Capital Expenditures [CAPEX]	3,737.6	4,454.5	4,881.7
Total North Slope Expenditures	6,991.5	7,708.4	8,176.6
Deductible North Slope Lease Expenditures (in \$ millions)			
Operating Expenditures [OPEX]	3,193.5	3,186.2	3,163.0
Capital Expenditures [CAPEX]	3,357.3	3,862.7	4,109.8
Deductible North Slope Expenditures	6,550.8	7,048.9	7,272.8
State Production Tax Revenue⁽⁴⁾			
Tax Revenue (in \$ millions)	2,598.2	523.6	308.4
Production Tax Collected per Taxable Barrel	15.7	3.2	1.8
Statewide Production Tax Credits⁽²⁾⁽⁵⁾			
Credits Used against Tax Liability (in \$ millions)	888.0	750.0	510.0
Credits for Potential Purchase (in \$ millions)	593.0	625.0	700.0

⁽¹⁾Royalty and Federal barrels represents our 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 2014 were prepared using unaudited company-reported estimates.

⁽³⁾Expenditure data for FY 2015 and FY 2016 are compiled from company submitted expenditure forecast estimates and other documentation as provided to the DOR. Expenditures shown here are shown 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 D.

⁽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.

maximum tax rate of 75%. Because of the escalating tax rate, ACES was considered a progressive tax system.

A credit system was also created to accompany the progressive tax system. Most notably, a credit for capital spending was added to help improve the economics of new projects. Known as the Qualified Capital Expenditures (QCE) credit, companies were eligible to reclaim 20% of all qualifying capital costs as a credit against their production tax liability. Companies with less than 50,000 BTU equivalent barrels per day of production, and less production tax liability than credits earned, could elect to receive any remaining credits as a cash payment from the State instead.

More information on credits can be found in chapter 8, and more details about exceptions and intricacies of the ACES tax law can be found on the Department of Revenue website.

MAPA Tax Law

For North Slope (CY2014 - Present)

MAPA retains the basic framework of ACES. The primary change from ACES to MAPA is the removal of the progressive surcharge tied to the value of oil. The base tax rate was increased from 25% to 35% of the net value of oil and gas production. Other major changes include the replacement of credits tied to capital spending with credits tied to North Slope oil production. Production from new areas on the North Slope was also incentivized under MAPA, with a special incentive to reduce the value of the taxable base of that production. These changes are described briefly below. Under MAPA, an alternate progressivity mechanism was created

in the form of a variable credit for each taxable barrel of oil produced. The value of the credit changes depending on oil price received for each taxable barrel of oil produced. Because the dollar value of each credit decreases as the value of the oil increases, the effective value the State collects on that barrel increases, making it a progressive system. This credit decreases as price increases until it is eliminated at wellhead values above \$150 per barrel. This approach results in a slower progressivity rate than ACES and a lower maximum tax of 35% rather than 75% of the net value of oil and gas production. With the addition of this credit on production, the credits for qualified capital expenditures for the North Slope were eliminated.

The final major component of MAPA was the introduction of an incentive to bring new production areas into development. This incentive reduces the tax liability in new production areas by excluding 20% of the gross value for that production from the tax calculation. Qualifying production includes areas surrounding a currently producing area that may not be commercial to develop, as well as new oil pools that have not been discovered or developed. Oil that qualifies for this Gross Value Reduction (GVR) receives a flat \$5 per barrel credit rather than the variable rate described above. A forecast of how much oil will be eligible for this incentive is included in Table 4-5 in the production portion of this chapter.

Production Tax Forecast Components

In order to forecast revenues from production taxes, the components of

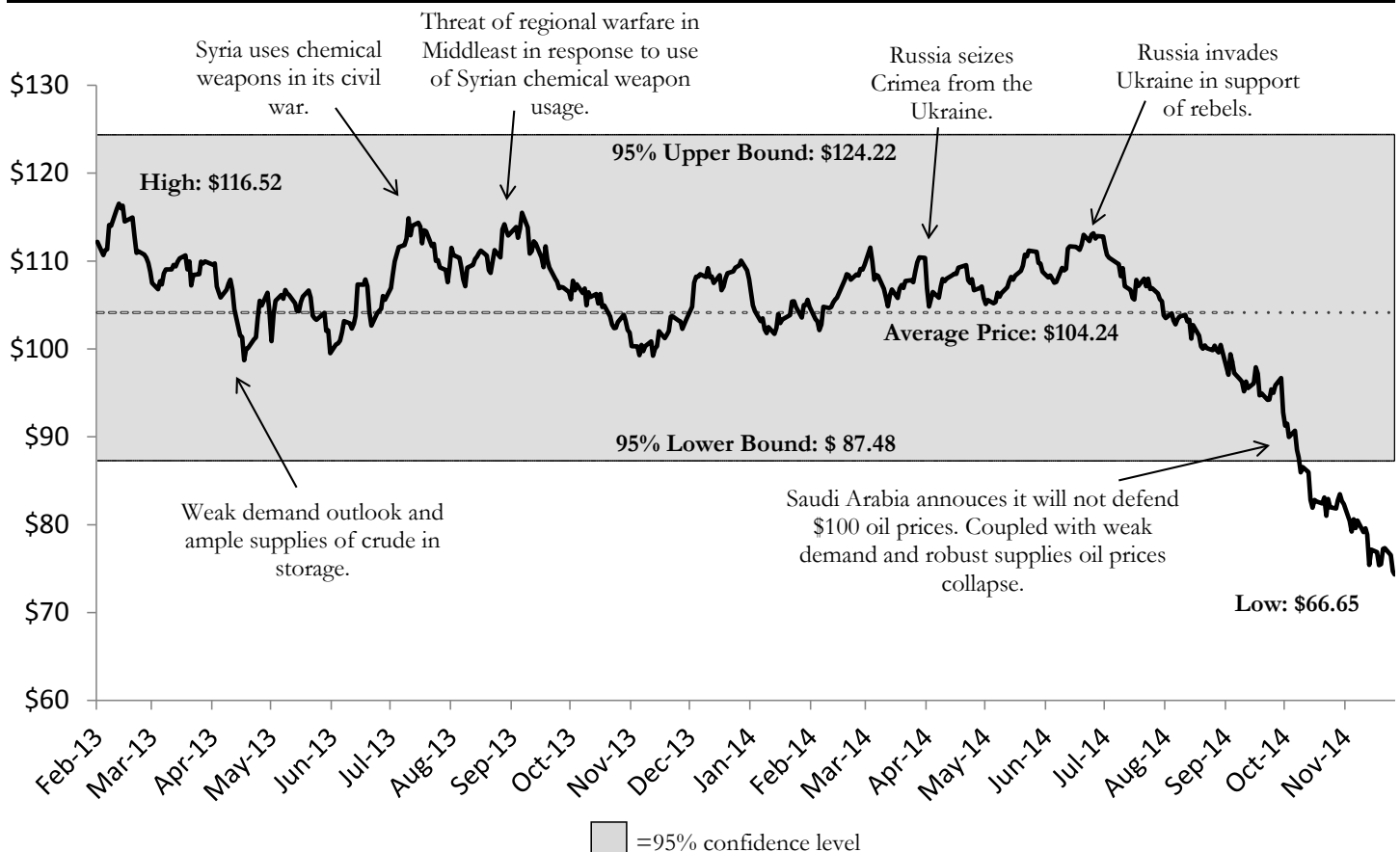
the tax calculation must be forecast. Under a net value tax system, those components are: the price of oil, the cost of transportation, the cost of production, and the volume of production. The price of oil is one of the more difficult components to forecast, since oil markets can be very volatile. The cost of transportation and production are important components in forecasting state production tax as the State effectively shares in the costs by making them deductible. The volume of production affects both production tax and royalties and is a major component of revenue forecasting. Unfortunately, none of these components are easy to predict and are subject to high degrees of volatility. Under MAPA, the flat marginal tax removes the compounding effects that price and costs once had under the ACES production tax system. While the department can make reasonable approximations for how these variables will act in the future, even a relatively minor deviation from the forecast of any component can still result in large variations in total revenue.

What follows is a description of each component, the methodology for forecasting each component, and a forecast for the next 10 years.

Crude Oil Prices

The future price of crude oil is the most sensitive variable in the revenue forecast and it is also the most prone to uncertainty. As a price taker in the global market, Alaska cannot exert any significant pressure on the future price of oil by altering its level of production. Rather, oil prices are determined on a global basis, reflecting supply and

Figure 4-B: Alaska North Slope crude West Coast price



demand.

A ten-year forecast of ANS oil prices, along with the inferred wellhead values, can be found in Table 4-4. Additionally, Appendix B includes a ten-year history and ten-year forecast of these values in nominal and real terms, and comparisons to the spring 2014 forecast.

Short Term Variables that Influence Oil Prices

Several major factors contribute to the pricing of oil on the world market, including but not limited to: (1) Inventory levels, (2) Infrastructure, (3) Geopolitics, (4) Natural disasters, (5) Warfare, (6) Action by the Organization of Petroleum Exporting Countries

(OPEC), (7) Macroeconomic events, (8) Financial market trends and speculation.

Figure 4-A shows oil prices in recent months and associated key market events.

Each of these factors influences the price of oil and have all been encountered within the last ten-year period. Without knowledge of when and if these events will occur, it is not possible to forecast a particular path for oil prices with any certainty. Furthermore, the system is dynamic and the impact of the same event can bring about different outcomes at different times.

In the longer term, fundamental economic factors of supply and demand drive oil prices. Ultimately,

predicting future price requires an understanding of demand growth and the available future supply of petroleum products.

Price Forecast

One of the major components in developing the official price forecast used in the RSB is a day-long price forecast session hosted by the Department of Revenue, usually held the first Tuesday of October. The forecast session uses a modified Delphi Method, a forecast method which relies on a pool of expert participants. This year, the fall 2014 oil price forecast session was held on Tuesday, October 7th with 37 participants from state government, the private sector, and academia. Each participant submitted their own price forecasts after a day of presentations

Figure 4-C: Historical ANS West Coast annual average and official Fall 2014 forecast

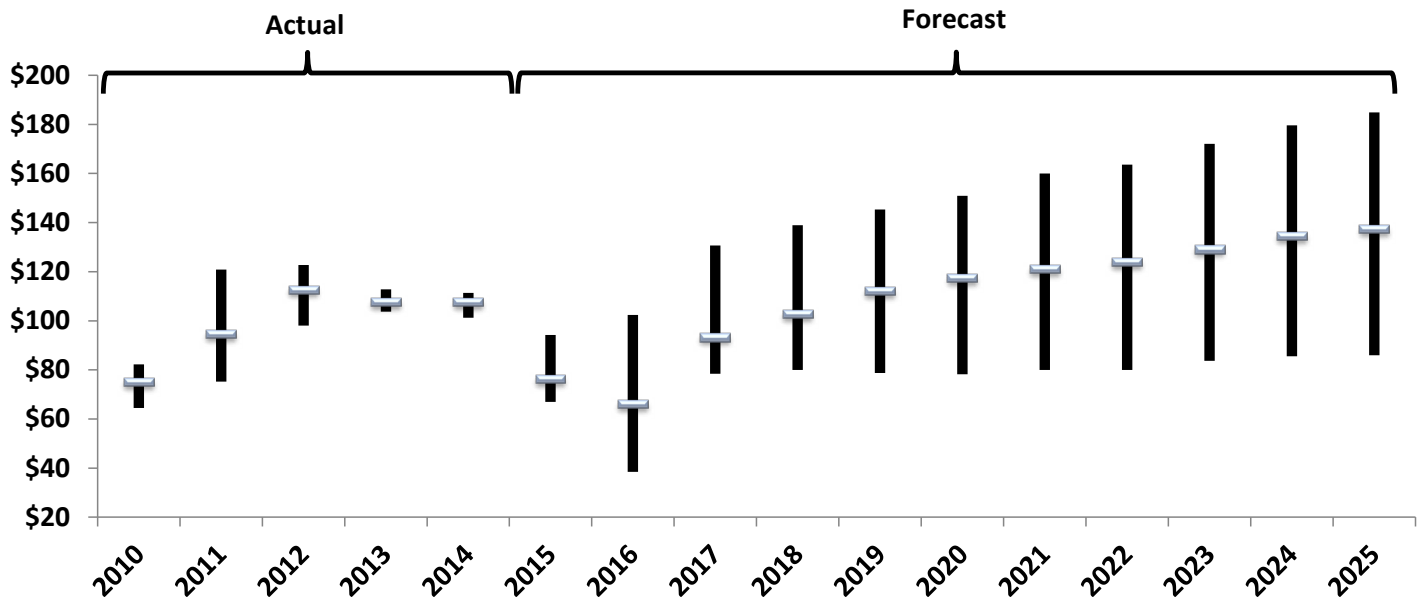


Table 4-4: Oil price and transportation forecast assumptions

	(Nominal \$/bbl)										
Fiscal Year	2014	2015 ⁽¹⁾	2016	2017	2018	2019	2020	2021	2022	2023	2024
ANS West Coast Price	107.57	76.31	66.03	93.18	102.81	112.00	117.36	121.14	123.87	129.04	134.39
ANS Marine Transportation	3.70	3.44	3.41	3.61	3.70	3.79	3.85	3.91	3.96	4.02	4.09
Other Deductions & Adjustments ⁽²⁾	0.20	0.06	0.05	0.11	0.01	-0.02	-0.01	0.02	0.06	0.10	0.09
ANS Wellhead Price	97.15	67.00	56.86	83.66	92.98	101.62	106.29	109.26	111.12	115.36	119.65

by experts on oil price markets and market structure. These individual price forecasts were combined to derive DOR's price forecast.

The forecast participants were asked to forecast ANS prices in 2014 dollars without accounting for inflation and their forecasts were submitted to the Department of Revenue at the end of the session. The median price for each

time period from the post-session results was used for the department's fall 2014 forecast. These prices were converted to nominal (inflation adjusted) oil prices using the current Callan Associates, Inc. inflation assumption of 2.25%.

The department has over the past year developed a new probabilistic model to forecast ANS prices. The

internal probabilistic model is based on a formula called Jump Diffusion. Applications of this formula vary from biological to financial. DOR uses three variables to derive oil price ranges, which are costs, global spare capacity and associated volatility based on global spare capacity. This model was presented at the price forecasting session as a tool for participants to consider when making

⁽¹⁾ FY 2015 values include four months of actual data.

⁽²⁾ Includes other adjustments such as quality bank charges, feeder pipeline tariffs, location differentials and company-amended information.

their forecasts.

Many factors put pressure on the future of oil prices. Currently, one of the most important drivers is increasing global supply with the advancement of horizontal drilling and hydraulic fracturing technology. This technology has unlocked billions of barrels of producible crude in North America and has the potential to unlock billions more barrels of oil around the world. Development of these new resources has created a structural shift in the market as the cost of bringing each new additional barrel to market has fallen.

The market was initially slow to react to this development as oil price volatility was at historical lows. Complacency in the financial markets was compounded by OPEC countries needing high prices to sustain social programs. OPEC countries have publically stated if prices fall in a sustained fashion below \$100, OPEC would likely cut production. This is sometimes referred to as the “Saudi put,” as Saudi Arabia has been considered by many to be the world “swing” producer. Instead, in the fall of 2014, Saudi Arabia opted to defend its global market share at the expense of maintaining a high price. This move may keep oil prices low in the short term, but in the mid to long term, the department forecasts oil prices to rebound.

On the other side of the economic equation, demand in many OECD countries is weaker than expected, keeping oil prices low. The ongoing expectation for weak demand can be traced to uncertainty generated by the Russia/Ukraine situation, as well as lower than anticipated demand in Europe and slower economic growth

in China. Without a lucid catalyst to spur demand, it is unlikely enough spare capacity will be utilized to increase oil price.

Oil prices used in the forecast come from two sources. Due to the rapid fall in oil prices following the price forecasting session, the department used its internal probabilistic model for the forecast prices for FY 2015 and FY 2016. For FY 2017 and beyond, prices are based on the results from the annual price forecast session. Results from the price forecasting session for ANS oil prices can be found in Figure 4-C.

The department projects nominal ANS oil prices will average around \$76 per barrel in FY 2015 and \$66 in FY 2016. In the mid-term, the department forecasts ANS to increase, with a FY 2017 price of \$93 and a FY 2018 price of \$103. By FY 2024, prices are expected to exceed \$134, mostly due to inflation. When stated in real 2014 dollars, ANS is expected to return to \$100 per barrel over the mid to long term.

Transportation Charges and Other Production Costs

The value of ANS crude oil at the wellhead is calculated by subtracting transportation costs from the sales price or the prevailing value at point of delivery. Transportation components include marine costs, the Trans-Alaska Pipeline System (TAPS) tariff, feeder pipeline tariffs, and quality bank adjustments. This wellhead calculation is shown in Table 4-4.

Marine Transportation Costs

Oil production from the North Slope is delivered through TAPS to Valdez where it is stored and then loaded on to tankers for shipment to refineries located primarily in Washington, California, Hawaii and the Kenai Peninsula. The double-hulled “Alaska Class” and “Endeavour Class” tankers range in size from 125 to 215 thousand deadweight tons with a carrying capacity of 800 thousand to 1.5 million barrels of oil. The typical voyage to the west coast takes about two weeks.

For tax purposes, companies are allowed to deduct the total costs under the charter or contract for shipping oil and certain other allowable costs borne by the producer. For crude oil shipped on tankers that are owned or effectively owned by the producer of the transported oil, which is typically the case, allowable marine costs are depreciation, return on investment, fuel, wages and benefits, routine maintenance, tug and pilotage fees, and dry-docking costs.

Marine costs can be broadly categorized as capital, fuel, and labor with each category accounting for roughly one third of the total. The marine cost model accounts for inflation in labor costs and changes in the cost of bunker fuel as it relates to the crude oil price forecast. Marine costs averaged \$3.70 in FY 2014 and are expected to decline slightly to \$3.44 in FY 2015 and then increase to \$4.09 per barrel by FY 2024.

Trans Alaska Pipeline System (TAPS) Tariff

Almost all of the oil produced in Alaska is shipped down the TAPS. The 800 mile, 48-inch pipeline costs about a billion dollars a year to

operate. Tariff rates on the pipeline are regulated to prevent carriers from exerting undue market power. The Regulatory Commission of Alaska (RCA) regulates intrastate rates and the Federal Energy Regulatory Commission (FERC) regulates interstate rates. In Opinion 154-B FERC established the generic principles for setting just and reasonable rates for oil pipelines. Trended original cost (TOC) is a distinguishing feature of the methodology.

Cost-of-service is the basic approach used to establish just and reasonable rates. Under this methodology, rates are designed around what it costs a pipeline to provide the service and have an opportunity to earn a reasonable rate of return on its investment. Major components are operation and maintenance expenses, depreciation, income taxes, cost of debt, and rate of return. Depreciation expense allows the pipeline to recover the capital investment undertaken to provide the service and the rate of return compensates the pipeline for the use of that capital investment. Other recoverable accounts include dismantling, removal and restoration, allowance for funds used during construction, accumulated deferred income taxes, working capital, and legal fees.

The department uses a cost-based TOC tariff model to forecast the cost of transporting a barrel of oil on TAPS. The forecast does not attempt to predict the outcome of pending litigation or estimate the level and timing of protested tariffs. Cost components and data extracted from FERC Opinion 502, pipeline tariff filings and Form 6 filings are used to populate the model.

Each of the cost-of-service components is forecasted and then summed for each year to estimate the total cost-of-service or the total revenue required to operate the pipeline. The total revenue requirement is divided by deliveries to calculate the average cost per barrel. This ratio makes the tariff sensitive to the production profile and the dynamic connection makes the tariff increase as costs are spread over fewer units of production. Current filings from the carriers result in a weighted average TAPS tariff of \$5.80. As costs increase and throughput declines, the tariff increases to \$10.56 per barrel by FY 2024.

Feeder Pipeline Tariffs

Feeder pipelines are used to move crude oil produced from the various North Slope oil fields to TAPS Pump Station No.1. Shippers on the jurisdictional pipelines pay the carriers a tariff to cover costs and provide a reasonable rate of return. The six jurisdictional feeder pipelines and their respective tariffs in CY 2014 are: Kuparuk \$0.36, Milne \$1.35, Endicott \$3.83, Badami \$9.42, Alpine \$1.01 and Northstar \$3.40. The weighted average tariff for CY 2014 was about \$1.00 per barrel for those fields with feeder pipelines.

Feeder pipeline tariff rates are forecast by estimating the cost-of-service and throughput volumes for each pipeline. The estimated cost-of-service for each pipeline is divided by the respective adjusted throughput from the production forecast. Using the fall 2014 production forecast, the weighted average feeder tariff for those fields with feeder pipelines is forecast to be about \$0.89 in FY

2015 and increase to \$1.63 in FY 2024. For all production, including Prudhoe Bay, the weighted average feeder tariff is forecast to be \$0.42 in FY 2015 and increase to about \$0.69 in FY 2024.

Lease Expenditures

Due to the deductibility of costs in the production tax equation, the department must forecast lease expenditures in addition to oil prices, production and transportation costs. Lease expenditures are defined as the upstream costs that are the directly related to exploring for, developing, or producing oil or natural gas.

Methodology for Forecasting Lease Expenditures

Since 2006, the Department of Revenue has received annual filings of tax returns under the net value production tax. Additionally, the department receives monthly information filings from oil and gas companies operating in the State that provide estimated monthly lease expenditures by property. Semi-annually, the department receives projections of lease expenditures by property for up to five years in the future. These reports are provided by the operators of the properties and have greatly enhanced the department's ability to prepare better revenue forecasts.

The department also uses several other means to forecast lease expenditures, including consulting other taxpayer-submitted information, such as plans of development. Production profiles are reviewed, as well as publicly available information on planned exploration activity, changes in activity levels at existing fields, estimated costs

of bringing new fields online and projected start-up dates.

Forecast for Lease Expenditures

In FY 2014, the unaudited lease expenditures reported by companies producing or exploring for oil and/or gas on the North Slope on monthly information forms were \$3.3 billion in operating expenditures and \$3.7 billion in capital expenditures. For FY 2015, the department forecasts North Slope operating expenditures to remain about \$3.3 billion and capital expenditures to increase to \$4.5 billion. In FY 2016, the department forecasts North Slope operating expenditures to remain at \$3.3 billion while capital expenditures continue increasing to \$4.9 billion.

As with our previous forecast, the FY 2015 and 2016 forecasts are higher in capital expenditures due to a combination of spending in new and existing (“legacy”) fields. Development of the Point Thomson field continues, along with higher spending at other new developments, such as CD-5 (Alpine West), Mustang, and Moose’s Tooth, while development continues at the Oooguruk and Nikaitchuq units. Our forecasts reflect continued increases in spending at legacy fields, including recently added rigs and investment in new drilling areas. Finally, continued exploration spending by several newcomers is included, despite the speculative nature of those plans. At this time, expenditures for developing any potential discoveries from this exploration are not included in our forecast.

The total North Slope lease expenditures forecast represents a

decrease of about \$400 million for FY 2015 and an increase of about \$300 million for FY 2016, compared to the spring 2014 revenue forecast. Over the next decade, there is little change to the aggregate value of investment expected on the North Slope, compared with what was expected in spring 2014. Thus far, investment activity appears to be consistent with the large upward revision to our forecast made in fall 2013, however we will continue to monitor this important indicator in light of changing oil market dynamics.

For areas outside the North Slope (including Cook Inlet), companies are also forecasting increased investment for FY 2015, followed by relative declines. Total lease expenditures outside the North Slope were about \$820 million in FY 2014, an increase of over \$200 million from the previous year and more than double the \$315 million reported in FY 2011. The forecast for total lease expenditures outside the North Slope is about \$960 million for FY 2015 then declining to just over \$800 million for FY 2016.

It should be noted that these spending estimates are subject to many uncertainties including oil prices, and projects receiving final company approval and financing. Longer term, there is also additional upside potential for investment, especially later this decade. Several potential projects are being evaluated, but are not concrete enough to include in this forecast. This means, notably, that expenditures for developing potential discoveries from most of the exploration taking place in the state are not included in our forecast, and will not be until those

developments meet the thresholds for inclusion in our production forecast.

For lease expenditure forecasts of FY 2017 and beyond, a risk factor has been applied to ensure consistency with the department’s production forecast. For units that are not currently in production, the risk factor has been applied to the entire amount of capital and operating expenses associated with those units. For currently producing units, the risk factor has been applied only to a portion of anticipated expenses, based on the portion of production that is forecast from new oil in each year (since risk factors are only applied to that category of production). More information on the risk adjustments incorporated into the production forecast can be found in the crude oil production section of chapter 4 in the Fall 2012 RSB.

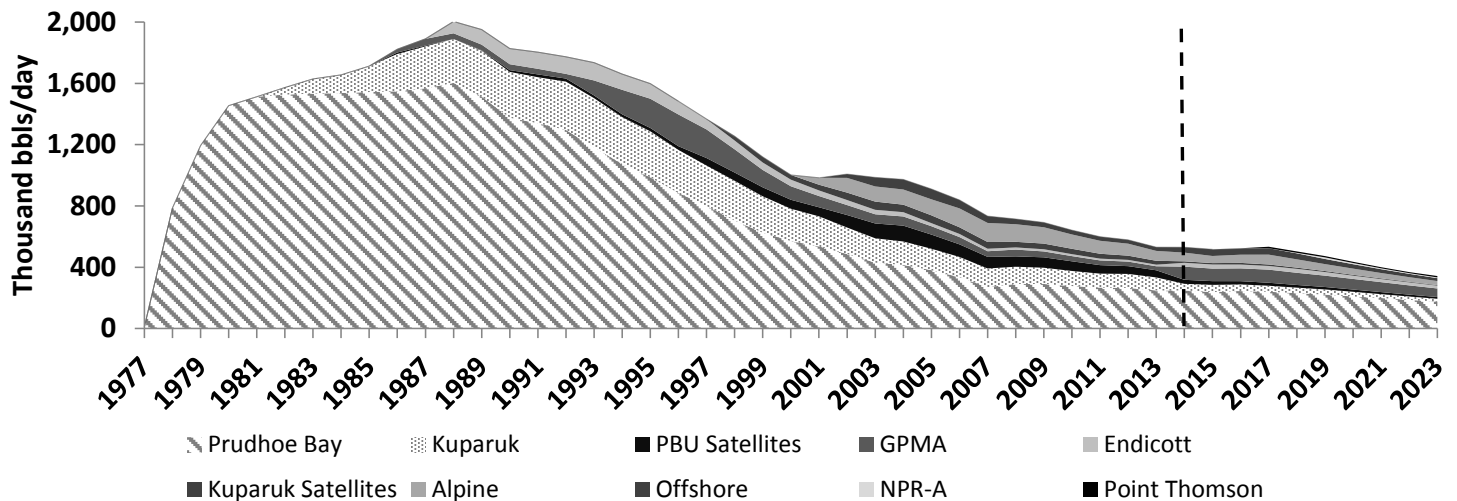
Production Volumes

The volume of oil produced in Alaska is a critical factor in calculating the amount of revenues that the State receives. Production volumes are used to calculate taxes and royalties, and are a key determinant in calculating pipeline tariff rates, which impact the wellhead value upon which both of those revenues are calculated. The production forecast also plays a role in determining the economic life of infrastructure, which is a component of some property tax assessments.

Geographic Impact

In Alaska, production from different areas within the State has different implications for petroleum revenues. Oil produced within state boundaries is subject to state taxes, but oil produced beyond three miles

Figure 4-D: Alaska North Slope production



offshore is not. The State collects 100% of the royalties on state owned lands, while royalties from oil produced on Federal lands are shared with the State. Finally, a zone exists between 3-6 miles offshore where the Federal government shares 27% of the royalties it collects with the State. The Alaska North Slope production volume being forecast is best described as the mean expected volume flowing through the Trans-Alaska Pipeline System, which includes volumes from each of the above areas. Oil volumes from Cook Inlet are also forecast, and can be found in the Appendix within Tables C2-a and C-2b.

Methodology

To assist with production forecasting, the Department of Revenue contracts an outside petroleum engineering consultant to evaluate Alaska production on a well-by-well basis. This consultant and petroleum economists meet with oil company representatives in the State to discuss project plans and cash-flow schedules of each operator's area of operation. As a result of these

meetings, the consultant is able to advise the department on expected future operations, maintenance plans, general risks, concerns, and uncertainties regarding future operations. The consultant provides an expert assessment, based on engineering principles, as to the technical potential production level for each oil pool over time. The department then takes further risks and uncertainties into consideration and accounts for these. Thus, many projects are anticipated by the department, however, the full amount of future volumes associated with them do not necessarily enter revenue projections, but are added incrementally as they become more certain with time.

Consistent with the procedure developed in 2012, the fall 2014 forecast consists of oil volumes produced from three categories: (1) developed oil and gas reserves, (2) presently undeveloped oil and gas reserves or additional or accelerated developed reserves, and (3) presently contingent resources. Oil volumes are not produced until they are developed reserves. Prior to

development, undeveloped reserves are expected to be recovered from new wells on undrilled acreage or from existing wells where a relatively major expenditure is required for recompletion. Oil production volumes forecast from wells drilled since the last forecast are now considered developed reserves whereas those projects were counted as undeveloped reserves last year. The categorization of oil volumes makes it difficult to compare forecasts between publications, except in aggregate volumes. This is because oil volumes transition across the three categories: from contingent resources to undeveloped resources to developed resources.

Volumes from Developed Reserves

To assess the future production profile of wells that are already in production, the department's consultant utilizes data from the Alaska Oil and Gas Conservation Commission to develop a time series data set. This data, provided by the producers, includes information on reservoir characteristics, oil flow rates, gas/oil ratios, and water cuts.

Figure 4-E: ANS oil production forecast

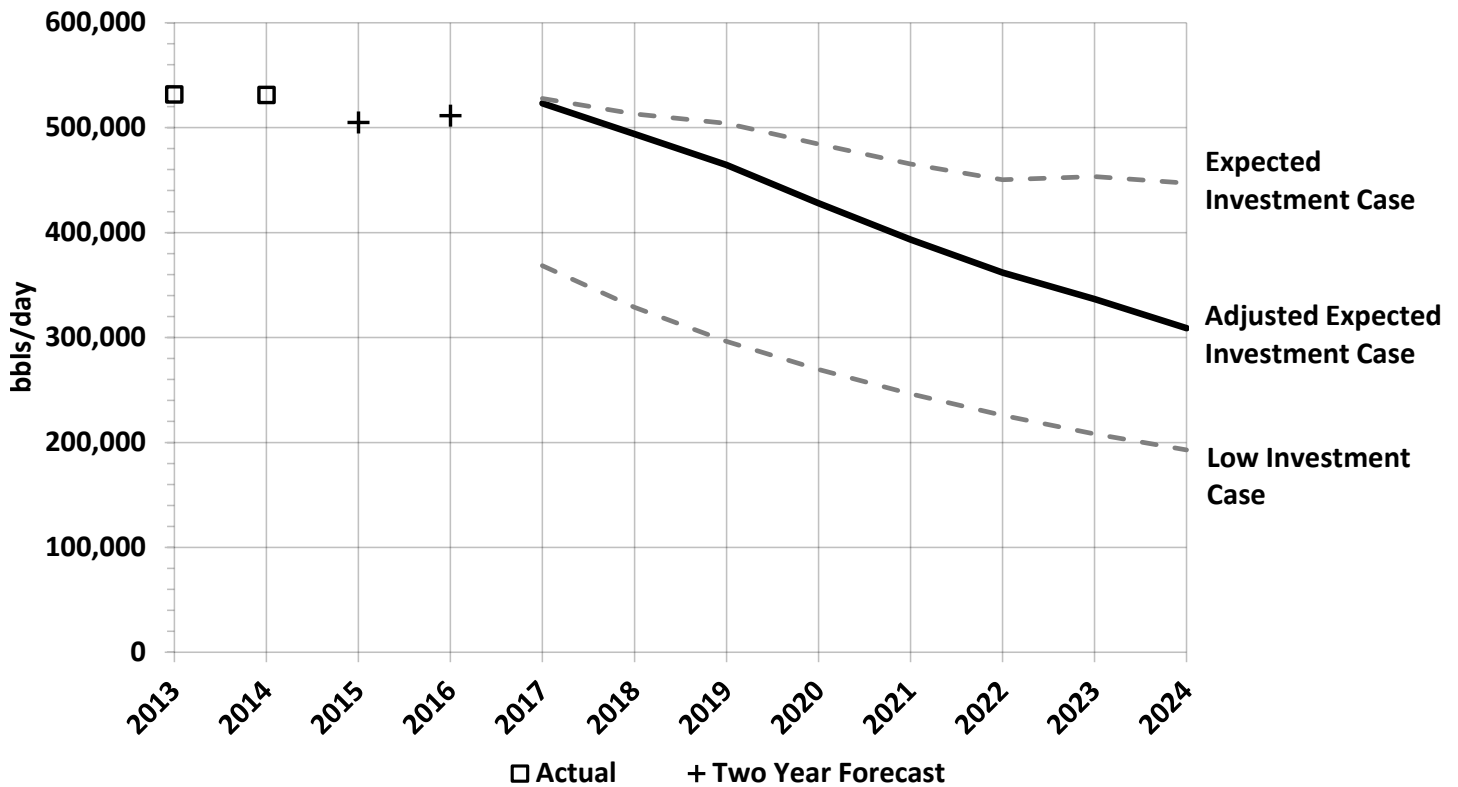


Table 4-5: ANS oil production forecast

(thousand bbls/day)										
Fiscal Year	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Low Investment Case	509,534	524,094	396,605	359,016	328,567	301,593	278,379	257,622	238,924	222,454
Decline Rate	-4%	3%	-24%	-11%	-10%	-9%	-9%	-8%	-8%	-7%
Adjusted Expected Investment Case	509,534	524,094	534,065	503,460	473,191	435,842	400,437	368,512	342,884	314,732
Decline Rate	-4%	3%	2%	-6%	-6%	-8%	-8%	-8%	-7%	-8%
Expected Investment Case	509,534	524,094	538,992	523,278	513,717	493,744	474,308	459,107	461,787	455,314
Decline Rate	-4%	3%	3%	-3%	-2%	-4%	-4%	-3%	1%	-1%
GVR Eligible under Adjusted Expected Investment Case	35,788	42,027	57,135	54,817	53,818	44,888	37,779	32,565	30,843	27,446
% GVR Eligible under Adjusted Expected Investment Case	7%	8%	11%	11%	11%	10%	9%	9%	9%	9%

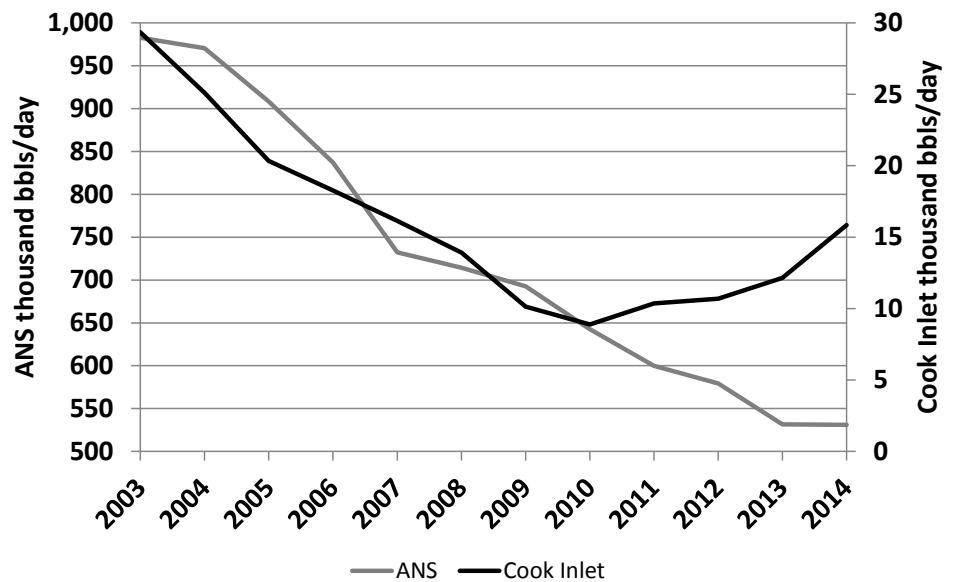
By assessing these data with decline curve analysis, an expectation for future production is determined for each producing well. Planned downtime is factored in for known work-overs and stimulation work and anticipated responses are incorporated into future production. These production profiles are then aggregated into oil pools, resulting in an aggregate expected decline rate based on well specific data.

Volumes from developed reserves are the least speculative category of this forecast. Developed reserves have the characteristic that the recovery of oil is through existing wells with existing equipment and operating methods, through installed extraction equipment and infrastructure operational at the time of the forecast. As the cost associated with producing from these wells is simply the continued operating costs, to assume only this portion of the forecast is nearly analogous to assuming no future capital investment. Therefore, volumes from developed reserves are the technical forecast and considered the most conservative forecast for production volumes as shown as the low investment case in Table 4-5 and Figure 4-E.

Volumes from Undeveloped Reserves and Additional/Accelerated Developed Reserves

For forecasting purposes, when a project has funding, approval, an annual cash flow schedule and a drilling plan but is not yet developed, the volumes forecasted from that project are categorized as undeveloped reserves. If a project does not have these qualifiers, the expected future volumes from it are

Figure 4-F: ANS and Cook Inlet production 2003-2014



not even considered undeveloped; rather these contingent or prospective resources are considered too uncertain to include with any degree of certainty. Along with the volumes from some of these projects come additional or accelerated developed reserves.

In other terms, all oil volumes in the forecast that are not produced from existing wells are considered to come from presently undeveloped reserves for the purpose of this forecast. Oil volumes from undeveloped reserves include production from infill drilling within existing units, incremental oil from enhanced oil recovery methods, increases in flow rates via debottlenecking facilities, and the development of new areas that are not currently in production. This layer consists of projects considered “under development” as well as “under evaluation.” More information regarding these terms is available in the Fall 2012 RSB.

Because all oil in this category requires some level of capital

employment and the use of equipment, there is potential for each of these projects to be delayed or abandoned. The actual performance of each project is also uncertain as no production data exists. Therefore, some consideration must be given to the associated risk and accounted for, or else the forecast is prone to be optimistic. In the best case scenario, all projects would come in on-time, on-budget, and on-target. This scenario is the technical forecast provided by our consultant and is labeled “Expected Investment Case” in Table 4-5 and Figure 4-E. The scenario used for 10-year forecasting accounts for and adjusts for those uncertainties in the final production forecast and is called the “Adjusted Expected Investment Case.”

Performance

FY 2014 averaged 531,074 barrels of oil per day (bbls/day). The decline rate between FY 2013-2014 was 0.1%, or nearly no decline. The primary drivers in this extremely low decline rate were increased enhanced

recovery, well counts increasing above those expected and operational seasonality.

Cook Inlet, on the other hand, saw its fourth consecutive annual increase in production. At 15,838 barrels per day, a 30.3% increase in production over FY 2013, Cook Inlet is now producing more oil than its FY 2008 level. Early indications suggest that production in Cook Inlet will increase modestly next year based on projections for continued investment increases.

Forecast

In all, an increase in development is being anticipated by the department. Over the next two years, we anticipate increased production volumes, which are higher than recent years' forecasts. Figure 4-E shows in +s the departments forecast for fiscal years 2015 and 2016. Beyond 2016, a range is provided for potential production possibilities. The Expected Investment Case is considered technically possible, but essential commercial uncertainties have not been considered in this case. If, however, all projects went according to plan, the department would expect these levels of production to occur. Accounting for these uncertainties, the Adjusted Expected Investment Case provides a somewhat more conservative view of ANS oil production. If nearly no new investment occurred, then much less oil would be expected to be produced. This is illustrated by the Low Investment Case.

The forecast of FY 2015 ANS production has been increased relative to last year's forecast by 21.5 thousand barrels because offshore well drilling projects progressed

more quickly than anticipated and company statements regarding expectations of higher production are more credible given the increase in lease expenditures.

Production Tax Forecast Summary

In the end, the forecasts of the components that determine production taxes are not the aim of the department. Instead, the department is forecasting the total revenues that stem from the components. In FY 2014, the State received \$2.6 billion in production tax revenue. The forecast receipts in FY 2015 are \$0.5 billion. This is a reduction in forecast revenue by \$1.2 billion relative to the spring 2014 forecast. Reduction in production tax revenue is primarily due to a reduced price forecast. By FY 2024, production tax revenues are expected to rebound to just over \$2 billion, potentially higher if new production comes online or oil prices increase relative to the forecast. The forecast revenue from Cook Inlet production is negligible due to the tax incentives currently in place.

Royalties

A royalty interest is an ownership of future production and is a typical feature in oil and gas contracts with a landowner. These royalty interests are made as part of a contract prior to the actual development of a project and allow the company to shift some of the risk on to the landholder. When a company bids on a lease, they pay an up-front bonus payment, agree to an annual rental payment, and typically offer a royalty interest in any discoveries that may be found. Thus, the bonus is a guaranteed payment to the State as the owner,

while the royalty is a contingent amount, only paid if there is success in production.

In Alaska, the State retains ownership of all subsurface minerals on state lands and requires a minimum royalty rate of 1/8 (12.5%) of any production, although there are exceptions that can be made for economically challenged projects. In other U.S. oil producing areas, private citizens usually own these subsurface rights and the royalty is paid directly to the landowner, rather than the government. Occasionally, a company may enter into a net profits sharing lease (NPSL) which bases the royalty payment on net profits rather than gross value of the oil. These profit sharing leases can reach as high as 75% of company profits after their development costs are recovered. Most leases in Alaska are 1/8 (12.5%) or 1/6 (16.67%) royalty.

Alaska has the option of allowing the company to sell the royalty oil on its behalf (known as "royalty in-value" or "RIV"), or to sell the royalty oil itself (known as "royalty in-kind" or "RIK"). The State currently holds a contract to sell some royalty oil to the Tesoro refinery in Cook Inlet. The one-year contract is for up to 15,000 barrels of oil per day. The value the State accepts for royalty in-kind cannot be lower than the value it would receive for royalty in-value.

The actual price received for RIV oil is a derived price based on the value of oil sold on the West Coast and adjusted by a formula defined by DNR royalty settlement agreements. All costs of shipping the oil on pipelines and tankers are subtracted from this value in order to determine the actual value of only

the oil (called the “wellhead value”). This value may be slightly different between calculating royalty values and taxable values due to differences in statutes and regulations between the Department of Revenue and the Department of Natural Resources.

For more information about royalties, visit the Department of Natural Resources, Division of Oil and Gas website: <http://dog.dnr.alaska.gov/>.

Royalty Forecast

The department forecasts that \$1.1 billion in unrestricted royalty revenues will be collected by the Department of Natural Resources in FY 2015. Current projections show a FY 2024 collection of \$1.25 billion in unrestricted royalties.

Petroleum Property Tax

Property subject to state oil and gas property tax includes property used in the exploration, production, and pipeline transportation of unrefined oil and gas. Each year, the Department of Revenue determines the assessed value for taxable petroleum property as of the assessment date of January 1. The State then levies a tax on its assessments at a rate of 20 mills (2%) of the assessed value. When petroleum property is located within a municipality, the municipality may also levy a tax on the department’s assessments at the same rate it taxes all other property within its jurisdiction. The tax paid to a municipality on petroleum property assessments act as

Table 4-6: FY 2014 distribution of petroleum property tax⁽¹⁾

Municipality	(\$ millions)		
	Total Tax	Local Share	State Share
Municipality of Anchorage	6.6	4.9	1.7
Fairbanks Northstar Borough	17.4	12.0	5.2
Kenai Peninsula Borough	22.8	10.4	11.5
North Slope Borough	372.0	344.0	27.9
Other Municipalities ⁽²⁾	0.4	0.2	0.2
Unorganized	82.5	0.0	82.5
City of Valdez	46.1	46.1	0.0
Total Petroleum Property Tax	547.8	417.6	128.9

a credit towards payment to the State on those same assessments.

Methodology

The forecast of state revenues from petroleum property tax starts with the most recent certified assessed values for oil and gas property in Alaska. Assumptions are made regarding new capital investment and typical depreciation curves are applied. The State rate of 20 mills is applied to the forecast values and the estimated payments made to municipalities are subtracted to estimate net receipts to the State.

Forecast

In FY 2014, the State collected about \$128 million in property tax revenue. The department is projecting state revenue from petroleum property tax to be about \$129 million in FY 2015, declining to about \$113 million in FY 2024.

Corporate Income Tax

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 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) property. The tax rates are graduated according to the schedule in Table 5-3.

Corporate income tax revenues are one of the more volatile revenue sources for the State of Alaska because of year-to-year variation in the profitability of oil companies.

Methodology

The corporate income tax forecast is derived from a regression model that includes past revenue, oil prices, and operating costs. The forecast also accounts for changes in apportionment factors due to restructuring of assets

⁽¹⁾ Tax amounts shown here represent the total certified tax roll for the 2014 tax year, due June 30, 2014. These amounts may not exactly match cash revenue received in the fiscal year as presented elsewhere in this book. Gross is total tax due. Local state share is revenue received.

⁽²⁾ Includes Matanuska-Susitna Borough, Cordova, Northwest Arctic Borough and Whittier.

and changes in production.

Forecast

FY 2014 receipts totaled \$317 million, down from \$435 million in FY 2013. The department is forecasting FY 2015 revenue of \$249 million and FY 2016 revenue of \$195 million as continued high costs and lower prices reduce companies' apportionable income. By FY 2024, corporate income tax collections are projected to increase to \$323 million, mostly due to the anticipated increase in oil prices.

Oil Revenue Summary

In all, the department is forecasting that oil revenues will continue to be the most significant source of revenue to the State in the foreseeable future. Current projections are that unrestricted revenues attributable to oil production will total about \$2 billion in FY 2015. This revenue stream is expected to trend upward with increasing oil prices. Current projections show total unrestricted oil revenues increasing to about \$3.7 billion by FY 2024.

Restricted Revenues

As mentioned earlier, some oil revenue is not available to the Legislature for general spending and is instead deposited into special accounts for special purposes. More detail about these funds and their balances is available in chapter 9.

Restricted Royalties

The majority of oil revenue that is restricted comes from royalties. At least 25% of royalty collections are required to be deposited into the permanent fund by the Alaska State Constitution. Some properties pay 50%. The weighted average of

these contributions results in about 30% of all royalty collections being deposited into the permanent fund.

Additionally, 0.5% of royalty collections are deposited into the public school trust fund. Earnings from that fund support the state public school program.

NPR-A Fund

The State is entitled to 50% of the bonuses, rents and royalties that the Federal government receives from the leasing of lands in the National Petroleum Reserve – Alaska (NPR-A). These revenues are deposited into the NPR-A special revenue fund and are restricted for specific uses. These funds can be appropriated to municipalities in the form of grants to compensate for any impacts resulting from the development on those lands. Revenue that is not appropriated is treated like other royalty revenue (25% is deposited into the permanent fund, and 0.5% to the public schools trust fund), with the remaining revenue available for appropriation to either the power cost equalization fund, rural electric capitalization fund, or the general fund. For purposes of categorization, these funds are considered “federal revenues” rather than “petroleum revenues,” but are included here as they are collected from oil activity. These payments typically amount to about \$5 million, but have exceeded \$20 million during high interest lease sales.

Hazardous Release Surcharge

Finally, up to \$0.05 per barrel of taxable oil is collected and deposited into the oil and hazardous substance release prevention and response fund (or simply the “response fund”).

This fund was created in 1986 under Alaska Statute 46.08 and is intended to be a source of funds that can be drawn upon in the event of the release of a hazardous substance for the abatement of damages from them. The fund is separated into two accounts – a response account and a prevention account. As the names imply, the response fund is designed to respond to a spill or discharge, while the prevention account is intended to support the Department of Environmental Conservation in spill prevention and preparedness planning activities. The prevention account can also be used to respond to substance releases that are not declared disasters by the governor or can be used to support other response and prevention programs if appropriated by the Legislature.

The surcharge paid to the response account is \$0.01 per taxable barrel of oil produced in the State. However, the surcharge is suspended when the account has a balance of \$50 million or more. In November of 2006, the fund was accessed to assist with pipeline spills on the North Slope. The surcharge was re-imposed in 2007 and has been suspended and re-imposed since. The balance of the fund as of September 30, 2014 was \$47.1 million.

Following a 2006 amendment, the prevention account now receives a surcharge of \$0.04 per taxable barrel of oil produced within the State (increased from \$0.03). All interest payments, penalties, settlements and fines from both accounts are deposited into the prevention account and are available for appropriation to eligible programs. This account does not have a limit.

Non-petroleum Revenue



Introduction

Revenue collections from In-State Activities other than petroleum include non-petroleum taxes, charges for services, fines and forfeitures, licenses and permits, rents and royalties, miscellaneous and transfer revenue sources such as dividends from public entities. These sources are categorized as “non-petroleum revenue, except federal and investment,” sometimes shortened to “non-petroleum revenue.” Federal and investment revenue are discussed in chapters 6 and 7, respectively. These revenue sources are each subcategorized into unrestricted, designated general fund, and other restricted revenue in Table 5-1. The amounts of each revenue type are reflected in Table 5-2 and Tables 5-4 through 5-8 in this chapter.

This chapter provides history on non-oil revenue sources for FY 2014 and forecasts revenue for FY 2015 and FY 2016. The chapter also includes descriptions of each revenue source and explains the methodology used for the forecasts. The Department of Revenue’s Annual Report contains more comprehensive historical information about each tax type, and the Department of Administration’s

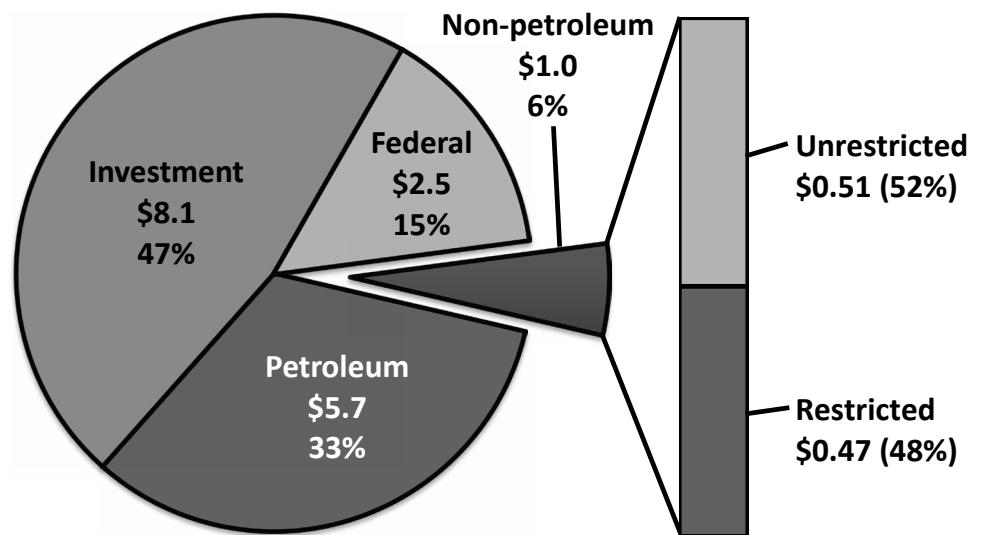


Figure 5-A: FY 2014 non-petroleum revenue, by restriction and type (\$ billions)

Comprehensive Annual Financial Report contains more detail about many non-tax revenue sources.

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.

In Alaska over the past 5 years, wine consumption has grown at an annual rate of 2.25% and liquor consumption has grown at an annual rate of 3.7%. Consumption of beer, cider, and malt liquor has grown at an annual rate of 0.4%, and the share of these beverages produced by qualifying small breweries is steadily increasing, from 17.4% in 2009 to 27.1% in 2014. Alcoholic beverage tax revenue is forecasted by applying

Table 5-1: Non-petroleum revenue, by restriction and category

	(\$ millions)		
	History	Forecast	
	FY 2014	FY 2015	FY 2016
Unrestricted Non-petroleum Revenue			
Taxes	334.7	354.9	364.7
Charges for Services	24.2	23.4	23.4
Fines & Forfeitures	11.3	10.9	10.9
Licenses & Permits	42.7	42.0	42.0
Rents & Royalties	33.0	27.7	28.1
Other	62.6	43.4	59.1
Unrestricted Non-petroleum Revenue	508.5	502.3	528.2
Restricted			
Designated General Fund			
Taxes	48.9	46.8	45.4
Charges for Services	206.4	241.3	241.8
Fines & Forfeitures	7.8	9.5	9.4
Licenses & Permits	0.4	0.2	0.2
Rents & Royalties	4.7	4.5	4.5
Other	21.4	20.8	20.8
Subtotal	289.6	323.1	322.1
Other Restricted			
Taxes	77.2	74.3	75.8
Charges for Services	36.9	86.4	86.4
Fines & Forfeitures	26.3	23.9	23.6
Licenses & Permits	31.6	31.3	31.3
Rents & Royalties	6.6	6.8	6.8
Other	5.3	6.5	6.5
Subtotal	183.9	229.2	230.4
Total Restricted	473.5	552.3	552.5
Total Non-petroleum Revenue	982.0	1,054.6	1,080.7

Table 5-2: Non-petroleum tax revenue, by restriction and detail

	(\$ millions)		
	History	Forecast	
	FY 2014	FY 2015	FY 2016
Unrestricted			
Corporate Income Tax (non-petroleum)	104.1	114.4	125.2
Excise Tax			
Alcoholic Beverage	18.3	20.0	20.4
Tobacco Products – Cigarettes	30.0	30.5	28.2
Tobacco Products – Other (General Fund)	12.8	13.7	14.2
Electric & Telephone Cooperative	0.2	0.2	0.2
Insurance Premium	55.4	57.4	58.5
Motor Fuel Tax	39.3	39.9	39.7
Tire Fee	1.3	1.3	1.3
Vehicle Rental	8.3	8.4	8.5
Subtotal	165.6	171.4	171.0
Fish Tax			
Fisheries Business	25.1	21.2	18.8
Fishery Resource Landing	7.1	5.5	5.9
Subtotal	32.2	26.7	24.7
Other Tax			
Charitable Gaming	2.5	2.5	2.5
Estate	0.0	0.0	0.0
Large Passenger Vessel Gambling	6.7	6.7	6.7
Mining License	23.6	33.2	34.6
Subtotal	32.8	42.4	43.8
Unrestricted Non-petroleum Tax Revenue	334.7	354.9	364.7

these 5-year annual growth rates to the previous year's consumption, then multiplying predicted consumption by the tax rate. The Department of Revenue forecasts very slow growth in alcoholic beverage revenue.

Charitable Gaming

Under Alaska law, municipalities and qualified nonprofit organizations may conduct specific charitable gaming activities allowed by law.

The purpose of such activities is to derive public benefit in the form of money for charities and revenue for the State. The department collects permit and license fees, a 1% net proceeds fee, and a 3% pull-tab tax.

Commercial Passenger Vessel Taxes

Alaska voters approved an initiative to impose new taxes and fees on commercial passenger vessels in 2006, which the Legislature modified in 2010. Following

are descriptions of the various commercial passenger vessel taxes and fees in current law. The ocean ranger fee is described under environmental compliance fund in the charges for service category.

- The commercial passenger vessel tax (CPVT) is a tax of \$34.50 on each passenger aboard a commercial passenger vessel with 250 or more berths. Revenue is deposited into a subfund of the general fund, the

Table 5-2: Non-petroleum tax revenue, by restriction and detail *(continued from previous page)*

	(\$ millions)		
	History	Forecast	
	FY 2014	FY 2015	FY 2016
Restricted			
Designated General Fund			
Alcoholic Beverage (alcohol & drug treatment)	19.5	19.9	20.3
Insurance Premium/Other ⁽¹⁾	5.3	5.3	5.1
Tobacco – Cigarettes (school fund)	21.0	19.6	18.1
Tobacco – Cigarettes (tobacco use cessation)	3.1	2.0	1.9
Subtotal	48.9	46.8	45.4
Other Restricted			
Cost Recovery Fisheries Assessment	1.1	0.7	1.0
Cruise Ship Passenger Fee (State Share)	0.4	2.0	2.0
Cruise Ship Passenger Fee (Municipal Share)	15.9	15.5	15.5
Dive Fishery Management Assessment (designated management areas)	0.5	0.6	0.6
Electric and Telephone Cooperative (Municipal Share)	4.0	4.0	4.0
Fisheries Business (Municipal Share)	24.9	22.6	23.1
Fishery Resource Landing (Municipal Share)	5.1	7.1	7.3
Motor Fuel Tax-Aviation (Municipal Share)	0.2	0.2	0.2
Salmon Enhancement (Aquaculture Association Share)	12.8	10.2	10.4
Seafood Development (qualifying regional associations)	1.9	1.9	2.0
Seafood Marketing Assessment (seafood marketing programs)	10.2	9.5	9.7
Settlements to CBRF (non-petroleum taxes)	0.2	0.0	0.0
Subtotal	77.2	74.3	75.8
Restricted Non-petroleum Tax Revenue	126.1	121.1	121.2
Total Non-petroleum Tax Revenue	460.8	476.0	485.9

CPVT account. Five dollars of the tax can be appropriated to each of the first seven ports of call. If a commercial passenger vessel visits a port that levies a tax similar to the CPVT, and that tax was in place before December 17, 2007, the local tax imposed is allowed as a credit

against the State tax. Only Juneau and Ketchikan had qualifying levies in place at that time (Juneau's fee is \$8 per passenger and Ketchikan's is \$7). CPVT can only be collected if a cruise ship spends more than 72 consecutive hours in Alaskan waters. All funds received from the CPVT

must be spent on port facilities, harbor infrastructure, and other services provided to commercial passenger vessels and the passengers on board those vessels. The entire passenger fee is considered restricted revenue.

- The Large Passenger Vessel

⁽¹⁾ 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.

Gambling Tax is a tax of 33% on the adjusted gross income from gaming or gambling activities aboard large passenger vessels in the State. Revenue goes to the general fund and is considered unrestricted.

- The Alaska corporate income tax now applies to large commercial passenger vessels, and the revenue is included in the forecast of corporate income taxes.
- There are penalties for false reporting, violating environmental regulations, and failing to make proper disclosures on promotions and shore side activity sales. Revenue from these provisions is included in the fines and forfeitures section.

About one million passengers visited the State in large passenger vessels in FY 2014, and expectations are similar for FY 2015 and FY 2016. In recent years, the municipal share of the CPVT has been much larger than the State share. The Department of Revenue estimates the State share at \$2.0 million in FY 2015 and FY 2016.

Corporate Income Tax

Alaska levies the corporate income tax on corporations doing business in the State. Since August 26, 2013, corporate tax rates are graduated according to the schedule in Table 5-3. S-Corporations and LLCs that file federally as partnerships are generally exempt from corporate income tax. A corporation computes its tax liability based on the federal taxable income of its water's edge combined report, with Alaska adjustments. Corporations other than oil and gas corporations apportion their income to Alaska by using a three-factor apportionment

Table 5-3: Corporate income tax rate schedule

Taxable Income	Marginal Tax Rate
\$0-\$25,000	0.0%
\$25,000-\$49,000	2.0%
\$49,000-\$74,000	3.0%
\$74,000-\$99,000	4.0%
\$99,000-\$124,000	5.0%
\$124,000-\$148,000	6.0%
\$148,000-\$173,000	7.0%
\$173,000-\$198,000	8.0%
\$198,000-\$222,000	9.0%
\$222,000+	9.4%

based on sales, property, and payroll. Alaska taxable income is determined by applying the apportionment factor to the corporation's modified federal taxable income.

The corporate income tax for non-oil companies is forecasted using a regression model based on past collections, overall U.S. economic growth, and metal prices. Metal prices are used as a separate variable because mining accounts for much of the year-to-year variation in non-oil corporate income tax revenue. The result of the regression model is adjusted to account for tax credit activity that is anticipated in future years.

The Department of Revenue forecasts net revenue from the non-oil corporate income tax to rise slightly from \$104 million in FY 2014 to \$114 million in FY 2015 and \$125 million in FY 2016, as the economy continues to recover.

Fisheries Business Tax

The fisheries business tax (FBT) is levied on businesses that process fisheries resources in Alaska or export

fisheries resources from Alaska. Although the tax is usually 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 with qualified municipalities and is treated as other restricted revenue.

FBT revenue retained by the State is reduced by an estimate of tax credits, including Salmon Product Development credits, which apply only to the State portion of the tax. Forecasts of FBT revenue are based on estimated taxable values of the major fisheries in the State and historical effective tax rates. The FBT revenue in FY 2014 was relatively high, partly due to a record harvest of pink salmon. Since pink salmon runs tend to fluctuate on a two-year cycle, the Department of Revenue expects the state share of FBT revenue to decline to \$21.2 million in FY 2015. In FY 2016, although pink salmon harvests are expected to rebound, the State share of FBT revenue is projected to decline further as a result of increased claims under the Salmon Product Development tax credit.

Fishery Resource Landing Tax

The fishery resource landing tax is based on the unprocessed statewide average price of the resource and is levied on fishery resources processed outside of Alaska and first landed in Alaska. The tax is collected primarily

from factory trawlers and floating processors that process fishery resources outside the State's three 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 with qualified municipalities, and is treated as other restricted revenue.

Fisheries resource landing tax revenue retained by the State is reduced by a forecast of tax credits which apply only to the State's share of the tax. The Department of Revenue forecasts fisheries resource landing tax revenue based on estimated taxable values of the major fisheries in the State and historical effective tax rates. The department expects total fisheries resource landing tax revenue to rise slightly in FY 2015 and FY 2016 due to higher prices for groundfish, which account for over 90% of landing tax revenue.

Insurance Premium Tax

Insurance companies in Alaska pay an insurance premium tax instead of corporate income tax, sales, or other excise taxes. The tax is levied as a percentage of the total insurance premiums for policies in the State of Alaska. 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.

The forecast of insurance premium tax revenue are 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.

Marijuana Tax

In November 2014, voters approved a ballot measure which will levy a new tax on marijuana cultivation. The tax rate is \$50 per ounce, paid upon the sale of the product to a retail marijuana store or marijuana product manufacturing facility. The ballot measure will take effect in 2015. The Department does not have sufficient data at this time to make an estimate of future revenues from this tax type.

Mining License Tax

The mining license tax (MLT) ranges from 0% to 7% on the net income of most mining operations in the State. New mining operations are exempt from the MLT for a period of 3.5 years after production begins. Sand and gravel operations are exempt from the MLT tax.

This forecast uses a bottom-up approach to estimate tax payments for each of the major mines in the State based on expected minerals prices and production. MLT revenue decreased from \$46.7 million in FY

2013 to \$23.6 million in FY 2014. Gold, zinc, and silver play the largest role in the MLT, as the largest mines in the State rely heavily on those three metals. The steep revenue decline was due partly to declines in the prices of those metals, especially gold, and partly to one-time payment events. The Department of Revenue forecasts MLT revenue to rise to \$33.2 million in FY 2015 as zinc prices increase. Zinc prices tend to track with overall economic growth, which is expected to be positive in FY 2015. However, this rise in revenue will be tempered by a continued decline in gold prices, and the department does not forecast a return to FY 2013 revenue levels in the near future.

Motor Fuel Tax

The motor fuel tax is imposed on all motor fuel sold, transferred, or used within Alaska. Per gallon rates are \$0.08 for highway use, \$0.05 for marine fuel, \$0.047 for aviation gasoline, \$0.032 for jet fuel, and \$0.08 or \$0.02 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 international flights. All revenue derived from motor fuel taxes is deposited in the general fund. Sixty percent of the revenue attributable to aviation fuel sales at municipal airports is shared with the respective municipalities and is treated as other restricted revenue.

The state share of revenue from the motor fuel tax declined from \$41.9 million in FY 2013 to \$39.3 million

in FY 2014. The forecast of motor fuel tax revenue shows it remaining constant at just under \$40 million.

Seafood Assessments and Taxes

The Department of Revenue administers five different programs that collect funds 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. It is currently a 0.5% assessment and supports the operations of the Alaska Seafood Marketing Institute.
- The dive fishery management assessment is levied on the value of fishery resources taken using dive gear in a designated management area. The current assessment rate is 5% for sea cucumbers and 7% for geoducks and sea urchins. Dive fishery taxes are based on the value of the fishery in the prior fiscal year.
- The regional seafood development tax, which is levied on the value of fishery resources in a designated management area. The current tax rate is 1% and covers drift and set gillnet operations in Prince William Sound, as well as drift gillnet operations in Bristol Bay. Seafood development tax revenue is based on the estimated taxable value of seafood processed in Alaska.
- The salmon enhancement tax is levied on salmon sold or exported

from designated aquaculture regions. The rate varies from 2-3% by location.

- The cost recovery fisheries assessment, a program authorized in 2006 that allows hatcheries to establish a common property fishery and recoup costs through an assessment on fishery resources taken in the terminal harvest area. This program was first used in 2012 for the Hidden Falls hatchery in Southeast Alaska.

Revenue received under these assessments is deposited in the general fund. Funds treated as other restricted revenue in this forecast are set aside for appropriation for the benefit of the seafood industry, either in marketing or in management and development of the industry.

The estimated taxable value of Alaska's salmon fishery and historical effective tax rates are used to forecast salmon enhancement tax revenue. Seafood assessments and taxes are forecasted using the department's estimates of fisheries values developed for the fisheries business and landing taxes.

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.

Forecasted revenue from the tire fee is based on the expected number of vehicle registrations in the State.

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 has been \$2.00 per pack since July 1, 2007. Of the cigarette tax, \$0.76 per pack is deposited into the school fund, and is considered designated 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. 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 designated restricted revenue.

Our forecast for cigarette tax revenue is based on past rates of decline in cigarette consumption. In recent years, the total number of cigarettes purchased in Alaska has fallen by about 20 million per year, translating to a roughly \$2 million yearly decline in cigarette tax revenue.

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. In contrast to cigarettes, the revenue from other tobacco products is projected to rise, due to moderate increases in both wholesale prices and consumption levels. This is partly because e-cigarette consumption is displacing regular cigarettes.

Vehicle Rental Tax

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.

Revenue from the vehicle rental tax is forecasted based on GDP growth, since most vehicle renters are tourists and tourism increases when the overall economy is strong. The Department of Revenue forecasts a modest increase in vehicle rental revenues due to positive economic growth.

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. This category only includes those services 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 revenue listed in this category comes 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 the department has grouped into the broad categories “General Government,” “Natural Resources” and “Other.” Estimates for these categories are based on fiscal year-to-date collections and historical averages. 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. Because revenue is customarily appropriated for Alaska marine highway operations, it is considered restricted revenue for this forecast. Revenue projections are based upon revenue expectations provided by the Alaska Marine Highway Division within the Alaska Department of Transportation.

Environmental Compliance Fund

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 and are based on estimated cruise ship passenger levels. The Ocean Ranger fee is levied on each voyage in Alaska by commercial passenger vessels with 250 or more berths at a rate of \$4 per berth. 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 a broader cruise-ship related initiative passed by voters in August 2006.

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 and implement laws related to the program, or cover costs associated with collecting the receipts. Some programs with program receipt authority are not included in the department’s Charges for Services category because they are reported elsewhere in this forecast or because they do not generate revenue available for general appropriation.

Expected revenue from program receipts are 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 include state services such as Pioneers homes and occupational licensing that are funded by program receipts.
- 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 cost charges and user fees levied on utilities and pipelines to fund costs of regulation.
- Timber sale receipts, which are used to fund the timber disposal program of the Department of Natural Resources.
- Oil and Gas Conservation

Table 5-4: Revenue from charges for services, by restriction and detail

	(\$ millions)		
	History	Forecast	
	FY 2014	FY 2015	FY 2016
Unrestricted			
General Government	13.7	13.5	13.5
Natural Resources	2.4	2.4	2.4
Other	8.1	7.5	7.5
Unrestricted Revenue from Charges for Services	24.2	23.4	23.4
Restricted			
Designated General Fund			
DCCED Business Licenses	8.5	8.5	8.5
Environmental Compliance Fees	1.0	1.0	1.0
General Government - GF Subfunds	7.3	6.6	6.6
Marine Highway Receipts	50.9	54.4	54.9
Natural Resources	0.1	0.3	0.3
Ocean Ranger Fees	3.9	3.8	3.8
Oil and Gas Conservation	5.9	7.3	7.3
RCA Receipts	10.7	10.8	10.8
Receipt Supported Services	117.4	146.9	146.9
Timber Sale Receipts	0.7	1.7	1.7
Subtotal	206.4	241.3	241.8
Other Restricted			
General Government - Special Funds	0.5	0.3	0.3
Statutorily Designated	36.4	86.1	86.1
Subtotal	36.9	86.4	86.4
Restricted Revenue from Charges for Services	243.3	327.7	328.2
Total Revenue from Charges for Services	267.5	351.1	351.6

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 often referred to as the Master Settlement Agreement. Other sources are forecast based on

fiscal year-to-date collections and historical averages.

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. Eighty

Table 5-5: Revenue from fines & forfeitures, by restriction and detail

	(\$ millions)		
	History	Forecast	
	FY 2014	FY 2015	FY 2016
Unrestricted			
Fines and Forfeitures	11.3	10.9	10.9
Unrestricted Revenue from Fines & Forfeitures	11.3	10.9	10.9
Restricted			
Designated General Fund			
Tobacco Settlement (Tobacco Use Education & Cessation Fund)	6.5	5.9	5.8
Other - GF Subfunds	1.3	3.6	3.6
Subtotal	7.8	9.5	9.4
Other Restricted			
Tobacco Settlement (Northern Tobacco Securitization Corporation)	26.0	23.6	23.3
Other - Special Revenue Funds	0.3	0.3	0.3
Subtotal	26.3	23.9	23.6
Restricted Revenue from Fines & Forfeitures	34.1	33.4	33.0
Total Revenue from Fines and Forfeitures	45.4	44.3	43.9

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 revenue for these bonds is considered other restricted revenue. The remaining 20% of the revenue is deposited into the tobacco use education and cessation fund, a subfund of the general fund. Tobacco use education and cessation fund revenue is considered designated general fund revenue.

Tobacco settlement payments are based on a complex formula that takes into account several factors including declines in cigarette consumption, inflation, and certain adjustments for litigation expenses and market share losses related to the

settlement.

Licenses and Permits

Licenses and permits represent revenue derived from charges for participating in activities regulated by the State. The majority of the receipts under this category are from motor vehicle registration and fishing and hunting license fees. Several other small license and permit fees are summarized in the Other Fees category. Alcoholic beverage license fees are forecast separately.

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 other restricted revenue for purposes of this forecast. The department expects little change in revenue because the issuance of alcoholic beverage licenses is limited based on population, and population growth is relatively steady.

Hunting and Fishing License Fees

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

Table 5-6: Revenue from licenses & permits, by restriction and detail

	(\$ millions)		
	History	Forecast	
	FY 2014	FY 2015	FY 2016
Unrestricted			
Alcoholic Beverage Licenses	1.0	1.0	1.0
Motor Vehicles	38.6	38.0	38.0
Other Fees	3.1	3.0	3.0
Unrestricted Revenue from Licenses & Permits	42.7	42.0	42.0
Restricted			
Designated General Fund			
Other Fees - GF Subfunds	0.4	0.2	0.2
Other Restricted			
Alcoholic Beverage License Share	0.9	0.9	0.9
Hunting and Fishing Fees (Fish & Game Fund)	27.1	26.6	26.6
Other Fees - Special Revenue Funds	3.6	3.8	3.8
Subtotal	31.6	31.3	31.3
Restricted Revenue from Licenses & Permits	32.0	31.5	31.5
Total Revenue from Licenses & Permits	74.7	73.5	73.5

this revenue is appropriated to a special revenue fund called the fish and game fund and are classified as other restricted revenue. Money in the fund can only be spent for fish and game management purposes. Revenue forecasts from hunting and fishing license fees are provided by 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 fees 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. Historical and forecast revenue from motor vehicle registration fees is based on data provided by the Division of Motor Vehicles.

Rents and Royalties

Rents and royalties from sources other than oil and gas fall into two categories: mining rents and royalties, and other non-petroleum rents and royalties. All rents and royalties from oil and gas are reported in the oil revenue section.

Mining Rents and Royalties

As with oil and gas production, the State earns revenue from other mineral production that occurs on state lands leased for exploration and

development. As the landowner, the State earns revenue from leases as: (1) up-front bonuses, (2) annual rent charges, and (3) as a retained royalty interest in minerals production.

Revenue received from mining rents and royalties is deposited as follows: between 25% and 50% into the permanent fund, 0.5% into the school fund, and the remainder into the general fund. The permanent fund and school fund portions are treated as other restricted revenue.

Future revenue from mining rents and royalties are based on analyst forecasts of future minerals prices and mine-specific forecasts for large mines on state land.

Other Non-Petroleum Rents and

Table 5-7: Revenue from rents & royalties, by restriction and detail

	(\$ millions)		
	History	Forecast	
	FY 2014	FY 2015	FY 2016
Unrestricted			
Mining Rents and Royalties	16.2	15.9	16.3
Other Non-Petroleum Rents and Royalties	16.8	11.8	11.8
Unrestricted Revenue from Rents & Royalties	33.0	27.7	28.1
Restricted			
Designated General Fund			
Other Non-Petroleum Rents & Royalties	4.7	4.5	4.5
Other Restricted			
Mining Rents & Royalties	6.6	6.8	6.8
Restricted Revenue from Rents & Royalties	11.3	11.3	11.3
Total Revenue from Rents & Royalties	44.3	39.0	39.4

Royalties

The State receives revenue from the leasing, rental, and sale of state land. While all of this revenue is deposited into the general fund, some is deposited into subfunds of the general fund and is treated as designated general fund revenue for purposes of this forecast. This category includes revenue from leasing, rental, and sale of state land that do not fall into the oil and gas or mining royalty categories. Other non-petroleum rents and royalties are based on analysis of fiscal year-to-date and historical collections.

Miscellaneous and Transfer Revenues

This category includes unclaimed property transfers, transfers to the

State from component organizations, and miscellaneous revenue. Projections of miscellaneous revenue, which include contributions to the State and other revenue, are based on analysis of fiscal year-to-date and historical collections. 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.

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 and the Alaska Industrial Development & Export Authority, frequently in the form of dividends. Component organizations are covered in more detail in chapter 10, State Entities. Some component organizations do not make transfers

⁽¹⁾ Revenue shown under account codes for "other" or "contributions" in the Alaska State Accounting System for general fund subfunds and special revenue subfunds.

Table 5-8: Miscellaneous & transfer revenues, by restriction and detail

	(\$ millions)		
	History	Forecast	
	FY 2014	FY 2015	FY 2016
Unrestricted Miscellaneous & Transfer Revenues			
Miscellaneous	33.1	26.8	26.8
Alaska Housing Finance Corporation	1.0	0.0	8.7
Alaska Industrial Development & Export Authority	20.7	10.7	17.7
Alaska Municipal Bond Bank Authority	0.0	0.9	0.9
Alaska Student Loan Corporation	0.7	0.0	0.0
Alaska Energy Authority	0.1	0.0	0.0
Alaska Natural Gas Development Authority	0.0	0.0	0.0
Mental Health Trust	0.0	0.0	0.0
Unclaimed Property	7.0	5.0	5.0
Unrestricted Miscellaneous & Transfer Revenues	62.6	43.4	59.1
Restricted			
Designated General Fund			
Miscellaneous - GF Subfunds ⁽¹⁾	21.4	20.8	20.8
Other Restricted			
Miscellaneous - Special Revenue Funds ⁽¹⁾	5.3	6.5	6.5
Restricted Miscellaneous & Transfer Revenues	26.7	27.3	27.3
Total Miscellaneous & Transfer Revenues	89.3	70.7	86.4

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

Actual transfers for FY 2014 are reflected in draft tables from the Comprehensive Annual Financial Report. Forecasts for FY 2015 and FY 2016 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 under this

category may differ from those presented in the State Entities section for two reasons: (1) amounts in this section account differently for funds paid over time for multi-year capital projects, and (2) amounts in this section include funds that are transferred to the State and then appropriated to the component unit for operations.

6

Federal Revenue



General Discussion

The federal government continues to play a significant role in Alaska's economy. In FY 2014, the State of Alaska was authorized for \$3.0 billion in federal funds; however, only \$2.5 billion were received, constituting roughly 15% of total state revenues. 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.

Forecast

Estimates of FY 2015 and FY 2016 receipts come from the Office of Management and Budget and are based on state agency projections of potential federal revenue. Table 6-1 provides the FY 2014 actual and FY 2015-2016 forecasts.

During FY 2015, the State is authorized to receive over \$3.1 billion in federal funds. It is important to note that the Legislature authorizes state agencies to receive and spend the maximum that federally funded programs might receive, while actual appropriation amounts are historically

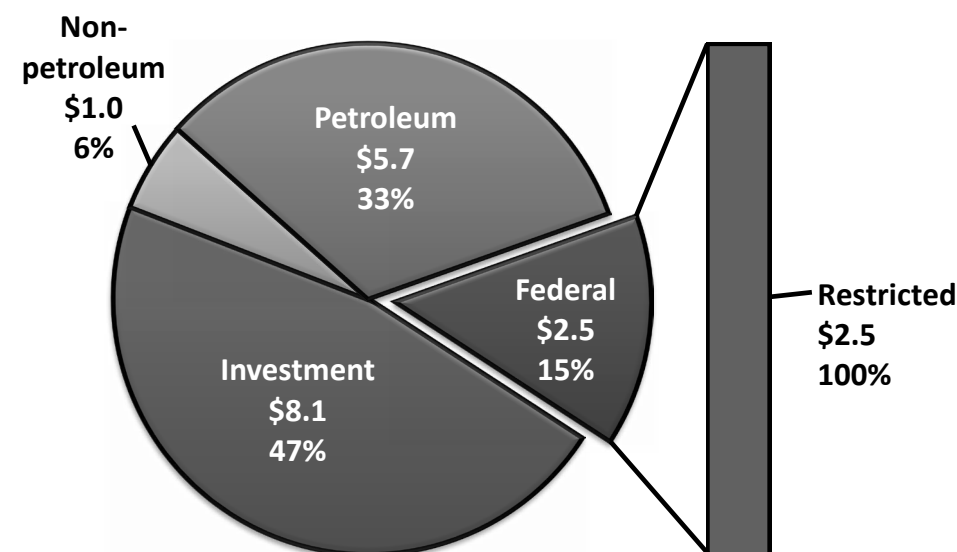


Figure 6-A: FY 2014 federal revenue, by restriction (\$ billions)

20-30% lower. In addition, some of the funding granted for multi-year capital projects is received and spent in years following the year in which the money is procured. All federal funds, whether spent in the operating or capital budget, are limited in how they may be used; therefore, they are shown as restricted revenue.

State-Matching

Most federal funding requires state-matching. The State match for federal spending in FY 2014 and the enacted FY 2015 budgeted amount are included in Table 6-2. Overall, in FY 2014, Alaska spent \$640.6 million and

received \$2.5 billion to fund specific programs. This means Alaska received roughly \$3.92 in federal funds for each dollar it spent in matching state funds.

Distribution of Restricted Revenue

Of the federal funds the state was authorized to receive in FY 2014, 68% were authorized to the operating budget and the remaining 32% to the capital budget. Medicaid, through the Department of Health and Social Services, received 38% of total federal funds the state actually received, making it the largest destination for federal funds within the operating

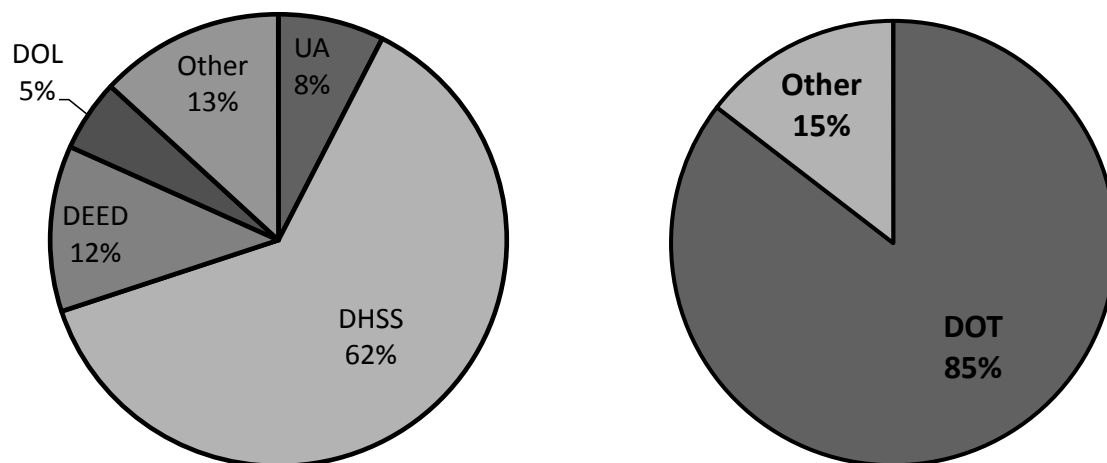
Table 6-1: Federal revenue, by restriction

	History FY 2014	(\$ millions) Forecast	
		FY 2015	FY 2016
Unrestricted General Fund			
Federal Receipts	0.0	0.0	0.0
Restricted (Federal)			
Federal Receipts Authorization ⁽¹⁾	2,511.9	3,126.4	3,126.4
Total Federal Revenue	2,511.9	3,126.4	3,126.4

Sources: Historical figures provided by the Division of Finance and projected revenue by the Office of Management and Budget.

Table 6-2: Budgeted state funds matching requirement

	History FY 2014	(\$ millions) Forecast	
		FY 2015	FY 2016
Operating Budget	572.8	572.8	572.8
Capital Budget	67.8	67.8	67.8
Total Matching Requirement	640.6	640.6	640.6

Figure 6-B: FY 2014 federal revenue allocation; operating (left) and capital (right), by recipient agency

budget. The Department of Education and University of Alaska are other major recipients, together receiving 15% of total federal funds. In the capital budget, the Department of Transportation is the dominant

destination for federal funds, receiving about 28% of total federal funds in FY 2014.

Figure 6-B illustrates a more detailed distribution of federal funds the state was authorized to receive; the

distribution of funds actually received may differ slightly.

⁽¹⁾ This amount includes federal receipts other than Alaska's share of NPR-A oil royalties, which are presented in Chapter 2.

Investment Revenue



Investment Forecast

The total investment revenue for FY 2014 was approximately \$8.1 billion, with nearly all of it classified as restricted revenue as shown in Figure 7-A. The majority (85%) of revenues from investment are from the Alaska permanent fund. Table 7-1 shows there are lower investment returns forecasted for FY 2015-2016 for the Alaska permanent fund than FY 2014 actuals.

To forecast investment revenue, the department combined actual performance through September 30, 2014, with a projection for the remainder of the fiscal year. Forecasts and capital market median returns are based on information provided in the Five- to Ten-Year capital market returns projection, provided by the State's investment consultant, Callan Associates, Inc.

Table 7-14 shows a summary of Callan Associates, Inc. long-term capital market projections, as well as the benchmark against which performance for a specific asset class is measured in the State portfolios. The column titled "Projected Returns" is the estimated return. The numbers in the "Projected Risk" column represent a statistical measure called

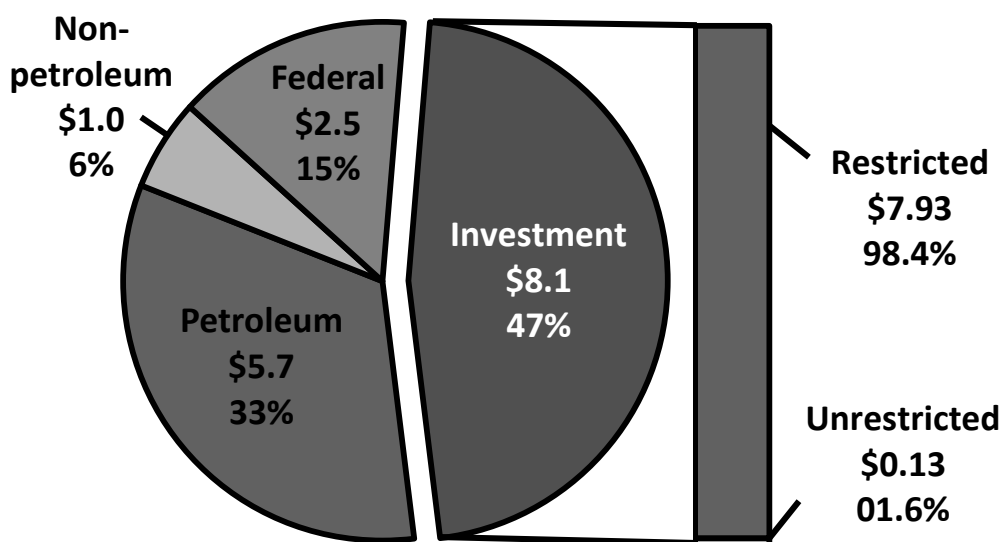


Figure 7-A: FY 2014 investment revenue (\$ billions)

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 the standard deviation to provide a range of possible outcomes at any desired level of confidence. With a bell-curve (normal) distribution, approximately 68% of the observed outcomes are expected to be one standard deviation from the mean. A greater level of confidence (say 95%) would require a broader range (two standard deviations). For example, Callan estimates an average annual return for the Domestic Fixed Income asset class

of 3.00% and a projected risk for that asset class of 3.75%. That means Callan is forecasting, with a normal distribution, the annual return for the Domestic Fixed Income asset class will fall between -0.75% and 6.75%, (one standard deviation). A prediction at 95% confidence would run from -4.50% to 10.50% (plus or minus two standard deviations from the mean), and is 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 reflects the downside risk of the asset class or portfolio.

Table 7-1: Investment revenue⁽¹⁾, by restriction and detail

	(\$ millions)		
	History	Forecast	
	FY 2014	FY 2015	FY 2016
Unrestricted			
Investments ⁽²⁾	129.9	28.5	30.9
Interest Paid by Others	0.3	1.5	1.5
Unrestricted Investment Revenue	130.2	30.0	32.4
Restricted			
Designated General Fund Revenue			
Investments - Designated GF ⁽³⁾	3.8	1.1	2.4
Other Treasury Managed Funds	62.5	19.3	33.4
Subtotal Designated General Fund	66.3	20.4	35.8
Other Restricted			
Investments - Other Restricted	7.6	2.3	4.9
Constitutional Budget Reserve Fund	1,006.1	270.5	357.0
Alaska Permanent Fund	6,847.7	3,046.4	3,175.3
Subtotal Other Restricted Revenue	7,861.4	3,319.2	3,537.2
Restricted Investment Revenue	7,927.7	3,339.6	3,573.0
Total Investment Revenue	8,057.9	3,369.6	3,605.4

Unrestricted Investment Revenue

Unrestricted investment revenue is earned on the general fund, other non-segregated investments, and the statutory budget reserve fund (SBRF). The SBRF was segregated from the general fund and given its own asset allocation on July 1, 2013. As of July 1, 2014, the asset allocation of the SBRF is similar to that of the constitutional budget reserve main. When forecasting earnings on the SBRF, this projection rolls into

the total unrestricted investment revenue associated with the general fund. These funds are managed by the Treasury Division, Department of Revenue. 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 - main and subaccount), other Treasury Division managed governmental funds, and the Alaska permanent fund.

The application of Callan's five- to ten-year capital market returns projection to the Permanent Fund Corporation's current asset allocation

⁽¹⁾ 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.

⁽²⁾ Includes projected SBR unrestricted investment revenue.

⁽³⁾ Includes subfunds of the general fund.

Table 7-2: General fund and statutory budget reserve fund revenues

	(\$ millions)		
	Actual FY 2014	Projected	
		FY 2015	FY 2016
Investment Revenue Unrestricted	129.9	28.5	30.9
Investment Revenue Restricted - Designated GF ⁽¹⁾	3.8	1.1	2.4
Investment Revenue Restricted - Other Restricted	7.6	2.3	4.9
Total	141.3	31.9	38.2

**Table 7-3: General fund;
Asset allocation and summary**

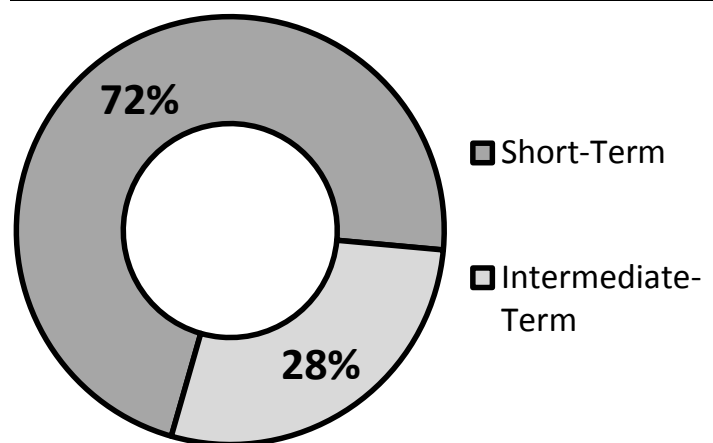
Treasury Pool	Target Percent Allocation	Performance Benchmark
Liquidity Pool / Short-term Fixed Income Pool	72%	Three-Month U.S. Treasury Bill
Intermediate-Term Fixed Income Pool	28%	Barclays 1-3 Year Gov't Bond Index
Bank Bonds	0%	Allocation up to 2%
T-Bills, T-Notes, T-Bonds or Fed. Agency Debentures	0%	Allocation up to 2%
Broad Fixed Income	0%	Allocation up to 10%
Investment Balance: Septem- ber 30, 2014	5,238.9	\$ millions
Long-term Expected Rate of Return	2.14%	Callan's returns
Probability of Negative Return Over 1 Year	2.39%	

results in a 6.15% median expected total return. These estimates result in forecasted earnings of \$3.0 billion for FY 2015 and \$3.2 billion for FY 2016. Actual net income returns for FY 2014 was \$6.8 billion, \$2.4 billion above the Spring 2014 forecast, and \$3.8 billion higher than the forecast presented for FY 2013. This highlights the effect that unanticipated market fluctuations have on the earnings of the fund.

The CBRF returned \$1.0 billion in FY 2014 and is expected to return \$271 million in FY 2015 and \$357 million in FY 2016.

Expected Lifetime of the CBRF

As approved by voters in 1990, all receipts from oil and gas tax and royalty settlements are deposited into the CBRF. From the CBRF's inception, through September 30, 2014, the State has deposited ap-

**Figure 7-B: General fund, non-segregated investments
Moderate risk: short to intermediate horizon**

*Short-term: 3-month U.S. T-Bill;
Intermediate Term: Barclays 1-3 Year Gov't Bond Index

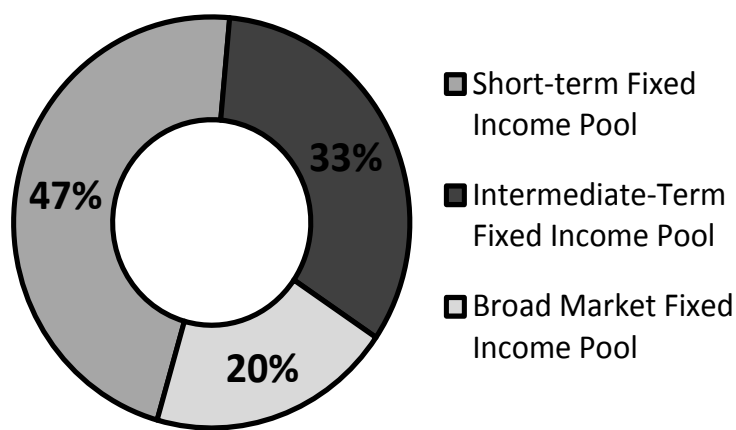
proximately \$7.8 billion into the fund and generated approximately \$4.9 billion in investment earnings. A cumulative total of approximately \$8.8 billion has been borrowed from the CBRF to balance the budget during prior fiscal years, but has been fully repaid to the CBRF. The current net asset value in the CBRF, as of September 30, 2014, was \$11.7 billion, which includes a portion of the \$3 billion in approved pension

⁽¹⁾ Includes subfunds of the general fund.

**Table 7-4: Statutory budget reserve fund⁽¹⁾;
Asset allocation and summary**

Treasury Pool	Target Percent Allocation	Performance Benchmark
Short-term Fixed Income Pool	47%	Three-Month U.S. Treasury Bill
Intermediate-Term Fixed Income Pool	33%	Barclays 1-3 Year Gov't Bond Index
Broad Market Fixed Income Pool	20%	Barclays US Aggregate
Investment Balance: September 30, 2014 ⁽²⁾	3,724.7	\$ millions
Long-term Expected Rate of Return	2.38%	Callan's returns
Probability of Negative Return Over 1 Year	6.59%	

**Figure 7-C: Statutory budget reserve fund
Moderate risk: short to intermediate horizon**



*Short-term: 3-month U.S. T-Bill;
Intermediate Term: Barclays 1-3 Year Gov't Bond Index;
Broad Market: Barclays U.S. Aggregate;

transfers occurring during FY 2015. Since the increase in oil prices beginning in 2003, no significant CBRF withdrawals have been necessary to balance the State's budget. However, the State may have to depend on the CBRF in the future should state revenues decline and spending remain at current levels. Table 7-7 is a matrix that estimates the time period in which the CBRF would be depleted, depending on the price of oil, percent change in the budget, and the current production forecast. On the right-hand side of the matrix are estimates based on the official price forecast for fall 2014. In the event of a budget deficit, the SBRF would be the first fund to be drawn down, and upon depletion, would be followed with draws upon the CBRF. Table 7-7 shows that, given the current oil price and production forecast and an

assumption of 2% budget decreases from FY 2016 levels, the CBRF would not be depleted within a 10-year time horizon. However, projecting out an oil price of \$80 with the current production forecast, and an assumption of 2% budget increases, the CBRF could be depleted as early as 2018.

⁽¹⁾Statutory Budget Reserve Fund was segregated from the general fund and given its own asset allocation July 1, 2013.

⁽²⁾ The SBRF balance at September 30, 2014 reflects draws for general fund cash needs. Please see http://treasury.dor.alaska.gov/Portals/0/docs/cash_management/fy15a.pdf

Table 7-5: Constitutional budget reserve fund; cash flows

	Actual FY 2014	(\$ millions) Projected	
		FY 2015	FY 2016
Beginning Cash Balance CBRF	11,564.4	12,779.7	9,589.9
Beginning Main Account Balance	5,764.0	6,057.8	2,622.3
Earnings on Main Account Balance ⁽¹⁾	84.6	24.8	28.9
Petroleum Tax, Royalty Settlements ⁽²⁾⁽³⁾	209.2	20.0	20.0
(Loan to GF)/Repayment to CBRF	-	-	-
Draw from/to GF	-	(480.3)	(3,637.8)
TO PERS / TRS	-	(3,000.0)	-
Transfer from sub to rebalance	-	-	3,750.0
Ending Main Account Balance	6,057.8	2,622.3	2,783.4
Beginning Special Subaccount Balance	5,800.4	6,721.9	6,967.6
Earnings on Special Subaccount Balance ⁽¹⁾	921.5	245.7	328.1
Transfer to Subaccount from Main Acct	-	-	(3,750.0)
Ending Special Subaccount Balance	6,721.9	6,967.6	3,545.7
Total CBRF Balance	12,779.7	9,589.9	6,329.1

⁽¹⁾The long-term earnings estimate for the main account is 2.375% and the long-term earnings estimate for the special subaccount is 6.31%. These projections are based on 2014 Callan's capital market assumptions and Department of Revenue, Treasury Division's asset allocation.

⁽²⁾Settlement estimates are provided by the Department of Revenue and Department of Law, net of annual Federal Minerals Management Service payments.

⁽³⁾The petroleum tax, royalty settlements number on this sheet is shown on a cash basis. Please note the State accounting system numbers presented elsewhere in this book include accruals and therefore may differ from the numbers presented here.

Table 7-6: Constitutional budget reserve fund revenue

	(\$ millions)		
	Actual	Projected	
Restricted - Other Restricted	FY 2014	FY 2015	FY 2016
Regular Account	84.6	24.8	28.9
Special Subaccount	921.5	245.7	328.1
Total	1,006.1	270.5	357.0

Table 7-7: CBRF depletion date⁽¹⁾

Annual State Budget (% change start- ing FY 2017)	Fiscal Model of Oil Revenue & CBRF Performance at Selected Prices (\$ per barrel starting FY 2015) ⁽²⁾						Fall 2014 Oil Price Forecast ⁽³⁾
	\$60	\$70	\$80	\$90	\$100	\$110	
-4%	Apr-2018	Aug-2018	Mar-2019	Oct-2020	Nov-2024	Jun-2025	Jun-2025
-2%	Jan-2018	Jun-2018	Sep-2018	Feb-2020	Aug-2022	Jun-2025	Jun-2025
0%	Nov-2017	May-2018	Aug-2018	Sep-2019	Jul-2021	Jan-2024	Jun-2025
2%	Oct-2017	Feb-2018	Jul-2018	May-2019	Sep-2020	Aug-2022	Oct-2024
4%	Sep-2017	Dec-2017	Apr-2018	Jan-2019	Mar-2020	Aug-2021	Jun-2023
6%	Aug-2017	Oct-2017	Feb-2018	Sep-2018	Oct-2019	Dec-2020	Jun-2022

⁽¹⁾Based on the current forecast and the assumption that in the occurrence of a budget deficit, the SBRF would be the first fund to be drawn down, and upon depletion, would be followed with draws upon the CBRF.

⁽²⁾Matrix allows reader to select specific fiscal year price (from FY 2015-beyond), with anticipated percent change in budget to determine CBRF exhaustion date. Fall 2014 forecasted production volumes are used. A date of Jun-2025 indicates that the CBRF does not run-out before that date.

⁽³⁾See Figure B-1b for Fall 2014 oil price forecast used in base scenario.

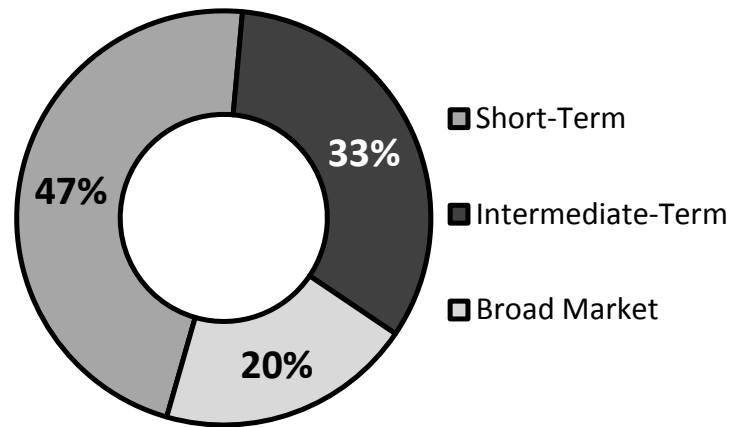
**Table 7-8: Constitutional budget reserve fund;
Main account asset allocation and summary**

Treasury Pool	Target Percent Allocation	Performance Benchmark
Short-term Fixed Income Pool	47%	3-Month U.S. Treasury Bill
Intermediate-Term Fixed Income Pool	33%	Barclays 1-3 Year Government Bond Index
Broad Market Fixed Income Pool	20%	Barclays US Aggregate
Bank Bonds	0%	Allocation up to 2%
<hr/>		
Regular Account Balance: September 30, 2014	5,054.9	\$ millions
Long-term Expected Rate of Return	2.38%	Callan's returns
Probability of Negative Return Over 1 Year	6.59%	

**Table 7-9: Constitutional budget reserve fund;
Special subaccount asset allocation and summary**

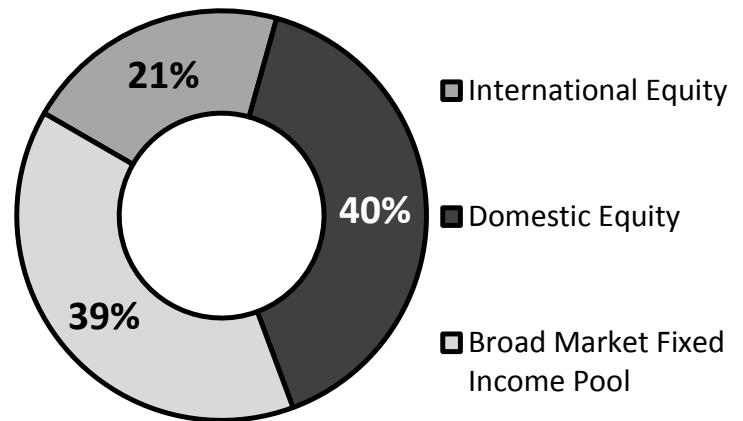
Treasury Pool	Target Percent Allocation	Performance Benchmark
Broad Market Fixed Income Pool	39%	Barclays US Aggregate
Domestic Equity Pool	40%	Russell 3000 Index
International Equity Pool	21%	MSCI EAFE Index
Short-term Fixed Income Pool	0%	Allocation up to 2%
<hr/>		
Special Subaccount Balance: September 30, 2014	6,646.4	\$ millions
Long-term Expected Rate of Return	6.31%	Callan's returns
Probability of Negative Return Over 1 Year	28.88%	

**Figure 7-D: Main constitutional budget reserve fund
Moderate risk: intermediate investment horizon**



*Short-term: 3-month U.S. T-Bill;
Intermediate Term: Barclays 1-3 Year Gov't Bond Index;
Broad Market: Barclays U.S. Aggregate

**Figure 7-E: Constitutional budget reserve subaccount
High risk: moderately long investment horizon**



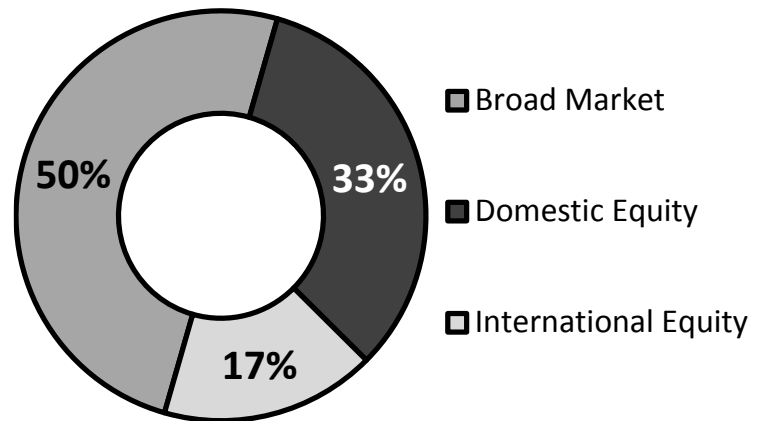
*Broad Market: Barclays U.S. Aggregate; Domestic Equity: Russell 3000 Stock Index; International Equity: MSCI EAFE

Table 7-10: Public school fund revenue

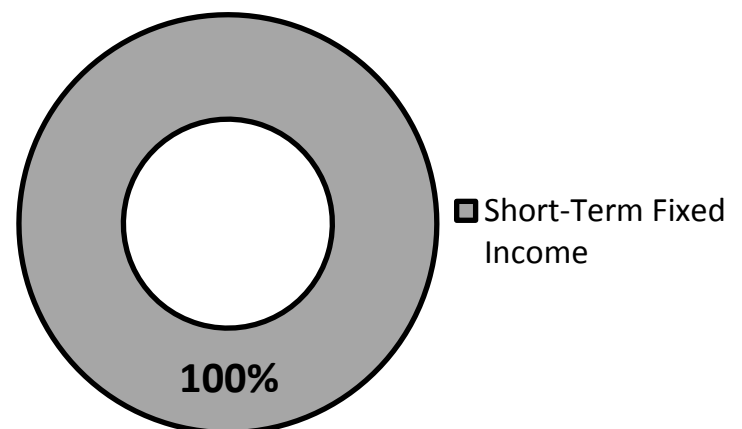
	(\$ millions)		
	Actual	Projected	
Restricted - Designated General Fund	FY 2014	FY 2015	FY 2016
Public School Trust Total Investment Income	62.5	19.3	33.4
Public School Trust Income Distributed ⁽¹⁾	6.5	12	13

**Table 7-11: Public school trust;
Asset allocation and summary**

Treasury Pool	Target Percent Allocation	Performance Benchmark
Broad Market Fixed Income Pool	50%	Barclays US Aggregate
Domestic Equity Pool	33%	Russell 3000 Index
International Equity Pool	17%	MSCI EAFE
Short-term Fixed Income Pool	0%	Allocation up to 2%
Public School Fund Balance: September 30, 2014 ⁽²⁾	572.7	\$ millions
Long-term Expected Rate of Return	5.85%	Callan's returns
Probability of Negative Return Over 1 Year	26.77%	

**Figure 7-F: Public school trust fund
Moderate risk: long-term investment horizon**

*Broad Market: Barclays U.S. Aggregate;
Intermediate Term: Barclays 1-3 Year Gov't Bond Index;
Domestic Equity: Russell 3000 Stock Index;

**Figure 7-G Public school trust fund
Low risk: short-term investment horizon**

*Short-term: 3-month U.S. T-Bill

⁽¹⁾Public School Trust Fund Income Distributed reflects the EED Actual and Projected Appropriations.

⁽²⁾Includes the balance of the Public School Trust Fund Principal and Income Account.

Table 7-12: Alaska permanent fund revenue

	(\$ millions)		
	Actual	Projected	
Restricted - Other Restricted	FY 2014	FY 2015	FY 2016
Annual Unrealized Gain/Loss	3,285.0	416.8	434.2
Annual Realized Earnings/Loss	3,562.7	2,629.6	2,741.1
Reported Earnings	6,847.7	3,046.4	3,175.3

**Table 7-13: Alaska permanent Fund;
Account asset allocation and summary**

Treasury Pool	Target Percent Allocation	Performance Benchmark
Stocks	36%	Multiple Strategies
Bonds and Cash	23%	Multiple Strategies
Real Estate	12%	Multiple Strategies
Private Equity	6%	Multiple Strategies
Absolute Return Strategies	6%	Multiple Strategies
Infrastructure	4%	Multiple Strategies
Other	13%	Multiple Strategies
Account Balance: June 30, 2014"	51,213.7	\$ Millions
Long-Term Expected Rate of Return	6.15%	Callan's returns

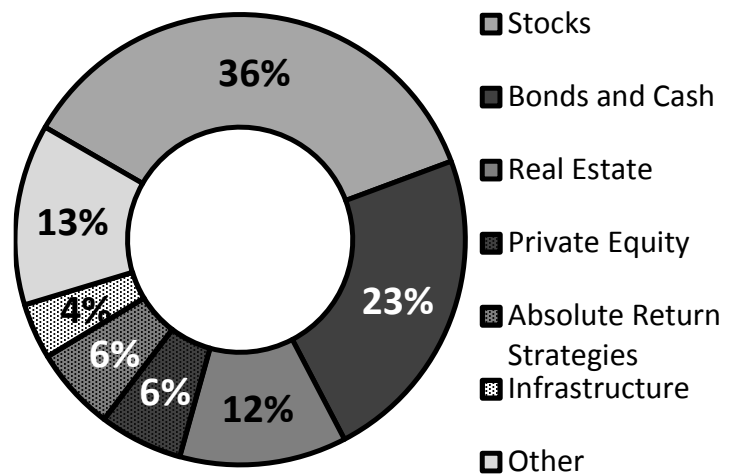
**Figure 7-H: Alaska permanent fund
target asset allocation**

Table 7-14: 2014 Summary of Callan Associates, Inc.
Long-term capital market projections

Asset Class	Benchmark for Asset Class	Projected Return: Ten-Year Geometric*	Projected Risk: Standard Deviation	% Projected Return within One Standard Deviation										
				-30	-20	-10	0	10	20	30	40			
Equities														
Broad Domestic Equity	Russell 3000 Index	7.60%	19.00%											
Global ex-US Equity	MSCI ACWI ex-USA	7.80%	21.45%											
International Equity	MSCI EAFE	7.50%	20.20%											
Fixed Income														
Domestic Fixed	Barclays Aggregate	3.00%	3.75%											
High Yield	Barclays High Yield	5.05%	11.45%											
Government 1-3	Barclays Gov't 1-3 Year	2.50%	2.40%											
TIPS	Barclays TIPS	3.00%	5.30%											
Long Duration	Barclays Long Gov't / Credit	4.10%	11.40%											
Non-U.S. Fixed	Citi Non-USD World Gov't	2.75%	9.40%											
Emerging Market Debt	JPM EMBI Global Div.	4.90%	10.65%											
Other														
Private Equity	TR Post Venture Cap	8.50%	33.05%											
Real Estate	Callan Real Estate	6.15%	16.50%											
Hedge Funds	Callan Hedge FoF	5.10%	8.85%											
Commodities	DJ-UBS Commodity	2.75%	18.25%											
Cash Equivalents	90-Day T-Bill	2.00%	0.90%											
Inflation	CPI-U	2.25%	1.50%											

*Geometric returns are derived from arithmetic returns and the associated risk (standard deviation)

8

Credits



Introduction

Tax credits are an element of tax law that provides incentives for certain activities via a direct reduction in a taxpayer's tax liability. Alaska's tax code provides for a wide range of credits. This chapter provides an overview of the various credits, how they are earned, their limitations, and their revenue impact. Other types of tax expenditures, such as exemptions and exclusions are not included in this chapter, but are detailed in DOR's Alaska Indirect Expenditure Report, a new publication in 2014.

Many tax credits can be applied only in the tax year in which the credit is earned, but some can be carried forward into future years. In some cases, credits are recognized by a tax program when they are applied to an annual or quarterly tax return. These tax credits can be difficult to forecast, as many credits are contingent upon discretionary spending or investments on the part of taxpayers. There are several credit programs that are exceptions, however, and have an approval process prior to the issuance of the credit. One such program is the film production tax credit, which has an extensive approval process prior to issuing credits. Other programs include tax credits applicable to the oil and gas production tax, which are an integral part of the overall fiscal regime, and are built into revenue forecasts.

Recent Developments

In 2014, the 28th Alaska Legislature passed House Bill 306, an act requiring DOR to submit a biennial report to the Legislature detailing indirect expenditures of all agencies in the State under AS 21.06.110. Indirect expenditures include tax credits or other credits, exemptions, discounts, deductions, and differential allowances. HB 306 also imposed or modified sunset dates on certain credits: The Winn Brindle Scholarship tax credit and Salmon Utilization tax credit in 2016, the Film Production Tax credit and the Education credit in 2018, and the Salmon Product and Herring Development credit and Community Development Quota credit in 2020.

Also in 2014, a new credit for qualified infrastructure expenditures for in-state oil refineries was established by House Bill 287 under AS 43.20.053. The former Salmon Product Development Credit, AS 43.75.035, was amended to include herring products, and is now the Salmon and Herring Product Development Credit. House Bill 278 expanded the Education Credit qualifications to include contributions to public or private nonprofit elementary or secondary schools, qualified apprenticeship programs, and regional vocational training schools.

For the North Slope, Senate Bill 21, passed in 2013, amended AS 43.55.023 to allow producers or explorers with qualified capital expenditures to apply 100% of those credits in a calendar year, where previously, only 50% could be applied each calendar year. This change accelerated the use of those credits during calendar year 2013, and as a result, both FY 2013 and FY 2014 show higher than average use of capital expenditure credits.

Oil and Gas Tax Credit Fund

The Oil and Gas Tax Credit Fund, established under AS 43.55.028, was created for the State to purchase certain oil and gas tax credit certificates. Money in this fund is appropriated annually by the Legislature for state purchase of certain transferrable oil and gas tax credit certificates. Credits available for state purchase include the transferrable production tax credits under AS 43.55.023 and AS 43.55.025. Non-transferrable credits are not available for state purchase, and state purchase is only available for companies with fewer than 50,000 British Thermal Units (BTU) equivalent barrels per day of production. This fund allows companies undertaking exploration and development activity to monetize

Table 8-1: FY 2012-2014 Tax credits claimed

	Total Credits Claimed in (\$ millions)		
	History		
	FY 2012	FY 2013	FY 2014 ⁽¹⁾
Credits Applicable to the Oil and Gas Production Tax			
Alternative Credit for Exploration, Cook Inlet Jack-Up Rig Credit, and Frontier Basin Credit	\$57	\$11	\$59
Carried-Forward Annual Loss Credit	Totals included in Qualified Capital Expenditure Credit		
Cook Inlet Jack-Up Rig Credit	Totals included in Alternative Credit for Exploration		
Exploration Incentive Credit	\$0	\$0	\$0
Frontier Basin Credit	Totals included in Alternative Credit for Exploration		
Per-Taxable-Barrel Credit	Credit program began on January 1, 2014		\$492
Qualified Capital Expenditure Credit, Well Lease Expenditure Credit, and Carried-Forward Annual Loss Credit	\$606	\$854	\$861
Small Producer / New Area Development Credit	\$53	\$53	\$54
Transitional Investment Expenditure Credit	Cannot be reported due to taxpayer confidentiality		
Credits Applicable to the Corporate Income Tax			
Film Production Credit	\$3	\$6	\$21
Gas Exploration and Development Credit	Cannot be reported due to taxpayer confidentiality		
Gas Storage Facility Credit	\$0	\$0	\$15
In-State Gas Refinery Credit	Credit program began on January 1, 2014		
Internal Revenue Code Credits Adopted by Reference	Not tracked		
LNG Storage Facility Credit	Credit program began in 2012	\$0	\$0
Oil and Gas Industry Service Expenditures Credit	Credit program began on January 1, 2014		
Veteran Employment Tax Credit	Credit program began in FY 2013	\$0	\$0
Credits Applicable to Multiple Tax Programs			
Education Tax Credit	\$4	\$7	\$3
Minerals Exploration Incentive Credit	\$6	\$6	\$0
Credits Applicable to Fisheries Taxes			
Winn Brindle Scholarship Contributions Credit	<\$1	<\$1	<\$1
Salmon and Herring Product Development Credit	<\$1	\$2	(<\$1) ⁽²⁾
Community Development Quota Credit	<\$1	<\$1	<\$1
Other Taxes Credit	Not tracked		
Total All Reportable Tax Credits	\$732	\$940	\$1,506

⁽¹⁾FY 2014 credit totals are estimated pending annual tax filings.

⁽²⁾Salmon & Herring Product Development Credits accounted for in FY 2014 were negative as a result of adjustments to prior year credits.

Table 8-2: History of production tax credits 2008-2014

	(\$ millions)							
Fiscal Year	2007	2008	2009	2010	2011	2012	2013	2014⁽¹⁾
Statewide Credits								
Credits Used against Tax Liability	557	378	333	412	386	363	549	888
Credits Purchased by the State ⁽²⁾	55	54	193	250	450	353	369	593
Total Statewide Production Tax Credits	612	432	526	662	836	716	918	1,481

the full value of their tax credits when they do not have an offsetting tax liability. Additionally, certain Corporate Income Tax credits under AS 43.20 are also eligible for state purchase from the Oil and gas tax credit fund, including the Gas Storage Facility Credit, the In-State Refinery Tax Credit, and the LNG Storage Facility Credit.

DOR expectations for credits purchased by the state are partly dependent on oil forecasts. At lower oil prices, more producers incur a net operating loss, which increases the amounts of carried-forward annual loss credits eligible for state purchase. At higher oil prices, the same producers may have a smaller net operating loss, or a positive tax liability before credits. As a result, credits for potential state purchase will increase as oil prices decrease. This feature of the tax system is one of the primary reasons that the forecast for credits purchased by the state in FY 2015 and FY 2016 increased over the prior forecast. Oil price expectations for FY 2015 and FY 2016 have been reduced, and we are now forecasting credits purchased by the state of \$625 million in FY 2015 and \$700 million in FY 2016, as

shown in Table 8-3.

Credits Applicable to the Oil and Gas Production Tax

Alternative Credit for Exploration

The Alternative Credit for Exploration is a transferable credit for expenditures for certain oil and gas exploration activities. Outside of Cook inlet, the credit is 40% for seismic costs outside an existing unit, 30% for drilling costs greater than 25 miles from an existing unit, 30% for pre-approved new targets greater than 3 miles from an existing well, and 40% for pre-approved new targets greater than 3 miles from a well and greater than 25 miles from an existing unit. The 3-mile limit does not apply for wells in “Frontier Basins,” as described under the Frontier Basin Credit below. For Cook Inlet, the credit is 40% for seismic costs outside an existing unit, 30% for drilling costs greater than 10 miles from an existing unit, 30% for pre-approved new targets, and 40% for drilling costs that are greater than 10 miles from an existing unit and pre-approved new targets. The credit expires on July 1, 2016 for the North Slope and Cook Inlet; for areas other than the North Slope and Cook Inlet, the credit expires January 1, 2022.

Carried-Forward Annual Loss Credit

This credit is a transferable credit for a carried-forward annual loss, defined as a producer or explorer’s adjusted lease expenditures that are not deductible in calculating production tax values for the calendar year. For areas outside the North Slope, the credit is 25% of the carried-forward annual loss. Beginning January 1, 2014, the credit for carried-forward annual losses incurred on the North Slope increased to 45% of the loss, and certificates for these credits may be taken in a single year. On January 1, 2016, the credits for losses incurred on the North Slope decreases to 35% of the loss.

Cook Inlet Jack-Up Rig Credit

This credit is for exploration expenses for the first three wells drilled by the first jack-up rig brought in to Cook Inlet. It is only for expenses incurred in drilling wells that test pre-tertiary; all three wells must be drilled by unaffiliated parties using the same rig. The credit is 100% of costs for the first well up to \$25 million, 90% of costs for the second well up to \$22.5 million, and 80% of costs for the third well up to \$20 million. If the exploration well is brought into production, the operator repays 50% of the credit over ten

⁽¹⁾FY 2014 credit totals are estimated pending annual tax filings.

⁽²⁾ Credits Purchased by the State consists primarily of production tax credits purchased, but also includes corporate income tax credits available for state purchase from the Oil and Gas Tax Credit Fund. These include the gas storage facility credit, LNG storage facility credit, and refinery credits.

Table 8-3: Fall 2014 10-year forecast for production tax credits

(\$ millions)

Fiscal Year	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Statewide Credits										
Credits Used against Tax Liability	750	510	1,180	990	810	710	650	490	460	400
Credits Purchased by the State	625	700	400	250	250	250	250	250	250	250
Total Statewide Production Tax Credits	1,375	1,210	1,580	1,240	1,060	960	900	740	710	650

years following production start-up.

Exploration Incentive Credit

The exploration incentive credit is a non-transferrable credit for the cost of drilling or seismic work performed under a limited time period established by the Commissioner of the Department of Natural Resources. Credit may be granted for up to 50% of the cost of drilling or seismic work, not to exceed 50% of the tax liability to which it is being applied. This credit may also be applied against the State royalty.

Frontier Basin Credit

The Frontier Basin Credit is for expenses for the first four persons to drill exploration wells and the first four persons to conduct seismic projects within an area designated in AS 43.55.025(p), also called the "Frontier Basins." The credit is for the lesser of 80% of qualified exploration drilling expenses or \$25 million; or for seismic projects, credit is for lesser of 75% of qualified seismic exploration expenditures or \$7.5 million. It includes expenditures incurred for work performed after June 1, 2012 and before July 1, 2016.

Per-Taxable-Barrel Credit

Beginning January 1, 2014, there is a per-taxable-barrel credit for oil production on the North Slope. This credit cannot be transferred, carried forward, or used to

reduce the producer's tax liability to less than zero.

In areas that qualify for a gross value reduction (GVR), the credit is \$5 per taxable barrel. Those areas are defined in AS 43.55.160(f) and (g).

For areas that do not qualify for a GVR, the credit ranges from \$0 to \$8 per taxable barrel based on price. The sliding scale credit is a dollar-per-taxable-barrel credit ranging from zero dollars per barrel at per-barrel gross value at point of production (GVPP) values greater than \$150 to \$8 per barrel at per-barrel GVPP values less than \$80. The credit for non-GVR eligible oil may not reduce the producer's tax liability to less than the minimum tax established under AS 43.55.011(f).

The vast majority of oil produced on the North Slope is not GVR-eligible. Therefore, the structure of the per-taxable-barrel credit is such that as the price of oil increases, the dollar value of the credit decreases. Likewise, when the price of oil decreases, the dollar value of the credit increases.

Qualified Capital Expenditure and Well Lease Expenditure Credit

This credit is a transferable tax credit for qualified oil and gas capital expenditures in the State and outside the North Slope. It can be taken in lieu of exploration incentive credits under AS 43.55.025 and gas exploration credits under AS

43.20.043. The credit is 20% of eligible capital expenditures, or 40% for qualified well lease expenditures. As of January 1, 2014, the qualified capital expenditure credit is no longer available for North Slope capital expenditures.

Small Producer / New Area Development Credit

The Small Producer Credit is a non-transferable credit for oil and gas produced by small producers, defined as having average taxable oil and gas production of less than 100,000 BTU equivalent barrels per day. The credit is available until the later of 2016 or nine years after the first commercial production of oil and gas on the properties for which the credit applies. The small producer credit is capped at \$12 million annually for producers with less than 50,000 BTU equivalent barrels per day. The credit then phases out, reaching to zero for producers with 100,000 or more BTU equivalent barrels per day. The credit may only be used against a tax liability, providing the producer has a positive tax liability before the application of credits.

The New Area Development Credit is a credit of up to \$6 million per company annually, for oil or gas produced from leases outside Cook Inlet and south of 68 degrees North latitude, providing the producer has a positive tax liability on that production before the application

of credits. The credit is available until the later of 2016 or nine years after the first commercial production of oil and gas on the properties for which the credit applies.

Transitional Investment Expenditure Credit

The transitional investment expenditure credit is a non-transferable credit for qualified oil and gas capital expenditures incurred between March 31, 2001 and April 1, 2006. It is only available to companies that did not have production in commercial quantities prior to January 1, 2008. The credit is 20% of qualified oil and gas capital expenditures incurred between March 31, 2001 and April 1, 2006, not to exceed 10% of the capital expenditures incurred between March 31, 2006 and January 1, 2008. The credit was only available until December 31, 2013.

Credits Applicable to Corporate Income Tax

Gas Exploration and Development Credit

The Gas Exploration and Development Credit is a non-transferable credit for qualified expenditures for the exploration and development of non-North Slope natural gas reserves. The credit is 25% of qualified expenditures for investment after January 1, 2010; investments in existing units qualify. The credit is capped at 75% of tax liability as calculated before applying other credits.

Gas Storage Facility Credit

The Gas Storage Facility Credit is a non-transferable credit for the costs incurred to establish a natural gas storage facility. The credit is \$1.50 per thousand cubic feet of “working gas” storage capacity as determined by the Alaska Oil and Gas Conservation Commission. It does not apply to gas storage related to a gas sales pipeline on the North Slope. To qualify,

the facility must operate as a public utility regulated by the Regulatory Commission of Alaska with open access for third parties. It is effective for facilities placed into service between January 1, 2011 and December 31, 2015. The maximum credit is the lesser of \$15 million or 25% of costs incurred to establish the facility.

In-State Refinery Tax Credit

The In-State Refinery Tax Credit is a credit for qualified infrastructure expenditures for in-state oil refineries. The credit may not exceed the lesser of 40% of total qualifying expenditures or \$10 million per tax year per refinery. The credit can be applied against corporate income tax liability and carried forward for up to five years, or purchase by the state via the Oil and Gas Tax Credit Fund. The authorizing statute will sunset on December 31, 2019.

Internal Revenue Code Credits Adopted By Reference

Under Alaska’s blanket adoption of the federal Internal Revenue Code, taxpayers can claim all federal incentive credits. Federal credits that refund other federal taxes are not allowed. Multistate taxpayers apportion their total federal incentive credits. In most cases, the credit is limited to 18% of the amount of the credit determined for federal income tax purposes which is attributable to Alaska.

LNG Storage Facility Credit

The LNG Storage Facility Credit is a non-transferable, refundable credit for the costs incurred to establish a storage facility for liquefied natural gas. The credit is lesser of \$15 million or 50% of costs incurred to establish the facility. It applies to facilities with a minimum storage capacity of 25,000 gallons of LNG, and that are public utilities regulated by the Regulatory Commission of Alaska. It is for facilities placed into service after January 1, 2011.

Oil and Gas Industry Service Expenditures Credit, AS 43.20.049

The Oil and Gas Industry Service Expenditures Credit is a credit of 10% of qualified oil and gas industry service expenditures that are for in-state manufacture or in-state modification of oil and gas tangible personal property with a service life of three years or more. The credit may be applied to corporate income tax liabilities in amounts up to \$10 million per taxpayer per year. The credit is effective for expenditures incurred after January 1, 2014. The credit is not transferable but any amount of the credit that exceeds the taxpayer’s liability may be carried forward up to five years.

Minerals Exploration Incentive Credit

See “Credits Applicable to Multiple Tax Programs.”

Veteran Employment Tax Credit

The Veteran Employment Credit is a non-transferable credit for corporate income taxpayers that employ qualified veterans in the State. A “qualified veteran” is a veteran who was unemployed for more than four weeks preceding the employment date and who was discharged or released from military service not more than ten years before employment date (for a disabled veteran) or not more than two years before employment date (for a veteran who is not disabled). The credit is \$3,000 for a disabled veteran or \$2,000 for a veteran who is not disabled for employment for a minimum of 1,560 hours during 12 consecutive months following the veteran’s employment date. For seasonal employment, the credit is \$1,000 for a veteran employed for a minimum of 500 hours during three consecutive months following the employment date.

Credits Applicable to

Fisheries Taxes

Community Development Quota Credit

The Community Development Quota Credit is a non-transferable credit for contributions to an Alaska nonprofit corporation that is dedicated to fisheries industry-related expenditures. The credit is available only for fishery resources harvested under a community development quota (CDQ). The credit is 100% of their contribution amount up to a maximum of 45.45% of tax liability on fishery resources harvested under a CDQ. The authorizing statute is scheduled to sunset on December 31, 2020.

Other Taxes Credit

The Other Taxes Credit is a non-transferable credit for taxes paid to another jurisdiction on fishery resources landed in Alaska. The credit is 100% of taxes paid with a maximum of 100% of the Alaska tax liability on the fishery resources.

Salmon and Herring Product Development Credit

The Salmon and Herring Product Development Credit is a non-transferable credit for eligible capital expenditures to expand value-added processing of Alaska salmon and herring, including ice-making machines. The credit is 50% of qualified investments up to 50% of tax liability incurred for processing salmon and herring during the tax year. The credit may be carried forward for three years, but the authorizing statute is scheduled to sunset on December 31, 2020. Herring products were added to the credit in 2014.

Winn Brindle Scholarship Contributions Credit

The Winn Brindle Scholarship Contributions Credit is applicable to both the Fisheries Business Tax and the

Fishery Resource Landing Tax. It is a non-transferable credit for contributions to the A.W. "Winn" Brindle memorial education loan account. The credit is 100% of the contribution amount, up to a maximum of 5% of tax liability. This credit will sunset on December 31, 2016.

Credits Applicable to Multiple Tax Programs

Education Credit

The Education Credit is a non-transferable credit applicable to the Corporate Income Tax, Fisheries Business Tax, Fishery Resource Landing Tax, Insurance Premiums Tax, Title Insurance Premiums Tax, Mining License Tax, Oil and Gas Production Tax, and the Oil and Gas Property Tax. Taxpayers can claim a credit for contributions to vocational educational programs, accredited non-profit, public or private Alaska universities or colleges, Alaska public or private non-profit elementary or secondary schools, annual intercollegiate sports tournaments, Alaska Native educational programs, facilities that qualify under the Coastal American Partnership, qualified apprenticeship programs, nonprofit regional training centers, the Alaska higher education investment fund, a postsecondary institution in the state providing dual-credit courses, a residential school in the state, and the Department of Education and Early Development. The credit is available for up to 50% of annual contributions up to \$100,000, 100% of the next \$200,000, and 50% of annual contributions beyond \$300,000. The credit for any one taxpayer cannot exceed \$5,000,000 annually across all eligible tax types.

Film Production Credit

The Film Production Credit is a transferable credit for expenditures on eligible film production activities

in Alaska. Effective July 1, 2013: 1) a producer must spend at least \$75,000 in qualified expenditures over a consecutive 24-month period to qualify; 2) the credit is 30% of eligible film production expenditures, plus an additional 20% credit for wages paid to Alaska residents, plus an additional 6% credit for filming in a rural area, plus an additional 2% credit for filming between October 1 and March 30; 3) the credits must be used within six years; 4) in addition to corporate income tax, the tax credit now also applies to the insurance premium tax, title insurance tax, oil and gas production tax, oil and gas property tax, mining license tax, fisheries business. The program is capped at a \$300 million maximum budget for all projects and the credit will sunset on December 31, 2018.

Minerals Exploration Incentive Credit

The Minerals Exploration Incentive Credit is applicable to the Corporate Income Tax, Mining License Tax, and Mineral Production Royalty. It is a non-transferable credit for eligible costs of mineral or coal exploration activities. The credit is 100% of allowable exploration costs with a maximum of \$20 million per mining operation and must be used within fifteen years. For mining license tax (MLT), the credit is limited to the lesser of 50% of the MLT liability at the mining operation at which the exploration occurred or 50% of total MLT liability. For the corporate income tax, it is limited to the lesser of 50% of the MLT liability at the mining operation at which the exploration occurred or 50% of total CIT liability. For mineral royalty, the credit is limited to 50% of royalty liability from the mining operation at which the exploration activity occurred.

9

State Endowment Funds



General Discussion

This section compares important attributes of five 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.

The fiduciary for each of these endowment funds has the responsibility for establishing an asset-allocation policy for the fund. Table 9-1 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 five of these endowments report annual income on this basis. However, three 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, and the Public School 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, 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.

Alaska Permanent Fund

The annual distribution for the permanent fund dividend follows the formula in AS 37.13.140-.145, 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.

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

Current statute requires net income earned on the cash principal of the fund to be calculated by the Alaska Permanent Fund Corporation in the same manner used to determine the net income of the Alaska permanent fund. Accumulated undistributed earnings in one year are available for distribution in subsequent years. The board of trustees has established an asset management policy that limits the annual payout to 4.25% of the four year moving average net asset value of its investment accounts plus other revenues and recoveries including spendable income generated by the DNR Trust Land Office, interest earned on cash holdings, and the unexpended balance of expired appropriations lapsing back to the fund.

The Trust also has adopted a policy to periodically make transfers and/or assign

Table 9-1: State endowment funds' target asset allocations

	(%)								
	Cash	U.S. Bonds	International Bonds	U.S. Equities	International Equities	Global Equities	Real Estate	Alternative Investments	
Public School Trust	0	50	0	33	17	0	0	0	
Power Cost Equalization	0	33	0	44	23	0	0	0	
	Cash		Capital Appreciation		Diversifying Strategies		Inflation Sensitive		Deflation Sensitive
University of Alaska Endowment	0		60		15		10		15
	Cash and Interest Rate		Company Exposure			Real Assets		Special Opportunities	
Alaska Permanent Fund	6		55			19		20	
Mental Health Trust	6		55			19		20	
	Cash		Broad Market Fixed Income		Domestic Equity		International Equity		
Other Mental Health Trust Investments	10		29		40		21		

funds to offset the effects of inflation in order to preserve the purchasing power of the fund.

Public School Trust

The distributable income of the public school trust fund, interest and dividends, moves from the principal account assets to the income account. The transfer is conducted monthly by the Treasury Division, to a separate income account within the Trust, where it is held pending appropriation by the Legislature annually. Once appropriated, the income assets are available for expenditures that support the state public school system.

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 (PCE) Endowment

Seven percent of the amount determined by the commissioner of revenue on July 1st of each year under AS 42.45.080(c) may be appropriated for the fiscal year beginning the following July 1st for: 1) Funding the power cost equalization and rural electric capitalization fund (AS 42.45.100); 2) reimbursement to the Department of Revenue for the costs of establishing and managing the fund; and 3) reimbursement of other costs of administration of the fund.

University of Alaska Endowment

The University of Alaska's land grant endowment is invested along with the University of Alaska Foundation's endowments in a consolidated endowment fund. The consolidated endowment fund (the "Fund") is a pooled investment fund which is managed by the University of Alaska Foundation Investment Committee in accordance with an agreement and an investment policy approved by the University Board

of Regents and the Foundation Board of Trustees.

The overall objectives of the Fund are to provide a stream of relatively stable earnings in support of annual budgetary needs; and to maintain the real (inflation-adjusted) purchasing power of the Fund to the extent practicable. In order to meet these objectives the Fund desires to achieve an average annual real return of 5% of its market value, net of investment management expenses and all fees charged to the Fund over rolling five year periods.

The University of Alaska's spending allowance rate is 4.5% of the five-year moving average of the market value of the Fund measured on December 31. The University of Alaska Foundation's spending allowance rate is 4.0% of the five-year moving average of the market value of the Fund measured at December 31.

10

Public Entities and University of Alaska



Overview

The State has established the following public corporations and entities to carry out certain public policies:

- Alaska Aerospace Corporation (AAC)
- Alaska Energy Authority (AEA)
- Alaska Gasline Development Corporation (AGDC)
- Alaska Housing Finance Corporation (AHFC)
- Alaska Industrial Development and Export Authority (AIDEA)
- Alaska Mental Health Trust Authority (AMHTA)
- Alaska Municipal Bond Bank Authority (AMBBA)
- Alaska Railroad Corporation (ARC)
- Alaska Seafood Marketing Institute (ASMI)
- Alaska Student Loan Corporation (ASLC)
- University of Alaska (UA)

These eleven entities are components of state government presented in the State's Comprehensive Annual Financial Report. Information in this section is provided by these entities.

The Alaska Housing Finance Corporation, Alaska Industrial Development and Export Authority, Alaska Student Loan Corporation and Alaska Municipal Bond Bank Authority pay, or may elect to pay, some portion of their income as an annual "dividend" to the State. This chapter summarizes the missions, financing and dividends of these corporations and other public entities.

Missions, Financing and Dividends

Alaska Aerospace Corporation (AAC)

AAC 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.

The State has supported AAC through funding for capital and operating expenses. In FY 2014, the State contributed \$8.5 million to maintain operations. AAC does not pay a dividend or return capital to the State.

Alaska Energy Authority (AEA)

AEA provides loans to utilities, communities, 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 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, operates and maintains (under contractual agreements) state-owned power projects, such as the Bradley Lake Hydroelectric Project and the Alaska Intertie.

The AEA was established 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.

AEA does not pay a dividend or return capital to the State on a regular basis.

Alaska Gasline Development Corporation (AGDC)

AGDC was established in 2010, by the Legislature, and is now an independent, public corporation

Table 10-1: Public entities - FY 2014 financial facts⁽¹⁾

	(\$ millions)				
	Total Assets	Assets Less Liabilities Book Value	FY 2013 Operating Budget	FY 2014 Operating Budget	Total Positions ⁽¹⁾
Alaska Aerospace Corporation	84.8	77.5	10.5	10.6	49
Alaska Energy Authority ⁽³⁾	1,561.4 ⁽⁵⁾	1,406.2	50.1	51.7	See AIDEA ⁽²⁾
Alaska Gasline Development Corporation	392.8	370.5	3.6	11.9	38
Alaska Housing Finance Corporation	4,055.0	1,510.0	90.8	95.4	353
Alaska Industrial Development and Export Authority	1,487.5 ⁽⁵⁾	1,270.8	14.1	15.9	106
Alaska Mental Health Trust Authority	610.5	585.6	3.2	3.4	16
Alaska Municipal Bond Bank Authority	993.8	56.6	0.8	0.8	1
Alaska Railroad Corporation ⁽³⁾	1,038.1	278.2	129.1	133.3	625
Alaska Seafood Marketing Institute	21.7	17.9	24.8	29.6	19
Alaska Student Loan Corporation ⁽⁴⁾	468.7	219.6	12.9	13.3	91
University of Alaska	1,934.5	1,631.2	925.8	914.2	4,949

of the State of Alaska charged with developing North Slope natural gas for the maximum benefit of Alaskans; advancing a pipeline to deliver gas in-state at the lowest possible cost; developing other transportation mechanisms for delivering gas or non-oil hydrocarbons in-state; and assisting the Department of Revenue and the Department of Natural Resources in maximizing the value of the State's gas.

AGDC is currently pursuing two options for delivery of North Slope natural gas to Alaskans: the Alaska Stand Alone Pipeline (ASAP) project and the Alaska liquefied natural gas (LNG) project. The Corporation

is responsible for two funds from which it finances its operations and activities for both the ASAP project and the Alaska LNG project. The In-State Natural Gas Pipeline Fund (AS 31.25.100) was established in 2013 to fund the planning, financing, development, acquisition, maintenance, construction, and operation of the ASAP in-state natural gas pipeline project. The State of Alaska has appropriated approximately \$420 million to AGDC and the fund.

The Alaska Liquefied Natural Gas Project Fund (AS 31.25.110) was established in 2014 to fund state expenditures associated with the Alaska

LNG project and the State's equity participation in that venture. AGDC is authorized to acquire a 25% ownership interest in the project, on the State's behalf, including development of infrastructure and services related to transportation, liquefaction, marine terminals, marketing and commercial support. The fund has been capitalized with appropriations totaling \$69.8 million.

Alaska Housing Finance Corporation (AHFC)

Using proceeds from the sale of bonds backed by its corporate assets, AHFC purchases home mortgages from Alaska banks. Income from

⁽¹⁾ Permanent Full Time (PFT), Permanent Part Time (PPT) and Temporary (TMP) are included in total positions.

⁽²⁾ The Alaska Industrial Development and Export Authority (AIDEA) provides staff for the activities of the Alaska Energy Authority (AEA). A significant portion of AIDEA's 97-member staff is engaged in AEA programs.

⁽³⁾ The Alaska Railroad reports financial data on a calendar year basis. Assets and book value shown in this table are from audited December 31, 2013, financial statements. The revised operating budget figures shown here are for CY 2013 and 2014.

⁽⁴⁾ The Alaska Student Loan Corporation (ASLC) contracts with the Alaska Commission on Postsecondary Education (ACPE) to service its loan portfolio and provide staff support. Budget and positions reported are those of ACPE's funded by ASLC.

⁽⁵⁾ AIDEA & AEA's asset totals include deferred outflow of resources.

Table 10-2: Public entities - FY 2014 revenue and dividends

	(\$ millions)				
	Revenue	Expenditures	Net Income	Dividend	State Contribution
Alaska Aerospace Corporation	11.5	15.3	(3.8)	0.0	8.5
Alaska Energy Authority	265.9	156.5	225.3	0.0	115.9
Alaska Gasline Development Corporation	427.2	73.9	353.3	0.0	424.8
Alaska Housing Finance Corporation	308.0	313.0	(5)	10.9	0.0
Alaska Industrial Development and Export Authority	66.3	29.7	105.8	20.7	89.9 ⁽¹⁾
Alaska Mental Health Trust Authority	82.8	24.6	58.2	0.0	0.0
Alaska Municipal Bond Bank Authority	35.6	36.5	(0.8)	0.0	0.0
Alaska Railroad Corporation	184.1	169.8	14.3	0.0	0.0
Alaska Seafood Marketing Institute	22.6 ⁽²⁾	20.1	2.5	0.0	8.2
Alaska Student Loan Corporation	26.5	23.0	3.5	0.0	0.0
University of Alaska	815.8	814.9	0.9	0.0	385.9 ⁽³⁾

payments on these mortgages repays bond holders and supplements the corporation's income, thereby enabling the corporation to pay an annual dividend and/or return of capital to the State in some years. In addition to ensuring that Alaskans, especially those of low to moderate income and those in remote or underdeveloped areas of the State, have adequate housing at reasonable cost, the corporation administers federal- 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. AHFC also managed the Alaska Gasline Development Corporation as a subsid-

iary until 2013, when it became an independent entity.

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. Payments on mortgages, including additional mortgages purchased with 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.

In 2003, the 23rd Legislature enacted SCS HB 256 (the "2003" Act), which added language to the Alaska Statutes to modify and incorporate a transfer plan between AHFC and the

State. As approved and signed into law by the Governor and modified by the 24th Legislature in 2006 with SB 236, the 2003 Act calls for annual transfers that do not exceed the lesser of 75% of adjusted change in net assets for the fiscal year two years prior to the current fiscal year or \$103 million less debt service on certain State Capital Project Bonds, less any legislative appropriation of AHFC's unrestricted, unencumbered funds other than appropriations of its operating budget. Since 1991, AHFC has paid nearly \$2 billion in dividends to the State, including \$10.9 million in FY 2014.

Alaska Industrial Development and Export Authority (AIDEA)

AIDEA provides various means of financing and investment to advance economic growth and job opportu-

⁽¹⁾Includes re-appropriation of \$50 million.

⁽²⁾Revenue from the Seafood Marketing Assessment Tax of \$10.2mil are included in the Revenue column, not State contribution.

⁽³⁾Does not include On-Behalf payments made by State of Alaska for pension

nities in Alaska. AIDEA's financing tools include loan participations, direct loans, credit enhancements, issuing of revenue bonds, and equity investments in projects. AIDEA makes financing available for industrial, commercial, and other business enterprises in Alaska. The corporation generates income from interest on its loans, investments, leases, and operations of its properties.

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. Since then, it has sustained itself without further state assistance while also paying annual dividends to the State.

As defined by statute, AIDEA must make available to the State each year not less than 25% and not more than 50% of its audited "net income" (as defined in statute) for the "base year." The "base year" is the fiscal year ending two years prior to the end of the fiscal year in which the dividend payment is made to the State of Alaska. In no case may the dividend exceed the base year unrestricted audited "net income." The actual transfer of the dividend requires a legislative appropriation that may be a line item vetoed by the Governor. Since 1997, AIDEA has paid over \$355 million in dividends to the State treasury, including \$20.7 million in FY 2014.

Alaska Mental Health Trust Authority (AMHTA)

The Alaska Mental Health Trust Authority is a public corporation of the State within the Department of Revenue and carries out the State's obligations under the Mental Health Enabling Act of 1956, namely to

ensure an integrated comprehensive mental health program. The Mental Health Enabling Act established the Alaska Mental Health Trust as a perpetual trust and capitalized it with one million acres of land that was to be managed to generate income for mental health services in Alaska. During the course of class action litigation, the Alaska Supreme Court concluded the State breached its fiduciary duty while managing Trust land. A 1994 settlement created the Alaska Mental Health Trust Authority and established a seven-member board of Trustees to oversee it. The settlement recapitalized the Mental Health Trust with \$200 million and one million acres of land consisting of original Trust land as well as replacement lands.

Under the terms of the settlement and state statute, the Alaska Permanent Fund Corporation manages the cash principal. The Department of Natural Resources manages the land assets and a portfolio of directly owned real estate investments. The Trust Authority operates similar to a private foundation to administer, protect and enhance the Mental Health Trust. The Trust Authority provides leadership in advocacy, planning, implementing and funding Alaska's comprehensive integrated mental health program and coordinates with state agencies on programs and services to help improve the lives of Trust beneficiaries.

Alaska Municipal Bond Bank Authority (AMBBA)

The Bond Bank loans money to Alaska municipalities for capital improvement projects. Limited State of Alaska credit support, a cross collateralized pooled reserve

fund structure, and its resulting high 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 both in bond reserves and other reserves and, by statute, must return a dividend to the State when net revenues exceed operational expenses. Between 1976 and 1986, the Legislature appropriated \$18.6 million to AMBBA to be used in funding bond issue reserves for operating costs. In addition, the Legislature gave AMBBA \$2.5 million in 1981 to fund a direct loan by a municipality. The municipality repaid the loan and the Bond Bank retained the funds. In 2012 the Legislature appropriated \$13.2 million to the Bond Bank to forgive loans from the general fund. Since its inception, the Bond Bank has transferred \$27.8 million to the State's general fund. In recent years, due to an extraordinary low interest rate environment, the earnings of the Bond Bank have been less than operating costs and no dividend has been available.

Alaska Railroad Corporation (ARC)

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.

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. The corporation does not pay a cash dividend to the general fund.

Alaska Seafood Marketing Institute (ASMI)

The institute is a marketing organization with the mission of increasing the economic value of Alaska seafood. It conducts advertising campaigns and public relations for the seafood industry. It also works directly with foodservice distributors, retailers and restaurants to build the Alaska Seafood brand. ASMI is a public-private partnership and receives funding from the State of Alaska, the federal government and private industry.

The State levies a 0.5% assessment on fisheries to support ASMI's operations, the Seafood Marketing Assessment. In addition, ASMI received \$4.3 million in federal funding and \$ 8.2 million of general funds.

Alaska Student Loan Corporation (ASLC)

The Alaska Student Loan Corporation issues debt and recycles education loan payments to finance education loans. Education loan payments satisfy debt obligations and provide funding for operations. Alaska statutes authorize the board of directors to return capital to the State based on net income. 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 (AS 14.42.220). Investment earnings on proceeds of bonds issued in 2004 under this statute are also used to finance projects of the State. The corporation issued \$163 million in bonds, the proceeds of which have been appropriated to fund capital projects of the State. 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.

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).

University of Alaska (University)

The University of Alaska is a constitutionally-created corporation of the State of Alaska which is authorized to hold title to real and personal property and to issue debt in its own name. The University is the only public institution of higher learning in Alaska. It is a statewide system that consists of three universities located in Anchorage, Fairbanks, and Juneau, with each having extended satellite colleges and sites throughout Alaska. The system's administrative offices are located on the Fairbanks campus. The University is governed by an eleven-member Board of Regents, which is appointed by the governor.

The University of Alaska System is primarily supported by the State of Alaska general fund appropriations, student tuition and fees, and grant and contract revenue from a diverse group of federal agencies, the State of Alaska and private sponsors, including the University of Alaska Foundation.

Appendices



Glossary

Constitutional Budget Reserve Fund (CBRF)

Created by voters in 1990, the CBRF 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.

Designated General Fund Revenue

General fund revenue that is designated for a specific purpose, typically using a general fund subaccount. The Legislature can at any time remove the restrictions on this category of revenue as they are solely imposed by either Alaska statute or customary practice. At times, this category of revenue may be included in legislative and public debate over the budget.

Federal Revenue

When the federal government gives money to states, it typically restricts how that money can be used. For example, 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 fund unrestricted revenue, general fund sub-account revenue, program receipts and other funds spent through the general fund. In budget reports, general fund revenue is split into revenue with no specific purpose, and revenue with a specific purpose. These categories are called unrestricted general fund revenue and designated general fund revenue, respectively.

General Fund Unrestricted Revenue

Revenue not restricted by the constitution, state or federal law, trust or debt restrictions, or customary practice. This revenue is deposited into the State's unrestricted general fund and most legislative and public debate over the budget each year centers on this category of revenue. In deriving the department's Unrestricted

Revenue figure from total general fund revenue, the department has excluded general fund subaccount revenue, as well as customarily restricted revenue such as shared taxes and pass-through revenue for qualified fisheries associations. The department has also added certain revenue such as transfers to the State treasury from the Unclaimed Property Trust and dividends from component units.

Other Restricted State Revenue

Non-federal revenue that is not deposited to the general fund or a subaccount of the general fund. This revenue is restricted by the constitution, state or federal law, trust or debt restrictions, or by customary practice.

Permanent Fund GASB (or Market) Income

Under standards adopted by the Governmental Accounting Standards Board, 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. The Legislature may appropriate the earnings for any purpose it chooses. The historical practice has been to use realized income primarily for 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

This 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 provisions 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. These

earmarked funds are categorized as designated general funds.

Restricted Revenue

Restricted revenue represents revenue that is 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, revenue allocated to sub-accounts of the general fund, and general fund revenue customarily shared with other entities are all considered restricted revenue for the purposes of this report. In this report, the department presents three categories of restricted revenue: designated general fund revenue, other restricted state revenue, and federal revenue.

Abbreviations

bbls - barrels of oil

\$/bbl - dollars per barrel of oil

bbls/day - barrels of oil per day

Acronyms

ACES - Alaska’s Clear and Equitable Share

ANS - Alaska North Slope

GVR - gross value reduction

LNG - liquified natural gas

MAPA - More Alaska Production Act

TAPS - Trans-Alaska Pipeline System

Table A-1: General fund unrestricted revenue matrices, with price sensitivity FY 2015-2017

FY 2015		FY 2016		FY 2017	
At forecasted production of 509.5 thousand bbls/day		At forecasted production of 524.1 thousand bbls/day		At forecasted production of 534.1 thousand bbls/day	
ANS \$/barrel ⁽¹⁾	GFUR	ANS \$/barrel	GFUR	ANS \$/barrel	GFUR
\$50	\$1,880	\$50	\$1,810	\$50	\$1,820
\$60	\$2,140	\$60	\$2,030	\$60	\$2,000
\$70	\$2,380	\$66.03	\$2,197	\$70	\$2,300
\$76.31	\$2,551	\$70	\$2,300	\$80	\$2,630
\$80	\$2,660	\$80	\$2,580	\$90	\$3,430
\$90	\$3,140	\$90	\$3,340	\$93.18	\$3,657
\$100	\$4,070	\$100	\$4,220	\$100	\$4,300
\$110	\$5,030	\$110	\$5,110	\$110	\$5,190
\$120	\$5,890	\$120	\$6,010	\$120	\$6,090
\$130	\$6,850	\$130	\$6,910	\$130	\$6,980
\$140	\$7,730	\$140	\$7,810	\$140	\$7,850
\$150	\$8,510	\$150	\$8,710	\$150	\$8,710

⁽¹⁾ANS \$/barrel values are fiscal year averages that incorporate actual prices for the first 5 months of FY 2015. Because oil prices averaged \$93.56 for the first 5 months, it can take a different price for the remainder of the year to bring the fiscal year average to levels in the table. For example, a fiscal year price of \$80 per barrel would require 7 months of oil prices around \$70 per barrel.

This table presents estimated general fund unrestricted revenue at a range of ANS prices, holding all other variables constant. Only production tax, royalties, and corporate income tax are adjusted for purposes of this analysis. Users should be cautioned that changes in any number of variables may cause revenue to vary significantly from amounts shown. These variables include but are not limited to production, lease expenditures, and netback costs. In addition, revenues may vary from amount shown due to changes in company decision making, company specific tax calculation issues, month to month variation in price or production, and changes in non-oil revenue.

Figure A-A: FY 2016 General fund unrestricted revenue, with price sensitivity

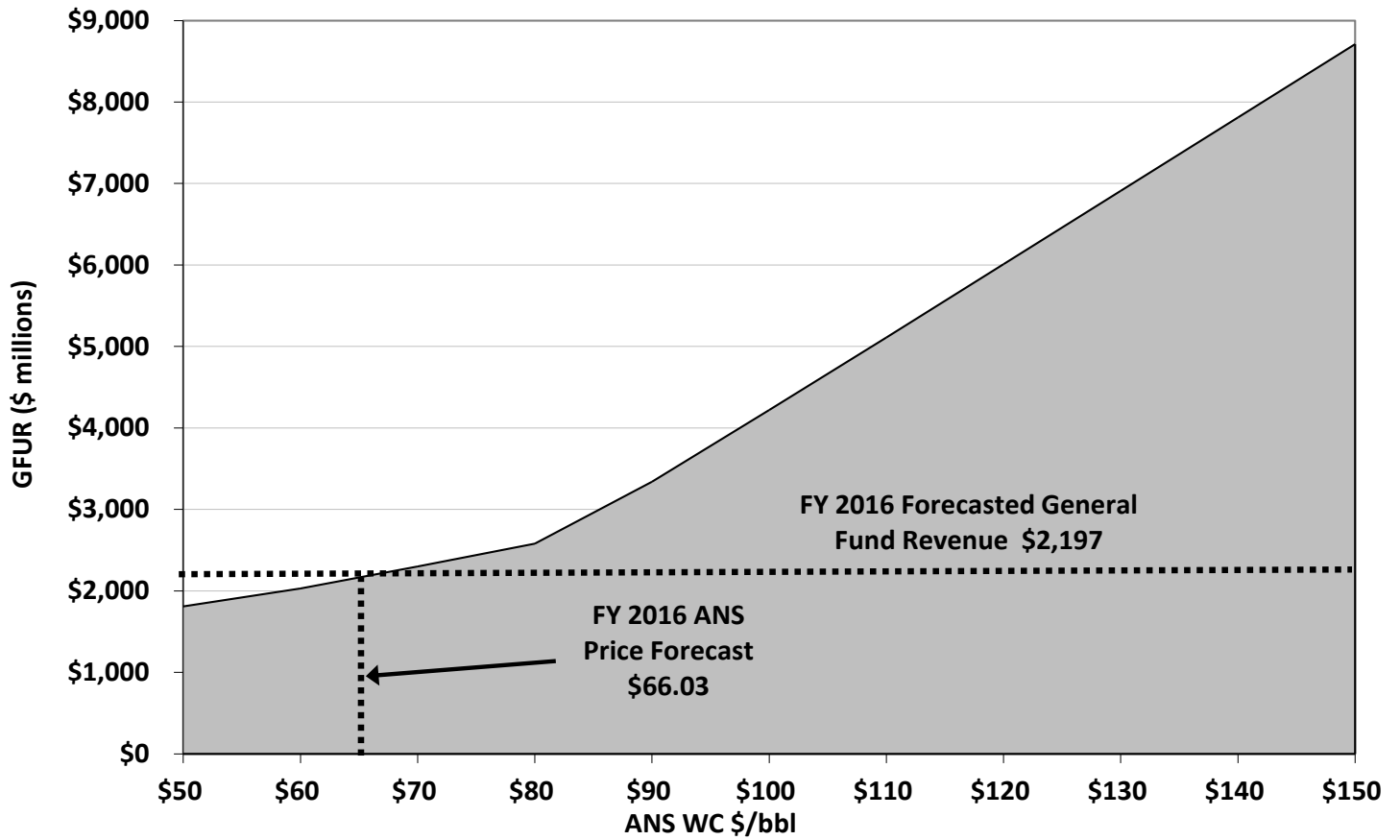


Table A-2: History of general fund unrestricted revenue⁽¹⁾, by type

	(\$ millions)									
Fiscal Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Tax Revenue										
Petroleum Property Tax	42.5	54.5	65.6	81.5	111.2	118.8	110.6	111.2	99.3	128.1
Excise Tax										
Alcoholic Beverages	17.3	17.6	17.1	20.0	19.5	19.5	19.4	19.4	19.8	18.3
Tobacco Products	25.1	35.4	43.8	44.9	46.6	45.1	46.5	45.6	44.8	42.8
Insurance Premium	45.9	44.3	46.5	47.1	45.5	50.4	49.6	54.8	52.4	55.4
Electric and Telephone Cooperative	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2
Motor Fuel Tax	39.4	42.0	39.2	41.8	10.1	28.8	39.5	40.9	41.9	39.3
Vehicle Rental tax	7.5	7.7	8.0	8.5	8.0	7.3	8.3	8.5	8.4	8.3
Tire Fee	1.6	1.6	1.5	1.5	1.5	1.4	1.5	1.4	1.4	1.3
Total	137.0	148.8	156.3	164.0	131.3	152.6	164.9	170.8	168.9	165.6
Income Tax										
General Corporate	61.8	138.0	176.9	182.7	120.9	81.9	157.7	98.5	112.5	104.1
Petroleum Corporate	524.0	661.1	594.4	605.8	492.2	446.1	542.1	568.8	434.6	316.6
Total	585.8	799.1	771.3	788.5	613.1	528.0	699.8	667.3	547.1	420.7
Oil and Gas Production Tax										
Oil and Gas Production Tax	854.9	1,191.7	2,198.3	6,810.9	3,100.9	2,860.7	4,543.2	6,136.7	4,042.5	2,589.4
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 Hazardous Release	8.3	7.8	10.1	11.7	11.1	10.3	9.7	9.4	7.8	8.8
Total	863.2	1,199.5	2,208.4	6,822.6	3,112.0	2,871.0	4,552.9	6,146.1	4,050.3	2,598.2
Fisheries Tax										
Fisheries Business Tax	10.7	15.4	17.1	14.7	19.3	14.0	20.1	26.4	19.2	25.1
Fishery Landing	3.9	4.7	5.3	7.9	4.7	8.3	2.7	6.3	5.5	7.1
Total	14.6	20.1	22.4	22.6	24.0	22.3	22.8	32.7	24.7	32.2
Other Tax										
Estate	1.5	0.6	0.1	0.0	0.2	0.0	0.0	0.0	0.0	0.0
Mining	10.3	18.6	79.1	54.4	15.5	29.7	49.0	40.7	46.7	23.6
Charitable Gaming	2.5	2.4	2.5	2.7	2.8	2.6	2.5	2.6	2.5	2.5
Large Passenger Vessel Gambling	0.0	0.0	0.0	0.0	0.0	6.3	5.8	5.2	6.0	6.7
Total	14.3	21.6	81.7	57.1	18.5	38.6	57.3	48.5	55.2	32.8
Total Unrestricted General Fund Tax Revenue	1,657.4	2,243.6	3,305.7	7,936.3	4,010.1	3,731.3	5,608.3	7,176.6	4,945.5	3,377.6

Table A-2: History of unrestricted general fund revenue⁽¹⁾, by type *(continued)*

	(\$ millions)									
Fiscal Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Non-Tax Revenue										
Licenses and Permits	42.7	41.0	42.0	38.9	35.5	39.5	42.8	42.3	41.9	42.7
Intergovernmental Receipts										
Federal Shared Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Charges for Services	17.9	21.8	28.5	29.3	19.3	17.1	18.5	29.2	25.2	24.2
Fines and Forfeitures	9.4	8.5	7.8	8.9	10.5	10.4	7.0	10.9	15.8	11.3
Rents and Royalties										
Oil and Gas Royalties-Net	1,401.1	1,772.2	1,583.8	2,420.6	1,451.2	1,469.0	1,821.3	2,022.8	1,748.4	1,685.0
Oil and Gas Bonuses, Rents, Interest ⁽²⁾	18.8	11.9	29.2	25.5	14.4	8.0	22.0	8.9	19.4	27.4
Other ⁽³⁾	9.3	8.8	11.8	14.6	15.6	13.2	17.6	20.4	24.7	33.0
Total	1,429.2	1,792.9	1,624.8	2,460.7	1,481.2	1,490.2	1,860.9	2,052.1	1,792.5	1,745.4
Investment Earnings	24.7	53.3	140.1	227.9	247.6	184.0	96.3	107.8	28.1	130.2
Miscellaneous Revenue ⁽⁴⁾	7.5	39.3	9.7	26.2	27.0	40.8	39.1	66.3	79.5	62.6
Total Unrestricted General Fund Non-Tax Revenue	1,531.4	1,956.8	1,852.9	2,791.9	1,821.1	1,782.0	2,064.6	2,308.6	1,983.0	2,016.4
Total Unrestricted General Fund Revenue	3,188.8	4,200.4	5,158.6	10,728.2	5,831.2	5,513.3	7,672.9	9,485.2	6,928.5	5,394.0

⁽¹⁾ Unrestricted general fund revenue includes those revenue that are not restricted by statute or custom, as reported elsewhere in this publication. A summary of historical unrestricted general fund revenue can be found on the Tax Division's web site at: www.tax.alaska.gov/sourcesbook/GeneralFundUnrestrictedRevenueHistory.pdf

⁽²⁾ This category is primarily composed of petroleum revenue.

⁽³⁾ Includes non-petroleum rents and royalties.

⁽⁴⁾ Starting in FY 2010, dividends and payments from state-owned corporations are included in unrestricted miscellaneous revenue.

Table A-3a: Petroleum revenue history⁽¹⁾

(\$ millions)

FY	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Unrestricted Petroleum Revenue										
Petroleum Property Tax	42.5	54.5	65.6	81.5	111.2	118.8	110.6	111.2	99.3	128.1
Petroleum Corporate Income Tax	524.0	661.1	594.4	605.8	492.2	446.1	542.1	568.8	434.6	316.6
Oil and Gas Production Tax	854.9	1,191.7	2,198.3	6,810.9	3,100.9	2,860.7	4,543.2	6,136.7	4,042.5	2,589.4
Oil and Gas Hazardous Release	8.3	7.8	10.1	11.7	11.1	10.3	9.7	9.4	7.8	8.8
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 ⁽²⁾	1,401.1	1,772.2	1,583.8	2,420.6	1,451.2	1,469.0	1,821.3	2,022.8	1,748.4	1,685.0
Bonuses, Rents & Interest-Net ⁽²⁾⁽³⁾	18.8	11.9	29.2	25.5	14.4	8.0	22.0	8.9	19.4	27.4
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	2,849.6	3,699.2	4,481.4	9,956.0	5,181.0	4,912.9	7,048.9	8,857.8	6,352.0	4,755.3
Cumulative Unrestricted Petroleum Revenue⁽⁴⁾	58,110	61,809	66,291	76,247	81,428	86,340	93,389	102,247	108,599	113,354
Restricted Petroleum Revenue										
NPR-A Rents, Royalties, Bonuses	31.6	4.5	12.8	5.2	14.8	21.3	3.0	4.8	3.6	6.8
Royalties to AK Permanent Fund	476.9	599.5	535.0	834.0	659.8	696.1	857.3	904.9	842.1	773.7
Royalties to Public School Fund	9.6	12.0	10.6	16.5	11.0	11.1	13.6	14.7	13.8	12.5
CBRF Deposits	27.4	43.7	101.9	476.4	202.6	552.7	167.3	102.1	176.6	141.4
Restricted Petroleum Revenue	545.5	659.7	660.3	1,332.1	888.2	1,281.2	1,041.2	1,026.5	1,036.1	934.4
Total Petroleum Revenue	3,395.1	4,358.9	5,141.7	11,288.1	6,069.2	6,194.1	8,090.1	9,884.3	7,388.1	5,689.7

⁽¹⁾ Historical unrestricted general fund petroleum revenue can be found on the Tax Division's website at: <http://www.tax.alaska.gov/sources-book/PetroleumRevenueHistory.pdf>. The table on the Tax website includes historical Reserve Tax (FY 1976-1977 and Petroleum Special Settlements (FY 1986-1995).

⁽²⁾ Royalties, bonuses, rents and interest rate are net of permanent fund contribution and (CBRF) deposits.

⁽³⁾ This category is primarily composed of petroleum revenue.

⁽⁴⁾ The cumulative unrestricted general fund petroleum revenue is based on revenue beginning in FY 1959.

Table A-3b: Petroleum revenue forecast

(\$ millions)

FY	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Unrestricted Petroleum Revenue										
Petroleum Property Tax	128.9	125.2	124.6	123.8	122.7	121.1	119.2	117.3	115.2	112.9
Petroleum Corporate Income Tax	249.2	195.4	276.7	282.9	289.3	295.8	302.5	309.3	316.3	323.4
Oil and Gas Production Tax	515.1	299.8	1,189.0	1,721.6	2,163.5	2,229.2	2,055.8	2,045.9	2,051.4	2,014.7
Oil and Gas Hazardous Release	8.4	8.6	8.8	8.2	7.7	7.2	6.6	6.0	5.6	5.2
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⁾	1,100.8	989.9	1,454.1	1,524.8	1,574.5	1,526.7	1,446.7	1,361.9	1,316.8	1,251.7
Bonuses, Rents & Interest-Net ⁽¹⁾⁽²⁾	16.7	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2
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	2,019.2	1,636.1	3,070.3	3,678.6	4,175.0	4,197.2	3,947.9	3,857.6	3,822.5	3,725.1
Cumulative Unrestricted Petroleum Revenue ⁽³⁾	115,374	117,010	120,080	123,759	127,934	132,131	136,079	139,936	143,759	147,484
Restricted Petroleum Revenue										
NPR-A Rents, Royalties, Bonuses	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Royalties to AK Permanent Fund	484.8	438.3	646.5	670.2	691.4	659.2	614.2	570.4	550.6	531.1
Royalties to Public School Fund	8.1	7.3	10.6	11.1	11.5	11.1	10.4	9.8	9.5	9.0
CBRF Deposits	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
Restricted Petroleum Revenue	517.9	470.6	682.1	706.3	727.9	695.3	649.7	605.3	585.1	565.1
Total Petroleum Revenue	2,537.1	2,106.7	3,752.5	4,384.9	4,902.9	4,892.4	4,597.6	4,462.8	4,407.7	4,290.2

⁽¹⁾ Royalties, bonuses, rents and interest rate are net of Permanent Fund Contribution and (CBRF) deposits.⁽²⁾ This category is primarily composed of petroleum revenue.⁽³⁾ The cumulative unrestricted general fund petroleum revenue is based on revenue beginning in FY 1959.

Table A-4a: General fund unrestricted revenue history

	(\$ millions)									
FY	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Total Unrestricted Petroleum Revenue	2,849.6	3,699.2	4,481.4	9,956.0	5,181.0	4,912.9	7,048.9	8,857.8	6,352.0	4,755.3
General Fund Unrestricted Non-petroleum Revenue	339.2	501.2	677.2	772.2	650.2	600.4	624.0	627.4	576.5	638.7
Total Unrestricted General Fund Revenue	3,188.8	4,200.4	5,158.6	10,728.2	5,831.2	5,513.3	7,672.9	9,485.2	6928.5	5394.0
Total Unrestricted General Fund Revenue from Petroleum	89%	88%	87%	93%	89%	89%	92%	93%	92%	88%

Table A-4b: General fund unrestricted revenue forecast

	(\$ millions)									
FY	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Total Unrestricted Petroleum Revenue	2,019.2	1,636.1	3,070.3	3,678.6	4,175.0	4,197.2	3,947.9	3,857.6	3,822.5	3,725.1
General Fund Unrestricted Non-petroleum Revenue	532.3	560.6	587.0	613.5	633.1	655.7	679.7	698.1	725.3	748.1
Total Unrestricted General Fund Revenue	2551.5	2196.7	3657.3	4292.1	4808.1	4852.9	4627.6	4555.7	4547.8	4473.2
Total Unrestricted General Fund Revenue from Petroleum	79%	74%	84%	86%	87%	86%	85%	85%	84%	83%

Table B-1a: Nominal netback costs history

	(\$/bbl)									
FY	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
ANS West Coast Spot	44.85	62.12	61.60	96.51	68.34	74.90	94.49	112.65	107.57	107.57
Netback Costs										
Marine Costs	1.79	1.65	1.62	1.93	2.05	2.21	2.44	3.24	3.64	3.70
Taps Tariff	3.33	3.55	4.37	5.08	4.59	3.81	4.02	5.06	5.93	6.52
Feeder Tariff	0.27	0.30	0.45	0.31	0.31	0.31	0.29	0.31	0.35	0.38
Quality Bank	-0.38	-0.24	-0.86	-1.26	-0.52	-0.41	-0.54	-0.68	-0.67	-0.59
Other	-0.29	0.17	-0.18	-0.01	-0.05	0.09	0.46	0.44	0.51	0.41
Sum of Netback Costs	4.72	5.43	5.40	6.05	6.38	6.01	6.67	8.37	9.76	10.42
ANS Wellhead Weighted Average All Destinations	40.13	56.69	56.20	90.46	61.96	68.89	87.82	104.28	97.81	97.15

Source: Data maintained by Alaska Department of Revenue, Tax Division, Economic Research Section. The department attempts to use a consistent methodology when reporting data. However, data sources and formats have changed over time making consistent comparison of data potentially difficult.

Table B-1b: Nominal netback costs forecast

	(\$/bbl)									
FY	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
ANS West Coast Spot	76.31	66.03	93.18	102.81	112.00	117.36	121.14	123.87	129.04	134.39
Netback Costs										
Marine Costs	3.44	3.41	3.61	3.70	3.79	3.85	3.91	3.96	4.02	4.09
Taps Tariff	5.80	5.72	5.80	6.12	6.61	7.22	7.95	8.73	9.55	10.56
Feeder Tariff	0.42	0.36	0.55	0.50	0.51	0.54	0.58	0.62	0.68	0.69
Quality Bank	-0.48	-0.42	-0.59	-0.65	-0.71	-0.74	-0.75	-0.76	-0.79	-0.82
Other	0.12	0.11	0.15	0.17	0.18	0.19	0.20	0.20	0.21	0.21
Sum of Netback Costs	9.31	9.17	9.52	9.83	10.38	11.07	11.88	12.75	13.68	14.74
ANS Wellhead Weighted Average All Destinations	67.00	56.86	83.66	92.98	101.62	106.29	109.26	111.12	115.36	119.65

Table B-2: Price difference from spring 2014 forecast

	(\$/bbl)									
FY	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Spring 2014 Forecast										
ANS West Coast	106.61	105.06	107.69	110.38	115.40	121.19	122.43	123.67	133.00	131.85
ANS Wellhead Wtd	96.71	95.25	98.07	100.53	105.29	110.65	111.27	111.81	120.38	118.45
Average All Destinations										
Fall 2014 Forecast										
ANS West Coast	107.57	76.31	66.03	93.18	102.81	112.00	117.36	121.14	123.87	129.04
ANS Wellhead Wtd	97.15	67.00	56.86	83.66	92.98	101.62	106.29	109.26	111.12	115.36
Average All Destinations										
Price change from prior forecast										
ANS West Coast	0.96	-28.76	-41.66	-17.20	-12.59	-9.19	-5.07	-2.53	-9.13	-2.81
ANS Wellhead Wtd	0.44	-28.25	-41.21	-16.87	-12.31	-9.03	-4.98	-2.55	-9.26	-3.09
Average All Destinations										
Percent change from prior forecast										
ANS West Coast	0.9%	-27.4%	-38.7%	-15.6%	-10.9%	-7.6%	-4.1%	-2.0%	-6.9%	-2.1%
ANS Wellhead Wtd	0.5%	-29.7%	-42.0%	-16.8%	-11.7%	-8.2%	-4.5%	-2.3%	-7.7%	-2.6%
Average All Destinations										

Table C-1: Production differences from spring 2014 forecast

	(thousand bbls/day)									
FY	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Spring 2014 Forecast										
Alaska North Slope	521.8	495.9	493.5	488.4	464.6	433.3	403.1	371.9	342.8	315.2
Non-North Slope	14.5	11.6	10.4	9.5	8.8	8.1	7.6	7.1	6.6	6.2
Total	536.3	507.5	503.9	497.9	473.4	441.4	410.7	379.0	349.4	321.4
Fall 2014 Forecast										
Alaska North Slope	531.1	509.5	524.1	534.1	503.5	473.2	435.8	400.4	368.5	342.9
Non-North Slope	15.8	16.6	14.7	13.0	11.7	10.6	9.7	8.9	8.2	7.6
Total	546.9	526.1	538.8	547.1	515.2	483.8	445.5	409.3	376.7	350.5
Volume change from prior forecast										
Alaska North Slope	9.3	13.6	30.6	45.7	38.9	39.9	32.7	28.5	25.7	27.7
Non-North Slope	1.3	5.0	4.3	3.5	2.9	2.5	2.1	1.8	1.6	1.4
Total	10.6	18.6	34.9	49.2	41.8	42.4	34.8	30.3	27.3	29.1
Percent change from prior forecast										
Alaska North Slope	1.78%	2.74%	6.20%	9.36%	8.37%	9.21%	8.11%	7.66%	7.50%	8.79%
Non-North Slope	8.97%	43.10%	41.35%	36.84%	32.95%	30.86%	27.63%	25.35%	24.24%	22.58%
Total	1.98%	3.67%	6.93%	9.88%	8.83%	9.61%	8.47%	7.99%	7.81%	9.05%

Table C-2a: Annual historical daily averaged crude oil production

	(thousand bbls/day)									
FY	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Prudhoe Bay ⁽¹⁾⁽²⁾	380.2	335.4	270.8	291.1	291.4	276.7	267.6	265.2	247.4	247.6
PBU Satellites ⁽¹⁾⁽³⁾	92.4	82.1	75.7	67.5	67.9	63.1	55.4	50.7	46.5	44.3
GPMA ⁽⁴⁾	54.6	47.5	36.9	44.3	38.5	34.0	30.8	29.7	26.3	26.2
Kuparuk	140.8	132.0	121.4	112.6	105.6	99.2	91.0	91.5	86.4	86.0
Kuparuk Satellites ⁽⁵⁾	51.0	43.3	43.8	36.5	37.0	35.0	31.9	27.5	25.3	25.1
Endicott ⁽⁶⁾	20.0	20.5	16.4	14.1	14.2	12.7	11.7	11.3	10.4	9.5
Alpine ⁽⁷⁾	104.6	123.4	124.4	114.9	106.7	93.5	84.6	78.2	64.5	56.8
Offshore ⁽⁸⁾	67.7	55.4	44.9	34.4	31.5	28.4	27.0	25.2	24.8	35.4
NPR-A ⁽⁹⁾	-	-	-	-	-	-	-	-	-	-
Point Thomson ⁽⁹⁾	-	-	-	-	-	-	-	-	-	-
Total Alaska North Slope	911.3	839.7	734.2	715.4	692.8	642.6	599.9	579.3	531.6	531.1
Cook Inlet	20.3	18.3	16.1	13.9	10.1	8.9	10.4	10.7	12.2	15.8
Total Alaska	931.6	858.0	750.4	729.4	702.9	651.5	610.3	590.0	543.8	546.9

⁽¹⁾ Milne Point Unit production is now being reported with PBU Satellites instead of with PBU volume. Historical volumes will, therefore, not match the Fall 2011 RSB.

⁽²⁾ Includes NGLs from Central Gas Facility shipped to TAPS.

⁽³⁾ Aurora, Borealis, Midnight Sun, Orion, Polaris, Milne Point, Sag River, Schrader Bluff, Ugnu

⁽⁴⁾ Lisburne, Niakuk, Point McIntyre, Raven, West Beach, West Niakuk

⁽⁵⁾ Meltwater, NEWS, Tabasco, Tarn, West Sak

⁽⁶⁾ Endicott, Minke, Sag Delta, Eider, Badami

⁽⁷⁾ Alpine, Fiord, Nanuq, Qannik, Mustang (after 2016)

⁽⁸⁾ Northstar, Oooguruk, Nikaitchuq, Liberty (delayed)

⁽⁹⁾ Not in production

* Totals may show slight differences from other sources due to rounding and aggregation differences

Table C-2b: Annual forecasts of daily averaged crude oil production

	(thousand bbls/day)									
FY	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Prudhoe Bay	234.8	244.2	239.3	230.8	220.4	209.8	198.5	186.5	174.5	160.2
PBU Satellites ⁽¹⁾	44.5	43.8	40.3	36.3	35.0	30.3	26.2	22.8	20.1	17.8
GPMA ⁽²⁾	24.0	21.3	19.4	17.5	15.9	14.6	13.4	12.3	11.4	10.6
Kuparuk	81.1	83.6	85.6	79.5	74.0	69.3	65.0	60.3	55.7	51.4
Kuparuk Satellites ⁽³⁾	26.8	25.0	24.1	25.7	23.6	21.2	19.9	19.3	18.3	16.4
Endicott ⁽⁴⁾	9.1	10.7	9.6	7.9	6.6	5.6	4.8	4.2	3.8	3.4
Alpine ⁽⁵⁾	46.0	53.5	64.2	54.1	45.2	40.6	34.8	30.0	26.3	23.1
Offshore ⁽⁶⁾	43.2	41.1	41.8	39.3	33.6	28.8	24.9	21.7	19.0	16.8
NPR-A	0.0	0.0	0.0	3.2	10.4	7.9	5.8	4.4	4.8	6.4
Point Thomson	0.0	0.8	9.8	9.1	8.4	7.7	7.1	6.9	9.0	8.6
Total Alaska North Slope	509.5	524.1	534.1	503.5	473.2	435.8	400.4	368.5	342.9	314.7
Cook Inlet	16.6	14.7	13.0	11.7	10.6	9.7	8.9	8.2	7.6	7.0
Total Alaska	526.1	538.8	547.1	515.2	483.8	445.6	409.3	376.7	350.5	321.8

⁽¹⁾ Aurora, Borealis, Midnight Sun, Orion, Polaris, Milne Point, Sag River, Schrader Bluff, Ugnu

⁽²⁾ Lisburne, Niakuk, Point McIntyre, Raven, West Beach, West Niakuk

⁽³⁾ Meltwater, NEWS, Tabasco, Tarn, West Sak

⁽⁴⁾ Endicott, Minke, Sag Delta, Eider, Badami

⁽⁵⁾ Alpine, Fiord, Nanuq, Qannik, Mustang (after 2016)

⁽⁶⁾ Northstar, Oooguruk, Nikaitchuq, Liberty (delayed)

Table D-1a: History of lease expenditures 2007-2014

	(\$ millions)							
Fiscal Year	2007	2008	2009	2010	2011	2012	2013	2014
Total North Slope Lease Expenditures								
Operating Expenditures	2,081	2,027	2,085	2,270	2,614	3,001	3,110	3,254
Capital Expenditures	1,578	1,953	2,212	2,389	2,317	2,383	2,969	3,738
Total North Slope Lease Expenditures	3,659	3,980	4,297	4,659	4,931	5,385	6,079	6,992
Total Non-North Slope Lease Expenditures (includes Cook Inlet)								
Operating Expenditures	223	279	201	165	191	245	261	252
Capital Expenditures	134	247	341	168	123	350	415	595
Total Non-North Slope Lease Expenditures	357	526	542	332	314	594	676	848
Total Statewide Lease Expenditures								
Operating Expenditures	2,304	2,306	2,286	2,435	2,805	3,246	3,370	3,506
Capital Expenditures	1,712	2,200	2,553	2,557	2,440	2,733	3,384	4,333
Total Statewide Lease Expenditures	4,016	4,506	4,839	4,991	5,245	5,979	6,754	7,839

Table D-1b: FY 2014 10-year forecast of lease expenditures

	(\$ millions)									
Fiscal Year	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Total North Slope Lease Expenditures										
Operating Expenditures	3,254	3,295	3,335	3,205	3,011	2,850	2,672	2,511	2,389	2,234
Capital Expenditures	4,454	4,882	4,177	3,642	3,288	3,094	3,228	2,990	2,702	2,426
Total North Slope Lease Expenditures	7,708	8,177	7,511	6,847	6,299	5,943	5,900	5,501	5,091	4,660
Total Non-North Slope Lease Expenditures (includes Cook Inlet)										
Operating Expenditures	272	321	330	328	321	311	300	294	285	277
Capital Expenditures	684	489	398	329	255	230	215	215	215	215
Total Non-North Slope Lease Expenditures	956	810	728	658	577	541	515	509	501	493
Total Statewide Lease Expenditures										
Operating Expenditures	3,526	3,616	3,665	3,533	3,332	3,161	2,972	2,805	2,675	2,511
Capital Expenditures	5,139	5,371	4,575	3,971	3,543	3,324	3,444	3,206	2,917	2,641
Total Statewide Lease Expenditures	8,665	8,986	8,240	7,505	6,875	6,485	6,415	6,010	5,592	5,152

Table E-1a: Income statement FY 2014 production tax estimate using income statement format

This table presents an approximation of the production tax calculation, and does not match production tax estimates throughout this publication.

	Price	Barrels (Thousands)	Value (\$ millions)
Avg ANS Oil Price (\$/bbl) & Daily Production	\$107.57	531.1	\$57.1
Annual Production			
Total		193,852	\$20,852.6
Royalty, Federal and other barrels ⁽¹⁾		-28,402	(\$3,055.3)
Taxable barrels from companies with tax liability⁽²⁾		165,449	\$17,797.4
Downstream (Transportation) Costs (\$/bbl)			
ANS Marine Transportation	-\$3.70		
TAPS Tariff	-\$6.52		
Other	-\$0.20		
Total Transportation Costs	-\$10.42	165,449	(\$1,724.0)
Deductible Lease Expenditures⁽³⁾			
Deductible Operating Expenditures	-\$19.30		(\$3,193.5)
Deductible Capital Expenditures	-\$20.29		(\$3,357.3)
Total Lease Expenditures	-\$39.59	165,449	(\$6,550.8)
Production Tax			
Production Tax Value (PTV)			\$9,522.6
Base Tax (25%*PTV for ACES, 35%*PTV for MAPA)			\$2,856.77
Production Tax Value per barrel	\$57.56		
Progressive Tax under ACES = (11.0% * PTV)			\$524.8
Total Tax before credits			\$3,381.6
North Slope Credits applied against tax liability⁽⁴⁾			(\$870.0)
Estimated Total Tax after credits⁽⁵⁾			\$2,511.6

⁽¹⁾Royalty, Federal and other barrels represents the department's best estimate of barrels that are not taxed. This estimate includes both state and federal royalty barrels, barrels produced from federal offshore property, and barrels used in production. For purposes of this calculation, it also includes barrels produced by companies that are not expected to have a tax liability.

⁽²⁾This number does not represent all taxable barrels, only those produced by companies that are expected to have a tax liability.

⁽³⁾Deductible Lease Expenditures represents the department's best estimate of lease expenditures that are applicable to companies that are likely to produce a tax liability for the year. The per-barrel expenditures reflect expenditures per taxable barrel and do not reflect expenditures per all barrels produced.

⁽⁴⁾Under MAPA, 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.

⁽⁵⁾Estimated Total Tax after credits is a calculated total based on constant daily production, constant oil prices, constant expenditures for the entire year, and no company specific information. Variations in these assumptions captured in larger revenue models will produce different results that differ from the estimates in the simple model above.

Table E-1b Income statement FY 2015 production tax estimate using income statement format

This table presents an approximation of the production tax calculation, and does not match production tax estimates throughout this publication.

	Price	Barrels (Thousands)	Value (\$ millions)
Avg ANS Oil Price (\$/bbl) & Daily Production	\$76.31	509.5	\$38.9
Annual Production			
Total		185,980	\$14,191.2
Royalty, Federal and other barrels ⁽¹⁾		-23,565	(\$1,798.2)
Taxable barrels from companies with tax liability⁽²⁾		162,415	\$12,393.0
Downstream (Transportation) Costs (\$/bbl)			
ANS Marine Transportation	-\$3.44		
TAPS Tariff	-\$5.80		
Other	-\$0.06		
Total Transportation Costs	-\$9.31	162,415	(\$1,511.3)
Deductible Lease Expenditures⁽³⁾			
Deductible Operating Expenditures	-\$19.62		(\$3,186.2)
Deductible Capital Expenditures	-\$23.78		(\$3,862.7)
Total Lease Expenditures	-\$43.40	162,415	(\$7,048.9)
Production Tax			
Gross Value Reduction			(\$47.3)
Production Tax Value (PTV)			\$3,785.6
Base Tax (35%*PTV)			\$1,325.0
Total Tax before credits			\$1,325.0
North Slope Credits applied against tax liability⁽⁴⁾			(\$720.0)
Estimated Total Tax after credits⁽⁵⁾			\$605.0

⁽¹⁾Royalty, Federal and other barrels represents the department's best estimate of barrels that are not taxed. This estimate includes both state and federal royalty barrels, barrels produced from federal offshore property, and barrels used in production. For purposes of this calculation, it also includes barrels produced by companies that are not expected to have a tax liability.

⁽²⁾This number does not represent all taxable barrels, only those produced by companies that are expected to have a tax liability.

⁽³⁾Deductible Lease Expenditures represents the department's best estimate of lease expenditures that are applicable to companies that are likely to produce a tax liability for the year. The per-barrel expenditures reflect expenditures per taxable barrel and do not reflect expenditures per all barrels produced.

⁽⁴⁾Under MAPA, 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.

⁽⁵⁾Estimated Total Tax after credits is a calculated total based on constant daily production, constant oil prices, constant expenditures for the entire year, and no company specific information. Variations in these assumptions captured in larger revenue models will produce different results that differ from the estimates in the simple model above.

Table E-1c: Income statement FY 2016 production tax estimate using income statement format

This table presents an approximation of the production tax calculation, and does not match production tax estimates throughout this publication.

	Price	Barrels (Thousands)	Value (\$ millions)
Avg ANS Oil Price (\$/bbl) & Daily Production	\$66.03	524.1	\$34.6
Annual Production			
Total		191,294	\$12,631.2
Royalty, Federal and other barrels ⁽¹⁾		-24,291	(\$1,604.0)
Taxable barrels from companies with tax liability⁽²⁾		167,003	\$11,027.2
Downstream (Transportation) Costs (\$/bbl)			
ANS Marine Transportation	-\$3.41		
TAPS Tariff	-\$5.72		
Other	-\$0.05		
Total Transportation Costs	-\$9.17	167,003	(\$1,531.8)
Deductible Lease Expenditures⁽³⁾			
Deductible Operating Expenditures	-\$18.94		(\$3,163.0)
Deductible Capital Expenditures	-\$24.61		(\$4,109.8)
Total Lease Expenditures	-\$43.55	167,003	(\$7,272.8)
Production Tax			
Gross Value Reduction			(\$3.0)
Production Tax Value (PTV)			\$2,219.6
Base Tax (35%*PTV)			\$776.9
Total Tax before credits			\$776.9
North Slope Credits applied against tax liability			(\$490.0)
Estimated Total Tax after credits⁽⁴⁾			\$286.9

⁽¹⁾Royalty, Federal and other barrels represents our best estimate of barrels that are not taxed. This estimate includes both state and federal royalty barrels, barrels produced from federal offshore property, and barrels used in production. For purposes of this calculation, it also includes barrels produced by companies that are not expected to have a tax liability.

⁽²⁾This number does not represent all taxable barrels, only those produced by companies that are expected to have a tax liability.

⁽³⁾Deductible Lease Expenditures represents our best estimate of lease expenditures that are applicable to companies that are likely to produce a tax liability for the year. The per-barrel expenditures reflect expenditures per taxable barrel and do not reflect expenditures per all barrels produced.

⁽⁴⁾Under MAPA, 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.

⁽⁵⁾Estimated Total Tax after credits is a calculated total based on constant daily production, constant oil prices, constant expenditures for the entire year, and no company specific information. Variations in these assumptions captured in larger revenue models will produce different results that differ from the estimates in the simple model above.

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