Revenue Sources Book Fall 2020

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Revisions – December 18, 2020
Language was added in Chapter 10 to clarify how the Alaska Railroad Corporation has been impacted by the COVID-19 pandemic. Other minor edits were made throughout the book for clarity, punctuation, and formatting.

Cover: Tracy Arm Fjord, south of Juneau. Photo by Ky Clark.

THE STATE of ALASKA
GOVERNOR MIKE DUNLEAVY

Department of Revenue
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December 11, 2020

The Honorable Mike Dunleavy
Governor
State of Alaska
P.O. Box 110001
Juneau, Alaska 99811-0001

Dear Governor Dunleavy,

I am presenting to you the Department of Revenue's Fall 2020 *Revenue Sources Book*. This publication provides a history and projection of state revenues and is a collaborative effort among the Department of Revenue and several other state agencies.

Unrestricted General Fund (UGF) revenue, before accounting for the transfer from the Permanent Fund Earnings Reserve, is forecast to be $1.2 billion in both fiscal year FY 2021 and in FY 2022.

The Permanent Fund is expected to transfer $3.1 billion to the general fund per year in both FY 2021 and FY 2022. These amounts include funds for general government spending. Between continued growth of the fund and continued low oil prices, the Permanent Fund transfer is now by far the state's largest source of UGF revenue and is forecasted to contribute 71% of UGF in FY 2021 and 72% in FY 2022, continuing to contribute at least 67% for each year after until FY 2030.

In terms of petroleum revenue, the revenue forecast is based on Alaska North Slope oil prices of $45.32 for FY 2021 and $48.00 for FY 2022, climbing to $57.00 by FY 2030. The oil price forecast is based on futures market prices and reflects expectations of sluggish oil demand and ample global supply over the long term. Meanwhile, Alaska North Slope oil production is expected to average 477,300 barrels per day in FY 2021 and 439,600 barrels per day in FY 2022, before climbing to 481,800 barrels per day by FY 2030. Drilling and investment were sharply reduced this year, and are reflected in the lower near-term forecast, but we are hopeful that new developments will contribute to stabilizing production over the coming decade.

This fall revenue forecast comes during a continued period of uncertainty regarding COVID-19. Given the unprecedented nature of the COVID-19 pandemic, it is impossible to make predictions on the stock market, oil prices, future tourist activity, or revenue with certainty. In order to honor this uncertainty, the department has developed a plausible scenario upon which to base the fall revenue forecast. Key elements of this forecast scenario are detailed in Chapter 2.

The department will continue to monitor economic and revenue trends over the coming months. We look forward to providing you with an updated forecast in the spring of 2021.

Sincerely,

lucinda mahoney

Lucinda Mahoney
Commissioner
Department of Revenue

Revenue Sources Book Fall 2020

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Chapter 1
Introduction

Purpose

The *Revenue Sources Book* (RSB) provides Alaskans with a report of historical, current, and estimated future state revenue. The governor uses the information in this publication to formulate the proposed budget and financial plan before presenting it to the Alaska Legislature. Over the years, the RSB has become an educational tool to inform the general public of how the state's revenues are structured.

This publication is prepared by the Department of Revenue, in accordance with Alaska Statute (AS) 37.07.060 (b)(4). Forecasts of state revenue are made using models developed by the department's Economic Research Group and other state agencies.

The department expresses its gratitude to those state agencies and individuals in those agencies who have provided information, assistance, and analysis for this RSB.

Throughout this book, unless stated otherwise, information is presented based on a fiscal-year basis. The state's fiscal year runs from July 1 through June 30.

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 attempts to capture these uncertainties in order to provide policy-makers and the general public with a general understanding of the scale and scope of future revenue streams. The official forecast process considers 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.

The department will update the estimates in this forecast book in the coming spring, as more information is received. This forecast supersedes all prior estimates or forecasts as the official forecast of the State of Alaska. Therefore, all prior forecasts should be used only for comparison purposes.

Defining Revenue Categories

In general, this *Revenue Sources Book* presents revenues in accordance with current budget categories and conventions as agreed on by the Office of Management and Budget (OMB) in the Governor's Office, and the Alaska Division of Legislative Finance, a legislative agency.

The one exception is Chapter 3, which describes revenue that is available for appropriation for any current-year funding need, regardless of customary uses or restrictions. Displaying the information in this way gives a complete view of the state's ability to meet its obligations.

The remainder of the RSB utilizes revenue categories consistent with budget conventions. Revenues are divided into categories in two ways – by revenue source (where the revenue comes from) and spending restriction or designation (how the revenue may be used).

There are three basic revenue sources – earnings from investments, funds received from the federal government, and funds collected from in-state activities. Due to the importance of revenues from oil production, in-state activities are further divided into petroleum revenue and non-petroleum revenue.

Revenue is also categorized by the level of restrictions regarding its use. Those categories are "unrestricted" (available to fund general state activities and capital projects) or "restricted" (placed into reserves or used for a specific purpose, either by a requirement or historical practice).

Any revenue that is not restricted by the Alaska Constitution, state or federal law, trust or debt restriction, or customary practice is considered "unrestricted general fund revenue" (UGF) or simply "unrestricted revenue." Historically, most legislative and public discussion has centered on the unrestricted category of revenue, and it has been the figure most commonly referenced in budget discussions.

Restricted revenues are divided into three types to aid in the budget process – "designated general fund," "other restricted revenue," and "federal revenue." Some of these revenues are restricted by budget convention only and are technically available for appropriation even though they are shown as restricted in this RSB.

Changes

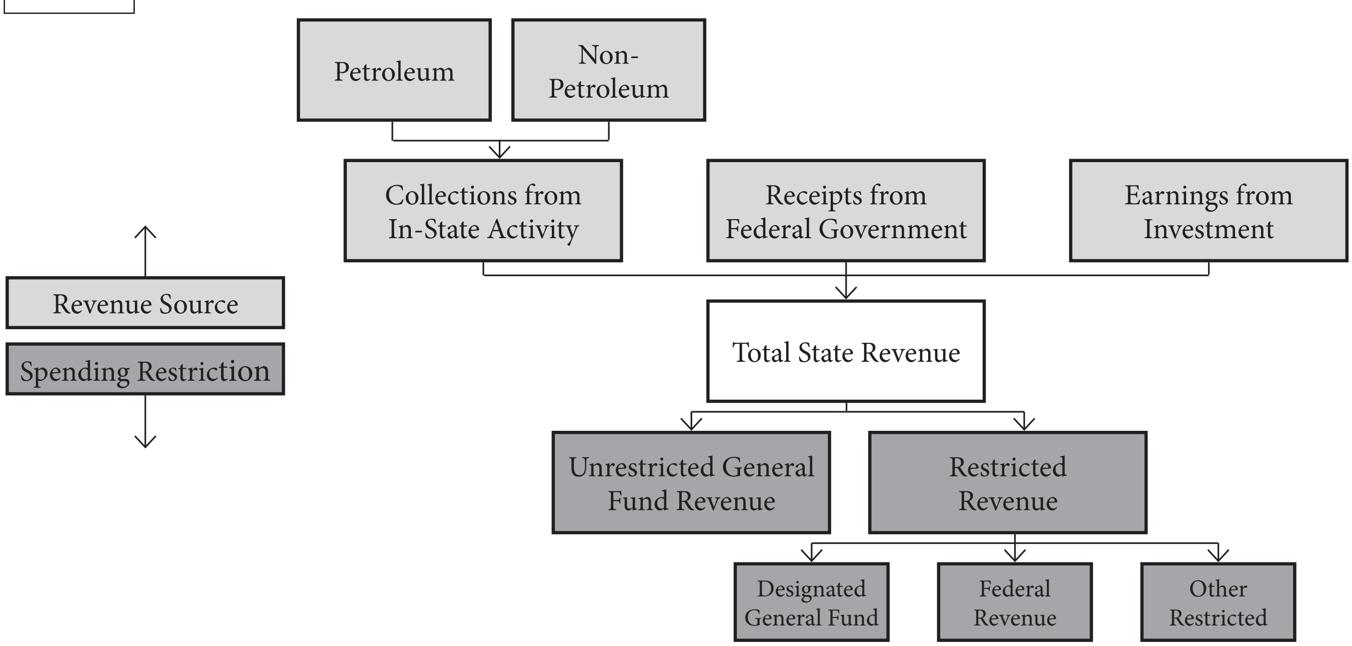
Noteworthy changes to this Fall 2020 *Revenue Sources Book* include:

- Chapters 4-7 have been reordered to reflect the changing makeup of state revenue. With investment revenue now being the largest source of state revenue in most years and the increased role of federal funding in the budget, the new chapter order is as follows: Chapter 4 is Investment Revenue, Chapter 5 is Federal Revenue, Chapter 6 is Petroleum Revenue and Chapter 7 is Non-Petroleum Revenue. The order of the other chapters remains the same.
- As investments have grown in significance to state revenue, the content of the Investment Revenue chapter, now Chapter 4, has been expanded to include discussion of investment management themes and investment management fees. This discussion is placed in an Alaska-specific framework with examples of manage¬ment strategies used by the state.

Chapter 1 **A**

Revenue Categories

Sources and spending restrictions



Chapter 1 B

QR Codes
Access data tables online

- The Federal Revenue chapter, now Chapter 5, has been expanded to include discussion of the federal stimulus funding received by Alaska in response to the COVID-19 pandemic. This is a significant part of the revenue stream for FY 2020 and FY 2021.
- Line numbers have been added to each table corresponding with rows containing data for ease of reference.

QR Codes

Quick response (QR) codes are included on the first page of each chapter so that the data tables are accessible online in the Microsoft Excel format.

To access them, use a QR code recognition application with your mobile phone, smartphone, or tablet to take a picture of the QR code, which looks similar to Figure 1-B.

The Figure 1-B QR code will take you to the RSB directory 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.

If you are reading the RSB in PDF form, the QR code images are hyperlinked to their corresponding web addresses.

Forecast Methods Note

This *Revenue Sources Book* includes an assumption that for all years of the forecast, 10,000 barrels per day of Natural Gas Liquids (NGLs) will be shipped from Prudhoe Bay to Kuparuk for use in an ongoing large-scale enhanced oil recovery project. These NGLs are excluded from production forecasts reported in this publication. These estimated NGL shipments are excluded from Department of Revenue figures because they are not considered produced barrels for tax purposes. The reason for this exclusion is so that production is only counted once, as the relevant barrels will ultimately be produced from the Kuparuk reservoir in the future and taxed at that time. This treatment is consistent with how the department presented previous NGL shipments which had been suspended in 2014 and were not included in historical production volumes. Beginning in September 2018, NGL shipments resumed, and these NGLs are again excluded from actual and forecast production volumes. Note that for royalty purposes the NGLs are subject to royalty and are considered produced barrels as reported by the Alaska Oil and Gas Conservation Commission (AOGCC) and forecasted by the Department of Natural Resources (DNR); this provision is incorporated into revenue forecast modeling.

At times, the Department of Revenue's forecast numbers may appear to vary between analyses, even if they come from the same data source. This can happen for many reasons and does not necessarily discount other analyses, nor should it be considered an error.

One example is in petroleum revenue forecasting, where results can differ depending on whether the department uses confidential company-specific data versus statewide aggregated summary data.

Another instance where differences can occur is in how uncertainty is incorporated. Depending on the analysis, uncertainties can be addressed by applying risk factors to the data, incorporating probability into the analysis and results, or providing a narrative disclaimer about the uncertainty.

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

Additionally, values and sums throughout this book may show slight differences due to rounding.

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Chapter 2
Executive Summary

Introduction

The Department of Revenue releases a formal revenue forecast twice per year. The revenue forecast is intended to be a policy-neutral document that provides fundamental data and information to inform the public and aid decision-makers.

This forecast will be used as the basis for the governor's budget proposal and legislative budget discussions. This revenue forecast is based on detailed modeling and reflects the department's most current expectations for numerous variables, including investment returns, oil price, oil production, and oil company spending. The forecast will be next released in the spring to provide an updated view on revenue to help guide final budget decisions.

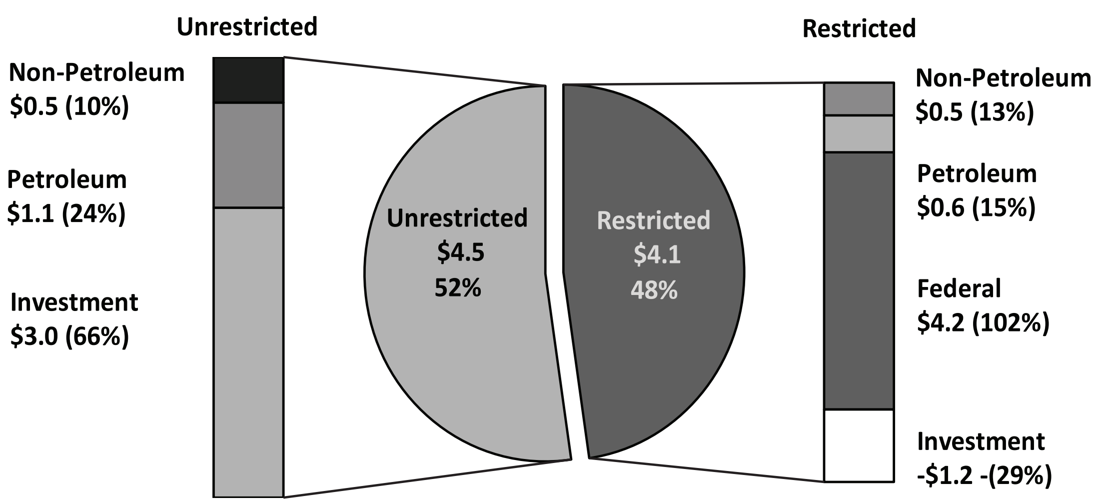
Revenue Summary

The State of Alaska received an estimated total of $8.7 billion in revenue in fiscal year (FY) 2020 from all sources, a decrease of $2.5 billion in total revenue from the previous fiscal year. Figure 2-A graphically illustrates the composition of total revenue by restriction and type.

In FY 2020, unrestricted general fund (UGF) revenues totaled $4.5 billion. Excluding transfers from the Alaska Permanent Fund, UGF revenue from all other sources for FY 2020 was $1.6 billion. Tables 2-1 and 2-2 provide an overview of the composition of UGF as well as forecasts for the next two fiscal years.

Chapter 2 **A**

FY 2020 Total State Revenue
By restriction and type, in billions of dollars



Chapter 2
1

Total State Revenue
By restriction and type

		Millions of Dollars		
		History	Forecast	
	Fiscal Year	2020	2021	2022
	Unrestricted Revenue Sources			
	Unrestricted General Fund Revenue			
1	Investment Revenue	2,991.2	3,107.1	3,090.2
2	Petroleum Revenue	1,083.1	861.7	808.9
3	Non-Petroleum Revenue	462.7	363.0	372.8
4	**Total Unrestricted General Fund Revenue**	**4,537.0**	**4,331.8**	**4,271.9**
	Restricted Revenue Sources			
	Designated General Fund Revenue			
5	Investment Revenue	33.5	43.2	45.1
6	Petroleum Revenue [1]	67.8	44.6	41.4
7	Non-Petroleum Revenue	385.6	403.2	419.8
8	**Subtotal Designated General Fund Revenue**	**486.9**	**491.0**	**506.2**
	Other Restricted Revenue			
9	Investment Revenue	-1,221.5	922.3	1,190.4
10	Petroleum Revenue [1]	537.3	270.1	228.2
11	Non-Petroleum Revenue	130.2	209.1	222.7
12	**Subtotal Other Restricted Revenue**	**-554.0**	**1,401.5**	**1,641.3**
	Federal Revenue			
13	Federal Receipts	4,173.0	4,638.6	3,884.2
14	Petroleum Revenue [2]	16.4	10.8	12.4
15	**Subtotal Federal Revenue**	**4,189.4**	**4,649.3**	**3,896.6**
16	**Total Restricted Revenue**	**4,122.2**	**6,541.7**	**6,044.1**
17	**Total State Revenue**	**8,659.2**	**10,873.5**	**10,316.1**

[1] The constitutionally dedicated 25% of minerals-related royalties, bonuses, rents, and interest to the Permanent Fund is shown as Other Restricted revenue. Beginning with FY 2020, the additional 25% for leases issued after December 1, 1979, as referred to in AS 37.13.010(a), is shown as Designated General Fund revenue. Previously, the additional 25% was shown as Other Restricted revenue; this change in presentation was made for conformity to budget documents.

[2] Petroleum Revenue shown in the Federal Revenue category includes the state share of rents, royalties, and bonuses received from the National Petroleum Reserve – Alaska.

Restricted revenue represents revenue that is limited in how it can be spent by the Alaska Constitution, state or federal law, trust or debt restrictions, or by customary practice. Major components of restricted revenue include federal receipts, investment earnings not attributable to the General Fund, constitutionally mandated petroleum revenue deposits, and non-petroleum revenue sources that are used for specific purposes. In FY 2020, restricted state revenue totaled $4.1 billion.

Tables 2-1 and 2-3 summarize the department's forecasts for restricted revenue for the next two fiscal years.

As mentioned in Chapter 1, restricted revenues are divided into three types – designated general fund, other restricted revenue, and federal revenue. As described in Chapter 3, some of these revenues, while categorized as restricted by custom, are still available for appropriation for any purpose.

Chapter 2

Unrestricted General Fund Revenue

By type and source

		Millions of Dollars		
		History	Forecast	
	Fiscal Year	2020	2021	2022
	Unrestricted Investment Revenue			
	Investment Revenue			
1	Alaska Permanent Fund	2,933.1	3,091.5	3,069.3
2	Investments	58.1	15.6	20.9
3	**Total Unrestricted Investment Revenue**	**2,991.2**	**3,107.1**	**3,090.2**
	Unrestricted Petroleum Revenue			
	Petroleum Taxes			
4	Petroleum Property Tax	122.9	115.7	113.2
5	Petroleum Corporate Income Tax	-0.2	5.0	-20.0
6	Oil and Gas Production Tax	285.1	171.8	163.3
7	**Subtotal Petroleum Taxes**	**407.9**	**292.5**	**256.6**
	Royalties (including Bonuses, Rents, and Interest)			
8	Mineral Bonuses and Rents	19.6	17.9	17.9
9	Oil and Gas Royalties	660.3	551.3	534.4
10	Interest	-4.6	0.0	0.0
11	**Subtotal Royalties**	**675.3**	**569.2**	**552.3**
12	**Total Unrestricted Petroleum Revenue**	**1,083.1**	**861.7**	**808.9**
	Unrestricted Non-Petroleum Revenue			
	Non-Petroleum Taxes			
	Excise Tax			
13	Alcoholic Beverage	20.4	20.5	20.6
14	Tobacco Product – Cigarette	29.4	23.3	22.4
15	Tobacco Product – Other	12.0	15.1	15.5
16	Electric and Telephone Cooperative	0.2	0.2	0.2
17	Insurance Premium Tax [1]	58.4	59.6	56.9
18	Marijuana	6.4	7.2	8.0
19	Motor Fuel (Refined Fuel Surcharge)	6.9	6.3	6.5
20	Tire Fee	1.4	1.4	1.4
21	**Subtotal Excise Tax**	**135.0**	**133.6**	**131.5**
22	**Corporate Income Tax**	**102.4**	**30.0**	**25.0**
	Fisheries Tax			
23	Fisheries Business	24.1	13.5	14.5
24	Fishery Resource Landing	9.8	5.9	6.3
25	**Subtotal Fisheries Tax**	**33.9**	**19.5**	**20.8**
	Other Tax			
26	Charitable Gaming	2.4	2.4	2.5
27	Large Passenger Vessel Gambling	13.1	0.0	5.3
28	Mining	36.8	30.4	43.3
29	**Subtotal Other Tax**	**52.2**	**32.9**	**51.1**
30	**Subtotal Unrestricted Non-Petroleum Taxes**	**323.5**	**215.9**	**228.4**

Chapter 2

2

Unrestricted General Fund Revenue

By type and source *(Continued)*

		Millions of Dollars		
		History	Forecast	
	Fiscal Year	2020	2021	2022
	Unrestricted Non-Petroleum Revenue			
31	**Charges for Services**	**6.5**	**6.5**	**6.5**
32	**Fines and Forfeitures**	**15.1**	**12.8**	**12.8**
	Licenses and Permits			
33	Motor Vehicle	33.6	31.7	31.7
34	Other	0.8	1.8	1.8
35	**Subtotal Licenses and Permits**	**34.4**	**33.5**	**33.5**
	Rents and Royalties			
36	Mining Rents and Royalties	1.6	2.1	2.5
37	Other Non-Petroleum Rents and Royalties	4.0	4.0	4.0
38	**Subtotal Rents and Royalties**	**5.6**	**6.1**	**6.5**
	Miscellaneous Revenues and Transfers			
39	Miscellaneous	27.8	29.2	29.2
40	Alaska Housing Finance Corporation Dividend	27.0	33.6	30.5
41	Alaska Industrial Development and Export Authority Dividend [2]	10.3	14.5	14.5
42	Alaska Municipal Bond Bank Authority	0.9	0.9	0.9
43	Alaska Student Loan Corporation Dividend	0.0	0.0	0.0
44	Alaska Energy Authority	0.0	0.0	0.0
45	Alaska Natural Gas Development Authority	0.0	0.0	0.0
46	Mental Health Trust	0.0	0.0	0.0
47	Unclaimed Property	11.5	10.0	10.0
48	**Subtotal Miscellaneous Revenues and Transfers**	**77.5**	**88.2**	**85.1**
49	**Total Unrestricted Non-Petroleum Revenue**	**462.7**	**363.0**	**372.8**
50	**Total Unrestricted General Fund Revenue**	**4,537.0**	**4,331.8**	**4,271.9**

[1] Insurance Premium Tax was considered designated restricted revenue for FY 2016 to FY 2018 and reverted to unrestricted revenue beginning in FY 2019.

[2] The AIDEA dividend for FY 2022 is an estimate as of Dec. 7, 2020; it will be revised in the *Revenue Sources Book's* spring 2021 update.

Chapter 2

3

Restricted Revenue

By type and source

		Millions of Dollars		
		History	Forecast	
	Fiscal Year	**2020**	**2021**	**2022**
	Designated General Fund Restricted Revenue			
	Investment Revenue			
1	Investments – Designated General Fund	3.5	0.6	1.1
2	Other Treasury – Managed Funds	30.0	42.6	44.0
3	**Subtotal Investment Revenue**	**33.5**	**43.2**	**45.1**
	Petroleum Revenue			
4	Royalties, Bonuses and Rents to Alaska Permanent Fund [1,2]	67.8	44.6	41.4
5	**Subtotal Petroleum Revenue**	**67.8**	**44.6**	**41.4**
	Non-Petroleum Revenue			
6	Taxes	137.6	138.7	139.8
7	Charges for Services	180.1	188.6	198.1
8	Fines and Forfeitures	5.5	5.8	5.6
9	Licenses and Permits	1.1	1.8	1.8
10	Rents and Royalties [1,2]	27.7	30.2	32.3
11	Other	33.6	38.1	42.2
12	**Subtotal Non-Petroleum Revenue**	**385.6**	**403.2**	**419.8**
13	**Total Restricted Designated General Fund Revenue**	**486.9**	**491.0**	**506.2**
	Other Restricted Revenue			
	Investment Revenue			
14	Investments – Other Restricted	12.2	2.0	4.0
15	Constitutional Budget Reserve Fund	62.8	2.0	0.6
16	Alaska Permanent Fund Restricted Earnings, net of General Fund Draw [3]	-1,296.5	918.3	1,185.8
17	**Subtotal Investment Revenue**	**-1,221.5**	**922.3**	**1,190.4**
	Petroleum Revenue			
18	Royalties, Bonuses and Rents to Alaska Permanent Fund [1,2]	251.1	206.0	199.2
19	Royalties, Bonuses and Rents to Public School Trust Fund [1,2]	5.0	4.1	4.0
20	Tax and Royalty Settlements to Constitutional Budget Reserve Fund	281.2	60.0	25.0
21	**Subtotal Petroleum Revenue**	**537.3**	**270.1**	**228.2**
	Non-Petroleum Revenue			
22	Taxes	36.6	27.5	39.2
23	Charges for Services	25.6	114.5	115.8
24	Fines and Forfeitures	16.1	17.0	16.2
25	Licenses and Permits	40.1	35.9	36.6
26	Rents and Royalties [1,2]	3.2	4.1	4.9
27	Other	8.6	10.0	10.0
28	**Subtotal Non-Petroleum Revenue**	**130.2**	**209.1**	**222.7**
29	**Total Other Restricted Revenue**	**-554.0**	**1,401.5**	**1,641.3**

Chapter 2
3

Restricted Revenue

By type and source *(Continued)*

		Millions of Dollars		
		History	Forecast	
	Fiscal Year	2020	2021	2022
	Restricted Federal Revenue			
30	**Federal Receipts**	**4,173.0**	**4,638.6**	**3,884.2**
	Petroleum Revenue			
31	NPR-A Royalties (includes bonuses, rents, and interest)[2,4]	16.4	10.8	12.4
32	**Total Restricted Federal Revenue**	**4,189.4**	**4,649.3**	**3,896.6**
33	**Total Restricted Revenue**	**4,122.2**	**6,541.7**	**6,044.1**

[1] The constitutionally dedicated 25% of minerals-related royalties, bonuses, rents, and interest to the Permanent Fund is shown as Other Restricted revenue. Beginning with FY 2020, the additional 25% for leases issued after December 1, 1979, as referred to in AS 37.13.010(a), is shown as Designated General Fund revenue. Previously, the additional 25% was shown as Other Restricted revenue; this change in presentation was made for conformity to budget documents.

[2] Royalties revenue reported here includes bonuses, rents, and interest.

[3] While payouts are limited to realized earnings, both unrealized and realized earnings are shown per Generally Accepted Accounting Principles (GAAP). Restricted earnings starting in FY 2019 consist of unrealized earnings plus realized earnings, less the transfer to the general fund.

[4] Petroleum Revenue shown in the Restricted Federal Revenue category includes the state share of rents, royalties, and bonuses received from the National Petroleum Reserve – Alaska.

Investment Revenue

Investment revenue is the earnings generated from certain assets such as the Permanent Fund, the Constitutional Budget Reserve Fund (CBRF), and other funds. In FY 2020, the state earned $1.8 billion in total investment revenue. The department is forecasting investment revenue of $4.1 billion in FY 2021 and $4.3 billion in FY 2022.

Prior to FY 2019, the majority of investment revenue was considered restricted revenue. However, beginning in FY 2019, a portion of the value of the Permanent Fund is depicted as unrestricted revenue. With this change, investment revenue is now the largest contributor to unrestricted revenue.

The Permanent Fund contributed $2.9 billion to unrestricted revenue in FY 2020 and is anticipated to contribute $3.1 billion to unrestricted revenue in FY 2021. These projections are based on a series of assumptions, including a total fund value of $65.3 billion as of June 30, 2020 and a 6.75% annual average return on invested assets. The annual Permanent Fund "draw" is available for appropriation to fund dividends, government spending, or savings.

More information about investment revenue can be found in Chapter 4.

Federal Revenue

All federal funds the state receives are considered restricted for purposes of this forecast. Federal funds include revenues for highways, medical care, education, and other dedicated purposes. The state received an estimated $4.2 billion in FY 2020. Consistent with practice in prior years, the federal revenue forecast represents the maximum possible federal revenue contribution, while actual revenues received routinely come in below forecast. In FY 2020 and FY 2021, federal funds also include stimulus money in response to the COVID-19 pandemic. More detail regarding federal revenue can be found in Chapter 5.

Petroleum Revenue

Petroleum revenue come from four components – production tax, royalties, property tax, and corporate income tax.

Unrestricted petroleum revenue amounted to $1.1 billion in FY 2020. Petroleum is projected to provide between 19% and 22% of unrestricted revenue over the next 10 years as shown in Table 2-5. This percentage is lower than the historical share, due in part to

Chapter 2
4

Total State Revenue, Actual and Forecast

FY 2020 actuals and FY 2021 – FY 2030 forecast

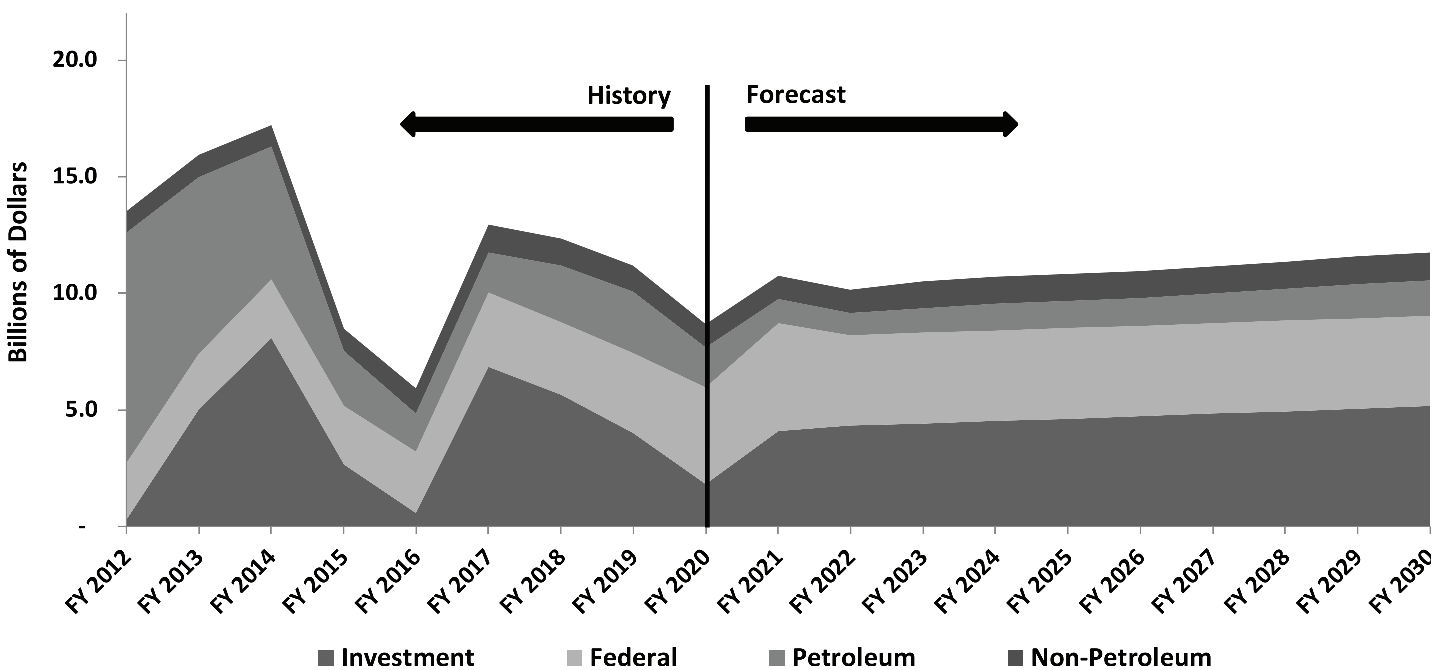
Millions of Dollars

	History	Forecast									
Fiscal Year	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Total State Revenue											
1 Investment	1,803.2	4,072.6	4,325.7	4,424.0	4,522.0	4,623.2	4,729.7	4,841.4	4,954.9	5,072.0	5,192.1
2 Federal	4,173.0	4,638.6	3,884.2	3,884.2	3,884.2	3,884.2	3,884.2	3,884.2	3,884.2	3,884.2	3,884.2
3 Petroleum	1,704.6	1,187.1	1,090.8	1,216.3	1,396.7	1,463.3	1,479.7	1,497.4	1,554.0	1,647.7	1,697.5
4 Non-Petroleum	978.4	975.3	1,015.3	1,147.3	1,163.4	1,179.4	1,188.0	1,197.8	1,209.3	1,210.7	1,216.0
5 **Total State Revenue**	**8,659.2**	**10,873.5**	**10,316.1**	**10,671.8**	**10,966.4**	**11,150.1**	**11,281.6**	**11,420.8**	**11,602.4**	**11,814.6**	**11,989.8**

Chapter 2
B

Total State Revenue

A look back and a look ahead



Chapter 2

5 Total Unrestricted General Fund Revenue

FY 2020 actuals and FY 2021 – FY 2030 forecast

Millions of Dollars

		History	Forecast									
	Fiscal Year	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
	Unrestricted General Fund Revenue											
1	Investment Revenue	2,991.2	3,107.1	3,090.2	3,234.4	3,322.8	3,373.3	3,423.8	3,499.4	3,578.9	3,660.5	3,744.0
2	Petroleum Revenue	1,083.1	861.7	808.9	920.0	1,042.3	1,082.6	1,084.0	1,080.7	1,109.2	1,173.4	1,196.0
3	Non-Petroleum Revenue	462.7	363.0	372.8	484.1	494.6	508.8	515.3	522.6	532.2	531.7	535.1
4	**Total Unrestricted General Fund Revenue**	**4,537.0**	**4,331.8**	**4,271.9**	**4,638.5**	**4,859.7**	**4,964.7**	**5,023.1**	**5,102.7**	**5,220.3**	**5,365.6**	**5,475.0**
5	Percent from Petroleum	24%	20%	19%	20%	21%	22%	22%	21%	21%	22%	22%
6	**Permanent Fund Transfer**	**2,933.1**	**3,091.5**	**3,069.3**	**3,206.0**	**3,287.0**	**3,330.0**	**3,373.0**	**3,441.0**	**3,513.0**	**3,587.0**	**3,663.0**
7	**Total Unrestricted Revenue (not including Permanent Fund transfer)**	**1,603.9**	**1,240.3**	**1,202.6**	**1,432.5**	**1,572.7**	**1,634.7**	**1,650.1**	**1,661.7**	**1,707.3**	**1,778.6**	**1,812.0**
8	Percent from Petroleum	68%	69%	67%	64%	66%	66%	66%	65%	65%	66%	66%
	Selected Petroleum Data											
9	Price Per Barrel of ANS Crude (Dollars)	52.12	45.32	48.00	49.00	50.00	51.00	53.00	54.00	55.00	56.00	57.00
10	Average Daily ANS Production[1] (Thousand Barrels Per Day)	471.8	477.3	439.6	447.0	463.3	461.5	455.7	458.8	466.5	475.9	481.8

[1] Fall 2020 Forecast assumes that for all years of the forecast, 10,000 barrels per day of Natural Gas Liquids (NGLs) will be shipped from Prudhoe Bay to Kuparuk for use in a large-scale enhanced oil recovery project. Beginning with FY 2019, these NGLs are excluded from actual and forecast production reported in this table. With new information, future NGL shipment estimates may change, and these changes will be included in subsequent production forecasts.

including a portion of the value of the Permanent Fund as unrestricted revenue beginning in FY 2019. Excluding this Permanent Fund share, petroleum is expected to provide between 64% and 69% of unrestricted revenue over the next 10 years.

Restricted petroleum revenue contributed an additional $0.6 billion in FY 2020. The primary sources of restricted petroleum revenue are royalties deposited into both the Permanent Fund and Public School Trust Fund, as well as settlements of tax and royalty disputes deposited into the CBRF.

Four elements are critical to the determination of petroleum revenues – price, production, lease expenditures, and transportation costs. These components are explained in detail in Chapter 6.

Oil Price

Alaska North Slope (ANS) oil prices averaged $52.12 per barrel in FY 2020. The revenue forecast is based on an annual average ANS oil price of $45.32 per barrel for FY 2021 and $48.00 per barrel for FY 2022. The department projects that annual average prices will increase to $57.00 (nominal) within the 10-year forecast period.

The department made a change to how oil prices are forecast in 2019. Beginning with fall 2019, the short-term oil price forecast (current and next fiscal year) is derived from futures market expectations for Brent crude. Beyond the next fiscal year, the price forecast is held constant in real terms, increasing with inflation. This approach to price forecasting allows the department to prepare a forecast with minimal expense to the state, while providing a transparent methodology that incorporates the most recent market information available at the time the forecast is made.

Oil Production

Total crude oil production from Alaska's North Slope averaged 471,800 barrels per day in FY 2020. The oil production forecast expects ANS production of 477,300 barrels per day in FY 2021 and 439,600 barrels per day in FY 2022. After FY 2022, production is forecast to stabilize and increase to 481,800 barrels per day by the end of the 10-year forecast period.

The oil production forecast balances projected declines in production at existing fields with incremental production from new fields and new developments. Several new oil fields are progressing through the planning and development process. These new fields are expected to contribute to stable and increasing production later in the forecast period.

Lease Expenditures and Transportation Costs

In FY 2020, allowable oil and gas lease expenditures amounted to an estimated $6.0 billion statewide, including $5.5 billion of spending on the North Slope. Allowable lease expenditures are expected to decrease in FY 2021 to $4.3 billion statewide, including $3.9 billion of spending on the North Slope. Allowable lease expenditures are expected to increase in FY 2022 – 2023, as activity increases at existing fields and as companies make expected investments in new developments. These investments include multiple billions of dollars to bring new fields like Pikka and Willow into production.

In FY 2020, transportation costs for North Slope oil averaged $8.16 per barrel; they are expected to average $9.21 in FY 2021 and $9.91 in FY 2022. Transportation costs are subtracted from the ANS price to form the basis for tax and royalty calculations.

Major Gas Sales and ANWR

Two major petroleum-related projects have the potential to add to state petroleum revenues beyond what is presented in this forecast.

First, the State of Alaska is continuing to work on a project to commercialize North Slope natural gas reserves. This project could lead to liquid natural gas exports and substantial new state revenues. To be conservative, major gas sales will not be included in this forecast until the project reaches a Final Investment Decision.

Additionally, as part of federal tax legislation enacted in 2017, the U.S. Department of Interior is directed to hold two lease sales in the Arctic National Wildlife Refuge (ANWR) "1002 area" over the 10-year period.

ANWR lease sales are of interest to Alaska both as a source of future production and economic activity, and because the state will receive a portion of any federal bonuses, rents, and royalties from the leases. It is anticipated that 50% of ANWR revenue will be shared with the state. Of the revenue received by the state, 50% of the state's share will go to the Permanent Fund, 0.5% to the Public School Trust Fund, and the remaining share would be unrestricted general fund revenue. Since lease sale timing and revenue are unknown at this time, the department has conservatively chosen not to include lease sale revenue in the forecast until a successful lease sale has taken place. Additionally, any production from ANWR will not be included until a discovery is made that meets the criteria for inclusion in the production forecast.

Non-Petroleum Revenue from In-State Activity

Corporate income tax revenue from non-petroleum related businesses, excise taxes, consumption taxes, charges for services, fines and forfeitures, licenses and permits, non-petroleum rents and royalties, transfers, and other miscellaneous revenue are referred to as "non-petroleum revenues from in-state activities."

This does not include investment and federal revenues. In FY 2020, unrestricted non-petroleum revenues amounted to $463 million. Unrestricted non-petroleum revenues from in-state activities are expected to be $363 million in FY 2021, increasing to $535 million by the end of the 10-year forecast period. In FY 2020, restricted non-petroleum revenue amounted to $516 million. Restricted non-petroleum revenues are expected to be $612 million in FY 2021. Details regarding these revenue sources can be found in Chapter 7. These amounts only represent revenues from existing revenue sources under current law.

Forecasting and COVID-19

This fall revenue forecast comes during a continued period of uncertainty regarding COVID-19. Given the uncertainty and unprecedented nature of the COVID-19 pandemic, it is impossible to make predictions on the stock market, oil prices, future tourist activity, or revenue with certainty. In recognition of this increased uncertainty, the department has developed a plausible scenario upon which to base the fall revenue forecast.

Key elements of this forecast scenario include:

- Investment Revenue: The forecast is based on a most likely case for expected investment returns which presumes continued stable growth in markets.
- Federal Revenue: The forecast incorporates stimulus funding as of October 2020 and is based on a return to more typical levels of federal funding. The forecast does not include any potential new stimulus funds.
- Oil and Gas Revenue: Low prices and production curtailments impacted oil and gas in April – June of 2020. The forecast is based on oil prices as indicated by futures markets and does not assume any further production curtailments.
- Non-Oil and Gas Revenue: The forecast is based on a scenario for a return to normalcy following COVID-19. The scenario assumes that shutdowns will reverse over the course of FY 2021, and that most economic activity will return to baseline levels by FY 2022. For tourism, including cruise ships, a slower recovery is assumed. This forecast assumes that the 2021 summer season (FY 2021-2022) proceeds, but only at 50% of previously expected levels. For the 2022 summer season (FY 2022-2023), tourism activity is assumed to return to 75% of previously expected levels. For the 2023 summer season (FY 2023-2024) and on, tourism activity is assumed to return to pre-COVID expected levels. These assumptions reflect no inside knowledge and are intended simply to provide one possible baseline for budget planning purposes.

The department will continue to monitor these assumptions and the COVID-19 situation and will update in the Spring 2021 forecast.

Chapter 3

Revenue Available for Appropriation for Any Purpose

General Discussion

Historically, most of the discussion on Alaska's budget has focused on the "unrestricted general fund" (UGF) category of revenue, which in times of deficiency is supplemented by "funding from reserves." At the same time, certain current-year revenue available for appropriation for any purpose is added to reserves.

This way of defining revenue has served Alaska well by automatically placing categories of revenue in reserves. However, it is also important to accurately define revenue that is available for appropriation for any purpose so that both the Alaska Legislature, in deliberations on potentially shifting how revenue is categorized, as well as people outside the Legislature, in analyzing Alaska's budget, are able to determine the state's true revenue potential.

Table 3-1 provides an accounting of current-year revenue available for appropriation for any purpose for the most recent fiscal year, as well as a 10-year forecast period.

The State of Alaska has historically categorized certain revenues that are available for appropriation for any purpose as "restricted." The primary use of these "customarily restricted" revenues has been largely to fund reserves. Examples of revenues customarily treated as restricted, but available for appropriation for any purpose include:

- Settlement revenue deposited into the Constitutional Budget Reserve Fund (CBRF), as well as the investment earnings of the CBRF.
- Royalty revenue deposited into the Alaska Permanent Fund beyond the 25% constitutional dedication, as well as a portion of the earnings of the Permanent Fund.
- Most revenue deposited into subfunds or subaccounts of the general fund. For example, 50% of alcoholic beverage tax revenue is designated for the Alcohol and Other Drug Abuse Treatment and Prevention Fund.

The Permanent Fund and Constitutional Budget Reserve Fund

Alaska receives investment earnings from a number of internal funds. Primary sources of investment revenue for the state are two constitutionally mandated funds – the Permanent Fund and the CBRF.

The balance of the CBRF is available for appropriation for any purpose with a three-fourths vote of each body of the Legislature. This also applies to the amount of any investment earnings and tax and royalty settlement deposits to the CBRF.

The Earnings Reserve Account balance in the Permanent Fund is available for appropriation for any purpose with a majority vote of the Legislature. This is different from an appropriation of the Permanent Fund's principal balance, which would require an amendment to the Alaska Constitution.

For accounting purposes, the Permanent Fund is divided into two parts – principal (the non-spendable funds), and the Earnings Reserve (assigned funds).

Chapter 3
1

Current-Year Revenue Subject to Appropriation

FY 2020 actuals and FY 2021 – FY 2030 forecast

		Millions of Dollars									
	History	Forecast									
Fiscal Year	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Investment Revenue											
1 Unrestricted General Fund	2,991.2	3,107.1	3,090.2	3,234.4	3,322.8	3,373.3	3,423.8	3,499.4	3,578.9	3,660.5	3,744.0
2 Designated General Fund	33.5	43.2	45.1	47.3	49.5	51.7	54.1	56.6	58.9	61.4	64.0
3 CBRF	62.8	2.0	0.6	0.3	0.6	1.1	1.6	2.2	2.9	3.8	4.8
4 **Subtotal Investment Revenue**	**3,087.5**	**3,152.3**	**3,135.9**	**3,282.0**	**3,372.9**	**3,426.1**	**3,479.5**	**3,558.2**	**3,640.7**	**3,725.7**	**3,812.8**
Petroleum Revenue											
5 Unrestricted General Fund	1,083.1	861.7	808.9	920.0	1,042.3	1,082.6	1,084.0	1,080.7	1,109.2	1,173.4	1,196.0
6 Royalties, Rents and Bonuses to Alaska Permanent Fund [1]	67.8	44.6	41.4	41.7	50.2	61.9	73.1	85.6	95.6	103.1	109.2
7 Tax and Royalty Settlements to CBRF	281.2	60.0	25.0	15.0	15.0	10.0	10.0	10.0	10.0	10.0	10.0
8 **Subtotal Petroleum Revenue**	**1,432.1**	**966.3**	**875.2**	**976.7**	**1,107.6**	**1,154.5**	**1,167.1**	**1,176.3**	**1,214.8**	**1,286.5**	**1,315.2**
Non-Petroleum Revenue											
9 Unrestricted General Fund	462.7	363.0	372.8	484.1	494.6	508.8	515.3	522.6	532.2	531.7	535.1
10 Designated General Fund	382.7	399.4	415.3	428.3	431.3	432.7	434.5	436.8	438.4	440.0	441.4
11 Royalties, Rents and Bonuses to Alaska Permanent Fund [1]	2.9	3.8	4.5	4.6	4.6	4.7	4.7	4.8	4.8	4.8	4.8
12 Tax and Royalty Settlements to CBRF	-1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13 **Subtotal Non-Petroleum Revenue**	**846.9**	**766.2**	**792.6**	**917.0**	**930.5**	**946.2**	**954.6**	**964.1**	**975.4**	**976.4**	**981.2**
14 **Total Revenue Subject to Appropriation**	**5,366.5**	**4,884.7**	**4,803.8**	**5,175.6**	**5,411.0**	**5,526.8**	**5,601.2**	**5,698.6**	**5,830.9**	**5,988.7**	**6,109.2**

Note: CBRF is an acronym for Constitutional Budget Reserve Fund.

[1] The constitutionally dedicated 25% of minerals-related royalties, bonuses, rents, and interest to the Permanent Fund is shown as Other Restricted revenue. Beginning with FY 2020, the additional 25% for leases issued after December 1, 1979, as referred to in AS 37.13.010(a), is shown as Designated General Fund revenue. Previously, the additional 25% was shown as Other Restricted revenue; this change in presentation was made for conformity to budget documents.

The Earnings Reserve contains both net realized earnings from all the fund's investments, and unrealized gains or losses on assets in that portion of the Permanent Fund that are accounted for in the Earnings Reserve. Historically, a portion of the Earnings Reserve has been used to fund Permanent Fund dividends. Beginning in FY 2019, funds have been appropriated from the Earnings Reserve for both government spending and dividends.

Other Customarily Restricted Revenues

Because Alaska is dependent on taxes, royalties, fees, and other revenues that can be volatile, the State of Alaska has developed a framework of constitutionally and statutorily restricted revenue that is held in a variety of reserve funds. These funds provide short-term and long-term options to address cash flow mismatches and budgetary needs.

The Alaska Constitution provides that, with three exceptions, the proceeds of state taxes or licenses "shall not be dedicated to any special purpose." The three exceptions are when dedication is required by the federal government for state participation in federal programs, any dedication existing before statehood, and dedication of funds as provided for in the Alaska Constitution.

Many state revenues are classified as "customarily restricted," meaning they are designated for a specific purpose, even though the Constitution does not allow a dedication of funds. This includes most revenue deposited into subfunds or subaccounts of the general fund. The State of Alaska has historically restricted these revenue sources based on custom or by statutory direction, even though neither of these structures limit the ability of a future Legislature to appropriate the revenue for any purpose. Statutory language typically suggests that revenue from a certain source "may be appropriated" by the Legislature for a specific purpose. Such revenue is nonetheless subject to annual appropriation, even if the State of Alaska by historical practice has followed customary restrictions.

Meeting State Obligations

Understanding the customary nature of many sources of restricted revenue is important, because the ability of the state to meet its obligations is not entirely reflected by the UGF category in budget documents. The state's ability to meet its obligations is provided by adjusting for customary restrictions and looking at all current-year revenues that are subject to appropriation for any purpose.

All revenues subject to appropriation for any purpose can be used by the Legislature to fund government services or obligations, including the use of funds in the CBRF and the Earnings Reserve of the Permanent Fund.

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Chapter 4

Investment Revenue

Introduction: Alaska as an Endowment State – Investment Considerations

Over the past several years Alaska has transitioned from depending primarily on oil revenues to fund government, to depending primarily on investment revenues. Alaska is now, at least partially, an "endowment" state, where a large percentage of revenues are generated by investment earnings and not by taxes. Alaska is the first state in the United States to achieve this status.

Over the years, Alaska policy-makers have invested a considerable amount of time and energy to develop a high level of petroleum industry sophistication in order to appropriately oversee the complexities of oil and gas revenue generation. Due to the importance of investment revenues in our forecast, policy-makers are encouraged to develop a similar level of expertise with respect to this revenue source.

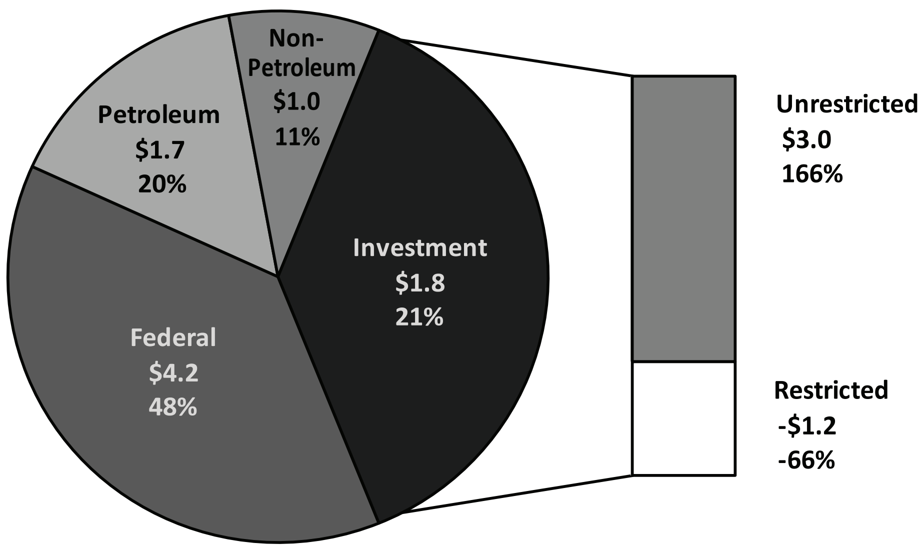
There are a number of investment themes that warrant policy-maker awareness, which include:

Fiduciary Standard of Care

Alaska law imposes fiduciary duty, the highest standard of care, on anyone that invests public funds. This includes the Commissioner of Revenue, the Alaska Retirement Management (ARM) Board members, and the Alaska Permanent Fund Corporation (APFC) Board of Trustees. By statute, fiduciaries of state funds shall apply the prudent investor rule and exercise the

Chapter 4 **A**

FY 2020 Investment Revenue
By restriction and type, in billions of dollars



Chapter 4
1 Total Investment Revenue[1]
By restriction and category

		Millions of Dollars		
		History	Forecast	
	Fiscal Year	2020	2021	2022
	Unrestricted			
	Unrestricted Investment Revenue			
1	Alaska Permanent Fund	2,933.1	3,091.5	3,069.3
2	Investments	58.1	15.6	20.9
3	**Total Unrestricted Investment Revenue**	**2,991.2**	**3,107.1**	**3,090.2**
	Restricted			
	Designated General Fund Revenue			
4	Investments – Designated General Fund[2]	3.5	0.6	1.1
5	Other Treasury – Managed Funds	30.0	42.6	44.0
6	**Subtotal Designated General Fund**	**33.5**	**43.2**	**45.1**
	Other Restricted			
7	Alaska Permanent Fund[3]	-1,296.5	918.3	1,185.8
8	Constitutional Budget Reserve Fund	62.8	2.0	0.6
9	Investments – Other Restricted	12.2	2.0	4.0
10	**Subtotal Other Restricted Revenue**	**-1,221.5**	**922.3**	**1,190.4**
11	**Total Restricted Investment Revenue**	**-1,188.0**	**965.5**	**1,235.5**
12	**Total Investment Revenue**	**1,803.2**	**4,072.6**	**4,325.7**

[1] Governmental Accounting Standards Board principles require the recognition of changes in the value of investments as gains or losses at the end of each trading day, whether the investment is actually sold or not.

[2] Includes subfunds of the general fund.

[3] Starting in FY2019, Alaska Permanent Fund restricted revenue is total realized and unrealized earnings, less the unrestricted revenue due to the transfer to the general fund.

fiduciary duty in the sole financial best interest of the funds entrusted to the fiduciary. Fiduciaries establish investment policy, diversify investments, review the performance of investment portfolios, and may utilize consultants, advisors, custodians, investment services, and legal counsel for assistance in investment matters.

The ARM Board Trustees serve as fiduciaries of the state's retirement and benefits funds and is staffed by the Department of Revenue - Treasury Division. The Board consists of nine governor-appointed Trustees including the Commissioners of Administration and Revenue and seven trustees, who have staggered, four-year terms and are professionally credentialed or have recognized competence in investment management, finance, banking, economics, accounting, pension, administration, or actuarial analysis.

The APFC's Board of Trustees serve as fiduciaries of the Alaska Permanent Fund. The Board appoints the Corporation's Chief Executive Officer, who provides executive leadership and manages APFC in accordance with its established mission, goals, and strategic objectives. The Board is composed of six governor-appointed Trustees. Two of the members must be heads of principal departments of state government, one of whom shall be the Commissioner of Revenue. Four public members fill the remaining seats, who have staggered, four-year terms. The four public members of the Board must have recognized competence and wide experience in finance, investments, or other business management-related fields.

Investment Risk / Volatility

Investing prudently requires building portfolios that balance the ability to earn returns while managing a reasonable level of risk. Long-term changes in investment markets have created difficult choices for fiduciaries. In particular, stock markets are at near all-time highs, and according to the state's investment consultant, Callan Associates, Inc. our future annual returns are expected to be lower than the long-term historical average. At the same time, yields on cash and fixed income investments, which are generally viewed as safer investments, have declined in recent years. As a result, fiduciaries must carefully balance several types of risks in pursuit of target returns. Higher risk exposes investments to higher return volatility and potentially higher losses. But lower risk exposure reduces the chances of achieving expected returns. Under a fiduciary standard of care, there is a fairly wide spectrum of responsible options. Vigorous governance and oversight help ensure appropriate investment decisions are taken. The funds are invested in a diversified portfolio of asset classes across multiple geographies.

Active vs. Passive Investment

Active investment seeks to outperform established market benchmarks through investment manager judgment and skill. It involves a deeper analysis and the expertise to know when to pivot into or out of a particular investment. Passive investment limits the amount of buying and selling within a portfolio and typically invests in a manner that replicates established markets.

Public vs. Private Markets

Historically, assets of state funds have been invested in public markets, with most of the holdings being equity and fixed income investments that are widely followed and available to any investor. In recent years, investments have been made in private markets that are inaccessible through public securities exchanges. Private investments are characterized by long investment horizons and limited liquidity but bring increased diversification and the potential for superior returns. At APFC, private investments have supported the creation and expansion of over 3,000 underlying companies and generated over $6 billion in investment gains in the last six years. In general, public market investments come with higher liquidity and transparency. Private market investments tend to be less liquid, and have higher investment costs and fees. However over time, private market investments also tend to deliver higher net returns.

Investment Management Fees

All investments have a management cost associated with them, including passive investment funds. Over the past decade, investors have placed continual pressure on investment managers to reduce fees. Net returns on investments are equal to the gross or total return less the cost of managing the investment and any profit sharing.

The impact of fees can make a considerable difference. Consider the experience of two identical $50 billion investment funds. One fund earns a net 6.6% over 10 years. The other reduces its fees by 0.15% and so earns a net 6.75% over 10 years. The fee reduction is worth $1.3 billion in additional earnings at the end of 10 years.

All Alaska funds are closely tracking and reporting on their investment management fees. Figure 4-12 summarizes the Alaska Permanent Fund Corporation's FY 2020 fee report and Figure 4-13 summarizes the Alaska Retirement Management Board's FY 2020 fee report. Figure 4-14 summarizes the State Funds' FY 2020 fee report. All Alaska funds strive to reduce management fees by managing investments internally, where possible.

With close to $110 billion in public assets under its management, Alaska has become a sizable financial entity in the Pacific Northwest. As a consequence, considerable staff expertise has been developed at the Department of Revenue and Alaska Permanent Fund Corporation which is available to brief policy-makers on request.

Overview

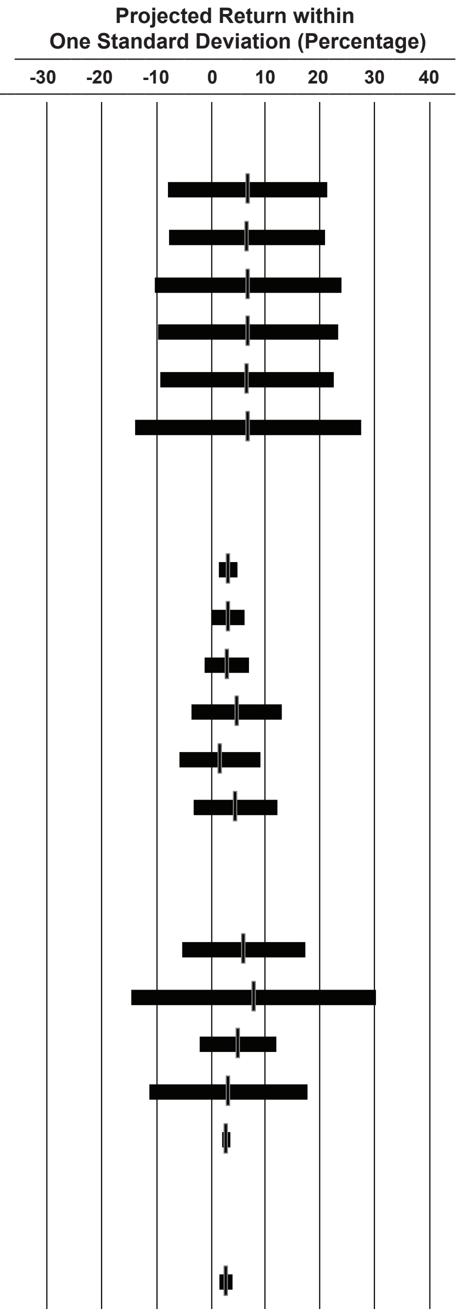
Investment revenue is one of the largest contributors to total state revenue. Table 4-1 shows investment revenues for the most recent fiscal year and forecasts for the next two fiscal years. These forecasts are based on assumptions of projected returns and growth in the value of equities and other investments.

To forecast investment revenue, the Department of Revenue combines actual performance for the first few months of the current fiscal year with a projection for the remainder of the fiscal year. Forecasts and capital-market median returns are based on

Chapter 4
2

2020 Summary of Callan Associates, Inc.
Long-term capital market projections

	Asset Class	Benchmark for Asset Class	Projected Return: 10-Year Geometric[1]	Projected Risk: Standard Deviation
	Equities			
1	Broad U.S. Equity	Russell 3000	7.15%	18.10%
2	Large Cap	S&P 500	7.00%	17.70%
3	Small / Mid Cap	Russell 2500	7.25%	21.20%
4	Global ex-U.S. Equity	MSCI ACWI ex USA	7.25%	20.50%
5	Developed ex-U.S. Equity	MSCI World ex USA	7.00%	19.70%
6	Emerging Market Equity	MSCI Emerging Markets	7.25%	25.70%
	Fixed Income			
7	Short Duration Gov't/ Credit	Bloomberg Barclays 1-3 Yr G/C	2.70%	2.10%
8	Core U.S. Fixed	Bloomberg Barclays Aggregate	2.75%	3.75%
9	TIPS	Bloomberg Barclays TIPS	2.40%	5.05%
10	High Yield	Bloomberg Barclays High Yield	4.65%	10.25%
11	Global ex-U.S. Fixed	Bloomberg Barclays Glbl Agg xUSD	0.90%	9.20%
12	Emerging Market Sovereign Debt	EMBI Global Diversified	4.35%	9.50%
	Other			
13	Core Real Estate	NCREIF ODCE	6.25%	14.00%
14	Private Equity	Cambridge Private Equity	8.50%	27.80%
15	Hedge Funds	Callan Hedge FOF Database	5.00%	8.70%
16	Commodities	Bloomberg Commodity	2.75%	18.00%
17	Cash Equivalents	90-Day T-Bill	2.25%	0.90%
18	**Inflation**	CPI-U	2.25%	1.50%



[1] Geometric returns are derived from arithmetic returns and associated risk (standard deviation).

Chapter 4
3

General Fund Investment Pool Revenue

Non-segregated investments invested alongside general fund

		Millions of Dollars		
		History	Forecast	
	Fiscal Year	**2020**	**2021**	**2022**
	Unrestricted			
1	**Unrestricted Investment Revenue**	58.1	15.6	20.9
	Restricted			
	Restricted Investment Revenue			
2	Designated General Fund [1]	3.5	0.6	1.1
3	Investments – Other Restricted	12.2	2.0	4.0
4	**Total**	**73.8**	**18.2**	**26.0**

[1] Includes subfunds of the general fund.

Chapter 4
4

General Fund Investment Pool I

GeFONSI I, asset allocation and summary

	Treasury Pool	Target Percent Allocation	Performance Benchmark
1	Cash Equivalents	77%	90 Day T-Bill
2	Core U.S. Fixed Income	23%	Bloomberg Barclays Aggregate
3	Asset Balance: October 31, 2020	1,574.9	$ Million
4	Long-term Expected Rate of Return	2.38%	Callan's returns
5	Probability of Negative Return Over One Year	2.00%	From FY 2021 Asset Allocation

Note: GeFONSI is an acronym for general fund and other non-segregated investments.

Chapter 4

5

General Fund Investment Pool II

GeFONSI II, asset allocation and summary

	Treasury Pool	Target Percent Allocation	Performance Benchmark
1	Cash Equivalents	75%	90 Day T-Bill
2	Core U.S. Fixed Income	18%	Bloomberg Barclays Aggregate
3	Broad U.S. Equity	4%	Russell 3000
4	International Equity	3%	MSCI ACWI ex-US
5	Invested Assets as of October 31, 2020	1,126.7	$ Million
6	Long-term Expected Rate of Return	2.78%	Callan's returns
7	Probability of Negative Return Over One Year	3.00%	From FY 2021 Asset Allocation

Note: GeFONSI is an acronym for general fund and other non-segregated investments.

information given in the five- to 10-year capital-market returns projection, provided by the state's investment consultant, Callan Associates, Inc.

Table 4-2 shows a summary of Callan's 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 Return" is the estimated annual rate of return. The numbers in the "Projected Risk" column represent a statistical measure called standard deviation, which is a commonly used measure of investment risk. 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 (for instance, 95%) would require a broader range (two standard deviations). 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.

Unrestricted and Restricted Investment Revenue

"Unrestricted investment revenue" is earned on some of the funds invested through the general fund and other non-segregated investments (GeFONSI) pool. These funds are managed by the Department's Treasury Division.

The Alaska Legislature adopted a protocol to appropriate a portion of the value of the Alaska Permanent Fund to the general fund beginning in FY 2019. The estimated amount of this appropriation is shown as unrestricted revenue. Additional information about the protocol and the enabling legislation, Senate Bill 26, can be found later in this chapter.

The Treasury Division invests general fund cash balances alongside cash balances from certain other funds in GeFONSI, a single investment pool. Earnings from GeFONSI are primarily unrestricted revenue, but also include some restricted revenue from balances in general fund subfunds and special revenue funds.

"Restricted investment revenue" consists of earnings from governmental funds, the Constitutional Budget Reserve Fund (CBRF), other Treasury Division-managed governmental funds, and net earnings of the Permanent Fund after subtracting the unrestricted portion appropriated to the general fund. As discussed in Chapter 3, some of these earnings, while considered "restricted" by convention or statute for budget purposes, are technically available for appropriation for any purpose.

Constitutional Budget Reserve Fund

The CBRF was established in 1990, when Alaskans voted to amend the Alaska Constitution to create a separate fund for money received from the resolution of disputes involving oil and gas and minerals taxes or royalties – both from the settlement of lawsuits as well as additional tax or royalty payments resulting from audits.

Chapter 4
6

Public School Trust Fund

Asset allocation and summary

	Treasury Pool	Target Percent Allocation	Performance Benchmark
1	Broad U.S. Equity	42%	Russell 3000
2	Core U.S. Fixed Income	29%	Bloomberg Barclays Aggregate
3	International Equity	28%	MSCI ACWI ex-US
4	Cash Equivalents	1%	90 Day T-Bill
5	Invested Assets as of October 31, 2020	688.5	$ million
6	Long-term Expected Rate of Return	6.37%	Callan's returns
7	Probability of Negative Return Over One Year	30.70%	From FY 2021 Asset Allocation

Chapter 4
7

Public School Trust Fund

By restriction and source

		Millions of Dollars		
		History	Forecast	
	Fiscal Year	2020	2021	2022
	Restricted			
	Restricted – Designated General Fund [1]			
1	Public School Trust Fund Total Investment Earnings	30.0	42.6	44.0
2	Public School Trust Fund Max Statutory Distribution to Alaska Department of Education and Early Development	26.5	30.0	31.2

[1] All earnings of the Public School Trust Fund are counted as revenue for this revenue forecast.

The maximum statutory distribution to the Alaska Department of Education and Early Development is provided for informational purposes and represents a portion of the total earnings of the fund.

Before revenue from royalty, rent, and bonus settlements or judgments is deposited into the CBRF, 25% to 50% of that revenue goes into the Permanent Fund, and 0.5% goes to the Public School Trust Fund. The CBRF receives 100% of other revenue from resolution of oil and gas and minerals related disputes, generally resulting from settlement of oil and gas production tax, petroleum property tax, minerals-related corporate income tax, and mining license tax disputes and audits.

The CBRF was set up such that the Legislature may, under certain conditions, appropriate funds from the CBRF to pay for operating state government. The CBRF is also used to provide cash flow sufficiency to the general fund. If the amount available for appropriation for a fiscal year is less than the amount appropriated for the previous fiscal year, an appropriation may be made from the CBRF with a majority vote of the Legislature. However, the amount appropriated from the fund under this provision may not exceed the amount necessary, when added to other funds available for appropriation, to provide for total appropriations equal to the amount of appropriations made in the previous calendar year for the previous fiscal year. Otherwise, a three-quarters vote of the Legislature is required for appropriation of CBRF funds. In either case, these funds must eventually be repaid to the CBRF.

In 2014, the Legislature approved a $3 billion transfer from the CBRF to the Public Employees' Retirement System and Teachers' Retirement System. That transfer, as well as additional authorized withdrawals to balance the state's budget, will need to be paid back to the CBRF under law.

Statutory Budget Reserve Fund

The Statutory Budget Reserve Fund (SBRF) was established by the Legislature in 1986. This fund allows for state savings outside of the primary savings accounts

Chapter 4
8

Constitutional Budget Reserve Fund
Asset allocation and summary

	Treasury Pool	Target Percent Allocation	Performance Benchmark
1	Cash Equivalents	100%	90 Day T-Bill
2	Regular Account Asset Balance: October 31, 2020 [1]	1,047.1	$ Million
3	Long-term Expected Rate of Return	2.25%	Callan's returns
4	Probability of Negative Return Over One Year	0.60%	From FY 2021 Asset Allocation

[1] This figure represents actual cash and securities in the fund as of the date given and does not represent the amount of the CBRF that can be appropriated.

Chapter 4
9

Constitutional Budget Reserve Fund
By restriction and source

		Millions of Dollars		
		History	Forecast [1]	
	Fiscal Year	2020	2021	2022
	Restricted			
	Restricted – Other Restricted			
1	Regular Account	62.8	2.0	0.6
2	**Total**	**62.8**	**2.0**	**0.6**

[1] Projected balances and earnings of the CBRF are subject to change over the forecast period. The balance of the CBRF is available for appropriation by vote of the Legislature subject to certain conditions.

(the Permanent Fund and the CBRF), with the fund balances and earnings available for appropriation for any purpose with a simple majority vote of the Legislature. The entire remaining unobligated balance of the SBRF was appropriated in the enacted FY 2020 budget.

Alaska Permanent Fund

The Alaska Permanent Fund receives a portion of state royalty revenue from oil, gas, and other minerals. Over the decades, this fund has grown to become a major asset of the state. The fund has supported the Permanent Fund Dividend program and now supports general government operations as well.

Fund earnings are estimated by applying Callan's five- to 10-year capital-market returns projection to the Alaska Permanent Fund Corporation's current asset allocation targets. Market fluctuations could result in the actual return being materially higher or lower than forecast.

The Legislature adopted a protocol to appropriate a portion of the value of the Permanent Fund to the general fund beginning in FY 2019. The remainder of the net earnings of the fund, after accounting for general fund appropriation, are shown as restricted investment revenue. The total revenue attributable to the Permanent Fund, per Governmental Accounting Standards Board principles, is the sum of these two categories. The total revenue includes both realized and unrealized earnings of the fund.

Chapter 4
10

Alaska Permanent Fund

By restriction and source

		Fiscal Year	Millions of Dollars History 2020	Forecast 2021	Forecast 2022
	Unrestricted				
1	Alaska Permanent Fund Draw		2,933.1	3,091.5	3,069.3
	Restricted				
	Restricted – Other Restricted				
2	Annual Unrealized Gain/Loss		-1,489.8	659.9	227.7
3	Annual Realized Gain/Loss		3,126.4	3,349.9	4,027.4
4	Reported Earnings Net of Unrestricted Draw [1]		-1,296.5	918.3	1,185.8
5	**Reported Earnings**		**1,636.6**	**4,009.8**	**4,255.1**

[1] Starting in FY 2019, Alaska Permanent Fund Restricted revenue is the total realized and unrealized earnings, less the transfer to the general fund.

Chapter 4
11

Alaska Permanent Fund

Asset allocation and summary

	Treasury Pool	Target Percent Allocation	Performance Benchmark
1	Stocks	39%	Multiple Strategies
2	Fixed Income	21%	Multiple Strategies
3	Real Estate	7%	Multiple Strategies
4	Private Equity & Growth Opportunities	15%	Multiple Strategies
5	Absolute Return Strategies	6%	Multiple Strategies
6	Infrastructure, Private Credit & Income Opportunities	9%	Multiple Strategies
7	Risk Parity	1%	Multiple Strategies
8	Cash	2%	Multiple Strategies
9	Special Subaccount Balance: June 30, 2020	65,302.2	$ Millions
10	Long-Term Expected Rate of Return	6.75%	Callan's returns

The Permanent Fund Percent of Market Value

During the 2018 legislative session, the Alaska Legislature passed Senate Bill 26 (SB 26), which created a Percent of Market Value (POMV) framework for using a portion of the earnings of the Alaska Permanent Fund to support government operations. The impetus for this change was several years of low oil prices that led to the near-depletion of the CBRF, the state's primary savings account. Accessing the Permanent Fund in this way allowed policy-makers to continue providing government services while also largely avoiding new or increased taxes on Alaska residents and industry.

SB 26 provides for an annual appropriation from the Permanent Fund based on the POMV at the end of the fiscal year. To provide predictability and stability of the draw, the POMV is calculated on the average of the first five of the last six fiscal years. For example, the FY 2019 draw was based on the average ending market value in FY 2013 – FY 2017. For FY 2019, FY 2020, and FY 2021 5.25% of that POMV is appropriated to the general fund; for FY 2022 and beyond, the appropriation is 5.0%. Modern endowments are structured to preserve the inflation-adjusted value of the endowment fund indefinitely. Endowments accomplish this by limiting the annual distribution percentage to the real rate of return on the investments of the endowment (real rate of return = nominal rate of return – inflation). As long as the Permanent Fund's long-term market real returns exceed the amount of the POMV draw, the annual appropriation and the Permanent Fund itself should be sustainable over the long term. Comparison of the Permanent Fund's average real rates of return with the average POMV distribution rate should be a regular exercise to ensure long-term sustainability.

One provision not specified in SB 26 was how the annual draw is divided between dividends and government operations. Barring further legislative changes, this split is not set and will need to be determined annually by the Legislature.

Investment Fee Definitions

Below is background information to better understand ARM Board's and APFC's presentation of fees.

FEES PAID FROM INVESTMENTS
External investment managers retain fees from the assets they are managing, which is netted against income before being distributed back to a Fund. This category includes underlying fund management fees incurred in the private equity, real estate, and absolute return portfolios.

FEES PAID FROM INVESTMENT MANAGEMENT ALLOCATION
These fees are billed to the funds for payment, are limited by an approved budget appropriation, and include fees for external investment management, custody, and other investment management costs.

FEES PAID FROM OPERATIONS ALLOCATION
This category of fees includes all operating expenses from an investment organization that are directly related to the management of investments. This category includes personal services, travel, contractual services, commodities, and equipment for all staff.

PROFIT SHARING/PERFORMANCE FEES
Performance fees are paid to an external manager after the invested assets have generated a return on investment above an agreed-upon hurdle rate. In a year in which there are relatively higher performance fees, this is usually a reflection of the assets performing above expectations.

Chapter 4

12

Alaska Permanent Fund Management Fees

By source, FY 2020

Report Date	**June 30, 2020**
Total Fund Balance	**65,837,081,396**
YTD Change in Total Fund Balance (Net of Transfers)	**(4,302,839,000)**

Investment Management Fees

	Paid From Investments	Paid from Investment Management Allocation	Paid from Operations Allocation	Total
Public Equity	2,734,000	49,113,000	1,965,000	53,812,000
Fixed Income Plus	58,000	10,549,000	4,271,000	14,878,000
Absolute Return	51,296,000	1,369,000	844,000	53,509,000
Asset Allocation**	2,998,000	1,384,000	0	4,382,000
Private Equity & Special Opps	109,178,000	21,465,000	3,226,000	133,869,000
Infrastructure & Private Income	76,738,000	3,062,000	1,688,000	81,488,000
Real Estate	33,083,000	5,365,000	2,859,000	41,307,000
Total Mgmt Fees by Source	**276,085,000**	**92,307,000**	**14,853,000**	**383,245,000**
Basis Points	**42**	**14**	**2**	**58**

Profit Sharing/Performance

	Paid From Investments	Paid from Investment Management Allocation	Paid from Operations Allocation	Total
Public Equity	0	13,987,000	0	13,987,000
Fixed Income Plus	0	0	0	0
Absolute Return	17,436,000	0	0	17,436,000
Asset Allocation	0	0	0	0
Private Equity & Special Opps	109,088,000	0	0	109,088,000
Infrastructure & Private Income	95,646,000	0	0	95,646,000
Real Estate	113,000	0	0	113,000
	222,283,000	13,987,000	0	236,270,000

Notes: One basis point is equal to 1/100th of 1%, or 0.01%, or 0.0001, and is used to denote percentage change.
** Operating expenses related to Asset Allocation are spread across the asset classes.
All amounts presented, including fund balance and change net of transfers, consist of both APF and AMHT combined.
Source: https://apfc.org/report-archive/# (June 2020 Investment Management Fee Report)

Chapter 4
13
Alaska Retirement Management Board Fees
By source, FY 2020

Fiscal Year 2020 ARM Board Costs

	Estimated Costs Incurred by Private Equity Gatekeepers	Paid from Investments	Paid from Investment Management Allocation	Paid from Operations Allocation	Total	Net Asset Value as of June 30, 2020
Fixed Income	-	8,607,000	2,961,000	1,225,000	12,793,000	6,052,612,000
Opportunistic	-	3,867,000	3,867,000	166,000	7,900,000	1,463,847,000
Broad Domestic Equity	-	-	1,506,000	1,506,000	3,012,000	7,323,474,000
Global Equity Ex-US	-	-	10,403,000	582,000	10,985,000	5,053,592,000
Private Equity	-	8,680,000	5,597,000	895,000	15,172,000	3,006,949,000
Underlying Gatekeeper Fees	*34,387,000*	-	-	-	*34,387,000*	
Real Assets	-	24,507,000	257,000	777,000	25,541,000	3,616,761,000
Shared	-	-	2,754,000	1,184,000	3,938,000	
Total Non-Participant Directed Costs	34,387,000	45,661,000	27,345,000	6,335,000	113,728,000	26,517,235,000
Participant Directed		-	9,852,000	830,000	10,682,000	7,201,429,000
Total Participant and Non-Participant Directed Costs	34,387,000	45,661,000	37,197,000	7,165,000	124,410,000	33,718,664,000
Basis Points	10	14	11	2	37	

Accrued Performance Incentive Fees

Alternative Investments		41,330,000			41,330,000	

Notes: One basis point is equal to 1/100th of 1%, or 0.01%, or 0.0001, and is used to denote percentage change.
Underlying fees represent estimated management fees paid to general partners for private equity investments made through private equity gatekeepers.

Source: https://treasury.dor.alaska.gov/armb/Reports-and-Policies/Quarterly-Fee-Reports.aspx

Chapter 4
14
Alaska State Funds Investment Fees
By value and basis points, FY 2020

	Investment Plan	Total Fees ($)	Basis Points [1]
1	GeFONSI I	694,000	4
2	Public School Trust Fund	269,000	4
3	PCE Endowment Fund	424,000	4
4	Constitutional Budget Reserve Fund	568,000	4
5	GeFONSI II	449,000	4
6	Alaska Higher Education Investment	148,000	4

[1] One basis point is equal to 1/100th of 1%, or 0.01%, or 0.0001, and is used to denote percentage change.

Chapter 5

Federal Revenue

General Discussion

Each year, the State of Alaska receives several billion dollars in federal funds, constituting a major portion of total state revenue. This federal funding is considered restricted revenue, as it is required to be used for specific purposes for which the funds were provided such as road improvements, Medicaid payments, and aid to schools. Federal funds may require state matching funds or other contributions.

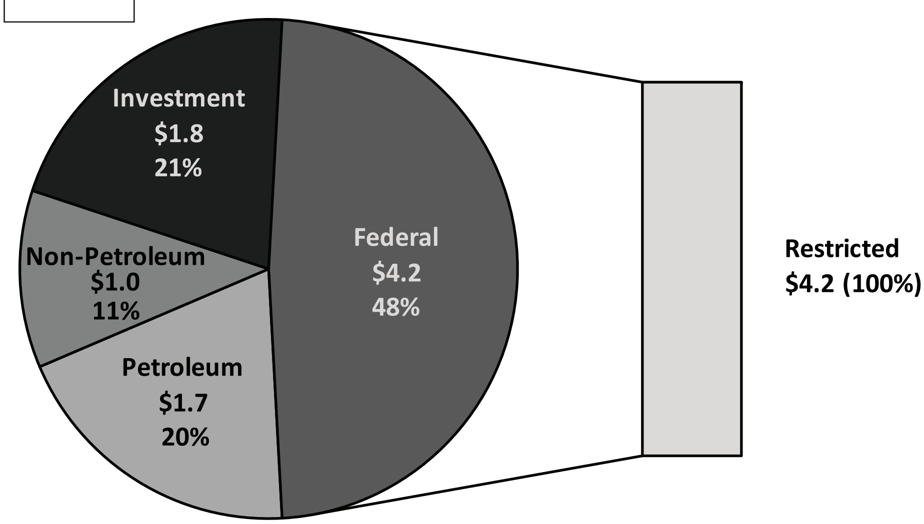
Federal funds are subject to state fiscal controls - Alaska requires federal receipts to be deposited into the treasury and appropriated in the same manner as other state money. The Alaska Legislature authorizes state agencies to receive and spend the federal funding. Given uncertainty at the time of appropriation of the exact amount of funding that will be available, the Legislature often appropriates a higher level of federal receipt authority to allow some flexibility in accepting funding and actual amounts received are historically-lower.

The Revised Program Legislative (RPL) process provides a pathway for state agencies to expend unexpected increases in federal or other program receipts within existing appropriations enacted by the Legislature. This process is typically used when the Legislature is not in session and federal or other funds become available at a higher than anticipated level. A relevant example of the RPL process is the recent influx of federal funding made available by congress for COVID-19 relief. Since the Legislature had already passed the budgets for

Chapter 5
A

FY 2020 Federal Revenue

By restriction and type, in billions of dollars



Chapter 5
1

Total Federal Revenue to the State

By restriction and category

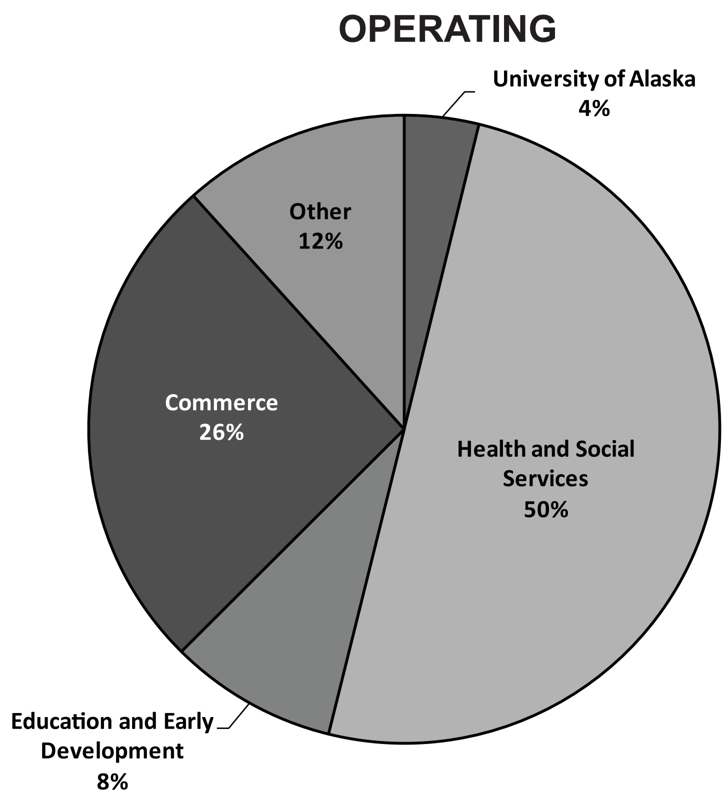
		Millions of Dollars		
		History	Forecast	
	Fiscal Year	**2020**	**2021**	**2022**
	Unrestricted General Fund			
1	Federal Receipts	0.0	0.0	0.0
	Restricted (Federal)			
2	Federal Receipts Authorization [1]	4,173.0	4,638.6	3,884.2
3	**Total Federal Revenue**	**4,173.0**	**4,638.6**	**3,884.2**

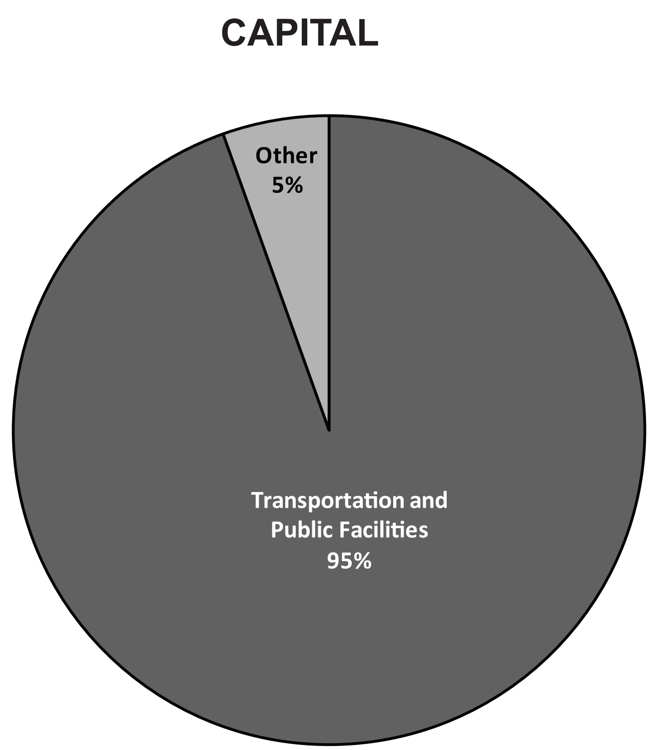
[1] This amount includes federal receipts other than Alaska's share of the royalties from the National Petroleum Reserve – Alaska, which are presented in Chapter 2.

Chapter 5
B

FY 2020 Federal Revenue Allocation

Revenue in operating and capital budgets, by recipient agency





Chapter 5
2

Total Federal COVID-19 Funding to the State

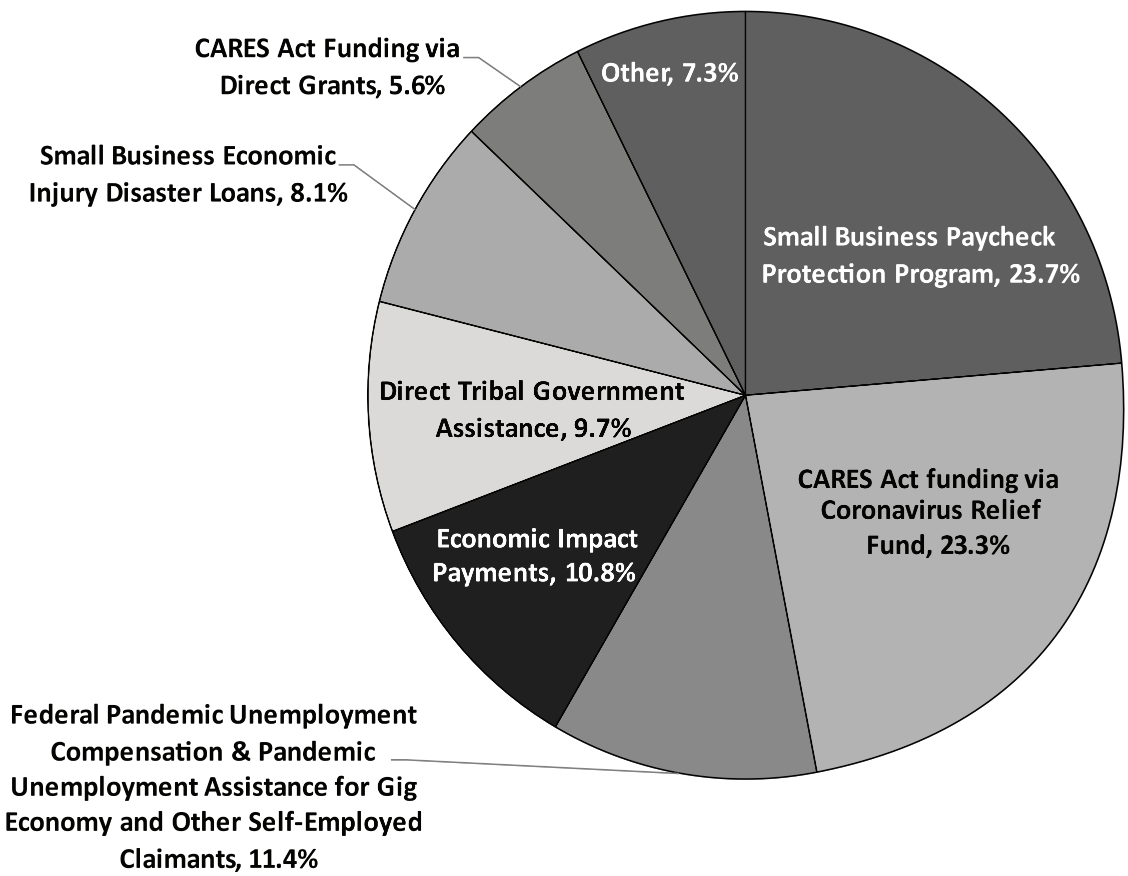
By restriction and source

	Name	Percent of Total	Millions of Dollars Value
1	Small Business Paycheck Protection Program	23.7%	1,269.3
2	CARES Act funding via Coronavirus Relief Fund (CRF)	23.3%	1,250.0
3	Federal Pandemic Unemployment Compensation & Pandemic Unemployment Assistance for Gig Economy and Other Self-Employed Claimants	11.4%	612.8
4	Economic Impact Payments	10.8%	580.8
5	Direct Tribal Government Assistance	9.7%	520.5
6	Small Business Economic Injury Disaster Loans (EDIL)	8.1%	436.4
7	CARES Act Funding via Direct Grants	5.6%	299.8
8	Other	7.3%	393.5
9	**Total**	**100.0%**	**5,363.1**

Chapter 5
C

Federal COVID-19 Funding

Total: $5.4 billion as of November 23, 2020



fiscal years 2020 and 2021, the RPL process was used to accept this funding. In fiscal years 2020 and 2021, several agencies which have historically been allocated very few federal dollars received a sizable federal funding increase as a result of COVID-19 spending by the federal government. The RPL process and federal COVID-19 relief spending in Alaska are discussed in more detail later in this chapter.

Consistent with state budget protocol and past practice, the federal revenue forecast represents the total authorization. Actual revenue received is typically less than the forecast.

Federal Funding Process

Federal funds in Alaska consist of both funds directly received by the state government (and reflected in the budget and revenue forecast) as well as funds that flow into the state in other ways (such as military spending, social security payments, etc.).

Federal receipts are provided to the state for its efforts in conducting congressionally authorized activities at the state level. Federal funding does not come as one large appropriation, rather there are hundreds of different grant programs that direct money to the state for everything from transportation to Medicaid to education. Most federal receipts are received as grants that can be used only for specific purposes. Federal receipts may be awarded to a state in a set amount or as part of an entitlement program with the amount determined by formula according to population or other criteria. Some grants require specific data collection activities or performance measures to receive funding. Some federal projects and grants may require a state financial commitment (state or local matching funds or in-kind contributions). Federal funding is often received as reimbursement for costs already incurred. All of these programs and grants come with varying levels of stipulations around how the funds may be used at the state level; for this reason all federal funding is reflected as restricted revenue in this *Revenue Sources Book*.

Revised Program Legislative (RPL) Process

A Revised Program Legislative (RPL) process is a type of budget revision that is subject to review by the Legislative Budget and Audit Committee under AS 37. 07. 080(h). This process allows for the increase of an appropriation item based on additional federal or other program receipts not specifically appropriated by the full Legislature. The RPL process is initiated by the Governor, who submits the proposed increase to an existing appropriation to the Legislative Budget and Audit Committee for review and committee recommendation. If, after 45 days, the committee has not met to recommend the state take part in the federal or otherwise funded activity, the Governor is able to authorize the expenditure. Committee approval allows immediate expenditure of additional receipts that were not specifically appropriated by the Legislature. The RPL process is frequently used to authorize federal funds that were not anticipated during the regular budget development and legislative budget process. The RPL process cannot be used to increase general fund authority or create a new appropriation.

Distribution of Restricted Revenue

In recognition of the potential liabilities to the state associated with accepting federal funding, federal funds are subject to state fiscal controls; Alaska requires federal receipts to be deposited into the treasury and appropriated in the same manner as other state money. In order to accept and spend federal funds, the state must include that spending authority in the state budget for each impacted program or project. When the Legislature passes the budget, the exact amount of federal funding that will be received for the coming fiscal year is not known. In order to allow some flexibility to receive possible federal funds, the Legislature typically authorizes a higher level of authority in the budget for each program or project and actual amounts received are historically somewhat lower. By convention, the *Revenue Sources Book* also includes this higher level of funding in the forecast, for consistency with budget protocols. Actual federal revenue is typically less than forecasted due to this convention.

Federal funds support significant portions of both the operating budget and the capital budget. Typically, the Alaska Department of Health and Social Services is the largest recipient of federal funds within the operating budget and the Alaska Department of Transportation and Public Facilities is the largest recipient of federal funds within the capital budget. Some of the funding for multi-year capital projects is received and spent in years following the year that the money was appropriated. Figure 5-B illustrates the allocation of federal funds the state was authorized to receive in the most recent fiscal year.

Federal COVID-19 Funding

For fiscal years 2020 and 2021, the State of Alaska received additional funding from the federal government as a result of two bills: the Families First Coronavirus Response Act (FFCRA) and the Coronavirus Aid, Relief, and Economic Security (CARES) Act. Most of these funds are being "passed through" the state government, that is, they are ultimately being sent to Alaskan businesses, non-profits, and individuals with the state acting as a central distribution point. Several funding streams are also being sent directly to non-state organizations such as through tribal assistance, small business loans, and assistance to universities outside of the University of Alaska System. When added together, federal funds coming to Alaska for COVID-19 total approximately $5.4 billion as of the writing of this publication. Figure 5-C illustrates the various sources of federal stimulus funds to Alaska. Note, not all provisions of the federal stimulus bills impacting the state came with funding attached; for example, the FFCRA included new requirements for private employers with under 500 employees and governments of all sizes to provide emergency paid sick and medical leave. While the FFCRA included tax credits to offset costs to private employers, it did not provide associated funding or tax credits to offset related costs to government employers.

Approximately $2.3 billion of the federal funding has been allocated through the state's budget. These funds fall into two categories: enhanced funding through existing state agency programs and coronavirus relief funds.

Enhanced funding for existing state agency programs is estimated to total $1.1 billion. These funds are allocated by the federal government and distributed directly to the impacted state agency programs. The enhanced funding streams in these bills impact almost every state department. Some notable provisions of the federal funding include:

- A temporary additional $600 per week and coverage of 'gig economy' workers through the unemployment insurance program in the Department of Labor, as well as the extra 13 weeks of coverage under the Pandemic Emergency Unemployment Compensation program and the FEMA Lost Wages funding ($612.8 million)
- Airport and Transit grants to the Department of Transportation and Public Facilities ($113.2 million)
- Nutrition and emergency relief grants to the Department of Education ($87.2 million)
- Enhanced federal funding match rate for Medicaid (projected to total $72 million)
- Hospital preparedness program grants and CDC Building Epidemiology and Laboratory Capacity funding through Department of Health and Social Services ($66.6 million)
- Emergency management grants to the Department of Military and Veterans Affairs ($0.9 million) and potential federal COVID-19 disaster reimbursements based on FEMA project worksheets ($55.5 million)
- Fisheries grants through the Department of Commerce, Community, and Economic Development ($50 million)
- Child Care, Heating Assistance, Substance Abuse, Housing, Nutrition Services, and Caregiver Support through the Department of Health and Social Services ($14.9 million)
- Higher education grants to the University of Alaska ($10.5 million)
- Community Block Grants through Department of Commerce, Community, and Economic Development ($6.2 million)
- Justice grants to the Department of Public Safety ($3.6 million)
- Election Support funding to the Governor's Office ($3 million)

Coronavirus relief funds were provided to the state directly and then allocated by the state to various impacted stakeholders. The State of Alaska was given $1.25 billion, which has been allocated by the Governor through the Revised Program Legislative (RPL) process. Allocations of this funding stream have been made for the following programs:

- Direct Municipal Relief through the Department of Commerce, Community, and Economic Development ($569 million)
- Small Business Relief through the Alaska Industrial Development and Export Authority ($290 million)
- Non-Profit support through the Department of Health and Social Services and the Alaska Community Foundation ($50 million)

- Homeless Assistance through the Alaska Housing Finance Corporation ($10 million)
- Other COVID-19 related costs to the State of Alaska through the Department of Health and Social Services ($331 million)

In addition to the two categories of funds mentioned above, some stimulus funds flowed into the state without going through the state government. These included funding for programs such as Small Business Administration (SBA) Loans ($469.2 million) and Paycheck Protection Program Forgivable Loans ($1.3 billion), which are sent directly to qualifying businesses. Economic Impact Payments of up to $1,200 per person were sent directly to qualifying taxpayers from the IRS ($580.8 million). Also, certain stimulus funding was provided directly to Tribal governments ($1.0 billion).

Chapter 6
Petroleum Revenue

General Discussion

The four major sources of state revenue from oil and gas production are production tax, royalties, property tax, and corporate income tax. This chapter describes each of these sources, as well as key variables that influence these revenue sources.

Production tax (the state's severance tax for oil and gas) is levied on a producer when the resource is severed (or extracted) from land in Alaska. Royalties are payments to the owners of the land and represent a percentage of production. Property tax is collected as a percentage of the value of taxable oil and gas property in the state. Corporate income tax is levied on oil and gas C-corporations as a percentage of their worldwide net income apportioned to Alaska.

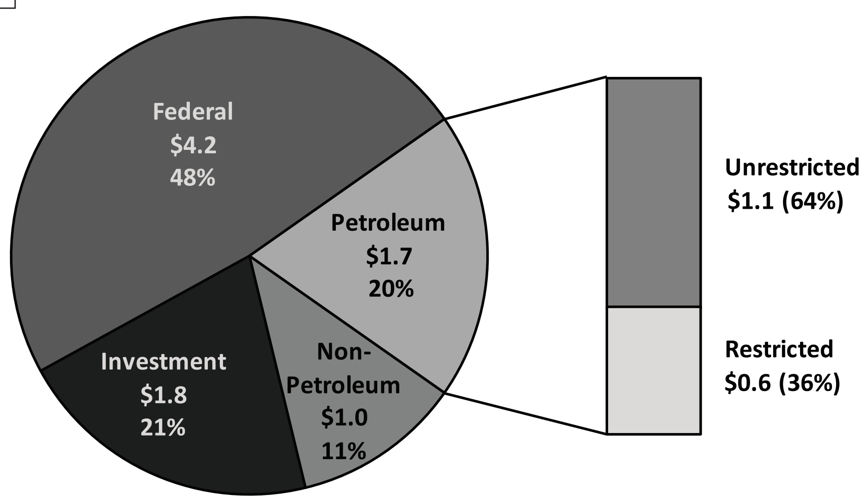
Revenue from oil and gas is unrestricted, with three exceptions:

- The Alaska Constitution requires that 25% of royalty revenue be deposited into the Alaska Permanent Fund. Alaska Statute 37.13.010(a) refers to 50% of royalty revenue from mineral leases issued after December 1, 1979, being deposited into the Permanent Fund. This additional amount is subject to appropriation from the general fund but is shown as restricted in this forecast. Additionally, the Public School Trust Fund receives 0.5% of royalty revenue.
- Payments received from the federal government representing a share of the bonuses, rents, and royalties derived from federal oil and gas leases in the National Petroleum Reserve – Alaska (NPR-A) are deposited into an NPR-A special revenue fund.

Chapter 6 **A**

FY 2020 Petroleum Revenue

By restriction and type, in billions of dollars



Chapter 6
1

Total Petroleum Revenue

By restriction and source

		Millions of Dollars		
		History	Forecast	
	Fiscal Year	**2020**	**2021**	**2022**
	Unrestricted Petroleum Revenue			
1	Petroleum Property Tax	122.9	115.7	113.2
2	Petroleum Corporate Income Tax	-0.2	5.0	-20.0
3	Oil and Gas Production Tax	285.1	171.8	163.3
4	Royalties (including bonuses, rents, and interest)	675.3	569.2	552.3
5	**Total Unrestricted Petroleum Revenue**	**1,083.1**	**861.7**	**808.9**
6	Change from Prior Period	-960.7	-221.4	-52.8
7	Percent Change from Prior Period	-47.0%	-20.4%	-6.1%
	Restricted Petroleum Revenue			
	Designated General Fund			
8	Royalties, Bonuses, and Rents to the Alaska Permanent Fund [1]	67.8	44.6	41.4
	Other Restricted			
9	Royalties, Bonuses, and Rents to the Alaska Permanent Fund [1]	251.1	206.0	199.2
10	Royalties, Bonuses, and Rents to the Public School Trust Fund	5.0	4.1	4.0
11	Tax and Royalty Settlements to Constitutional Budget Reserve Fund	281.2	60.0	25.0
12	**Subtotal Other Restricted**	**537.3**	**270.1**	**228.2**
	Federal			
13	NPR-A Royalties, Rents, and Bonuses	16.4	10.8	12.4
14	**Total Restricted Petroleum Revenue**	**621.5**	**325.4**	**282.0**
15	Change from Prior Period	45.6	-296.1	-43.5
16	Percent Change from Prior Period	7.9%	-47.6%	-13.4%
17	**Total Petroleum Revenue**	**1,704.6**	**1,187.1**	**1,090.8**
18	Change from Prior Period	-915.0	-517.5	-96.3
19	Percent Change from Prior Period	-34.9%	-30.4%	-8.1%

[1] The constitutionally dedicated 25% of minerals-related royalties, bonuses, rents, and interest to the Permanent Fund is shown as Other Restricted revenue. Beginning with FY 2020, the additional 25% for leases issued after December 1, 1979, as referred to in AS 37.13.010(a), is shown as Designated General Fund revenue. Previously the additional 25% was shown as Other Restricted revenue; this change in presentation was made for conformity to budget documents.

- Payments received from settlements of tax and royalty disputes between the state and producers are deposited into the Constitutional Budget Reserve Fund (CBRF), after accounting for any applicable share of royalty settlements deposited into the Permanent Fund and Public School Trust Fund.

Table 6-1 shows both unrestricted and restricted petroleum revenue collected from each source for the most recent fiscal year and forecasts for the next two fiscal years. Table 6-2 shows the 10-year forecast of unrestricted revenue from these sources.

Production Tax

Oil and gas produced and sold from lands within Alaska are subject to a severance tax as the resources leave the land. This severance tax is commonly referred to as the "production tax." The production tax applies to oil and gas produced from any area within the boundaries of the state, including 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 nautical miles from the shore. Production tax

Chapter 6 **2**

Unrestricted Petroleum Revenue

FY 2020 actuals and FY 2021 – FY 2030 forecast

		Millions of Dollars										
		History	Forecast									
	Fiscal Year	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
1	Petroleum Property Tax	122.9	115.7	113.2	111.7	110.1	107.8	105.8	103.9	102.0	100.1	98.0
2	Petroleum Corporate Income Tax	-0.2	5.0	-20.0	55.0	70.0	80.0	85.0	85.0	90.0	95.0	100.0
3	Oil and Gas Production Tax[1]	285.1	171.8	163.3	191.0	249.3	255.1	234.3	215.7	218.5	261.1	265.6
4	Royalties – Net[2]	675.3	569.2	552.3	562.3	612.9	639.8	658.8	676.1	698.7	717.3	732.3
5	**Total Unrestricted Petroleum Revenue**	**1,083.1**	**861.7**	**808.9**	**920.0**	**1,042.3**	**1,082.6**	**1,084.0**	**1,080.7**	**1,109.2**	**1,173.4**	**1,196.0**
6	Change from Prior Period	-960.7	-221.4	-52.8	111.1	122.3	40.3	1.3	-3.3	28.5	64.2	22.6
7	Percent Change from Prior Period	-47%	-20%	-6%	14%	13%	4%	0%	0%	3%	6%	2%

[1] Includes hazardous release and conservation surcharge revenues.

[2] Includes bonuses, rents, and interest.

applies only to oil and gas that the producer sells. It excludes state royalties, gas used in lease operations or flared for safety reasons, and any production that is reinjected into a reservoir.

In 2013, the Alaska Legislature passed Senate Bill 21, which is the existing production tax regime applicable to oil and gas production in the state. Adjustments and refinements to the production tax regime were made in both 2016 with House Bill 247 and in 2017 with House Bill 111. Table 6-3 lists the major provisions of the production tax as they exist in current law. The following narrative describes the current production tax system for various areas of the state and types of production.

North Slope

For North Slope oil and gas (gas shipped and sold outside the state), the tax uses the concept of "production tax value" (PTV), which is the gross value at the point of production minus allowable lease expenditures. PTV is similar in concept to net profit, but different in that all allowable lease expenditures can be deducted in the year incurred; that is, capital expenditures are not subject to a depreciation schedule. The production tax rate is 35% of PTV with an alternative minimum tax floor calculation of 0% to 4% of gross value. The 4% minimum tax floor applies when average Alaska North Slope (ANS) oil prices for the year exceed $25 per barrel. Lower rates apply if the yearly average ANS price is below $25 per barrel.

Several tax credits and other mechanisms are available for North Slope oil production to incentivize additional investment. A sliding scale Per-Taxable-Barrel Credit is available, which is progressively reduced from $8 per barrel to $0 as wellhead value increases from $80 per barrel to $150 per barrel. A company that chooses to take this credit may not apply it or any other tax credits to reduce the tax paid below the gross minimum tax floor.

An additional incentive applies for qualifying new production areas on the North Slope. The gross value reduction (GVR) allows a company to exclude 20% or 30% of the gross value for that production from the tax calculation. Qualifying production includes areas surrounding a currently producing area that may not be otherwise commercial to develop, as well as certain new oil pools. Oil that qualifies for this GVR receives a flat $5 Per-Taxable-Barrel Credit rather than the sliding-scale credit available for most other North Slope production. As a further incentive, this $5 Per-Taxable-Barrel Credit can be applied to reduce tax liability below the minimum tax floor assuming that the producer does not seek to apply any sliding scale tax credit. The GVR is only available for the first seven years of production and ends early if ANS prices exceed $70 per barrel for any three years.

Effective January 1, 2022, for North Slope gas, the tax rate will be 13% of the gross value at the point of production. This tax rate would apply to a major gas export project. Senate Bill 138, passed in 2014, allows for the state to accept payment of this 13% gross tax as gas in-kind. Until December 31, 2021, North Slope gas is taxed at 35% of PTV, and limited to a maximum value averaging 17.7 cents per 1,000 cubic feet.

A company may carry forward 100% of allowable lease expenditures not applied against tax as a carried-forward annual loss, and may apply all or part in a future year. A carried-forward annual loss may not reduce tax below the minimum tax, and can only be used after the start of regular production from the area in which the expenditures were incurred. This provision is known as "ring fencing" of the loss. An unused carried-forward annual loss will reduce in value by one-tenth each year beginning in the eighth or 11th year after it is earned, depending on whether the carried-forward annual loss was earned from a producing or non-producing area.

Cook Inlet

Cook Inlet oil production is officially subject to the same tax rate of 35% of PTV. However, the tax is limited by statute to a maximum of $1.00 per barrel.

For Cook Inlet gas production, the tax rate is 35% of PTV and the tax is limited to a maximum value averaging 17.7 cents per 1,000 cubic feet.

Middle Earth

Areas outside the North Slope and Cook Inlet are commonly referred to as "Middle Earth." Middle Earth currently has no commercial production of oil or gas and a relatively small amount of exploration activity.

A 10% Qualified Capital Expenditure Credit and 20% Well Lease Expenditure Credit are available as incentives for activity in Middle Earth. Additionally, Middle Earth has a carried-forward annual loss provision similar to the North Slope.

Should oil or gas be produced from Middle Earth, it would nominally be subject to the statewide tax rate of 35% of PTV. However, a tax ceiling of 4% of gross value would apply for the first seven years of production, provided production begins prior to January 1, 2027.

Other Provisions

A Small-Producer Credit of up to $12 million per company is available for certain companies statewide, but it is gradually being phased out. The credit expired on either December 31, 2016, or the ninth calendar year after production started, if production started before May 1, 2016. New companies, therefore, are not eligible to take the credit.

For oil and gas produced from private lands across the state, Alaska levies a production tax on the value of private landowner royalty interest in the amount of 5% of gross value for oil and 1.667% for gas. Tax credits cannot be used to offset this portion of the tax.

The production tax includes several other nuances and provisions beyond the brief description provided here. For more information about the various tax credits, see Chapter 8.

Revenue from production tax is estimated on a company-specific basis by forecasting the components used in the tax calculation, then subtracting estimated tax credits. Under a net production tax regime, these components include oil prices, transportation costs, production costs and production volumes for each field.

Crude Oil Prices

The future price of crude oil is one of the most sensitive variables in the revenue forecast and is also prone to uncertainty and volatility. 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 fluctuations in supply and demand.

A 10-year forecast of ANS oil prices, along with the inferred wellhead values, can be found in Table 6-5. Appendix B includes a 10-year history and a 10-year forecast of these values, as well as comparisons to the prior revenue forecast.

Beginning with fall 2019, the short-term oil price forecast (current and next fiscal year) is derived from futures market expectations for Brent crude. Brent is used because it is a widely followed global benchmark crude that is typically priced similarly to ANS crude. Beyond the next fiscal year, the price

Chapter 6

3 Production Tax, Overview of Current Law

Key provisions under Senate Bill 21[1]

North Slope

	Provision	Current Law
1	Base Tax Rate (applied to Production Tax Value)	35%
2	Minimum Tax Floor (applied to Gross Value at Point of Production)	Up to 4%. 4% rate applies when the Alaska North Slope price is more than $25/barrel. Some credits can apply against minimum.
3	Gross Value Reduction	20% or 30% of gross value excluded from the tax calculation; limited to first seven years of production; benefit ends early if the average ANS price exceeds $70 for any three years. For qualifying fields that began production prior to January 1, 2017, benefit ends January 1, 2023 or after three years of ANS price exceeding $70.
4	Per-Taxable-Barrel Credit for Non-GVR Production	Sliding scale $0/barrel to $8/barrel. $8 credit applies when wellhead price is less than $80/barrel. Cannot apply against the minimum tax.
5	Per-Taxable-Barrel Credit for GVR Production	$5/barrel, no sliding scale. Can apply against minimum tax.
6	True-Up of Per-Taxable-Barrel Credit	Unused Per-Taxable-Barrel Credits can be used to offset tax liability in other months of the calendar year.
7	Net Operating Loss Credit	Repealed January 1, 2018.
8	Lease Expenditures Carry-forward	Beginning January 1, 2018, a company may carry forward lease expenditures not deducted against tax, and may apply in a future year to reduce liability to minimum tax, contingent on the production from the area earned. Carry-forwards reduce in value by one-tenth each year beginning in the eighth or 11th year after earned.

Cook Inlet

	Provision	Current Law
9	Base Tax Rate (applied to PTV)	35%
10	Tax Ceiling – Oil	$1/barrel, permanent tax ceiling.
11	Tax Ceiling – Gas	Average 17.7 cents/thousand cubic feet (McF), permanent tax ceiling.
12	Qualified Capital Expenditure Credit	Repealed January 1, 2018.
13	Well Lease Expenditure Credit	Repealed January 1, 2018.
14	Net Operating Loss Credit	Repealed January 1, 2018.

Chapter 6

3

Production Tax, Overview of Current Law

Key provisions under Senate Bill 21[1] *(Continued)*

Middle Earth

	Provision	Current Law
15	Base Tax Rate (applied to PTV)	35%.
16	Tax Ceiling	4% of gross value for the first seven years of production if production begins before 2027.
17	Capital/Well Lease Expenditure Credits	Credits maintained at 2017 rates (10% QCE, 20% WLE).
18	Net Operating Loss Credit	Repealed January 1, 2018.
19	Lease Expenditures Carry-forward	Beginning January 1, 2018, a company may carry forward lease expenditures not deducted against tax, and may apply in a future year to reduce liability to minimum tax, contingent on production from the area earned. Carry-forwards reduce in value by one-tenth each year beginning in the eighth or 11th year after earned.
20	Exploration Tax Credits	30% or 40% for qualifying exploration, expires January 1, 2022, does not apply to seismic after January 1, 2018. Credits can be applied against a company's own corporate tax liability.

Statewide/Other

	Provision	Current Law
21	Tax Ceiling for "Gas Used in State"	Qualifying gas is taxed at Cook Inlet rate, for production that started after 3/31/2006, permanent tax ceiling.
22	Interest Rate on Delinquent Taxes	5.25% above the Federal Reserve discount rate, compounded quarterly, for all tax types, after 12/31/2017.
23	Credits for Tax-Exempt Entities	Credits earned only for lease expenditures subject to tax.
24	Small-Producer Credits	Up to $12 million per company for first nine years of production, can apply against minimum tax; must begin production before May 1, 2016.
25	Retroactive Use of Credits	Tax credit certificates (including transferred) may be used to offset a liability or assessment for prior-year taxes, as long as the liability is not subject to the CBRF.
26	Production Limit for Purchased Credit Eligibility	Companies with more than 50,000 barrels of oil-equivalent production are not eligible for state purchase of credits.
27	Alaska-Hire Preference for Tax Credits	Department of Revenue must give credit purchase priority based on ranking of Alaska-hire percentage, including contractors.
28	Per-Company Limit for Purchased Credits	$70 million per company per year. First $35 million at full value; next $35 million may be purchased at 75% of value at company option.
29	Phase-Out of Oil and Gas Tax Credit Fund	No eligibility for state purchase for any credits earned after July 1, 2017, except for refinery and LNG storage credits.

[1]Current law reflects Senate Bill 21 provisions after changes made in 2016 with HB 247 and changes made in 2017 with HB 111.

Chapter 6

4 ANS Oil and Gas Production Tax

Data summary

		History	Forecast	
	Fiscal Year	**2020**	**2021**	**2022**
	North Slope Price (dollars per barrel)			
1	ANS West Coast	52.12	45.32	48.00
2	Transportation Costs and Other	8.16	9.21	9.91
3	ANS Wellhead	43.96	36.11	38.09
	North Slope Production[1] (thousand barrels per day)			
4	Total ANS Production	471.8	477.3	439.6
5	Royalty and Federal[2]	58.2	57.3	52.1
6	Taxable Barrels	413.6	420.0	387.5
	North Slope Lease Expenditures[3, 4] (millions of dollars)			
	Allowable North Slope Lease Expenditures			
7	Operating Expenditures (OPEX)	2,910.6	2,351.0	2,373.6
8	Capital Expenditures (CAPEX)	2,633.2	1,545.9	2,513.8
9	**Total Allowable North Slope Expenditures**	**5,543.8**	**3,896.9**	**4,887.4**
	Deductible North Slope Lease Expenditures			
10	Operating Expenditures (OPEX)	2,245.8	2,270.1	2,257.1
11	Capital Expenditures (CAPEX)	2,031.8	1,358.2	2,008.3
12	**Total Deductible North Slope Lease Expenditures**	**4,277.5**	**3,628.4**	**4,265.3**
	State Production Tax Revenue[5]			
13	Tax Revenue (millions of dollars)	285.1	171.8	163.3
14	Production Tax Collected per Taxable Barrel (dollars per barrel)	1.89	1.12	1.15
	Statewide Production Tax Credits[3, 6] (millions of dollars)			
15	Credits Used Against Tax Liability	603.2	506.0	243.0
16	Credits for Potential Purchase	1.1	0.0	60.0

[1] Fall 2020 Forecast assumes that for all years of the forecast, 10,000 barrels per day of Natural Gas Liquids (NGLs) will be shipped from Prudhoe Bay to Kuparuk for use in a large-scale enhanced oil recovery project. Beginning with FY 2019, these NGLs are excluded from actual and forecast production reported in this table. With new information, future NGL shipment estimates may change, and these changes will be included in subsequent production forecasts.

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

[3] Lease expenditures and credits used against tax liability for FY 2020 were prepared using unaudited company-reported estimates.

[4] Expenditure forecasts for FY 2021 and FY 2022 are compiled from company submitted estimates and other documentation as provided to DOR. Expenditures are shown in two ways: (1) total estimated allowable expenditures for all companies on the North Slope; and (2) estimated “deductible expenditures” defined for purposes of this analysis as the amount of total allowable expenditures for each company that does not exceed their gross value at point of production. Note that for producers with a net operating loss, only a portion of expenditures will be counted in the “deductible expenditures” category.

[5] 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 Tables E-1, E-2, and E-3.

[6] Production tax credits shown include all production tax credits from all areas of the state. 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.

forecast is held constant in real terms, increasing with inflation. This approach to price forecasting allows the department to prepare a forecast with minimal expense to the state, while providing a transparent methodology that incorporates the most recent market information available at the time the forecast is produced.

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 the point of delivery. Transportation components include marine costs, the Trans-Alaska Pipeline System (TAPS) tariff, feeder pipeline tariffs, quality bank adjustments, and other adjustments. The values used in this netback calculation are shown in Table 6-5.

Marine Transportation Costs

Oil production from the North Slope is delivered through TAPS to Valdez, Alaska, where it is stored and loaded onto tankers for shipment primarily to the West Coast (Washington, California, and Hawaii) and Alaska's Kenai Peninsula. While the West Coast remains the primary market for ANS, in some instances, it is shipped to other locations including Asia.

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 shipper. For crude oil shipped on tankers that are owned or effectively owned by the producer of the transported oil, which is frequently 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.

Pipeline Tariffs

Oil produced on the North Slope of Alaska is shipped down TAPS, an 800-mile, 48-inch oil pipeline from the North Slope to Valdez. Tariff rates on TAPS and other pipelines in the state 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. FERC has established generic principles for oil pipelines to use a cost-of-service method for determining tariffs charged to transport oil.

With a cost-of-service method, rates are designed around what it costs a pipeline company 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.

To forecast TAPS tariffs, the department projects cost-of-service components and sums them for each year to estimate the total cost of service or the total revenue required to operate the pipeline. This estimated total revenue requirement is divided by volume to calculate the average cost per barrel. The ratio is sensitive to the production profile and suggests that if production declines over time, the tariff will increase as costs are spread over fewer barrels of production.

Feeder pipelines are pipelines separate from TAPS that move crude oil produced from the various North Slope oil fields to Pump Station No. 1 at the northern terminus of TAPS. Shippers on these "jurisdictional pipelines" pay a tariff that covers pipeline operations costs and provides a reasonable rate of return.

Lease Expenditures

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

The department receives information about lease expenditures on annual tax returns and monthly information filings from oil and gas companies operating in the state. Semi-annually, the department also receives projections of lease expenditures for each unit for up to five years in the future. These reports are provided by the operators of the properties and are a major component of the allowable lease expenditure portion of the revenue forecast.

In general, capital expenditures represent company investment in new developments that are included in the production forecast. "Major" field maintenance is also reflected as a capital expenditure. Once new developments begin production, the ongoing costs of operating the fields are reflected as operating expenditures.

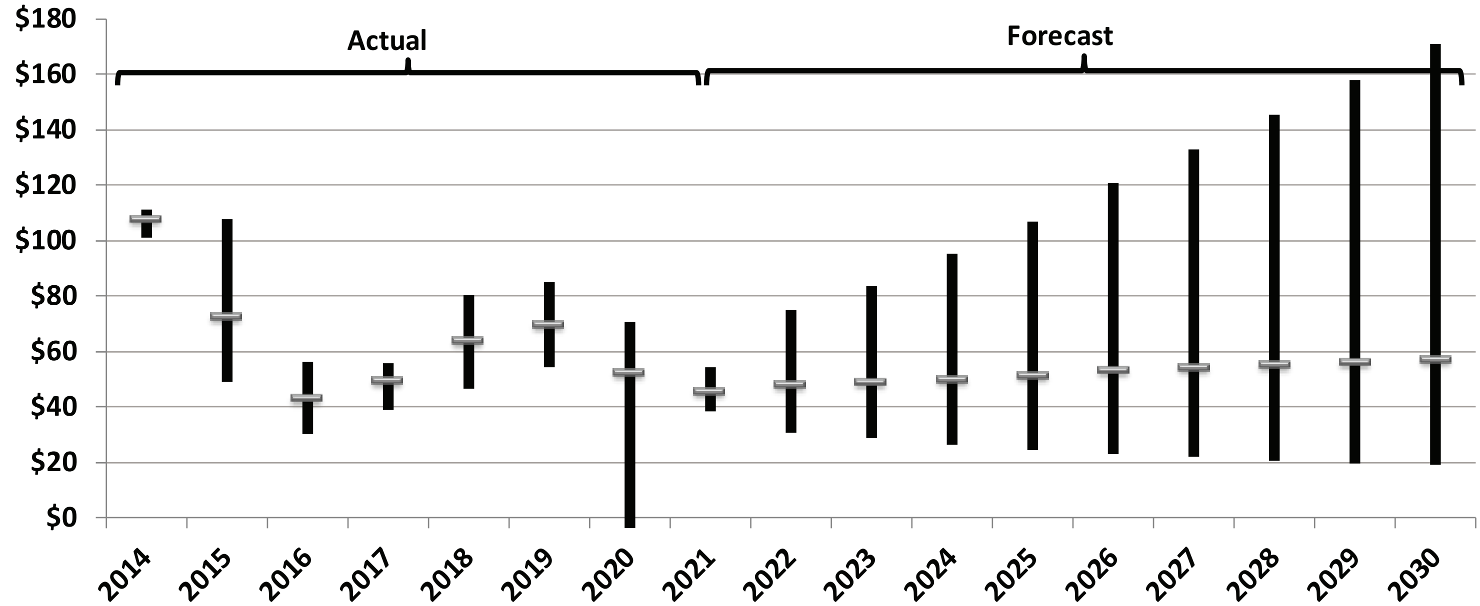
It should be noted that spending estimates are subject to many uncertainties, including oil prices, and the ability of projects to obtain final company

Chapter 6

B

ANS West Coast Price Per Barrel

Actual price fluctuation and official fall 2020 forecast spread



approval, and financing. Many new developments included in the production forecast are included on a "risked" basis, meaning they are only partially counted in the forecast based on a probability of occurring within the 10-year time horizon. Any associated costs for those fields are also included on a "risked" basis, using similar risk factors. Also, expenditures for developing potential discoveries from some of the exploration taking place in the state are not yet included in the forecast, and will not be until those developments meet the thresholds for inclusion in the production forecast.

The department reports lease expenditures in two ways. "Allowable lease expenditures" are specifically defined in statute and regulations and dictate what can and cannot be applied in tax calculations. Certain expenses incurred by producers fall outside this definition and are not tracked or reported by the department. Another term, "deductible lease expenditures," is not defined in statute or regulation, but rather is a term of art used to describe that portion of allowable lease expenditures actually applied in the tax calculation in the year incurred.

Appendix D-1 provides a 10-year history and 10-year forecast of allowable lease expenditures for the North Slope and non-North Slope.

Production Volumes

Future oil production is crucial to forecasting oil revenue, since it is a key variable used to calculate both production taxes and royalties. It is also a factor in determining future pipeline tariff rates, which impact the wellhead value on which both taxes and royalties are calculated. Future production also influences the economic life of the infrastructure, which is a factor in property tax assessments.

Geographic Impact

Production from different geographic areas has different implications for petroleum revenue. Oil produced within state boundaries is subject to state taxes, but oil produced beyond three nautical miles 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. For royalties from oil produced on private lands, the state does not collect a share of royalty directly, but instead assesses a tax on the private landowner royalty interest as part of the production tax.

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

Chapter 6

5

Oil Price and Transportation[1] Costs

FY 2020 actuals and FY 2021 – FY 2030 forecast

Nominal Dollars per Barrel

		History	Forecast									
	Fiscal Year	2020	2021[2]	2022	2023	2024	2025	2026	2027	2028	2029	2030
1	**ANS West Coast**	**52.12**	**45.32**	**48.00**	**49.00**	**50.00**	**51.00**	**53.00**	**54.00**	**55.00**	**56.00**	**57.00**
2	Marine Costs	2.84	3.01	3.24	3.27	3.31	3.35	3.40	3.43	3.47	3.51	3.56
3	TAPS Tariff	4.82	5.60	6.05	6.39	6.21	6.07	6.52	6.85	6.89	6.87	6.87
4	Feeder Tariff	0.60	0.64	0.66	0.65	0.62	0.64	0.66	0.66	0.65	0.64	0.62
5	Quality Bank	-0.23	-0.09	-0.10	-0.10	-0.10	-0.10	-0.11	-0.11	-0.11	-0.11	-0.11
6	Other[3]	0.14	0.05	0.06	0.06	0.05	0.06	0.06	0.06	0.06	0.06	0.06
7	**Netback Costs Total**	**8.16**	**9.21**	**9.91**	**10.26**	**10.10**	**10.01**	**10.52**	**10.89**	**10.96**	**10.98**	**10.99**
8	**ANS Weighted Average All Destinations**	**43.96**	**36.11**	**38.09**	**38.74**	**39.90**	**40.99**	**42.48**	**43.11**	**44.04**	**45.02**	**46.01**

[1] Field-specific transportation costs represent the average cost for all barrels, whether or not they incur a specific expense. For example, feeder costs represent the average cost for all barrels, including Prudhoe Bay production not using a feeder pipeline. Slope-wide costs are estimated based on reported relevant cost information.

[2] FY 2021 values include a combination of actual and forecast data for ANS price and transportation costs.

[3] This category primarily includes pipeline and tanker gains and losses.

in bonuses, rents, and royalties. The authority for this revenue sharing is the federal Outer Continental Shelf Lands Act, Section 8(g). This three-nautical mile band is referred to as the "8(g) zone." The state does not receive a share of royalties from offshore leases beyond six nautical miles from shore.

The state is entitled to 50% of the bonuses, rents, and royalties that the federal government receives from the leasing of lands in the NPR-A. The federal government dictates that shared NPR-A revenue must be used for specific purposes, and therefore it is considered restricted revenue in this forecast.

Forecast Methods

The oil production forecast is developed internally by the state. The Alaska Department of Natural Resources produces the forecast with assistance from the Department of Revenue. A presentation of key elements of the production forecast process can be found in Table 6-6.

The oil production forecast consists of oil volumes produced from three categories:

- Currently Producing (CP): Oil wells and pools that are currently in production. This category includes production from wells that are already in service prior to the start date of the forecast.
- Under Development (UD): New wells and pools that are planned, funded, and have partner alignment. Typically, production is expected in the first 12 months of the forecast period.
- Under Evaluation (UE): New wells and pools that are expected to begin production in years two through 10 of the forecast period and may not yet have final funding decisions or partner alignment.

The production forecast is focused specifically on oil production because that provides the majority of the state's petroleum revenue. The Department of Revenue uses a basic estimate of gas production for internal modeling purposes, based on an assumption of stable production volumes.

Currently Producing Volumes

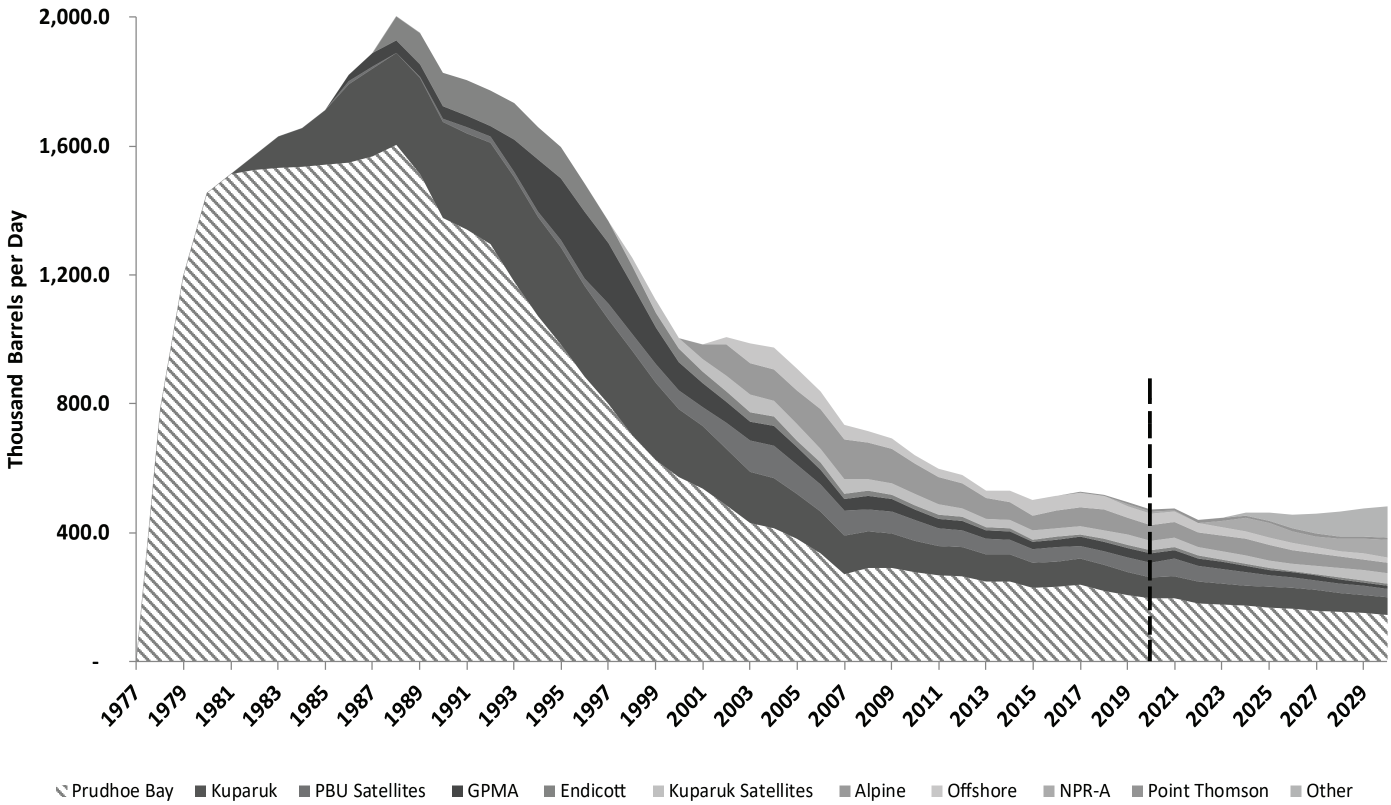
CP volumes are forecast at the pool-level using decline-curve analysis. Technical experts from the Department of Natural Resources utilize data from the Alaska Oil and Gas Conservation Commission to develop a time series dataset to assess the future production profile of fields that are already in production. This data is provided by the producers and includes information on reservoir characteristics, oil flow rates, gas/oil ratios, and water cuts. Using these data and decline-curve analyses, an expectation for future production is developed for

Chapter 6

C

Alaska North Slope Production

By production area, FY 1977 to FY 2030



each producing pool. Planned downtime is factored in for known facilities maintenance and summer turn-around work, and anticipated responses are incorporated into future production. This forecast category also incorporates the expected decline rate for each oil pool.

Production from CP areas is the least-speculative category in the production forecast, as production comes from developed reserves with known production characteristics, infrastructure, and constraints.

Under Development Volumes

UD volumes are forecast using planned field development activities presented by the operator in the Plan of Development (POD) for each pool. Production from planned infill wells is determined using the well performance from historical analogue wells. When a project has funding, approval, and a drilling plan, but is not yet developed, the volumes from that project are categorized as UD if production is expected to begin in the first year of the forecast period. If a project does not have these qualifiers, the expected future volumes from it are not considered in the UD category.

Volumes in the UD category may include production from infill drilling within existing units and other activities that lead to incremental oil production within the next 12 months. New pools or areas of production expected to be in production within the next 12 months also fall within this category.

Because all oil in this category requires some level of capital investment 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. Therefore, some consideration must be given to the associated risk or else the forecast is prone to be overly optimistic. In the best-case scenario, all projects would come in on-time, on-budget, and on-target. The forecast incorporates an occurrence risk factor for each individual project.

Under Evaluation Volumes

UE volumes are forecast using development concepts and plans presented by operators, as well as production performance and expected ranges developed from analogue wells. Volumes in the UE category are from projects likely to start producing oil in the second through 10th year of the forecast period. Most of the oil in this category is from discovered but currently undeveloped oil accumulations, though conceptually, the category could also include future infill drilling and other activities that lead to incremental oil production from existing fields. Projects may still have hurdles to overcome in relation to funding Working Interest Owners' sanctioning, regulatory approval, cash flow schedules, or drilling plans. Accordingly, a project-specific risk factor is applied for each individual project.

Because all oil in this category requires capital investment 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 typically there is insufficient production data or other data. Therefore, as with the UD category, consideration must be given to the associated uncertainty, or else the forecast is prone to be overly optimistic. Based on the forecast team's historical observations and technical judgment, the UE forecast category incorporates projects' individual risk of occurrence within the 10-year forecast window, along with statistical uncertainty ranges relating to the date of first production and potential production rates over time.

Production Forecast

Many of the projects reflected in the production forecast are still subject to uncertainty and final investment decisions. Some projects are marginally economic in the current environment and such projects are contingent on realization of lower costs, higher oil prices, or fiscal certainty. Depending on how these factors play out over time, combined with uncertainty about reservoir performance for new fields, future production could be substantially higher or lower than what is shown in the forecast. Thus, in addition to the base case production forecast, a range is provided for potential production possibilities to reflect future uncertainty. The high case can be interpreted as values close to the highest production level that could reasonably be expected to occur and the low case refers to values close to the lowest production that could reasonably be expected to occur. The official forecast, or "mean," is a likely production path within this range, but actual production can and will be either higher or lower than this forecast.

This *Revenue Sources Book* includes an assumption that for all years of the forecast, 10,000 barrels per day of Natural Gas Liquids (NGLs) will be shipped from Prudhoe Bay to Kuparuk for use in an ongoing large-scale enhanced oil recovery project. These NGLs are excluded from production forecasts reported in this publication. These estimated NGL shipments are excluded from Department of Revenue figures because they are not considered produced barrels for tax purposes. The reason for this exclusion is so that production is only counted once, as the relevant barrels will ultimately be produced from the Kuparuk reservoir in the future and taxed at that time. This treatment is consistent with how the department presented previous NGL shipments which had been suspended in 2014 and were not included in historical production volumes. Beginning in September 2018, NGL shipments resumed and these NGLs are again excluded from actual and forecast production volumes. Note that for royalty purposes the NGLs are subject to royalty and are considered produced barrels as reported by the Alaska Oil and Gas Conservation Commission and forecasted by the Department of Natural Resources; this provision is incorporated into revenue forecast modeling.

Values for the forecasts can be found in Table 6-7. Figure 6-C shows historical ANS production by major area with expected production from those areas over the coming 10 years. Additional production forecast detail can be found in Appendix C.

Production Tax Revenue Forecast

In broad terms, future revenue from production tax is a function of the forecasts of the various components. The netback components, as shown in Table 6-5, are deducted from the West Coast destination price to determine an ANS wellhead value, which is multiplied by the projected volume to calculate a gross value at the point of production. Allowable lease expenditures are deducted from the gross value to calculate a net value to which the production tax is applied and adjusted for anticipated credits. The forecast of production tax revenue also accounts for various nuances and provisions of the tax code, including the gross minimum tax floor, GVR, company-specific differences in investment and field ownership, impacts of gas production, and non-North Slope activity.

For the North Slope, in lower price environments, companies are able to use sliding scale Per-Taxable-Barrel Credits for non-GVR oil to reduce tax liability down to the minimum tax of 4% of gross value. Depending on their specific tax situation,

Chapter 6

6

Production Forecast, Key Elements

An overview

	Element	Method
1	Forecaster	Department of Natural Resources' Resource Evaluation and Commercial Teams in collaboration with Department of Revenue staff.
2	Time Horizon of Forecast	A 10-year oil production forecast for DOR's *Revenue Sources Book* 10-year revenue forecast, and a 20-year forecast for DOR's internal planning purposes.
3	Modeling Method	Probabilistic forecast is likely value taken from a range of possible outcomes consistent with industry best practice.
4	Alternative Production Cases	Probabilistic modeling produces a high case that can be interpreted as the highest production level that could reasonably be expected to occur, and a low case that can be interpreted as the least production that could reasonably be expected to occur.
5	Currently Producing Method	Pool-level decline curve analysis.
6	Under Development Method	Based on planned field development activities presented by the operator in the Unit Plan of Development (POD) for each pool, generally for projects starting in next 12 months. Risk factors incorporated into production model.
7	Under Evaluation Method	Based on planned field development activities, and informed by operator forecasts, generally for projects starting in one to 10 years. Risk factors incorporated into production model.
8	Risking	Adjustments for various types of risk are incorporated into the production model. An additional risk factor is individually applied for each new field starting in the two- to 10-year window.
9	Spring Forecast Update	Pool by pool ground-up forecast based on new production data and operator plans.

some companies may choose to forgo sliding scale Per-Taxable-Barrel Credits and instead reduce liability below the minimum tax using Per-Taxable-Barrel Credits for GVR-eligible oil and any small-producer credits or carried-forward annual loss that may be available.

For Cook Inlet, production tax is limited to $1 per barrel of oil. Gas limitations vary by field but average 17.7 cents per 1,000 cubic feet of gas. Cook Inlet taxes make a relatively small contribution to the revenue forecast.

These revenue estimates account for tax credits applied against tax liabilities that reduce the tax payments made to the state. Revenue estimates do not include the impact of tax credits eligible for purchase by the state from companies without a tax liability. Those additional tax credits are discussed in Chapter 8.

Hazardous Release Surcharge

Up to $0.05 per barrel of taxable oil is collected and customarily appropriated to the Oil and Hazardous Substance Release Prevention and Response Fund (often simply called the Response Fund). This revenue is reported as unrestricted revenue and collected as part of the production tax.

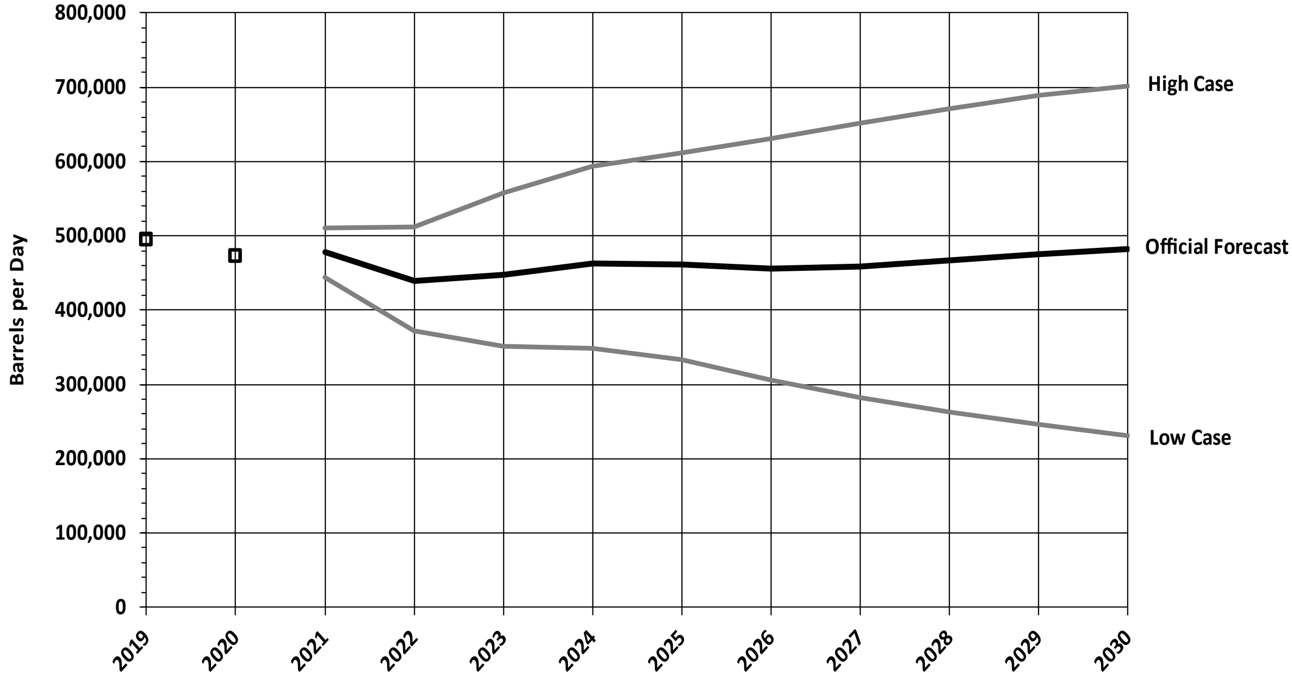
The Response Fund was created in 1986 and is intended to be a source of funds that can be drawn upon in the event of the release of a hazardous substance to be used for the abatement of damages. The fund is separated into two accounts – a response account and a prevention account. The surcharge paid to the response account is $0.01 per taxable barrel of oil produced in the state and applies when the response account has a balance of under $50 million. The surcharge paid to the prevention account is $0.04 per taxable barrel of oil produced in the state regardless

Chapter 6

D

Alaska North Slope Petroleum Production Forecast [1]

FY 2019 to FY 2030



[1] Fall 2020 Forecast assumes that for all years of the forecast, 10,000 barrels per day of Natural Gas Liquids (NGLs) will be shipped from Prudhoe Bay to Kuparuk for use in a large-scale enhanced oil recovery project. Beginning with FY 2019, these NGLs are excluded from actual and forecast production reported in this figure. With new information, future NGL shipment estimates may change, and these changes will be included in subsequent production forecasts.

of the current account balance. The forecast assumes that the full $0.05 per barrel surcharge will be in place for the entire forecast period.

Royalties

A royalty interest is an ownership of future production, and is a typical feature in oil and gas contracts with a landowner. When a company bids on a lease, it pays an up-front bonus payment, agrees to an annual rental payment, and typically offers a royalty interest in any discoveries that may be found. Thus, the bonus is a guaranteed payment to the state as the landowner, while the royalty is a contingent amount only paid once there is production.

In Alaska, the state retains ownership of all subsurface minerals on lands in the state, with the exception of some federal and Alaska Native Corporation lands. 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.

For state lands, Alaska requires a minimum royalty rate of one-eighth (12.5%) of any production, although there are exceptions that can be made for economically challenged projects. Most leases in Alaska are subject to a one-eighth (12.5%) or one-sixth (16.67%) royalty. Occasionally, a company may enter into a net profits sharing lease, which contains a payment to the state based on a proxy of the net profits associated with the production of oil and gas from said lease, which is in addition to the royalty payment based on the gross value of the oil and gas. These profit-sharing lease bids reached as high as 93.2% of company profits attributable to the specific lease, after the company's development costs are recovered.

Alaska has the option of allowing an oil company to sell royalty oil or gas on its behalf (known as royalty in-value, or RIV) or to receive and sell the royalty oil or gas itself (known as royalty in-kind, or RIK). The value the state accepts for RIK cannot be lower than the value it would receive for RIV. The state currently takes a portion of royalty oil from the North Slope as RIK and sells this oil to in-state refineries.

Chapter 6

7 Alaska North Slope Oil Production [1]

By category, FY 2021 – FY 2030 forecast

		Barrels per Day									
		Forecast									
	Fiscal Year	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
1	**Low Case**	**443,925**	**371,378**	**351,057**	**349,095**	**333,218**	**305,987**	**282,342**	**262,048**	**245,595**	**230,992**
2	Percent Change from Prior Year	-6%	-16%	-5%	-1%	-5%	-8%	-8%	-7%	-6%	-6%
3	**Official Forecast**	**477,294**	**439,587**	**446,963**	**463,335**	**461,522**	**455,696**	**458,803**	**466,535**	**475,869**	**481,843**
4	Percent Change from Prior Year	1%	-8%	2%	4%	0%	-1%	1%	2%	2%	1%
5	**High Case**	**511,100**	**512,178**	**557,630**	**593,042**	**611,936**	**631,279**	**651,231**	**670,930**	**688,702**	**702,099**
6	Percent Change from Prior Year	8%	0%	9%	6%	3%	3%	3%	3%	3%	2%
7	Production from GVR-Eligible Fields under Official Forecast	36,125	33,005	39,307	58,910	78,257	89,782	106,044	124,069	83,054	101,336
8	Percent from GVR-Eligible Fields under Official Forecast	8%	8%	9%	13%	17%	20%	23%	27%	17%	21%

Note: GVR is an acronym for Gross Value Reduction.

[1] Fall 2020 Forecast assumes that for all years of the forecast, 10,000 barrels per day of Natural Gas Liquids (NGLs) will be shipped from Prudhoe Bay to Kuparuk for use in a large-scale enhanced oil recovery project. Beginning with FY 2019, these NGLs are excluded from actual and forecast production reported in this table. With new information, future NGL shipment estimates may change, and these changes will be included in subsequent production forecasts.

Most RIV oil comes from leases affected by royalty settlement agreements (RSAs), and the price received for that oil is a derived price based on the value of oil sold on the West Coast with certain adjustments. Deductions approximating the shipment of the oil on pipelines and marine transportation costs are subtracted in order to determine the value of the oil for royalty purposes. An allowance for field costs is also applied for production from certain leases. As a result of the field costs allowance, as well as differences in statutes and regulations, the wellhead value for royalty purposes may be slightly different than the wellhead value for production tax purposes. A portion of RIV oil comes from leases not affected by RSAs. While the formulas used to determine value for this oil are similar to the formulas used in the RSAs, they are not necessarily the same.

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 of taxable oil and gas property as of the January 1 assessment date. The state levies a tax at a rate of 20 mills (2%) of the assessed value. When the oil and gas property is located within the jurisdiction of a municipality, the municipality may also levy a tax on the department's assessments at the same rate it taxes all other non-oil and gas property. The tax paid to a municipality on oil and gas property acts as a credit toward the payment to the state. The North Slope Borough is the primary recipient of municipal petroleum property tax.

Forecasting state revenue from oil and gas property tax starts with the most recent certified assessed values for oil and gas property in Alaska. Assumptions are made regarding future capital investment and typical depreciation curves are applied. The state rate of 20 mills is applied to the forecast values, and estimates of payments to municipalities are then subtracted to estimate net receipts to the state. Table 6-8 shows the state share and local share of oil and gas property tax by jurisdiction.

Chapter 6
8

Petroleum Property Tax[1]

Distribution and local mill rates, FY 2020

	Taxing Jurisdiction	Gross Tax	Local Share	State Share	Local Effective Mill Rate
		Millions of Dollars			
1	Unorganized	61.9	0.0	61.9	N/A
2	North Slope Borough	431.3	387.9	43.3	17.99
3	Fairbanks North Star Borough	14.4	12.3	2.1	17.09[2]
4	Municipality of Anchorage	3.0	2.6	0.4	17.10
5	Kenai Peninsula Borough	29.9	14.8	15.1	9.89[2]
6	City of Valdez	39.0	39.0	0.0	20.00
7	Matanuska-Susitna Borough	0.2	0.1	0.1	11.66[2]
8	City of Whittier	0.0	0.0	0.0	8.00
9	City of Cordova	0.2	0.1	0.1	11.08
10	**Total FY 2020**	**579.8**	**456.8**	**123.0**	

[1] Tax amounts shown here represent the total certified tax roll for the 2020 tax year, due June 30, 2020. These amounts may not exactly match cash revenue received in the fiscal year as presented elsewhere in this book due to a combination of credits and late payments. Gross Tax is total tax paid to both the local government and the State of Alaska. The Local Share and State Share columns represent revenue primarily received in June 2020.

[2] The Fairbanks North Star Borough, Kenai Peninsula Borough, and Matanuska-Susitna Borough do not have a uniform mill rate for petroleum properties. The rate presented here is the weighted-average effective mill rate based on the 2020 certified tax roll.

Corporate Income Tax

C-corporations doing business in Alaska are subject to the corporate income tax (CIT). This tax applies to many, but not all, of the companies involved in oil and gas activity in Alaska.

For eligible companies, 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 – tariffs and sales, oil and gas production, and property. CIT revenue is one of the more volatile revenue sources for Alaska because of the year-to-year variation in the profitability of oil companies as well as the substantial lag time between estimated tax payments and the final annual true-up.

Generally, a corporation is subject to tax on it's current-year Alaska taxable income, and any net operating losses may be carried-forward indefinitely to offset future tax liabilities. However, as part of the federal CARES Act passed in 2020, corporations may "carry back" net operating losses from tax years 2018, 2019, and 2020 up to five years and receive refunds for previous federal taxes paid. Since Alaska adopts most provisions of the federal corporate income tax code by reference, this carry back provision applies to state corporate income tax as well. For tax years 2021 and beyond, corporations will once again only be able to carry forward a net operating loss.

Restricted Petroleum Revenue

While most oil and gas revenue is unrestricted, some revenue is deposited into special accounts for special purposes.

Restricted Royalties

The majority of restricted oil and gas revenue comes from royalties.

A portion of royalty revenue is deposited into the Permanent Fund, and the Public School Trust Fund. The Alaska Constitution requires that 25% of royalty revenue be deposited into the Permanent Fund, and this revenue is shown as other restricted revenue. Alaska Statute 37.13.010(a) refers to 50% of royalty revenue from mineral leases issued after December 1, 1979 being deposited into the Permanent Fund. Beginning with this Fall 2020 *Revenue Sources Book*, this additional 25% of revenue is shown as designated general fund revenue. Previously the additional 25% was shown as other restricted revenue. This change was made for consistency with budget documents. Unless otherwise provided in budget legislation, this forecast assumes that the full statutory appropriation of minerals royalties will be deposited into the Permanent Fund.

Additionally, AS 37.14.150 specifies that 0.5% of royalty revenue be deposited into the Public School Trust Fund.

NPR-A Fund

The state is entitled to 50% of the bonuses, rents, and royalties that the federal government receives from the leasing of federal lands in the NPR-A. This revenue is deposited into the NPR-A special revenue fund and restricted for specific uses. These funds can be appropriated to municipalities in the form of grants to compensate for impacts resulting from the development on those lands.

Revenue that is not appropriated to municipalities is treated like other royalty revenue (25% is deposited into the Permanent Fund, and 0.5% to the Public School Trust Fund), with the remaining revenue available for appropriation to the Power Cost Equalization Fund, Rural Electric Capitalization Fund or general fund. For purposes of categorization, these funds are considered federal restricted revenue within the category of petroleum revenue, as they are collected from oil activity.

Settlements to CBRF

Payments received from settlements of oil and gas tax and royalty disputes between the state and producers are deposited into the CBRF, after accounting for any applicable share of royalty settlements deposited into the Permanent Fund and Public School Trust Fund.

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Chapter 7
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, and 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." Investment and Federal revenue are discussed in Chapters 4 and 5, respectively.

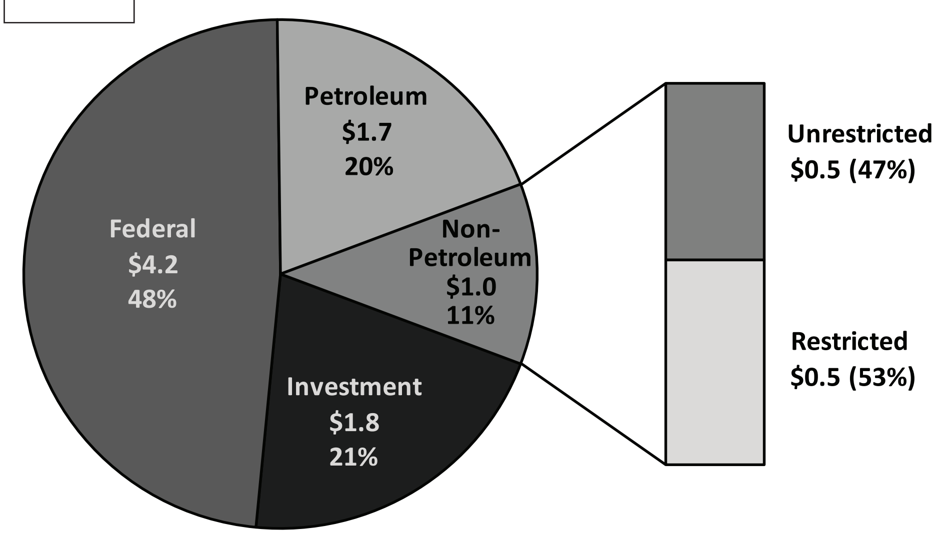
The non-petroleum revenue sources are each sub-categorized into unrestricted, designated general fund, and other restricted revenue in Table 7-1. Detail regarding each revenue type is reflected in Tables 7-2 through 7-7. This chapter also includes descriptions of each revenue source.

The Department of Revenue's Tax Division website and the division's annual report contain more comprehensive historical information about each type of tax the Tax Division collects. The Alaska Department of Administration's *Comprehensive Annual Financial Report* contains more detail about many non-tax revenue sources.[1]

[1] The Alaska Department of Administration's *Comprehensive Annual Financial Report* can be found at http://doa.alaska.gov/dof/reports/cafr.html

Chapter 7 **A**

FY 2020 Non-Petroleum Revenue
By restriction and type, in billions of dollars



Chapter 7
1

Total Non-Petroleum Revenue
By restriction and category

		Millions of Dollars		
		History	Forecast	
	Fiscal Year	**2020**	**2021**	**2022**
	Unrestricted			
	Unrestricted Non-Petroleum Revenue			
1	Taxes	323.5	215.9	228.4
2	Charges for Services	6.5	6.5	6.5
3	Fines and Forfeitures	15.1	12.8	12.8
4	Licenses and Permits	34.4	33.5	33.5
5	Rents and Royalties	5.6	6.1	6.5
6	Other	77.5	88.2	85.1
7	**Total Unrestricted Non-Petroleum Revenue**	**462.7**	**363.0**	**372.8**
	Restricted			
	Restricted Non-Petroleum Revenue			
	Designated General Fund			
8	Taxes	137.6	138.7	139.8
9	Charges for Services	180.1	188.6	198.1
10	Fines and Forfeitures	5.5	5.8	5.6
11	Licenses and Permits	1.1	1.8	1.8
12	Rents and Royalties [1]	27.7	30.2	32.3
13	Other	33.6	38.1	42.2
14	**Subtotal Designated General Fund**	**385.6**	**403.2**	**419.8**
	Other Restricted			
15	Taxes	36.6	27.5	39.2
16	Charges for Services	25.6	114.5	115.8
17	Fines and Forfeitures	16.1	17.0	16.2
18	Licenses and Permits	40.1	35.9	36.6
19	Rents and Royalties [1]	3.2	4.1	4.9
20	Other	8.6	10.0	10.0
21	**Subtotal Other Restricted**	**130.2**	**209.1**	**222.7**
22	**Total Restricted Non-Petroleum Revenue**	**515.8**	**612.3**	**642.5**
23	**Total Non-Petroleum Revenue**	**978.4**	**975.3**	**1,015.3**

[1] The constitutionally dedicated 25% of minerals-related royalties, bonuses, rents, and interest to the Permanent Fund is shown as Other Restricted revenue. Beginning with FY 2020, the additional 25% for leases issued after December 1, 1979, as referred to in AS 37.13.010(a), is shown as Designated General Fund revenue. Previously the additional 25% was shown as Other Restricted revenue; this change in presentation was made for conformity to budget documents.

Chapter 7
2

Non-Petroleum Tax Revenue

By restriction and source

		Millions of Dollars		
		History	Forecast	
	Fiscal Year	**2020**	**2021**	**2022**
	Unrestricted			
1	**Corporate Income Tax (Non-Petroleum)**	**102.4**	**30.0**	**25.0**
	Excise Tax			
2	Alcoholic Beverage	20.4	20.5	20.6
3	Tobacco Products – Cigarettes	29.4	23.3	22.4
4	Tobacco Products – Other	12.0	15.1	15.5
5	Electric and Telephone Cooperative	0.2	0.2	0.2
6	Insurance Premium Tax[1]	58.4	59.6	56.9
7	Marijuana[2]	6.4	7.2	8.0
8	Motor Fuel Tax – Refined Fuel Surcharge	6.9	6.3	6.5
9	Tire Fee	1.4	1.4	1.4
10	**Subtotal Excise Tax**	**135.0**	**133.6**	**131.5**
	Fish Tax			
11	Fisheries Business	24.1	13.5	14.5
12	Fishery Resource Landing	9.8	5.9	6.3
13	**Subtotal Fish Tax**	**33.9**	**19.5**	**20.8**
	Other Tax			
14	Charitable Gaming	2.4	2.4	2.5
15	Large Passenger Vessel Gambling	13.1	0.0	5.3
16	Mining License	36.8	30.4	43.3
17	**Subtotal Other Tax**	**52.2**	**32.9**	**51.1**
18	**Total Unrestricted Non-Petroleum Tax Revenue**	**323.5**	**215.9**	**228.4**
	Restricted			
	Designated General Fund			
19	Alcoholic Beverage (Alcohol and Drug Treatment and Prevention Fund)	20.3	20.5	20.6
20	Electric and Telephone Cooperative (Municipal Share)[3]	4.2	4.2	4.2
21	Fisheries Business (Municipal Share)[3]	19.9	22.0	17.7
22	Fishery Resource Landing (Municipal Share)[3]	5.0	7.0	6.5
23	Insurance Premium[1, 4]	7.2	6.5	6.2
24	Marijuana (Marijuana Education and Treatment Fund)[2]	5.9	7.2	8.0
25	Marijuana (Recidivism Reduction Fund)[2]	11.9	14.3	16.0
26	Motor Fuel Tax – Non-Aviation	36.5	33.4	34.7
27	Tobacco Products – Cigarettes (School Fund)	14.8	15.7	15.1
28	Tobacco Products – Cigarettes (Tobacco Use Education and Cessation Fund)	2.1	2.3	2.2
29	Vehicle Rental	9.7	5.7	8.6
30	**Subtotal Designated General Fund**	**137.6**	**138.7**	**139.8**

(Table continued, next page)

Chapter 7

2

Non-Petroleum Tax Revenue

By restriction and source *(Continued)*

		Millions of Dollars		
		History	Forecast	
	Fiscal Year	2020	2021	2022
	Other Restricted			
31	Commercial Passenger Vessel Tax (State Share)	-5.1	5.0	5.2
32	Commercial Passenger Vessel Tax (Municipal Share)	21.2	0.0	10.7
33	Common Property Fisheries Assessment	0.0	0.0	0.0
34	Dive Fishery Management Assessment (designated management areas)	0.5	0.5	0.5
35	Motor Fuel Tax – Aviation (State Share)	5.0	4.0	4.5
36	Motor Fuel Tax – Aviation (Municipal Share)	0.1	0.1	0.1
37	Salmon Enhancement Tax (Aquaculture Association Share)	6.7	6.8	7.0
38	Seafood Development Tax (qualifying regional associations)	3.3	3.4	3.5
39	Seafood Marketing Assessment (seafood marketing programs)	6.3	7.7	7.8
40	Settlements to Constitutional Budget Reserve Fund (Non-Petroleum taxes and royalties)	-1.3	0.0	0.0
41	**Subtotal Other Restricted**	**36.6**	**27.5**	**39.2**
42	**Total Restricted Non-Petroleum Tax Revenue**	**174.3**	**166.3**	**179.0**
43	**Total Non-Petroleum Tax Revenue**	**497.8**	**382.2**	**407.5**

[1] In FY 2016, House Bill 374 reclassified the previously unrestricted portion of the insurance premium tax to designated general fund revenue. Under current law, this portion of the insurance premium tax reverted to unrestricted revenue beginning in FY 2019.

[2] Fifty percent of marijuana tax revenue is deposited into the Recidivism Reduction Fund and treated as designated restricted revenue. Beginning in October 2018, an additional 25% of marijuana tax is deposited into the Marijuana Education and Treatment Fund, bringing the total designated general fund share of the marijuana tax to 75%.

[3] Beginning in FY 2019, shared taxes and fees are considered designated general fund revenue.

[4] In addition to the workers' compensation insurance premiums for the insurance premium tax, this amount also includes service fees from employers who are self-insured.

Taxes

Alcoholic Beverages Tax

Alcoholic beverages taxes imposed under AS 43.60 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. Beer from qualifying small breweries is taxed at a rate of $0.35 per gallon.

Revenue from the alcoholic beverages tax is deposited into Alaska's general fund. Half of the receipts from this tax are deposited into a subfund of the general fund, the Alcohol and Other Drug Abuse Treatment and Prevention Fund and are treated as restricted in this forecast. The other half of the receipts are treated as unrestricted in this forecast.

Charitable Gaming

Municipalities and qualified organizations may conduct certain gaming activities including pull-tabs, bingo, and raffles to support themselves and their mission. Qualified organizations include, but are not limited to, charitable, civic, fraternal, non-profit, and veterans' organizations.

The state imposes permit and license fees under AS 05.15.020(a) and (c) of between $20 and $100, a 1% net proceeds fee on gross receipts over $20,000 under AS 05.15.020(b), and a 3% pull-tab tax under AS 05.15.184. While all charitable gaming receipts are shown as unrestricted revenue in this forecast, a portion is actually classified as program receipts in the budget, as the Tax Division is responsible for regulating charitable gaming in the state.

Commercial Passenger Vessel Tax

The commercial passenger vessel (CPV) tax is imposed under AS 43.52.200 – 43.52.295 and is a tax of $34.50 on each passenger aboard a commercial passenger vessel with 250 or more berths that spends more than 72 hours in Alaska waters over the course of one voyage. If a commercial passenger vessel visits a port that levies a tax or fee on a passenger traveling on a commercial passenger vessel and that local tax or fee was in place before December 17, 2007, the local tax or fee imposed on a passenger is used to reduce the amount of CPV tax imposed on a passenger. Only Juneau and Ketchikan had qualifying taxes or fees in place at that time. Juneau's fee is $8 per passenger. Ketchikan's fee is $7 per passenger for docking at city owned or leased facilities and $4 per passenger for docking at non-city owned facilities.[2] Additionally, $5 of the net CPV tax collected per passenger may be appropriated by the Legislature to each of the first seven ports of call, for a maximum appropriation of $35 per passenger. All funds received from the CPV tax must be spent on port facilities, harbor infrastructure, and other services provided to commercial passenger vessels and the passengers on board those vessels. All revenue from the tax is considered restricted and is deposited into a subfund of the general fund, the Commercial Passenger Vessel tax account.

Corporate Income Tax

Alaska levies a corporate income tax on certain corporations doing business in the state under AS 43.19 and 43.20. Corporate tax rates are graduated, with a maximum rate of 9.4% applying to Alaska taxable income above $222,000. S-corporations and limited liability companies (LLCs) that file federally as partnerships are generally exempt from Alaska's corporate income tax.

A non-oil and gas corporation computes its tax liability based on the federal taxable income of its water's edge combined report (a measure of income earned in the United States), with Alaska adjustments – for example, Alaska tax code allows special treatment for certain dividends and royalties received from foreign corporations.

U.S. income is apportioned to Alaska based on three factors – sales, property, and payroll. Alaska taxable income is determined by applying the apportionment factor to the corporation's modified federal taxable income. Corporate income tax for oil and gas corporations is calculated differently and reported separately in Chapter 6.

Generally, a corporation is subject to tax on its current-year Alaska taxable income and any net operating losses may be carried-forward indefinitely to offset future tax liabilities. However, as part of the federal CARES Act passed in 2020, corporations may "carry back" net operating losses from tax years 2018, 2019, and 2020 up to five years and receive refunds for previous federal taxes paid. Alaska adopts most provisions of the federal corporate income tax code by reference, including the provision allowing the five-year carry back for net operating losses from tax years 2018, 2019, and 2020. Thus, this carry back provision applies to Alaska corporate income tax as well. For tax years 2021 and beyond, corporations will once again only be able to carry forward net operating losses.

Electric and Telephone Cooperative Taxes

The electric cooperative tax is imposed on qualified electric cooperatives under AS 10.25.555. The tax is based on kilowatt hours and the applicable rate is based on the number of years an electric cooperative has furnished electric energy and power to consumers.

The telephone cooperative gross revenue tax is imposed on qualified telephone cooperatives under AS 10.25.550. The tax is based on gross revenue and the applicable rate is based on the number of years a telephone cooperative has furnished telephone service to consumers.

Revenue from cooperatives located in municipalities is treated as designated general fund revenue in this forecast because it is shared 100% with the municipalities. The small amount of revenue collected from cooperatives outside municipalities as well as the cost expended by the state to collect the taxes are retained by the State of Alaska and treated as unrestricted revenue.

[2] Ketchikan's passenger fees are scheduled to increase in April 2021. However, only the amount of the fee in place before December 17, 2007 ($7 per passenger for docking at city owned or leased facilities and $4 per passenger for docking at non-city owned facilities) will be eligible to offset the state Commercial Passenger Vessel tax.

Fisheries Business Tax

The fisheries business tax imposed under AS 43.75.011 – 43.75.290 is levied on businesses that process fishery resources in Alaska or export unprocessed fishery 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, unprocessed fishery resource.

Tax rates vary from 1% to 5%, depending on whether a fish species is classified as "established" or "developing" in the geographic area where it was caught and whether it was processed by a shore-based processor, a floating processor, or a salmon cannery.

Revenue from the tax is deposited into the general fund. Half of that revenue (before credits) is shared with qualified municipalities and is treated as designated general fund revenue. The remainder (after credits) is treated as unrestricted revenue.

Tax credits for the fisheries business tax, including the Salmon and Herring Product Development Credit, apply only to the state portion of the tax.

Fishery Resource Landing Tax

The fishery resource landing tax imposed under AS 43.77.010 – 43.77.200 is levied on fishery resources processed outside Alaska, but first landed in Alaska. Tax liability is based on the statewide average price of unprocessed fish for each fish species. The tax is collected primarily from factory trawlers and floating processors that process fishery resources outside the state's three-nautical mile limit and bring their products into Alaska for shipment.

The tax rates vary from 1% to 3%, based on whether the species is classified as "established" or "developing."

Revenue from the tax is deposited into the general fund. Half of the revenue (before credits) is shared with qualified municipalities and is treated as designated general fund revenue.

As with the fisheries business tax, most tax credits apply only to the state share. The exception is the Community Development Quota Credit, which applies only to the municipal share. The remaining revenue after credits and municipal share is treated as unrestricted revenue.

Insurance Premium Tax

Insurance companies in Alaska pay an insurance premium tax instead of corporate income tax or other taxes under AS 21.09.210. The tax is levied as a percentage of the total insurance premiums for policies in the state and varies by the type of insurance. Except for a portion of the insurance premium tax on worker' compensation insurance, as discussed below, this *Revenue Sources Book* does not separately report the various components of insurance premium tax.

Revenue from the insurance premium tax on workers' compensation insurance is deposited into a subfund of the general fund, the Workers' Safety and Compensation Fund, and is 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.

Prior to FY 2017, non-workers' compensation insurance premium tax was considered unrestricted revenue. For FY 2017 and FY 2018, non-workers' compensation insurance premium tax was deposited into a subfund of the general fund, the Alaska Comprehensive Health Insurance Fund, and was reflected as restricted in this forecast. However, beginning in FY 2019, this revenue reverted to unrestricted revenue and is reflected as such in this forecast.

Large Passenger Vessel Gambling Tax

The large passenger vessel gambling (LPV) tax is imposed under AS 43.35.200 – 43.35.220 and is a tax of 33% on the adjusted gross income from gaming or gambling activities aboard large passenger vessels in the state. Gambling activities include the use of playing cards, dice, roulette wheels, coin-operated instruments or machines, or other objects or instruments used for gaming or gambling, and any other gambling activities aboard large passenger vessels in Alaska. The tax is imposed on the operator of gaming or gambling activities.

All proceeds from the LPV gambling tax are deposited into the Large Passenger Vessel Gaming & Gambling Tax Account, which is a subaccount of the Commercial Passenger Vessel Tax Account. The Commercial Passenger Vessel Tax Account, in turn, is a subfund in the General Fund. All revenue from the LPV gambling tax is considered unrestricted.

Marijuana Tax

Marijuana cultivation facilities in Alaska pay a tax on marijuana under AS 43.61. The tax rate is $50 per ounce on marijuana bud/flower, $25 per ounce on immature, seedy, or failed marijuana bud/flower, and $15 per ounce on other parts of the marijuana plant ("trim"). Clones are taxed at a flat rate of $1 per marijuana plant. The tax is due the month after the sale of the product to a retail marijuana store or marijuana product manufacturing facility.

Fifty percent of the revenue from the marijuana tax is deposited into a subfund of the general fund, the Recidivism Reduction Fund, and is treated as restricted in this forecast. Beginning in October 2018, 25% of marijuana tax revenue is deposited into the Marijuana Education and Treatment Fund and is also treated as restricted in this forecast. The remaining 25% of marijuana tax revenue is considered unrestricted revenue.

Mining License Tax

The mining license tax imposed under AS 43.65 is Alaska's severance tax on mining. Alaska's large metal mines are subject to the mining license tax, as are numerous smaller mining operations. Many of these smaller operations generate sufficient income to pay mining license tax in any given year. In addition to the mining operations themselves, Alaska also receives mining license tax for royalty income received by private landowners (including Alaska Native corporations) for mining operations that are located on private land. Quarry rock, sand and gravel, and marketable earth-mining operations are not subject to the mining license tax.

The tax is based on mining net income and royalties received in connection with mining properties and activities in Alaska. Tax rates range from 0% to 7% of the net income of mining operations in the state, with the top tax rate applying to mining net income above $100,000. No tax is due when mining net income is $40,000 or less. There is a 3½-year exemption period after production begins before new mining operations are subject to this tax.

Motor Fuel Tax

A motor fuel tax is imposed under AS 43.40.010 – 43.40.100 on motor fuel sold, transferred, or used within Alaska with some exemptions. Motor fuel tax is primarily collected from wholesalers and distributors licensed as qualified dealers. Various fuel uses are exempt from the tax, including fuel used by federal, state and local government agencies, charitable institutions, for heating, or for international flights.

The per-gallon tax 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 U.S. Environmental Protection Agency mandate.

The federal government requires that all aviation fuel tax revenue be used in direct support of the airports where the revenue is generated. As a result, both aviation gasoline and jet fuel revenue are shown as other restricted revenue. This includes the 60% of revenue attributable to aviation fuel sales at municipal airports that is shared with the respective municipalities under AS 43.40.010(e). This shared amount excludes the amount determined by the state that it spent in its collection of the tax.

Remaining motor fuel tax revenue is considered designated in the budget process, as AS 43.40.010(f), (g), and (j) designates motor fuel taxes for specific infrastructure maintenance accounts.

An additional refined fuel surcharge is imposed under AS 43.40.005 – 43.40.007 of $0.0095 per gallon on non-aviation fuel as well as certain non-motor fuels such as home heating oil. Municipalities and certain cooperatives are exempt from the surcharge. While the surcharge is shown as unrestricted revenue in this forecast, it is set aside for appropriation for the benefit of the Alaska Department of Environmental Conservation's Spill Prevention and Response Division.

Seafood Assessments and Taxes

In addition to the fisheries taxes discussed above, the department administers five 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 (ASMI), or by the department. The five programs are:

- The Common Property Fishery Assessment imposed under 15 AAC 116.410 – 15 AAC 116.490, which allows hatcheries to establish an annual cost recovery rate. The rate is set based on individual hatchery data in accordance with regulation.
- The Dive Fishery Management Assessment imposed under AS 43.76.150 – 43.76.210, which is levied on the value of fishery resources taken using dive gear in a designated management area.
- The Salmon Enhancement Tax imposed under AS 43.76.001 – 43.76.040, which is levied on salmon sold or exported from designated aquaculture regions.
- The Seafood Development Tax imposed under AS 43.76.350 – 43.76.399, which is levied on the value of fishery resources in a designated management area.
- The Seafood Marketing Assessment imposed under AS 16.51.120 – 16.51.180, which applies to all seafood products made or first landed in Alaska and all unprocessed products exported from Alaska. This assessment is a 0.5% levy on resources processed, landed, or exported from Alaska when the taxpayer has $50,000 or more value in a calendar year. Taxpayers with reportable value under $50,000 are not subject to the tax. This assessment supports the operations of the ASMI.

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

Settlements to CBRF

Payments received from settlements of mining tax and royalty disputes between the state and producers are deposited into the CBRF, after accounting for any applicable share of royalty settlements deposited into the Permanent Fund and Public School Trust Fund.

Tire Fee

The tire fee imposed under AS 43.98.025 has two components. The first component is a $2.50 per tire fee on all new tires sold in Alaska for motor vehicles intended for highway use. The second component is either an additional $5 per tire fee on all new tires with heavy studs for motor vehicles intended for highway use, or a $5 per tire fee on the installation of heavy studs on a previously un-studded tire for motor vehicles intended for highway use. Heavy studs are defined as being made of metal and weighing more than 1.1 grams each.

Tires sold to federal, state, or local government agencies for official use are exempt from the tire fees, as well as certain tires with lightweight studs or tires for motor vehicles not intended for highway use.

Tobacco Tax

Alaska levies a tax on cigarettes and other tobacco products under AS 43.50.

AS 43.50.090 – 43.50.180 levies a tax of 38 mills on each cigarette imported into the state for sale or personal consumption. Under AS 43.50.140, the receipts from this tax are deposited into the School Fund, a subfund of the general fund, and are considered designated restricted revenue. Money deposited into the School Fund is to be used for the rehabilitation, construction, repair, and associated insurance costs of state school facilities.

AS 43.50.190 levies an additional tax of 62 mills on each cigarette imported or acquired in the state, except the tax does not apply to the first 400 cigarettes personally transported into the state by an individual for personal use. Under AS 43.50.190, the receipts from this additional tax are deposited into the general fund, with 8.9% of the total receipts going to the Tobacco Use Education and Cessation subfund. These receipts are treated as designated restricted revenue.

For most cigarettes sold in the state, the total tax is 100 mills per cigarette, or $2.00 per standard pack of 20 cigarettes.

AS 43.50.200 levies a tax of 12.5 mills on each cigarette imported or acquired in the state from a tobacco product manufacturer that is not a participating manufacturer in the multi-state tobacco settlement, often referred to as the Master Settlement Agreement. Under AS 43.50.200, the receipts from this tax are deposited into the general fund.

AS 43.50.300 levies a tax of 75% of the wholesale price on other tobacco products (other than cigarettes) imported into the state for sale. Under AS 43.50.350, the receipts from this tax are deposited entirely into the general fund, and are unrestricted revenue. While this tax is shown as unrestricted revenue in this forecast, it is set aside for appropriation for health care, health research, health promotion, and health education.

Certain cigarettes and tobacco products are exempt from the taxes outlined above. For example, sales to authorized military personnel by a military exchange, commissary, or ship store, and sales by an Indian reservation business located within an Indian reservation to members of the reservation are exempt from the taxes.

Electronic cigarettes and "vaping" products are not subject to Alaska tobacco taxes under current statute.

Under federal law, the legal age for purchasing tobacco products was raised to 21, effective December 2019. The legal age in Alaska statutes remains at 19, however forecasts in this *Revenue Sources Book* assume that consumption will be based on the federal legal age. Reasons for this assumption include that the state has adopted the minimum age of 21 for tobacco licensing purposes, that most if not all major retailers have conformed their policies to the federal law, and that several municipalities have changed their laws as well to reflect the minimum age of 21.

Vehicle Rental Tax

The vehicle rental tax imposed under AS 43.52.010 – 43.52.020 is 10% on most passenger vehicle rentals of 90 days or less. The recreational vehicle rental tax imposed under AS 43.52.030 – 43.52.040 is 3% on recreational vehicle rentals of 90 days or less.

Exemptions include taxis, rentals to government agencies, motorcycles, and trucks used for transporting personal property.

Revenue from the vehicle rental tax is deposited into a vehicle rental tax subaccount within the general fund. The Alaska Legislature may appropriate the balance of that account for tourism development and marketing. In this forecast, the revenue is shown as restricted revenue, in the designated general fund category.

Charges for Services

Charges for services include 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 collected. 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 category, "general government."

Marine Highway Fund

The Alaska Marine Highway Fund under AS 19.65.050 – 19.65.100 is a subfund of the general fund and receives revenue from state ferry system operations. Because this revenue is customarily appropriated for Alaska Marine Highway operations, it is considered restricted revenue for this forecast.

Environmental Compliance Fund

Commercial passenger vessel fees paid into the Environmental Compliance Fund come from two sources – environmental compliance fees imposed under AS 46.03.480(a)-(c) and Ocean Ranger Program fees imposed under AS 46.03.480(d). All fees paid into the fund are considered restricted for the purpose of this forecast and are based on estimated cruise ship passenger levels.

Environmental compliance fees are levied on commercial passenger vessels with more than 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.

The Ocean Ranger Program fee is levied on each voyage in Alaska by commercial passenger vessels with 250 or more berths at a rate of $4 per berth. This fee was imposed as part of a broader commercial passenger vessel-related initiative passed by Alaska voters in August 2006.

Chapter 7

3

Charges for Services Revenue

By restriction and source

		Millions of Dollars		
		History	Forecast	
	Fiscal Year	**2020**	**2021**	**2022**
	Unrestricted			
1	**Unrestricted Revenue from Charges for Services**	**6.5**	**6.5**	**6.5**
	Restricted			
	Designated General Fund			
2	Department of Commerce, Community, and Economic Development Business Licenses	9.0	8.5	8.5
3	General Government – General Fund Subfunds	7.4	7.4	7.4
4	Marine Highway Receipts	27.2	28.0	36.4
5	Commercial Fisheries Entry Commission	7.5	7.5	7.5
6	Oil and Gas Conservation	6.6	6.6	6.6
7	Regulatory Commission of Alaska Receipts	9.8	9.8	9.8
8	Receipt Supported Services	112.3	119.8	120.9
9	Timber Sale Receipts	0.3	1.0	1.0
10	**Subtotal Designated General Fund**	**180.1**	**188.6**	**198.1**
	Other Restricted			
11	Environmental Compliance Fees	0.1	0.7	1.0
12	General Government – Special Revenue Funds	0.6	0.6	0.6
13	Ocean Ranger Fees	0.8	2.7	4.0
14	Statutorily Designated	24.1	110.5	110.2
15	**Subtotal Other Restricted**	**25.6**	**114.5**	**115.8**
16	**Total Restricted Revenue from Charges for Services**	**205.7**	**303.1**	**313.9**
17	**Total Revenue from Charges for Services**	**212.2**	**309.6**	**320.4**

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 particular program, or to 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.

Program receipts listed in this section are:

- Receipt-supported services, which include state services such as Alaska Pioneer Homes and occupational licensing 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 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 Alaska Department of Natural Resources.
- Alaska Oil and Gas Conservation Commission receipts, which are fees and charges for regulation of oil and gas wells and pipelines.
- Business license fees, which are collected by the Alaska Department of Commerce, Community, and Economic Development.

Chapter 7
4

Fines and Forfeitures Revenue

By restriction and source

		Millions of Dollars		
		History	Forecast	
	Fiscal Year	2020	2021	2022
	Unrestricted			
1	**Unrestricted Revenue from Fines and Forfeitures**	**15.1**	**12.8**	**12.8**
	Restricted			
	Designated General Fund			
2	Tobacco Settlement (Tobacco Use Education and Cessation Fund)	4.0	4.3	4.1
3	Other – General Fund Subfunds	1.5	1.5	1.5
4	**Subtotal Designated General Fund**	**5.5**	**5.8**	**5.6**
	Other Restricted			
5	Tobacco Settlement (Northern Tobacco Securitization Corporation)	16.1	17.0	16.2
6	Other – Special Revenue Funds	0.0	0.0	0.0
7	**Subtotal Other Restricted**	**16.1**	**17.0**	**16.2**
8	**Total Restricted Revenue from Fines and Forfeitures**	**21.6**	**22.8**	**21.8**
9	**Total Revenue from Fines and Forfeitures**	**36.7**	**35.6**	**34.6**

Fines and Forfeitures

Fines and forfeitures include civil and criminal fines and forfeitures, as well as 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.

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 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, and is considered designated general fund revenue.

Tobacco settlement payments are based on a complex formula that uses 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. Most of the receipts under this category are from motor vehicle registration and hunting and fishing license fees. Several other small license and permit fees are summarized in the Other Fees category.

Alcoholic Beverage Licenses

Alcoholic beverage licenses are required under AS 04.11.010 to manufacture or sell alcoholic beverages in Alaska and are issued by the Alcoholic Beverage Control Board within the Alaska Department of

Chapter 7

5

Licenses and Permits Revenue

By restriction and source

		Millions of Dollars		
		History	Forecast	
	Fiscal Year	2020	2021	2022
	Unrestricted			
	Unrestricted Revenue from Licenses and Permits			
1	Motor Vehicles Fees	33.6	31.7	31.7
2	Other Fees	0.8	1.8	1.8
3	**Total Unrestricted Revenue from Licenses and Permits**	**34.4**	**33.5**	**33.5**
	Restricted			
	Designated General Fund			
4	Alcoholic Beverage License Share [1]	0.8	0.8	0.8
5	Other Fees – General Fund Subfunds	0.3	1.0	1.0
6	**Subtotal Designated General Fund**	**1.1**	**1.8**	**1.8**
	Other Restricted			
7	Hunting and Fishing Fees	36.5	32.3	33.0
8	Other Fees – Special Revenue Funds	3.6	3.6	3.6
9	**Subtotal Other Restricted**	**40.1**	**35.9**	**36.6**
10	**Total Restricted Revenue from Licenses and Permits**	**41.2**	**37.7**	**38.4**
11	**Total Revenue from Licenses and Permits**	**75.6**	**71.2**	**71.9**

[1] Beginning with FY 2019, Alcoholic Beverage License Share is considered designated general fund revenue.

Commerce, Community, and Economic Development. There is also a separate license requirement under AS 43.60.040 for the Department of Revenue but those licenses do not have an associated fee.

All 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 designated general fund revenue for this forecast. The remaining revenue from annual wholesale fees and biennial wholesale license fees is also treated as designated general fund revenue, as these funds are considered program receipts supporting the service of issuing alcoholic beverage licenses. This remaining revenue is included in Table 7-5 in the "Other Fees" category.

Hunting and Fishing License Fees

Hunting and fishing licenses are issued under AS 16.05 by the Alaska Department of Fish and Game for participation in various hunting, fishing, and other related activities. The majority of this revenue is appropriated to a special revenue fund, the Fish and Game Fund, and is classified as other restricted revenue. Money in the fund can only be spent for fish and game management purposes. Another portion of this revenue is a surcharge used for debt services for sport fish hatchery bonds and is considered other restricted revenue.

Chapter 7

6 Rents and Royalties Revenue

By restriction and source

		Fiscal Year	History 2020	Forecast 2021	Forecast 2022
			Millions of Dollars		
	Unrestricted				
	Unrestricted Revenue from Rents and Royalties				
1	Mining Rents and Royalties		1.6	2.1	2.5
2	Other Non-Petroleum Rents and Royalties		4.0	4.0	4.0
3	**Total Unrestricted Revenue from Rents and Royalties**		**5.6**	**6.1**	**6.5**
	Restricted				
	Designated General Fund				
4	Mining Rents and Royalties		11.7	13.4	14.7
5	Mining Rents and Royalties to Alaska Permanent Fund [1]		2.9	3.8	4.5
6	Other Non-Petroleum Rents and Royalties		13.1	13.1	13.1
7	**Subtotal Designated General Fund**		**27.7**	**30.2**	**32.3**
	Other Restricted				
8	Mining Rents and Royalties to Alaska Permanent Fund [1]		3.0	3.9	4.6
9	Mining Rents and Royalties to Public School Trust Fund		0.1	0.1	0.1
10	Other Non-Petroleum Rents and Royalties		0.1	0.1	0.1
11	**Subtotal Other Restricted**		**3.2**	**4.1**	**4.9**
12	**Total Restricted Revenue from Rents and Royalties**		**30.9**	**34.3**	**37.2**
13	**Total Revenue from Rents and Royalties**		**36.5**	**40.4**	**43.7**

[1] The constitutionally dedicated 25% of minerals-related royalties, bonuses, rents, and interest to the Permanent Fund is shown as Other Restricted revenue. Beginning with FY 2020, the additional 25% for leases issued after December 1, 1979, as referred to in AS 37.13.010(a), is shown as Designated General Fund revenue. Previously, the additional 25% was shown as Other Restricted revenue; this change in presentation was made for conformity to budget documents.

Motor Vehicle Registration Fees

Motor vehicle registration fees under AS 28.10.421 are collected by the Division of Motor Vehicles within the Alaska 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.

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 Chapter 6.

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 up-front bonuses, annual rent charges, and a retained royalty interest in mineral production.

Under the state constitution, 25% of revenue from most mining rents and royalties must be deposited into the Permanent Fund. An additional 0.5% from most mining rents and royalties is deposited into the Public School Trust Fund, a pre-statehood dedicated fund. These deposits are treated as other restricted revenue.

For state mineral leases issued after December 1, 1979 (the majority of mining on state land falls into this category), an additional 25% of rents and royal-

Chapter 7

7

Miscellaneous and Transfer Revenue

By restriction and source

		Millions of Dollars		
		History	Forecast	
	Fiscal Year	2020	2021	2022
	Unrestricted			
	Unrestricted Miscellaneous and Transfer Revenue			
1	Miscellaneous	27.8	29.2	29.2
2	Alaska Housing Finance Corporation Dividend [1]	27.0	33.6	30.5
3	Alaska Industrial Development and Export Authority Dividend [2]	10.3	14.5	14.5
4	Alaska Municipal Bond Bank Authority	0.9	0.9	0.9
5	Alaska Student Loan Corporation Dividend	0.0	0.0	0.0
6	Alaska Energy Authority	0.0	0.0	0.0
7	Mental Health Trust	0.0	0.0	0.0
8	Unclaimed Property	11.5	10.0	10.0
9	**Total Unrestricted Miscellaneous and Transfer Revenue**	**77.5**	**88.2**	**85.1**
	Restricted			
	Designated General Fund			
10	Miscellaneous – General Fund Subfunds [3]	13.1	15.0	15.0
11	Alaska Capital Income Fund [4]	20.5	23.1	27.2
12	**Subtotal Designated General Fund**	**33.6**	**38.1**	**42.2**
	Other Restricted			
13	Miscellaneous – Special Revenue Funds [3]	8.6	10.0	10.0
14	**Total Restricted Miscellaneous and Transfer Revenue**	**42.2**	**48.1**	**52.2**
15	**Total Miscellaneous and Transfer Revenue**	**119.7**	**136.3**	**137.3**

[1] The AHFC dividend for FY 2021 is an estimate as of November 3, 2020; it will be revised in the Spring 2021 Forecast.

[2] The AIDEA dividend for FY 2022 is an estimate as of December 7, 2020; it will be revised in the Spring 2021 Forecast.

[3] These funds represent revenue shown under account codes for “other” or “contributions” in the Alaska State Accounting System for general fund subfunds and special revenue funds.

[4] Beginning with FY 2019, transfer revenue from the Alaska Capital Income Fund is considered designated general fund revenue.

ties is deposited into the Alaska Permanent Fund per statutory requirement. Beginning with this Fall 2020 *Revenue Sources Book*, this additional 25% of revenue is shown as designated general fund revenue. Previously the additional 25% was shown as other restricted revenue; this change was made for consistency with budget documents.

Remaining revenue is either unrestricted or designated general fund. Examples of designated general fund mining revenues include certain fees, royalties, and material sales revenues that are designated as program receipts and used to support mining resource management.

Other Non-Petroleum Rents and Royalties

This category includes revenue from the leasing, rental, and sale of state land that does not fall into the oil and gas or mining categories. Such revenues consist of a variety of different revenue streams flowing to the general fund, subfunds of the general fund, and special revenue funds. Thus, revenue is shown in the unrestricted, designated general fund, and other restricted categories. The Permanent Fund and Public School Trust Fund do not receive a mandated share of revenue for these non-mineral rents and royalties.

Miscellaneous and Transfer Revenues

This category includes unclaimed property transfers to the state from component organizations, transfers from state funds, and miscellaneous revenue, which are discussed below.

Unclaimed Property

Alaska's unclaimed property statutes – AS 34.45 – 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 or dividends from component organizations such as the Alaska Housing Finance Corporation and the Alaska Industrial Development and Export Authority. Because some component organizations do not make transfers to the state, not all are listed here.

Component organizations are covered in more detail in Chapter 10. Transfers and dividends present¬ed in this section may differ from those pre¬sented in Chapter 10 for two reasons – amounts in this section account differently for funds paid over time for multi-year capital projects, and amounts in this section include funds that are transferred to the state and then appropriated to the component unit for operations.

Transfers from State Funds

The Alaska Capital Income Fund is invested alongside the Permanent Fund, and in FY 2018, the earnings of the Alaska Capital Income Fund were transferred to the general fund for general appropriation. For FY 2019 and beyond, transferred earnings are designated for deferred maintenance purposes and are shown as designated general fund revenue.

The annual transfers from the Alaska Permanent Fund to the general fund are reported and discussed in detail in Chapter 4.

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Chapter 8

Credits

Overview

Alaska's tax code provides for a wide range of credits. Generally, tax credits may only be used to reduce a company's tax liability. However, for certain historical tax credits, a company could also choose to request the State of Alaska to purchase a credit. Many such credits remain outstanding, primarily for the oil and gas production tax. However, such credits are no longer available to be earned due to legislative action.

Tax credits applied against liability are sometimes referred to as a type of "indirect expenditure," as the forgone revenue is similar to spending in that it reduces the amount of revenue available for the state budget. Because the state never receives this revenue, these credits are not directly visible in revenue and spending numbers. On the other hand, tax credits purchased by the state do show up directly as expenditures in the budget, when funds are appropriated for this purpose.

This chapter provides an overview of the various tax credits, how they are earned, their limitations, and their revenue impact. Discussion in this chapter also addresses historical credits that have sunset or been repealed over the past 10 years. Other types of indirect expenditures, such as deductions, exemptions, and exclusions, are not included in this chapter, but can be found in the Department of Revenue's *Alaska Indirect Expenditure Report* on the Tax Division's website.[1]

Oil and Gas Tax Credit Fund

Background

The Oil and Gas Tax Credit Fund, established under AS 43.55.028, was created to allow the State of Alaska to purchase certain transferable oil and gas tax credit certificates. Funds are subject to annual appropriation by the Alaska Legislature for this purpose. Credits that have been available for state purchase include the transferable production tax credits under AS 43.55.023, AS 43.55.025, and certain corporate income tax credits under AS 43.20 – the Gas Storage Facility Credit, In-State Refinery Tax Credit, and Liquefied Natural Gas (LNG) Storage Facility Credit. Nontransferable credits, generally those offered under AS 43.55.024, are not available for state purchase.

A statutory formula in AS 43.55.028(c) provides a calculation for an appropriation that may be made by the Alaska Legislature to the Oil and Gas Tax Credit Fund. The calculation is based on a share of taxes levied under AS 43.55.011, the production tax statute. That share is 10% of revenue from taxes levied when the Alaska North Slope (ANS) price for the fiscal year is forecast at $60 per barrel or higher and 15% of revenue from taxes levied when the ANS price for the fiscal year is forecast at below $60 per barrel. The estimated statutory appropriation is shown in Figure 8-3. Despite the statutory appropriation, the state may, and in many years has, appropriated a different amount.

State purchase is limited in several ways. Only companies that produced fewer than 50,000 British thermal units (Btu) equivalent barrels per day in the prior calendar year may request state purchase and companies may only request purchase up to $70 million of credits per year. The first $35 million of this request may be purchased at full value and the second $35 million at 75% of face value.

From FY 2007 – FY 2019, the state annually appropriated funds to purchase tax credit certificates from eligible companies. Legislative action in 2016 and 2017 gradually phased out the ability to earn new credits that would be eligible for state purchase. The legislation eliminated the eligibility for state purchase for any credits earned on or after July 1, 2017, except for the LNG storage facility and refinery tax credits, both of which sunset at the end of 2019.

[1] The *Alaska Indirect Expenditure Report* can be found at http://tax.alaska.gov/programs/reports.aspx.

Chapter 8
1

Tax Credits Claimed

FY 2018 – FY 2020

		Millions of Dollars		
		Total Credits Claimed		
	Fiscal Year	**2018**	**2019**	**2020**[1]
	Credits Applicable to the Oil and Gas Production Tax			
1	Alternative Credit for Exploration, Cook Inlet Jack-Up Rig Credit, and Frontier Basin Credit	$15	$19	*
2	Exploration Incentive Credit	$0	$0	$0
3	Per-Taxable-Barrel Credit	$1,001	$1,037	$586
4	Qualified Capital Expenditure Credit, Well Lease Expenditure Credit, and Carried-Forward Annual Loss Credit	$78	$102	*
5	Small-Producer / New Area Development Credit	$19	$3	$10
	Credits Applicable to the Corporate Income Tax			
6	Gas Exploration and Development Credit	$0	D/I	D/I
7	Gas Storage Facility Credit	This was a single-use credit.		
8	In-State Gas Refinery Credit	*	D/I	D/I
9	Internal Revenue Code Credits Adopted by Reference	D/I	D/I	D/I
10	LNG Storage Facility Credit	$0	D/I	D/I
11	Oil and Gas Industry Service Expenditures Credit	$0	D/I	D/I
12	Veteran Employment Tax Credit	*	D/I	D/I
	Credits Applicable to Multiple Tax Programs			
13	Education Tax Credit	$5	D/I	D/I
14	Film Production Credit	$6	$2	$2
15	Minerals Exploration Incentive Credit	$0	D/I	D/I
	Credits Applicable to Fisheries Taxes			
16	Winn Brindle Scholarship Contributions Credit	$0	$0	D/I
17	Salmon and Herring Product Development Credit	$5	$3	D/I
18	Community Development Quota Credit	<$1	<$1	D/I
19	Other Taxes Credit	N/T	N/T	N/T
20	**Total All Reportable Tax Credits**	**$1,137**	**$1,167**	**$606**

[1] The FY 2020 credit totals are estimated pending annual tax filings.

* – Data cannot be reported due to confidentiality constraints.

D/I – Data incomplete.

N/T – Not tracked.

Note on Methodology: This table has been updated to show credit numbers consistent with the FY 2015-FY 2019 Indirect Expenditure Report. Beginning with the Fall 2016 *Revenue Sources Book*, the Department of Revenue has revised the methodology for determining which fiscal year any individual tax credit is attributed to, therefore, some fiscal years have incomplete data for certain credits. To accurately attribute credits to the fiscal year they were "incurred," credit amounts are based on returns for filing periods beginning during the relevant fiscal year. For example, a calendar-year return with a filing period that began in January 2020 would be included in FY 2020 data, however, the return may not be filed until FY 2021 or FY 2022.

Chapter 8 **2**

History of Production Tax Credits

FY 2011 – FY 2020

	Fiscal Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020 [1]
		Millions of Dollars									
		History									
	Statewide Credits										
1	Credits Used against Tax Liability	361	363	550	919	585	125	572	1,036	1,063	603
2	Credits Purchased by the State [2]	450	353	369	592	628	498	30	78	100	1
3	**Total Statewide Production Tax Credits**	**811**	**716**	**919**	**1,511**	**1,213**	**624**	**602**	**1,114**	**1,162**	**604**

[1] FY 2020 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.

As of the writing of this publication, a significant outstanding balance of tax credit certificates eligible for state purchase still exists. No funds were appropriated for the purchase of tax credit certificates for FY 2020 and no funds were appropriated in the enacted FY 2021 budget.

Tax Credit Bonding Program

House Bill 331 (HB 331), passed in 2018, authorized a tax credit bonding program that would have allowed the state to purchase outstanding oil and gas tax credits at a discount of face value, and spread the funding out over several years through issuance of subject to appropriation bonds. This program was envisioned as a win/win for the state and industry – the state can retire the outstanding tax credit liability at a discount, while tax credit holders benefit from immediate access to funds. In response to a legal challenge, the Alaska Supreme Court ruled on September 4, 2020 that the bonding proposal was unconstitutional.

Allocation of Credit Funds

If insufficient funds are appropriated to fulfill all credit purchase requests, as has been the case the past several years, the Tax Division's regulations establish the following protocol to allocate allotted funds.

First, all credits for which purchase was requested prior to January 1, 2017, are funded on a pro-rata basis.

Once all pre-2017 credits have been used or purchased, credits earned on or after January 1, 2017, are to be funded based on the year that the purchase was requested. For instance, all 2017 credits are to be paid before any 2018 credits are paid. In the case where purchase was requested in a single year, the applicants are to be ranked based on the companies' Alaska resident-hire percentage, including contractors.

Credits Forecast

This *Revenue Sources Book* uses an assumption that the statutory appropriation for purchase of tax credit certificates is made in FY 2022 and all subsequent fiscal years. Thus, the outstanding balance of tax credits is gradually retired over a period of several years in the forecast. This is a change from the convention used in previous *Revenue Sources Books* which had assumed that the entire outstanding balance of credits would be retired in the next fiscal year. Figures 8-3 and 8-4 of this chapter show a credit payoff timeline according to the statutory calculation. Of course, the state may appropriate a higher or lower amount in any given year.

Companies may use certain transferred tax credits to offset a current or prior-year tax liability, contingent on that liability not being dedicated to the Constitutional Budget Reserve Fund (CBRF). This forecast assumes that no additional credits will be transferred or sold, and that all credits will be retired over time through state appropriations to the Oil and Gas Tax Credit Fund. If credits are instead transferred, they could in certain circumstances, be used by producers in lieu of making tax payments that would otherwise go to the general fund. The net result of such a transaction would be a reduction to both production tax revenue and to the total balance of credits outstanding.

Chapter 8

3

10-Year Forecast for Production Tax Credits

FY 2021 – FY 2030 forecast

	Fiscal Year	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
		Millions of Dollars									
		Forecast									
	Statewide Credits										
1	Credits Used Against Tax Liability	506	243	188	233	335	322	324	344	414	458
2	Credits Purchased by the State[1]	0	60	56	71	87	82	80	83	100	107
3	**Total Statewide Production Tax Credits**	**506**	**303**	**244**	**304**	**422**	**404**	**404**	**427**	**514**	**565**
4	**Statutory Appropriation to Oil and Gas Tax Credit Fund[2]**	---	**60**	**56**	**71**	**87**	**82**	**80**	**83**	**100**	**107**

[1] 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.

[2] Per AS 43.55.028(c), the statutory appropriation is 10% of taxes levied by AS 43.55.011 (oil and gas production tax) when the Alaska North Slope price forecast for the fiscal year is $60 per barrel or higher, and 15% of taxes levied by AS 43.55.011 when the ANS price forecast for the fiscal year is below $60 per barrel.

Note: As of the Fall 2020 forecast, $760 million of outstanding credits are estimated to be available for state purchase. This forecast assumes that the statutory appropriation for purchase of tax credits will be made annually beginning in FY 2022. In this scenario, the final appropriation would be made in FY 2031 to retire all outstanding tax credits.

Credits Applicable to the Oil and Gas Production Tax

Alternative Credit for Exploration

AS 43.55.025(a)(1)-(4)

The Alternative Credit for Exploration is a transferable and state purchase-eligible credit for expenditures for certain oil and gas exploration activities in Middle Earth (leases outside the North Slope and Cook Inlet), the North Slope, and Cook Inlet.

The credit for Middle Earth exploration drilling is the only element of this credit still in place for new activity as of publication of this *Revenue Sources Book*, with an expiration date of January 1, 2022. It is a 30% credit for drilling costs for wells greater than 25 miles from an existing unit, 30% for preapproved new targets greater than three miles from an existing well, and 40% for pre-approved new targets greater than three miles from a well and greater than 25 miles from an existing unit. The three-mile limit does not apply for wells in "Frontier Basins" as described under the Frontier Basin Credit below.

The credit for Middle Earth seismic was a 40% credit for seismic costs outside an existing unit, but expired January 1, 2018.

The credit for North Slope activity had the same rates and geographical limitations as the Middle Earth credit, but expired July 1, 2016.

The credit for Cook Inlet was a 40% credit for seismic costs outside an existing unit, 30% for drilling costs greater than 10 miles from an existing unit, 30% for preapproved new targets, and 40% for preapproved drilling costs for wells that were greater than 10 miles from an existing unit. The Cook Inlet credit expired July 1, 2016.

Carried-Forward Annual Loss Credit

AS 43.55.023(b)

This credit is a transferable and state purchase-eligible 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 value for the calendar year.

On the North Slope, during 2014 and 2015, the credit for carried-forward annual losses incurred was 45% of the loss. On January 1, 2016, the credit for losses incurred on the North Slope decreased to 35%. Beginning January 1, 2017, a gross value reduction (GVR) could no longer be used to increase the size of an annual loss for credit calculation purposes. This

Historical Production Tax Credits and Forecast

Detail, FY 2011 – FY 2030

	Millions of Dollars									
	History									
Fiscal Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020[1]
Credits Purchased by the State of Alaska										
North Slope										
1 Qualified Capital Expenditure, AS 43.55.023(a); Carry-forward, AS 43.55.023(b)	399	267	*	*	203	*	*	*	*	0
2 Credits under AS 43.55.025[2]	12	53	*	*	21	*	*	*	*	0
3 **Total North Slope**	**411**	**320**	**261**	**281**	**224**	**212**	**< 1**	**51**	**68**	**0**
Non-North Slope										
4 Qualified Capital Expenditure, AS 43.55.023(a); Carry-forward, AS 43.55.023(b); Well Lease Expenditure, AS 43.55.023(l)	*	29	*	*	384	*	30	26	30	*
5 Credits under AS 43.55.025[2]	*	4	*	*	21	*	0	*	*	*
6 Credits under AS 43.20[3]	*	0	*	15	0	*	0	*	*	*
7 **Total Non-North Slope**	**39**	**33**	**108**	**312**	**404**	**287**	**30**	**27**	**32**	**1**
8 **Total Credits Purchased by the State**	**450**	**353**	**369**	**592**	**628**	**498**	**30**	**78**	**100**	**1**
Credits Used Against Tax Liability[4, 5]										
North Slope										
9 Qualified Capital Expenditure, AS 43.55.023(a);Carry-forward, AS 43.55.023(b)	313	306	486	332	0	*	*	*	*	*
10 Transitional Investment Credit: AS 43.55.023(i)	0	*	*							
11 Per-Taxable-Barrel Credit, AS 43.55.024(i)-(j)[6]				516	524	86	536	1,001	1,037	586
12 Small-Producer Credit, AS 43.55.024(a)(c)	*	*	*	*	*	*	*	*	*	*
13 Credits under AS 43.55.025[2]	*	*	*	*	*	*	*	*	*	*
14 **Total North Slope**	**345**	**347**	**536**	**907**	**575**	**120**	**570**	**1,034**	**1,061**	**601**
Non-North Slope										
15 Qualified Capital Expenditure, AS 43.55.023(a); Carry-forward, AS 43.55.023(b); Well Lease Expenditure, AS 43.55.023(l)	11	*	*	*	*	*	*	*	*	*
16 Small-Producer Credit, AS 43.55.024(a)(c)	6	*	*	*	*	*	*	*	*	*
17 **Total Non-North Slope**	**17**	**16**	**14**	**12**	**10**	**5**	**1**	**1**	**1**	**2**
18 **Total Credits Used Against Tax Liability**	**361**	**363**	**550**	**919**	**585**	**125**	**572**	**1,036**	**1,063**	**603**
19 Total Credits North Slope	756	667	797	1,188	799	332	570	1,086	1,129	601
20 Total Credits Non-North Slope	56	49	122	323	414	292	32	28	34	3
21 **Total Statewide Production Tax Credits**	**811**	**716**	**919**	**1,511**	**1,213**	**624**	**602**	**1,114**	**1,162**	**604**
22 **Carried-Forward Credits Balances and Tax Value of Carried-Forward Annual Losses and Credits[7, 8]**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**292**

* Data cannot be reported due to confidentiality constraints.

[1] These numbers are preliminary pending annual returns.

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

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

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

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

[6] For FY 2014, the Per-Taxable-Barrel Credit was in effect for only the last

		Millions of Dollars									
		Forecast									
		2021	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
	Credits Purchased by the State of Alaska										
	North Slope										
1	Qualified Capital Expenditure, AS 43.55.023(a); Carry-forward, AS 43.55.023(b)	0	38	36	45	56	24	20	21	25	26
2	Credits under AS 43.55.025 [2]	0	2	2	2	3	25	27	28	34	11
3	**Total North Slope**	**0**	**40**	**37**	**48**	**58**	**49**	**47**	**49**	**59**	**37**
	Non-North Slope										
4	Qualified Capital Expenditure, AS 43.55.023(a); Carry-forward, AS 43.55.023(b); Well Lease Expenditure, AS 43.55.023(l)	0	19	17	22	27	25	24	25	30	33
5	Credits under AS 43.55.025 [2]	0	1	0	1	1	5	5	5	6	2
6	Credits under AS 43.20 [3]	0	1	1	1	1	4	4	4	5	35
7	**Total Non-North Slope**	**0**	**20**	**19**	**23**	**29**	**33**	**33**	**34**	**41**	**70**
8	**Total Credits Purchased by the State [8]**	**0**	**60**	**56**	**71**	**87**	**82**	**80**	**83**	**100**	**107**
	Credits Used Against Tax Liability [4, 5]										
	North Slope										
9	Qualified Capital Expenditure, AS 43.55.023(a); Carry-forward, AS 43.55.023(b)	70	46	-	0	0	0	0	0	0	0
10	Transitional Investment Credit: AS 43.55.023(i)										
11	Per-Taxable-Barrel Credit, AS 43.55.024(i)-(j) [6]	422	186	186	230	332	320	324	344	414	458
12	Small-Producer Credit, AS 43.55.024(a)(c)	1	1	1	1	1	0	0	0	0	0
13	Credits under AS 43.55.025 [2]	0	0	0	0	0	0	0	0	0	0
14	**Total North Slope**	**493**	**233**	**186**	**231**	**333**	**320**	**324**	**344**	**414**	**458**
	Non-North Slope										
15	Qualified Capital Expenditure, AS 43.55.023(a); Carry-forward, AS 43.55.023(b); Well Lease Expenditure, AS 43.55.023(l)	12	9	0	0	0	0	0	0	0	0
16	Small-Producer Credit, AS 43.55.024(a)(c)	2	2	2	2	2	2	0	0	0	0
17	**Total Non-North Slope**	**13**	**11**	**2**	**2**	**2**	**2**	**0**	**0**	**0**	**0**
18	**Total Credits Used Against Tax Liability**	**506**	**243**	**188**	**233**	**335**	**322**	**324**	**344**	**414**	**458**
19	Total Credits North Slope	493	273	224	279	391	369	371	393	473	495
20	Total Credits Non-North Slope	13	30	21	26	31	35	33	34	41	70
21	**Total Statewide Production Tax Credits**	**506**	**303**	**244**	**304**	**422**	**404**	**404**	**427**	**514**	**565**
22	**Carried-Forward Credits Balances and Tax Value of Carried-Forward Annual Losses and Credits [7, 8]**	**380**	**524**	**830**	**1,129**	**1,296**	**1,435**	**1,531**	**1,598**	**1,641**	**1,646**

six months of the fiscal year. Credits applied against liability in the forecast are limited by a company's tax liability including the minimum tax.

[7] This row includes estimates of carried-forward credits for previous calendar years for companies with over 50,000 BOE of production. These Carried-Forward Credits are held by companies that are not eligible for refund. Carried-forward credits are primarily for net operating losses under AS 43.55.023(b). The Tax Value of Carried-Forward Annual Losses is calculated by multiplying the amount of carried-forward annual loss by the statutory 35% tax rate.

[8] FY 2020 values reported here are estimated based on excess lease expenditures reported on annual tax returns through December 31, 2019 plus estimated carried-forward tax credits for companies not eligible for state purchase as of June 30, 2020. The department has not prepared final estimates for years prior to FY 2019 for total value at those points in time of carried-forward lease expenditures and credits.

credit expired for the North Slope on January 1, 2018 and was replaced by a new carried-forward lease expenditures provision.

For areas outside the North Slope, the credit was repealed on January 1, 2018, as well. For Middle Earth, the credit was replaced by a carried-forward lease expenditures provision. For Cook Inlet, however, the credit was repealed.

Education, and Film Production Credits

See "Credits Applicable to Multiple Tax Programs."

Frontier Basin Credit

AS 43.55.025(a)(6)-(7)

The Frontier Basin Credit, which is expired, was a transferable, state purchase-eligible credit for the first four exploration wells and the first four seismic exploration projects within six specific areas designated in AS 43.55.025(o), also called the "Frontier Basins." For wells drilled or spudded prior to July 1, 2017, the credit was for 80% of qualified exploration drilling expenses or $25 million. For seismic projects, the credit, which expired July 1, 2016, was for the lesser of 75% of qualified seismic exploration expenditures or $7.5 million.

Per-Taxable-Barrel Credit

AS 43.55.024(i)-(j)

The Per-Taxable-Barrel Credit is a production tax credit for each taxable barrel of oil production on the North Slope. This credit is an integral part of the production tax calculation. It cannot be transferred or carried-forward, and is not eligible for cash purchase. This credit does not have an expiration date.

In "new oil" 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 the average gross value at point of production (GVPP) per barrel produced in the tax year. The credit operates on a sliding scale ranging from $0 per barrel when the GVPP is more than $150 per barrel, to $8 per barrel when the GVPP is less than $80 per barrel.

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, and vice versa.

One important limit is that if a company chooses to utilize the $0 to $8 credit for non-GVR-eligible oil, that company may not use this credit and any other credits or deductions to reduce its tax liability to less than the minimum tax established under AS 43.55.011(f), currently 4% of the GVPP. The credit for GVR-eligible oil may not reduce the producer's liability for that production below zero.

Because they cannot be transferred or carried forward, these credits do not create a future liability for the state if they are not used in the year earned.

Qualified Capital Expenditure and Well Lease Expenditure Credit

AS 43.55.023(a) and (l)

These are transferable and state purchase-eligible tax credits for qualified oil and gas capital expenditures in the state outside the North Slope. They can be taken in lieu of Exploration Credits under AS 43.55.025 but are in addition to any Carried-forward annual loss credits under AS 43.55.023(b). Before January 1, 2017, companies could qualify for a credit of 20% of eligible capital expenditures or 40% of qualified well lease expenditures. As of January 1, 2017, the Qualified Capital Expenditure Credit was reduced from 20% to 10% and the Well Lease Expenditure Credit was reduced from 40% to 20%. On January 1, 2018, both credits were repealed for Cook Inlet. There is no expiration date for Middle Earth.

Small-Producer and New Area Development Credit

AS 43.55.024(a) and (c)

The Small-Producer Credit is a nontransferable 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 was available until the later of (1) calendar year 2016 or (2) the ninth calendar year after the calendar year in which the producer first had commercial production, if that production began before May 1, 2016. Therefore, as of publication of the *Revenue Sources Book*, the credit will gradually sunset over the next several years. The credit is capped at $12 million annually for producers with less than 50,000 Btu-equivalent barrels per day. For larger producers, the credit phases out, and is zero for producers with 100,000 or more Btu-equivalent barrels per day. The credit may only be used against tax liability, and only if the producer has a positive tax liability before the application of credits. It may not be carried forward.

The New Area Development Credit was a credit of up to $6 million per company annually, for oil or gas produced from Middle Earth, providing the producer had a positive tax liability on that production before the application of credits. The credit was available until the later of (1) calendar year 2016 or (2) the ninth calendar year after the calendar year in which the producer first had commercial production from Middle Earth, if that production began before May 1, 2016. Because there has not been commercial production outside the North Slope and Cook Inlet, no companies qualified for this credit, and it was never used.

Transitional Investment Expenditure Credit

AS 43.55.023(i)

The Transitional Investment Expenditure Credit was a nontransferable credit for 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

Education, and Film Production Credits

See "Credits Applicable to Multiple Tax Programs."

Gas Storage Facility Credit

AS 43.20.046

The Gas Storage Facility Credit was a state purchase-eligible credit, paid out of the Oil and Gas Tax Credit Fund under AS 43.55.028, for costs incurred to establish an underground natural gas storage facility in Kenai. This credit was limited to one company and was taken in FY 2014.

The credit was $1.50 per 1,000 cubic feet of "working gas" storage capacity as determined by the Alaska Oil and Gas Conservation Commission. It did not apply to gas storage related to a gas sales pipeline on the North Slope. To qualify, the facility had to operate as a public utility regulated by the Regulatory Commission of Alaska (RCA) with open access for third parties. It was effective for facilities placed into service between January 1, 2011, and December 31, 2015. The maximum credit was the lesser of $15 million or 25% of costs incurred to establish the facility.

In-State Refinery Tax Credit

AS 43.20.053

The In-State Refinery Tax Credit began on January 1, 2015 and was a credit for qualified infrastructure expenditures for in-state oil refineries incurred after December 31, 2014, and before January 1, 2020. The credit could not exceed 40% of total qualifying expenditures or $10 million per tax year per refinery, whichever amount was less. The credit could be applied against corporate income tax liability and carried forward for up to five years, or purchased by the state. The authorizing statute sunset on December 31, 2019.

Internal Revenue Code Credits Adopted by Reference

AS 43.20.021

Under Alaska's blanket adoption of most provisions of the federal Internal Revenue Code, taxpayers may claim a portion of federal general business credits against the Alaska corporate income tax. 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 that is attributable to Alaska.

One of the credits adopted by reference under AS 43.20.021 is the Federal Alternative Minimum Tax Credit. The Tax Cuts and Jobs Act (TCJA) of 2017 and the federal CARES Act of 2020 created a refundable credit against corporate income taxes of all alternative minimum taxes paid since 1987. The credit may be claimed on an Alaska original or amended return for tax years 2018 or 2019.

LNG Storage Facility Credit

AS 43.20.047

The LNG Storage Facility Credit is a nontransferable, state purchase-eligible credit for the costs incurred to establish a storage facility for LNG. The credit is the lesser of $15 million or 50% of costs incurred to establish the facility and may be purchased by the state by direct appropriation. It applies to facilities with a minimum storage capacity of 25,000 gallons of LNG that are public utilities regulated by the Regulatory Commission of Alaska. It is for facilities placed into service after January 1, 2011. For a facility to qualify for the credit it must have commenced commercial operation prior to January 1, 2020.

Minerals Exploration Incentive Credit

See "Credits Applicable to Multiple Tax Programs."

Oil and Gas Industry Service Expenditures Credit

AS 43.20.049

The Oil and Gas Industry Service Expenditures Credit is a nontransferable 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 and is effective for expenditures incurred after January 1, 2014. Any amount of the credit that exceeds the taxpayer's liability may be carried forward up to five years. This credit does not have a sunset date in statute.

Urea/Ammonia/Gas to Liquid Facility Credit

AS 43.20.052

The Urea/Ammonia/Gas to Liquid Facility Credit was enacted in 2016. This nontransferable credit allows an in-state company that produces urea, ammonia, or gas-to-liquids products to apply a credit to its corporate income tax based on natural gas purchased from state leases. The credit is equal to the amount of state royalty paid on natural gas purchased for the qualifying project. The credit cannot be carried forward to future years, is not eligible for state purchase, and cannot be used to reduce a tax liability below zero. The credit is scheduled to be repealed January 1, 2024.

Veteran Employment Tax Credit

AS 43.20.048

The Veteran Employment Credit is a nontransferable and state purchase-ineligible credit for corporate income taxpayers who employ qualified veterans in the state. A "qualified veteran" is a veteran who was unemployed for more than four weeks preceding the veteran's employment date and who was discharged or released from military service (1) not more than 10 years before his or her employment date for a disabled veteran, or (2) not more than two years before his or her 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. The credit cannot be used to reduce a tax liability below zero, but it can be carried forward to future years. The credit does not have an expiration date.

Credits Applicable to Fisheries Taxes

Community Development Quota Credit

AS 43.77.040

The Community Development Quota (CDQ) Credit is a nontransferable 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 CDQ. The credit is 100% of a taxpayer's contribution amount, up to a maximum of 45.45% of the taxpayer's tax liability on fishery resources harvested under a CDQ. The sum of all CDQ Tax Credits is deducted from the amount that the state shares with municipalities under AS 43.77.060(a). The authorizing statute is scheduled to sunset December 31, 2020.

Education, and Film Production Credits

See "Credits Applicable to Multiple Tax Programs."

Salmon and Herring Product Development Credit

AS 43.75.035

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

Winn Brindle Scholarship Contributions Credit

AS 43.75.032, 43.77.035

The Winn Brindle Scholarship Contributions Credit was applicable to both the fisheries business tax and fishery resource landing tax. It was a nontransferable credit for contributions to the A.W. "Winn" Brindle Memorial Education Loan Account. The credit was 100% of the contribution amount, up to a maximum of 5% of tax liability. The credit sunset on December 31, 2016.

Credits Applicable to Multiple Tax Programs

Education Credit

AS 21.96.070, 43.20.014, 43.55.019, 43.56.018, 43.65.018, 43.75.018, 43.77.045

The Education Credit is a nontransferable and state purchase-ineligible credit applicable to the insurance premiums tax, title insurance premiums tax, corporate income tax, oil and gas production tax, oil and gas property tax, mining license tax, fisheries business tax, and fishery resource landing tax.

Taxpayers can claim a credit for contributions to vocational educational programs, accredited nonprofit, public or private Alaska universities or colleges, Alaska public or private nonprofit 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 Alaska Department of Education and Early Development.

In 2018, the credit was 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 could not exceed $5 million annually across all eligible tax types. Beginning on January 1, 2019, the credit has been available for up to 50% of annual contributions up to $100,000, 75% of the next $200,000, and 50% of annual contributions beyond $300,000. The credit for any one taxpayer has not been allowed to exceed $1 million annually across all eligible tax types. Previously, only cash contributions were accepted for the Education Tax Credit, but the credit was expanded to accept contributions of equipment beginning in 2019. Beginning in 2021, the credit is reduced to 50% of all donations; the $1 million cap on the credit per taxpayer each year will remain the same. The Education Tax Credit is currently scheduled to sunset on December 31, 2024.

Film Production Credit

AS 43.98.030, under AS 21.09.210, 21.66.110, 43.20, 43.55, 43.56, 43.65, 43.75, and 43.77

The Film Production Credit is a transferable, but state purchase-ineligible, credit for expenditures on eligible film production activities in Alaska. For qualifying productions, the credit is 30% of eligible film production expenditures. The credit also has an additional 20% credit for wages paid to Alaska residents, an additional 6% credit for filming in a rural area, and an additional 2% credit for filming between October 1 and March 30. The credit applies to the insurance premium tax, title insurance tax, corporate income tax, oil and gas production tax, oil and gas property tax, mining license tax, fisheries business tax, and fishery resource landing tax.

Alaska's film credit program is being phased out as of publication of this *Revenue Sources Book*. The program stopped accepting new projects on July 1, 2015. The final film credit was issued in 2017. Individual film credits expire six years from the date of issue.

Minerals Exploration Incentive Credit

AS 27.30.010 – 27.30.099, 43.20.044

The Minerals Exploration Incentive Credit is applicable to corporate income tax, mining license tax, and mineral production royalty. It is a nontransferable and state purchase-ineligible credit for eligible costs of mineral or coal exploration activities, and requires the approval of the Alaska Department of Natural Resources Commissioner.

The credit is 100% of allowable exploration costs with a maximum of $20 million per mining operation and must be used within 15 years. For the mining license tax, the credit is limited to the lesser of 50% of the tax liability at the mining operation where the exploration occurred or 50% of total tax liability. For the corporate income tax, it is limited to the lesser of 50% of the mining license tax liability at the mining operation where the exploration occurred or 50% of the total corporate income tax liability. For the mineral royalty, the credit is limited to 50% of the royalty liability from the mining operation where the exploration activity occurred.

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Chapter 9

State Endowment Funds

Overview

This chapter compares important attributes of five of the state's major endowment funds – the Alaska Permanent Fund, Alaska Mental Health Trust Fund, Public School Trust Fund, Power Cost Equalization Fund, and University of Alaska Endowment. This is not a comprehensive list of state endowment funds, just the five most significant.

The University of Alaska Endowment is not included in the state's *Comprehensive Annual Financial Report*, rather it is separately accounted for in University of Alaska financial statements. However, the University of Alaska Endowment is included in this chapter, because it is a major endowment benefitting the state and because it is one of Alaska's public endowment funds that uses the annual distribution calculation method typical of most 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 each fund. Table 9-1 compares the current asset-allocation policies for these endowments. Table 9-2 compares recent fund values and appropriations for these endowments.

Under the standards adopted by the Governmental Accounting Standards Board, 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. These calculations are done 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, the Permanent Fund, Mental Health Trust Fund, and Public School Trust Fund use other measures of annual income for determining their distributions. The Permanent Fund and the Mental Health Trust Fund are both administered by the Alaska Permanent Fund Corporation (APFC).

In determining the amount of income available for distribution each year for the two funds managed by the APFC, gains or losses on individual investments are not recognized until the investment is sold. For calculating distributable income for the Public School Trust Fund, 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.

Missions, Deposits, and Distributions

Alaska Permanent Fund

The Alaska Permanent Fund receives a portion of the state's royalty revenue from oil, gas, and other minerals. Over the past several decades, these royalty deposits plus earnings have grown to be a major asset of the state of Alaska.

Each year, the APFC calculates the amount of net income realized by the Permanent Fund, and this amount, plus any surplus funds already in the Earnings Reserve Account, are available for appropriation by the Alaska Legislature. Beginning in FY 2019,

Chapter 9
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State Endowment Funds

Target asset allocations, in percentages

	Strategy-Based	Cash	Core US Fixed Income	Broad US Equity	International Equity
1	Public School Trust Fund	1%	29%	42%	28%
2	Power Cost Equalization Endowment Fund	1%	60%	24%	15%

		Public Equity	Private Equity	Diversifying Strategies	Deflation Sensitive
3	University of Alaska Endowment	38%	25%	20%	17%

		Cash	Public Equities	Fixed Income	Private Equity/ Special Opportunities	Absolute Return	Real Estate	Private Infrastructure/ Private Credit/ Income Opportunities	Risk Parity
4	Alaska Permanent Fund[1]	2%	39%	21%	15%	6%	7%	9%	1%
5	Mental Health Trust[1]	2%	39%	21%	15%	6%	7%	9%	1%

[1] Asset allocations shown for Alaska Permanent Fund and Mental Health Trust are for FY 2021 as of 9/30/20.

statutes provide for a transfer from the Earnings Reserve Account to the general fund that can be used for the payment of unrestricted general fund expenditures and/or Permanent Fund Dividends. The amount of the transfer is based on a percentage of the average market value of the fund at the end of the first five of the preceding six years. This amount is subject to annual appropriation by the Legislature.

Following the calculation of net income and any appropriated transfer of funds to the general fund, APFC calculates an amount sufficient to offset the effects of inflation on the principal of the Permanent Fund using a formula set out in statute. Subject to annual appropriation by the Legislature, APFC then transfers this amount from the Earnings Reserve Account to the principal of the Permanent Fund. The principal of the Permanent Fund is made up of all oil and gas royalty contributions and legislative appropriations to the principal or corpus of the Permanent Fund.

Mental Health Trust

During Alaska's transition to statehood, Congress passed the Mental Health Trust Enabling Act of 1956 that transferred the responsibility for providing mental health services from the federal government to the territory of Alaska and ultimately the state. Through the 1956 act and subsequent litigation settled in 1994, the Mental Health Trust was capitalized with over 1 million acres of land and $200 million in cash that has been used to generate income to help pay for mental health programs and services in Alaska.

Earnings from the Alaska Mental Health Trust Fund, which is managed by the APFC, are for use in ensuring an integrated comprehensive mental health program for the state. Current statute requires net income earned on the principal of the fund to be calculated in the same manner as the Permanent Fund. Only realized income is ultimately made available for distribution to the Mental Health Trust.

The Alaska Mental Health Trust Authority Board of Trustees has established a percent-of-market-value distribution model where distributions from cash investments managed by APFC and cash reserves managed by the Department of Revenue are limited to 4.25% of the four-year moving-average net asset value. This reduces the volatility of program funding while budget reserves ensure funding continues even when financial markets are down.

Funding is also made available for mental health programs from spendable income generated by the Mental Health Trust's directly owned commercial

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State Endowment Funds

Market values as of September 30, 2020, and appropriations

	Endowment Fund	Market Value (Millions of Dollars)	Most Recent Statutorily Calculated Maximum Appropriation (Millions of Dollars)	Appropriation Fiscal Year
1	Public School Trust Fund	699.5	31.2	FY 2022
2	Power Cost Equalization Endowment Fund	1,078.2	52.9	FY 2022
3	University of Alaska Endowment [1]	144.3	6.2	FY 2021
4	Alaska Permanent Fund	65,105.5	3,091.5	FY 2021
5	Mental Health Trust	534.9	23.1 [2]	FY 2020

[1] Market value as of June 30, 2020. The total market value does not include private endowment funds managed by the University of Alaska Foundation.

[2] Represents the amount transferred by the Alaska Permanent Fund Corporation from the Alaska Mental Health Trust Fund to the Alaska Mental Health Trust.

real estate portfolio as well as statutorily designated revenue generated from land managed by the Alaska Department of Natural Resources' Trust Land Office.

The balance of funding consists of both interest earned on operating cash holdings, and the unexpended balance of expired appropriations lapsing back to the Alaska Mental Health Trust Authority fund.

The Alaska Mental Health Trust Authority has a policy to periodically make transfers and/or assign funds to offset the effects of inflation in order to preserve the purchasing power of the fund.

Public School Trust Fund

The Public School Trust Fund was established as a separate trust fund through transfer of the balance of the Public School Permanent Fund by the Legislature on July 1, 1978. Annual contributions are comprised of 0.5% of State of Alaska receipts from minerals royalty, bonuses, rents, and interest. From 1978 to 2018, the principal of the fund, and all capital gains/losses thereon, were perpetually retained in the fund and only the remaining net income of the fund was used in support of Alaska's public schools.

In 2018, the Legislature enacted House Bill 213 which transformed the Public School Trust from a traditional principal and income trust to an endowment structure with a maximum percent of average market value spending rule. With this revised structure, the Department of Revenue adjusted the trust's asset allocation targeting a greater long-term equity exposure, consistent with a modern endowment investment practice to generate long-term capital appreciation. Under the former principal and interest structure, investments were weighted towards fixed income assets in order to generate cash income for annual distribution, which generally generates less long-term capital appreciation. As long as spending from the trust is limited to the real return (nominal return less inflation) of the investments, the inflation adjusted value (also called purchasing power) of the trust will be maintained indefinitely. The modern endowment approach maximizes the potential of growth and distributions for future generations of beneficiaries.

On July 1 of each year, the Department of Revenue Commissioner determines the monthly average market value of the fund for the previous five fiscal years preceding the previous fiscal year. The Legislature may appropriate not more than 5% of this amount. The appropriated amount may be expended the following fiscal year to support Alaska's public school system.

Power Cost Equalization Endowment Fund

The Power Cost Equalization Endowment Fund was created and capitalized in FY 2001 with funds from the Constitutional Budget Reserve, and Four Dam Pool Project sale proceeds, and further capitalized in FY 2007 and FY 2012 with appropriations from the general fund. The purpose of the Power Cost Equalization Endowment Fund is to provide for a long-term, stable financing source for power cost equalization to support affordable levels of electric utility costs in otherwise high-cost service areas of the state.

Distributions from the Power Cost Equalization Endowment Fund are based on the monthly average market value of the fund for the previous three closed fiscal years. Five percent of this amount may be appropriated for the fiscal year beginning the following July 1 to fund the Power Cost Equalization Fund, the reimbursement to the department for the costs of establishing and managing the fund, and the reimbursement of administrative costs of the fund. If the amount appropriated is insufficient to achieve all three purposes, the amount shall be prorated among the first two purposes. If the earnings of the fund exceed the appropriation for the current fiscal year, the Legislature may appropriate certain amounts for other purposes further defined in statute.

University of Alaska Endowment

The University of Alaska Endowment consists of two separate funds that are invested together – the Land Grant Endowment Trust Fund and the University of Alaska Foundation Pooled Endowment Fund. The University of Alaska Land Grant Endowment has its origin in the federal land grant acts of 1915 and 1929, and subsequently the Alaska Statehood Act. Approximately 110,000 acres of land were transferred to the territory of Alaska and eventually to the Board of Regents to be held in trust for the university. The net proceeds from the sale, lease, exchange, and other uses of these lands have been deposited into the University of Alaska Endowment Trust Fund. The University of Alaska Foundation's Pooled Endowment Fund principal includes solicited gifts and donations that have been given to the endowment fund.

The overall objectives of the funds are to provide a stream of relatively stable earnings in support of the annual budgetary needs of the University of Alaska while maintaining the real (inflation-adjusted) purchasing power of the fund to the extent practicable. In order to meet these objectives, the goal of the fund is to achieve an average annual real return of 5% of its market value, net of investment management expenses.

The spending allowance rate for the Land Grant Endowment Trust Fund is 4.5% of the five-year moving average market value, while the University of Alaska Foundation's spending allowance rate ranges from 0%-4.0% of the five-year moving average market value, depending on the financial health and maturity of the assets.

Chapter 10

Public Entities and the University of Alaska

Overview

The State of Alaska has established several public corporations and entities to carry out certain public policy goals. This chapter discusses the following major public corporations and entities:

- 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 (ARRC)
- Alaska Seafood Marketing Institute (ASMI)
- Alaska Student Loan Corporation (ASLC)
- University of Alaska

These 11 entities are components of state government presented in the state's *Comprehensive Annual Financial Report*. This chapter summarizes the missions, financing, and dividends of these corporations and other public entities, with information largely being provided by the relevant entities.

Missions, Financing, and Dividends

Alaska Aerospace Corporation

The AAC operates and maintains the Pacific Spaceport Complex – Alaska, an FAA-licensed multi-user spaceport on Kodiak, Alaska. Pacific Spaceport Complex – Alaska provides commercial rocket vehicle launch support services for government and commercial customers for orbital, suborbital and complex test and evaluation missions. In addition, AAC also delivers launch operations services and expertise to other emerging spaceports enabled by their specialized knowledge and equipment. AAC promotes space-related business, research, education, and economic growth in the state.

The state has supported AAC in the past through funding for capital and operating expenses. AAC does not currently pay a dividend or return capital to the state.

Alaska Energy Authority

The AEA provides loans and grants to utilities, communities, and individuals to pay for the purchase or upgrade of equipment. Additionally, the agency administers the Power Cost Equalization Program, subsidizing rural electric costs with earnings from the Power Cost Equalization Endowment. AEA receives federal and state money to provide technical advice and assistance in energy planning, emergency response management, and 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 in the past, including in FY 2020. 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.

Chapter 10

1

Public Entities, Financial Facts

FY 2020

		Millions of Dollars				
		Total Assets	Assets Less Liabilities Book Value	FY 2019 Operating Budget	FY 2020 Operating Budget	Total Positions[1]
1	Alaska Aerospace Corporation	146.6	90.1	11.0	11.0	8.0
2	Alaska Energy Authority	1,599.9[2]	438.7	42.0	42.0	See AIDEA[3]
3	Alaska Gasline Development Corporation[4]	27.5	21.4	10.4	10.4	25.0
4	Alaska Housing Finance Corporation	4,609.9[2]	1,607.0[5]	98.7	99.2	350.0
5	Alaska Industrial Development and Export Authority	1,646.1[2]	1,419.5[5]	11.7	12.4	82
6	Alaska Mental Health Trust Authority	778.8[2]	714.3	4.1	4.2	18.0
7	Alaska Municipal Bond Bank Authority	1,117.8	59.3	1.0	1.0	2.0
8	Alaska Railroad Corporation[6]	1,099.0	378.3	121.6	136.6	699.0
9	Alaska Seafood Marketing Institute	15.0	12.4	20.6	26.2	20.0
10	Alaska Student Loan Corporation[7]	253.2	215.9	11.7	11.6	78.0
11	University of Alaska	2,210.7	1,570.8	888.5	856.7	4,183.0

[1] Permanent full time, permanent part time and temporary are included in total positions.

[2] AEA, AHFC, AIDEA, and AMHTA's asset totals include deferred outflow of resources.

[3] AIDEA provides staff for the activities of the AEA. A significant portion of AIDEA's staff is engaged in AEA programs.

[4] AGDC's numbers are unaudited and subject to revision.

[5] Assets and deferred outflows of resources less liabilities and deferred inflows of resources.

[6] The Alaska Railroad reports financial data on a calendar-year basis. Assets and book value shown in this table are from audited Dec. 31, 2019 financial statements. The revised operating budgets figure shown here is for calendar years 2019 and 2020.

[7] 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.

Alaska Gasline Development Corporation

The AGDC has early beginnings dating back to 2009, when declining Cook Inlet gas supplies resulted in energy brownouts and crippling Interior energy costs in communities across Alaska. In 2013, the Legislature passed House Bill 4, creating AGDC.

Today, AGDC is an independent, public corporation of the state. Its corporate mission is to maximize the benefit of Alaska's vast North Slope natural gas resources through the development of infrastructure necessary to move the gas into local and international markets, including advancing the development, financing, construction, and operation of a North Slope natural gas system capable of delivering natural gas for the maximum benefit of Alaskans.

AGDC is pursuing only one option for delivery of North Slope natural gas to Alaskans and potential international markets: the Alaska Liquefied Natural Gas (LNG) Project.

AGDC does not pay a dividend or return capital to the state on a regular basis.

Alaska Housing Finance Corporation

The AHFC was created in 1971 to assist in the financing, development and sale of dwelling units, operate the state's public housing, offer various home loan programs emphasizing housing for low- and moderate-income and rural residents, and administer federally and state-funded multi-residential housing, energy efficiency and weatherization programs within Alaska.

Generally, AHFC accomplishes its mortgage-related objectives by issuing its own bonds and other debt related instruments to finance qualified loans originated by financial institutions in Alaska. Interest and principal receipts from financed loans coupled with investment earnings repays bondholders and contributes toward the corporation's income, enabling the corporation to pay an annual dividend and/or return of capital to the state.

Alaska Industrial Development and Export Authority

AIDEA provides various means of financing and investment to advance economic growth, diversification, and job opportunities in Alaska. AIDEA's financing tools include loan participations, direct loans, credit enhancements, issuing of tax-exempt and taxable conduit revenue bonds, and preferred equity investments in projects. AIDEA's financing is available for enterprises in the commercial, industrial, resource, and nonprofit sectors, as well as public entities in certain instances. The corporation generates income from interest on its loans, investments, and leases, and the operation of its properties.

Between 1981 and 1986, the State of Alaska capitalized the Authority with approximately $333 million in cash and loans. Since then, AIDEA has not required state assistance to fund operations; instead, it has paid annual dividends to the state.

Alaska Mental Health Trust Authority

AMHTA, a public corporation of the state within the Department of Revenue, 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 are 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 AMHTA 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 land.

Earnings on this asset base are used to fund a variety of programs and are accounted for separately in the annual Mental Health budget, which is typically passed in conjunction with the state's operating budget. The Alaska Permanent Fund Corporation manages the cash principal. The Alaska Department of Natural Resources manages the land assets and a portfolio of directly owned real estate investments.

AMHTA operates similarly to a private foundation to administer, protect, and enhance the Mental Health Trust. AMHTA provides leadership in the advocacy, planning, implementation, and funding of services and programs to help improve the lives of Trust beneficiaries. AMHTA also coordinates with other state agencies. AMHTA does not pay a dividend or return capital to the state.

Alaska Municipal Bond Bank Authority

AMBBA lends monies to authorized borrowers within the state to finance capital projects, primarily through the issuance of AMBBA bonds. Bond proceeds are used to purchase authorized borrowers' debt instruments. Limited State of Alaska credit support, combined with a cross-collateralized loan portfolio and pooled reserve fund structure, results in a strong credit rating and enables AMBBA to sell bonds with lower interest rates than authorized borrowers could potentially obtain on their own.

AMBBA uses a combination of funds appropriated from the State, historical retained investment earnings, and surety policies to meet reserve requirements. Per AS 44.85.270(h), any excess earnings on funds previously appropriated to the AMBBA, after annual operating costs, are to be transferred to the State of Alaska and available for appropriation. Since fiscal year 2009, and continuing through FY 2021, the State's operating budget has appropriated any excess earnings of the operating account to AMBBA's reserve fund.

Alaska Railroad Corporation

The ARRC operates 683 track miles, providing both freight and passenger rail services between Seward and Fairbanks, including a spur line to Whittier and the Anchorage airport. The ARRC serves the ports of Whittier, Seward, and Anchorage, as well as Denali National Park and military installations. In addition, the corporation generates revenues from its real estate assets.

The state bought the railroad from the federal government in 1985. The purchase price of $22.7 million

Chapter 10
2

Public Entities, Revenue and Dividends

FY 2020

		Millions of Dollars				
		Revenue	Expenditures	Net Income	Dividend	State Contribution
1	Alaska Aerospace Corporation	20.7	17.7 [1]	3.0	0.0	0.0
2	Alaska Energy Authority	71.3	75.6	-4.3	0.0	-16.6 [2]
3	Alaska Gasline Development Corporation [3]	10.5	13.1	-2.6	0.0	0.0
4	Alaska Housing Finance Corporation	251.1	215.5 [4]	35.5	42.6	0.0
5	Alaska Industrial Development and Export Authority	93.5 [5]	48.9	44.6	10.3	2.7 [6]
6	Alaska Mental Health Trust Authority	39.2	29.9	9.3	0.0	0.0
7	Alaska Municipal Bond Bank Authority	51.3	49.5	1.8	0.0	0.0
8	Alaska Railroad Corporation	203.5	181.9	21.6	0.0	0.0
9	Alaska Seafood Marketing Institute	11.9 [7]	15.8	-3.9	0.0	0.0
10	Alaska Student Loan Corporation	7.1	10.7	-3.6	0.0	0.0
11	University of Alaska	708.1	705.2	2.9	0.0	310.4 [6]

[1] For AAC, insurance payments and capitalized expenditures for rebuilding the launch complex are included.

[2] State Contribution includes State of Alaska operating and capital expenditures by AEA and also State of Alaska appropriations of fund balances to other State of Alaska funds. State Contribution includes the PCE Endowment Sweep to the general fund for sweep to the CBR fund, see net state contribution excluding sweep below. FY 2020 was the first year the PCE Endowement fund was included in the sweep.

[3] AGDC's numbers are unaudited and subject to revision.

[4] For AHFC, the Expenditures amount includes operating expenses, non-operating expenses, special items, and transfers, as applicable.

[5] Includes State of Alaska non-employer contribution for pension and Other Post-employment Benefits (OPEB) for the AIDEA contribution.

[6] Does not include on-behalf payments made by State of Alaska for pensions. Does not include OPEB for AIDEA.

[7] Revenue from the seafood marketing assessment tax of $6.3 million is included in the Revenue column, not the State Contribution column.

was recorded as the state's capitalization. The corporation does not pay a cash dividend to Alaska's general fund, as the corporation's net position is restricted for reinvestment in infrastructure.

During March 2020, after the budget was established, the U.S. Center for Disease Control and the World Health Organization declared the novel coronavirus (COVID-19) outbreak as a pandemic. As the virus continues to spread globally, in addition to significant declines in the investment securities markets, there have been disruptions in ARRC's operations resulting from extensive travel restrictions, stay at home orders for many employees, supply chain management issues, and other related factors.

While disruption is expected to be temporary, there continues to be uncertainty in the duration of the outbreak. ARRC expects COVID-19 will negatively impact its financial position, results from operations, and liquidity; however, the ultimate impact is not presently determinable and may be mitigated by federal grant assisstance in the form of operating and capital assistance.

Alaska Seafood Marketing Institute

ASMI 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, and works directly with food service distributors, retailers and restaurants to build the "Alaska seafood" brand. ASMI is a public-private partnership that receives funding from the state, federal government, and private industry.

The state levies the seafood marketing assessment, a 0.5% assessment on fisheries, to support ASMI's operations.

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

Alaska Student Loan Corporation

The ASLC issues debt and recycles student loan payments to finance other student loans. Payments on student loans also provide funding for the corporation's operations.

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

The 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.

University of Alaska

The University of Alaska is a constitutionally created corporation of the State of Alaska that is authorized to hold title to real and personal property and to issue debt in its own name.

The University of Alaska system is the only public institution of higher learning in the state. It has a university in Anchorage, another in Fairbanks and a third in Juneau. The universities have extended satellite colleges and sites throughout the state. The system's main administrative offices are located on the Fairbanks campus. The University of Alaska system is governed by an 11-member Board of Regents, which is appointed by the governor and confirmed by the Legislature.

The University of Alaska system is primarily supported by the state's general fund appropriations, student tuition and fees, as well as grant and contract revenue from the State of Alaska, federal agencies, and private sponsors, including the University of Alaska Foundation.

Paying a dividend or return of capital to the state is not applicable to the University of Alaska.

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Glossary

Allowable Lease Expenditures
Lease expenditures are upstream costs that are directly related to exploring for, developing, or producing oil or gas. Allowable lease expenditures are specifically defined in statute and regulations, and dictate what can and cannot be applied in production tax calculations. Certain expenses incurred by taxpayers fall outside this definition and are not tracked or reported by the Department of Revenue.

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

Deductible Lease Expenditures
Deductible Lease Expenditures is a term of art, not defined in any statute or regulation, used to describe that portion of allowable lease expenditures actually applied in the tax calculation in the year incurred.

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 unrestricted general fund revenue, general fund subaccount 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.

Other Restricted State Revenue
Other restricted state revenue is on-federal revenue that is not deposited to the general fund or a subaccount of the general fund. This revenue is restricted by the Alaska Constitution, state or federal law, trust or debt restrictions, or by customary practice.

Percent of Market Value
Percent of market value (POMV) is a mechanism that is used to determine withdrawal amounts based on a percentage of a fund's total fair-market value balance, on preset dates, such as year-end.

Senate Bill 26, which the Legislature passed in 2018, uses a POMV framework to determine the amount of Permanent Fund earnings that is transferred out of the Permanent Fund each year.

Permanent Fund GASB (or Market) Income
Under standards adopted by the Governmental Accounting Standards Board (GASB), the Permanent Fund's income – and that of any other government fund – is the difference between the purchase price of the investments and their market value at a given point in time, plus any dividends, interest or rent earned on those investments. Under GASB standards, the Permanent Fund does not have to sell the investment to count the gain or loss as it changes value. It is called "marking to market," that is, mea

suring 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

Historically, 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 fiscal 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, Alaska 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 Alaska 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 subaccounts 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.

Revenue Available for Current-Year Appropriation

This is all revenue that is technically available for the Legislature to appropriate, regardless of customary practice. That includes unrestricted general fund revenue, designated general fund revenue, deposits to and earnings from the CBRF, a portion of deposits to the Permanent Fund, and realized earnings from the Permanent Fund.

Unrestricted General Fund Revenue

Unrestricted General Fund Revenue is revenue not restricted by the Alaska 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 of Revenue'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 specific revenues, such as transfers to the state treasury from the Unclaimed Property Trust and dividends from component units.

Appendices

Acronyms

AAC	Alaska Aerospace Corporation
ACPE	Alaska Commission on Postsecondary Education
ACWI	All Country World Index
AEA	Alaska Energy Authority
AGDC	Alaska Gasline Development Corporation
AHFC	Alaska Housing Finance Corporation
AIDEA	Alaska Industrial Development and Export Authority
AMBBA	Alaska Municipal Bond Bank Authority
AMHTA	Alaska Mental Health Trust Authority
ANS	Alaska North Slope
ANWR	Arctic National Wildlife Refuge
AOGCC	Alaska Oil and Gas Conservation Commission
APFC	Alaska Permanent Fund Corporation
ARM	Alaska Retirement Management
ARRC	Alaska Railroad Corporation
AS	Alaska Statutes
ASLC	Alaska Student Loan Corporation
ASMI	Alaska Seafood Marketing Institute
bbl	Barrel of oil
BOE	Barrels of oil equivalent
Btu	British thermal unit
CAPEX	Capital expenditures
CARES	Coronavirus Aid, Relief, and Economic Security Act
CBRF	Constitutional Budget Reserve Fund
CDC	Centers for Disease Control
CDQ	Community development quota
CIT	Corporate income tax
CP	Currently producing
CPI-U	Consumer Price Index for All Urban Consumers
CPV	Commercial passenger vessel
CRF	Coronavirus Relief Fund
CY	Calendar year
DCCED	Department of Commerce, Community, and Economic Development
DHSS	Department of Health and Social Services
D/I	Data incomplete
DNR	Department of Natural Resources
DOR	Department of Revenue
EIDL	Economic Injury Disaster Loans
EMBI	Emerging Markets Bond Index
FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
FFCRA	Families First Coronavirus Response Act
FY	Fiscal year
GASB	Governmental Accounting Standards Board
G/C	Government/Credit index
GeFONSI	General fund and other non-segregated investments
GPMA	Greater Point McIntyre Area
GVPP	Gross value at point of production
GVR	Gross value reduction
HB 4	House Bill 4, passed in 2013
HB 111	House Bill 111, passed in 2017
HB 213	House Bill 213, passed in 2018
HB 247	House Bill 247, passed in 2016
HB 331	House Bill 331, passed in 2018
HB 374	House Bill 374, passed in 2016
LLC	Limited liability corporation
LNG	Liquefied natural gas
LPV	Large Passenger Vessel
mcf	Thousand cubic feet
MSCI	Morgan Stanley Capital International
NCREIF	National Council of Real Estate Investment Fiduciaries
NEWS	North East West Sak
NGLs	Natural gas liquids
NPR-A	National Petroleum Reserve – Alaska
N/T	Not tracked
ODCE	Open End Diversified Core Equity
OMB	Office of Management and Budget
OPEB	Other Post-Employment Benefits
OPEX	Operating expenditures
PBU	Prudhoe Bay Unit
PCE	Power Cost Equalization
POD	Plan of Development
POMV	Percent of Market Value
PTV	Production tax value
QCE	Qualified Capital Expenditure
QR	Quick response
RCA	Regulatory Commission of Alaska
RIK	Royalty in kind
RIV	Royalty in value
RPL	Revised Program Legislature
RSA	Royalty settlement agreement
RSB	*Revenue Sources Book*
S&P	Standard & Poor's
SBA	Small Business Administration
SB 21	Senate Bill 21, passed in 2013
SB 26	Senate Bill 26, passed in 2018
SB 138	Senate Bill 138, passed in 2014
SBRF	Statutory Budget Reserve Fund
TAPS	Trans-Alaska Pipeline System
TCJA	Tax Cuts and Jobs Act
TIPS	Treasury Inflation Protected Securities
UD	Under development
UE	Under evaluation
UGF	Unrestricted General Fund
WLE	Well Lease Expenditure
YTD	Year to date

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Appendix A 1

Unrestricted General Fund Revenue Matrices

Revenue sensitivity to oil price

Millions of Dollars

	FY 2022			FY 2023			FY 2024	
	At forecast ANS production of 439,600 barrels per day [1]			At forecast ANS production of 447,000 barrels per day [1]			At forecast ANS production of 463,300 barrels per day [1]	
	Alaska North Slope Dollars per Barrel	Unrestricted General Fund Revenue Not Including Permanent Fund Transfer		Alaska North Slope Dollars per Barrel	Unrestricted General Fund Revenue Not Including Permanent Fund Transfer		Alaska North Slope Dollars per Barrel	Unrestricted General Fund Revenue Not Including Permanent Fund Transfer
1	$20	$680	13	$20	$810	25	$20	$840
2	$30	$880	14	$30	$990	26	$30	$1,040
3	$40	$1,060	15	$40	$1,210	27	$40	$1,240
4	$48.00	$1,203	16	$49.00	$1,433	28	$50	$1,573
5	$50	$1,270	17	$50	$1,470			
6	$60	$1,560	18	$60	$1,710	29	$60	$1,830
7	$70	$1,860	19	$70	$2,010	30	$70	$2,130
8	$80	$2,180	20	$80	$2,330	31	$80	$2,440
9	$90	$2,540	21	$90	$2,650	32	$90	$2,850
10	$100	$3,010	22	$100	$3,190	33	$100	$3,470
11	$110	$3,640	23	$110	$3,820	34	$110	$4,120
12	$120	$4,270	24	$120	$4,470	35	$120	$4,770

[1] Fall 2020 Forecast assumes that for all years of the forecast, 10,000 barrels per day of Natural Gas Liquids (NGLs) will be shipped from Prudhoe Bay to Kuparuk for use in a large-scale enhanced oil recovery project. Beginning with FY 2019, these NGLs are excluded from actual and forecast production reported in this table. With new information, future NGL shipment estimates may change, and these changes will be included in subsequent production forecasts.

Note:

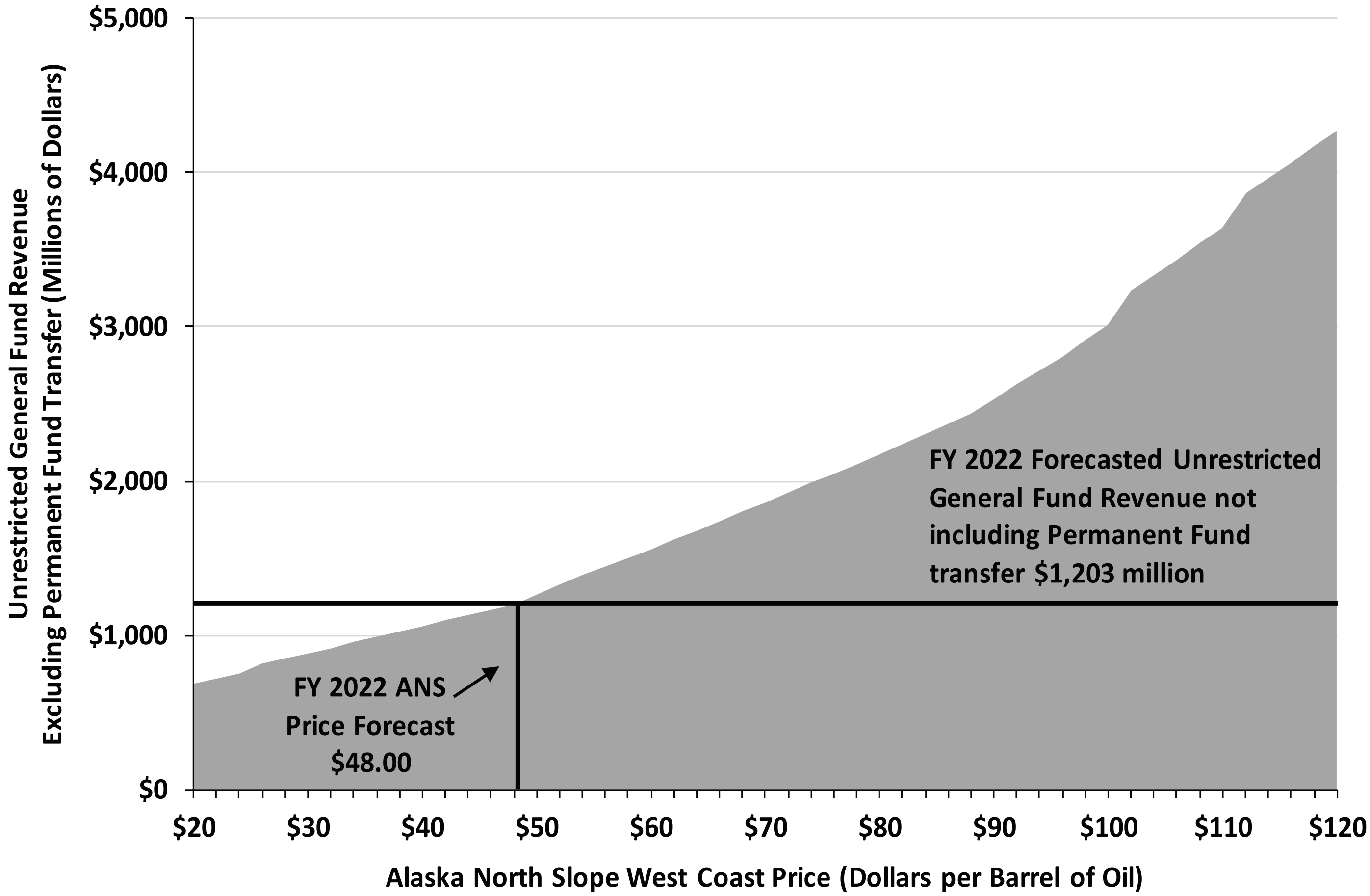
This table presents estimated unrestricted general fund revenue at a range of ANS prices, holding all other variables constant. Analysis assumes that the given price is in place for all three years shown. Only production tax, royalties, corporate income tax, and lease expenditures are adjusted for purposes 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 volumes and netback costs. In addition, revenues may vary from the amount shown due to changes in company decision-making, company-specific tax calculation issues, month-to-month variations in price or production, and changes in non-oil revenue.

Appendix A

A

UGF Revenue Relative to Price Per Barrel

Price sensitivity for FY 2022



Appendix A

2

History of Unrestricted General Fund Revenue[1]

By type and category

Millions of Dollars

		History									
	Fiscal Year	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
	Unrestricted General Fund Tax Revenue										
1	**Petroleum Property Tax**	**110.6**	**111.2**	**99.3**	**128.1**	**125.2**	**111.7**	**120.4**	**121.6**	**119.5**	**122.9**
	Excise Tax										
2	Alcoholic Beverages	19.4	19.4	19.8	18.3	17.7	22.2	20.1	19.6	20.4	20.4
3	Tobacco Products	46.5	45.6	44.8	42.8	40.5	45.5	43.4	37.4	40.1	41.4
4	Insurance Premium[2]	49.6	54.8	52.4	54.6	59.1	0.0	0.0	0.0	71.9	58.4
5	Electric and Telephone Cooperative	0.1	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2
6	Marijuana[3]	NA	NA	NA	NA	NA	NA	0.9	5.4	5.5	6.4
7	Motor Fuel Tax	39.5	40.9	41.9	41.9	41.8	44.3	41.3	6.3	6.3	6.9
8	Vehicle Rental Tax[4]	8.3	8.5	8.4	8.3	9.7	0.0	0.0	0.0	0.0	0.0
9	Tire Fee	1.5	1.4	1.4	1.3	1.5	1.5	1.4	1.4	1.3	1.4
10	**Total Excise Tax**	**164.9**	**170.8**	**168.9**	**167.5**	**170.5**	**113.6**	**107.3**	**70.4**	**145.7**	**135.0**
	Income Tax										
11	General Corporate	157.7	98.5	112.5	99.9	136.2	90.2	86.5	119.6	114.8	102.4
12	Petroleum Corporate	542.1	568.8	434.6	307.6	94.8	-58.8	-59.4	66.4	217.7	-0.2
13	**Total Income Tax**	**699.8**	**667.3**	**547.1**	**407.5**	**231.0**	**31.4**	**27.1**	**185.9**	**332.5**	**102.3**
	Oil and Gas Production										
14	Oil and Gas Production Tax	4,543.2	6,136.7	4,042.5	2,605.9	381.6	176.8	125.9	741.2	587.3	277.4
15	Oil and Gas Conservation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	Oil and Gas Hazardous Release	9.7	9.4	7.8	8.8	8.1	9.2	8.6	8.7	8.2	7.7
17	**Total Oil and Gas Production**	**4,552.9**	**6,146.1**	**4,050.3**	**2,614.7**	**389.7**	**186.0**	**134.4**	**749.9**	**595.5**	**285.1**
	Fish Tax										
18	Fisheries Business Tax	20.1	26.4	19.2	25.1	21.3	22.3	15.5	21.2	21.3	24.1
19	Fishery Resource Landing Tax	2.7	6.3	5.5	7.1	5.1	0.3	4.9	3.5	6.5	9.8
20	**Total Fish Tax**	**22.8**	**32.7**	**24.7**	**32.2**	**26.4**	**22.6**	**20.3**	**24.7**	**27.8**	**33.9**
	Other Tax										
21	Mining	49.0	40.7	46.7	23.3	38.6	10.7	41.4	46.9	45.1	36.8
22	Charitable Gaming	2.5	2.6	2.5	2.5	2.5	2.6	2.5	2.4	2.6	2.4
23	Large Passenger Vessel Gambling	5.8	5.2	6.0	6.7	6.6	7.7	8.2	8.6	10.1	13.1
24	**Total Other Tax**	**57.3**	**48.5**	**55.2**	**32.5**	**47.7**	**21.1**	**52.0**	**57.9**	**57.7**	**52.2**
25	**Total Unrestricted General Fund Tax Revenue**	**5,608.3**	**7,176.6**	**4,945.5**	**3,382.5**	**990.5**	**486.4**	**461.6**	**1,210.5**	**1,278.6**	**731.4**

(Table continued, next page)

Appendix A
2

History of Unrestricted General Fund Revenue[1]

By type and category *(Continued)*

		Millions of Dollars									
		History									
	Fiscal Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
	Unrestricted General Fund Non-Tax Revenue										
26	**Licenses and Permits[5]**	**42.8**	**42.3**	**41.9**	**42.7**	**34.4**	**41.2**	**45.6**	**37.1**	**38.0**	**34.4**
	Intergovernmental Receipts										
27	Federal Shared Revenues	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	**Charges for Services**	**18.5**	**29.2**	**25.2**	**24.2**	**20.1**	**21.5**	**21.5**	**6.8**	**6.9**	**6.5**
29	**Fines and Forfeitures**	**7.0**	**10.9**	**15.8**	**11.3**	**11.5**	**11.4**	**13.2**	**8.7**	**15.8**	**15.1**
	Rents and Royalties										
30	Oil and Gas Royalties[6]	1,821.3	2,022.8	1,748.4	1,685.0	1,052.1	840.3	676.2	977.8	1,074.5	660.3
31	Oil and Gas Bonuses, Rents, Interest[6]	22.0	8.9	19.4	27.4	26.1	30.3	5.3	24.5	36.6	15.0
32	Other[7]	17.6	20.4	24.7	34.5	36.3	24.7	27.4	5.8	5.6	5.6
33	**Total Rents and Royalties**	**1,860.9**	**2,052.1**	**1,792.5**	**1,746.9**	**1,114.5**	**895.3**	**708.9**	**1,008.1**	**1,116.7**	**680.9**
34	**Investment Earnings (not including Permanent Fund transfer)**	**96.3**	**107.8**	**28.1**	**130.2**	**47.9**	**22.5**	**17.3**	**16.3**	**93.3**	**58.1**
35	**Miscellaneous Revenue**	**39.1**	**66.3**	**79.5**	**52.3**	**37.5**	**54.4**	**86.5**	**126.1**	**77.9**	**77.5**
36	**Total Unrestricted General Fund Non-Tax Revenue**	**2,064.6**	**2,308.6**	**1,983.0**	**2,007.6**	**1,265.8**	**1,046.3**	**893.0**	**1,203.0**	**1,348.6**	**872.5**
37	**Total Unrestricted General Fund Revenue (not including Permanent Fund transfer)**	**7,672.9**	**9,485.2**	**6,928.5**	**5,390.1**	**2,256.3**	**1,532.7**	**1,354.6**	**2,413.5**	**2,627.2**	**1,603.9**
38	**Permanent Fund Transfer**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**2,722.6**	**2,933.1**
39	**Total Unrestricted General Fund Revenue (including Permanent Fund transfer)**	**7,672.9**	**9,485.2**	**6,928.5**	**5,390.1**	**2,256.3**	**1,532.7**	**1,354.6**	**2,413.5**	**5,349.8**	**4,537.0**

[1] Unrestricted general fund revenue includes revenue that is 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 website at www.tax.alaska.gov/sourcesbook/qr.aspx?Chapter=15&FY=2020.

[2] From FY 2016 – FY 2018, these revenues were deposited into a subfund of the general fund and were considered restricted.

[3] In November 2014, Alaska voters voted to legalize marijuana. The state's first collections from the marijuana excise tax were in FY 2017.

[4] Starting in FY 2016, to be consistent with other budget documents, vehicle rental tax is now classified as designated general fund revenue.

[5] Starting in FY 2016, for consistency with other budget documents, alcoholic beverage license revenue is classified as designated general fund revenue.

[6] Net of Permanent Fund, Public School Trust Fund, and Constitutional Budget Reserve Fund deposits.

[7] Includes non-petroleum rents and royalties.

Appendix A 3

Petroleum Revenue

By restriction and type

	Fiscal Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
		Millions of Dollars									
		History[1]									
	Unrestricted Petroleum Revenue										
1	Petroleum Property Tax	110.6	111.2	99.3	128.1	125.2	111.7	120.4	121.6	119.5	122.9
2	Petroleum Corporate Income Tax	542.1	568.8	434.6	307.6	94.8	-58.8	-59.4	66.4	217.7	-0.2
3	Production Tax	4,543.2	6,136.7	4,042.5	2,605.9	381.6	176.8	125.9	741.2	587.3	277.4
4	Oil and Gas Hazardous Release	9.7	9.4	7.8	8.8	8.1	9.2	8.6	8.7	8.2	7.7
5	Oil and Gas Royalties[2]	1,821.3	2,022.8	1,748.4	1,685.0	1,052.1	840.3	676.2	977.8	1,074.5	660.3
6	Bonuses, Rents and Interest[2]	22.0	8.9	19.4	27.4	26.1	30.3	5.3	24.5	36.6	15.0
7	**Total Unrestricted Petroleum Revenue**	**7,048.9**	**8,857.8**	**6,352.0**	**4,762.8**	**1,687.9**	**1,109.5**	**876.9**	**1,940.2**	**2,043.8**	**1,083.1**
8	Cumulative Total Unrestricted Petroleum Revenue[3]	93,389	102,247	108,599	113,362	115,050	116,159	117,036	118,976	121,020	122,103
	Restricted Petroleum Revenue										
9	NPR-A Rents,Royalties, Bonuses	3.0	4.8	3.6	6.8	3.2	1.8	1.4	23.7	12.3	16.4
10	Royalties to Permanent Fund[4]	857.3	904.9	842.1	773.7	510.4	390.5	334.5	356.1	374.8	318.9
11	Royalties to Public School Trust Fund	13.6	14.7	13.8	12.5	7.9	6.4	5.5	7.0	7.5	5.0
12	Constitutional Budget Reserve Fund Deposits	187.2	102.8	357.4	177.4	149.9	119.1	481.9	121.3	181.2	281.2
13	**Total Restricted Petroleum Revenue**	**1,061.1**	**1,027.2**	**1,216.9**	**970.4**	**671.4**	**517.8**	**823.2**	**508.0**	**575.8**	**621.5**

(Table continued, next page)

Appendix A 3

Petroleum Revenue

By restriction and type *(Continued)*

		Millions of Dollars									
		Forecast									
	Fiscal Year	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
	Unrestricted Petroleum Revenue										
1	Petroleum Property Tax	115.7	113.2	111.7	110.1	107.8	105.8	103.9	102.0	100.1	98.0
2	Petroleum Corporate Income Tax	5.0	-20.0	55.0	70.0	80.0	85.0	85.0	90.0	95.0	100.0
3	Production Tax	163.9	156.1	183.7	241.7	247.5	226.8	208.2	210.9	253.4	257.9
4	Oil and Gas Hazardous Release	7.9	7.3	7.4	7.6	7.6	7.5	7.5	7.6	7.7	7.7
5	Oil and Gas Royalties [2]	551.3	534.4	544.4	595.0	621.9	640.9	658.2	680.8	699.4	714.4
6	Bonuses, Rents and Interest [2]	17.9	17.9	17.9	17.9	17.9	17.9	17.9	17.9	17.9	17.9
7	**Total Unrestricted Petroleum Revenue**	**861.7**	**808.9**	**920.0**	**1,042.3**	**1,082.6**	**1,084.0**	**1,080.7**	**1,109.2**	**1,173.4**	**1,196.0**
8	Cumulative Total Unrestricted Petroleum Revenue [3]	122,965	123,774	124,694	125,736	126,819	127,903	128,984	130,093	131,266	132,462
	Restricted Petroleum Revenue										
9	NPR-A Rents, Royalties, Bonuses	10.8	12.4	32.8	62.2	68.7	62.1	60.4	67.3	80.4	94.3
10	Royalties to Permanent Fund [4]	250.5	240.6	244.4	272.8	297.3	318.8	341.2	362.1	378.4	391.6
11	Royalties to Public School Trust Fund	4.1	4.0	4.1	4.5	4.7	4.9	5.1	5.3	5.5	5.6
12	Constitutional Budget Reserve Fund Deposits	60.0	25.0	15.0	15.0	10.0	10.0	10.0	10.0	10.0	10.0
13	**Total Restricted Petroleum Revenue**	**325.4**	**282.0**	**296.2**	**354.4**	**380.7**	**395.8**	**416.7**	**444.8**	**474.3**	**501.6**

[1] Historical petroleum revenue can be found on the Tax Division's website at www.tax.alaska.gov/sourcesbook/qr.aspx?Chapter=16&FY=2020.

[2] Net of Permanent Fund, Public School Trust Fund, and Constitutional Budget Reserve Fund deposits.

[3] Based on revenue beginning in FY 1959.

[4] Includes both Designated General Fund Royalties and Other Restricted Royalties.

Appendix A 4

Unrestricted General Fund Revenue

Petroleum versus non-petroleum revenue

		Millions of Dollars									
		History									
	Fiscal Year	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
	Unrestricted General Fund Revenue										
1	Total Unrestricted Petroleum Revenue	7,048.9	8,857.8	6,352.0	4,762.8	1,687.9	1,109.5	876.9	1,940.2	2,043.8	1,083.1
2	Unrestricted General Fund Non-Petroleum Revenue	624.0	627.4	576.5	627.3	568.4	423.2	477.7	473.3	3,306.0	3,453.9
3	**Total Unrestricted General Fund Revenue**	**7,672.9**	**9,485.2**	**6,928.5**	**5,390.1**	**2,256.3**	**1,532.7**	**1,354.6**	**2,413.5**	**5,349.8**	**4,537.0**
4	Percent of Total Unrestricted General Fund Revenue from Petroleum	92%	93%	92%	88%	75%	72%	65%	80%	38%	24%
5	**Permanent Fund Transfer**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**2,722.6**	**2,933.1**
6	**Total Unrestricted General Fund Revenue (not including Permanent Fund transfer)**	**7,672.9**	**9,485.2**	**6,928.5**	**5,390.1**	**2,256.3**	**1,532.7**	**1,354.6**	**2,413.5**	**2,627.2**	**1,603.9**
7	Percent of Total Unrestricted General Fund Revenue from Petroleum (not including Permanent Fund transfer)	92%	93%	92%	88%	75%	72%	65%	80%	78%	68%

(Table continued, next page)

Appendix A 4

Unrestricted General Fund Revenue

Petroleum versus non-petroleum revenue *(Continued)*

	Fiscal Year	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
		Millions of Dollars									
			Forecast								
	Unrestricted General Fund Revenue										
1	Total Unrestricted Petroleum Revenue	861.7	808.9	920.0	1,042.3	1,082.6	1,084.0	1,080.7	1,109.2	1,173.4	1,196.0
2	Unrestricted General Fund Non-Petroleum Revenue	3,470.1	3,463.0	3,718.5	3,817.4	3,882.1	3,939.1	4,022.0	4,111.1	4,192.2	4,279.1
3	**Total Unrestricted General Fund Revenue**	**4,331.8**	**4,271.9**	**4,638.5**	**4,859.7**	**4,964.7**	**5,023.1**	**5,102.7**	**5,220.3**	**5,365.6**	**5,475.0**
4	Percent of Total Unrestricted General Fund Revenue from Petroleum	20%	19%	20%	21%	22%	22%	21%	21%	22%	22%
5	**Permanent Fund Transfer**	**3,091.5**	**3,069.3**	**3,206.0**	**3,287.0**	**3,330.0**	**3,373.0**	**3,441.0**	**3,513.0**	**3,587.0**	**3,663.0**
6	**Total Unrestricted General Fund Revenue (not including Permanent Fund transfer)**	**1,240.3**	**1,202.6**	**1,432.5**	**1,572.7**	**1,634.7**	**1,650.1**	**1,661.7**	**1,707.3**	**1,778.6**	**1,812.0**
7	Percent of Total Unrestricted General Fund Revenue from Petroleum (not including Permanent Fund transfer)	69%	67%	64%	66%	66%	66%	65%	65%	66%	66%

Appendix B **1**

Nominal Netback Costs, Actual and Forecast

By netback segment

		Dollars per Barrel									
		History									
	Fiscal Year	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
1	**Alaska North Slope West Coast**	**94.49**	**112.65**	**107.57**	**107.57**	**72.58**	**43.18**	**49.43**	**63.61**	**69.46**	**52.12**
	Netback Costs [1]										
2	Marine Costs	2.44	3.24	3.64	3.70	3.25	3.15	3.18	3.28	3.06	2.84
3	TAPS Tariff	4.02	5.06	5.93	6.52	6.11	6.25	6.09	5.84	4.49	4.82
4	Feeder Tariff	0.29	0.31	0.35	0.38	0.42	0.39	0.45	0.41	0.57	0.60
5	Quality Bank	-0.54	-0.68	-0.67	-0.59	-0.37	-0.04	-0.16	-0.17	-0.29	-0.23
6	Other [2]	0.46	0.44	0.51	0.41	0.33	0.13	0.15	0.17	0.19	0.14
7	**Total of Netback Costs**	**6.67**	**8.37**	**9.76**	**10.42**	**9.74**	**9.88**	**9.70**	**9.52**	**8.02**	**8.16**
8	**ANS Wellhead Weighted Average All Destinations**	**87.82**	**104.28**	**97.81**	**97.15**	**62.83**	**33.30**	**39.73**	**54.09**	**61.44**	**43.96**

(Table continued, next page)

Appendix B **1**

Nominal Netback Costs, Actual and Forecast

By netback segment *(Continued)*

		Dollars per Barrel									
		Forecast									
	Fiscal Year	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
1	**Alaska North Slope West Coast**	**45.32**	**48.00**	**49.00**	**50.00**	**51.00**	**53.00**	**54.00**	**55.00**	**56.00**	**57.00**
	Netback Costs [1]										
2	Marine Costs	3.01	3.24	3.27	3.31	3.35	3.40	3.43	3.47	3.51	3.56
3	TAPS Tariff	5.60	6.05	6.39	6.21	6.07	6.52	6.85	6.89	6.87	6.87
4	Feeder Tariff	0.64	0.66	0.65	0.62	0.64	0.66	0.66	0.65	0.64	0.62
5	Quality Bank	-0.09	-0.10	-0.10	-0.10	-0.10	-0.11	-0.11	-0.11	-0.11	-0.11
6	Other [2]	0.05	0.06	0.06	0.05	0.06	0.06	0.06	0.06	0.06	0.06
7	**Total of Netback Costs**	**9.21**	**9.91**	**10.26**	**10.10**	**10.01**	**10.52**	**10.89**	**10.96**	**10.98**	**10.99**
8	**ANS Wellhead Weighted Average All Destinations**	**36.11**	**38.09**	**38.74**	**39.90**	**40.99**	**42.48**	**43.11**	**44.04**	**45.02**	**46.01**

[1] Field-specific transportation costs represent the average cost for all barrels, whether or not they incur a specific expense. For example, feeder costs represent the average cost for all barrels, including Prudhoe Bay production not using a feeder pipeline. Slope-wide costs are estimated based on reported relevant cost information. The Department of Revenue's data sources are variable and the department has not been able to confirm that these calculations are consistent for all years.

[2] This category primarily includes pipeline and tanker gains and losses.

Appendix B 2

Price Difference from Prior Forecast

Spring 2020 forecast and fall 2020 forecast

		Dollars per Barrel										
	Fiscal Year	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
	Spring 2020 Forecast											
1	ANS West Coast	51.65	37.00	41.00	44.00	46.00	48.00	49.00	50.00	51.00	53.00	54.00
2	ANS Wellhead Weighted Average All Destinations	43.18	27.32	30.92	33.50	35.61	37.74	38.57	39.38	40.32	42.17	42.85
	Fall 2020 Forecast											
3	ANS West Coast	52.12	45.32	48.00	49.00	50.00	51.00	53.00	54.00	55.00	56.00	57.00
4	ANS Wellhead Weighted Average All Destinations	43.96	36.11	38.09	38.74	39.90	40.99	42.48	43.11	44.04	45.02	46.01
	Dollar Amount Change from Prior Forecast											
5	ANS West Coast	0.47	8.32	7.00	5.00	4.00	3.00	4.00	4.00	4.00	3.00	3.00
6	ANS Wellhead Weighted Average All Destinations	0.78	8.79	7.18	5.24	4.29	3.25	3.91	3.72	3.72	2.86	3.16
	Percent Change from Prior Forecast											
7	ANS West Coast	0.9%	22.5%	17.1%	11.4%	8.7%	6.3%	8.2%	8.0%	7.8%	5.7%	5.6%
8	ANS Wellhead Weighted Average All Destinations	1.8%	32.2%	23.2%	15.7%	12.0%	8.6%	10.1%	9.5%	9.2%	6.8%	7.4%

Appendix C 1

Production Difference from Prior Forecast

Spring 2020 forecast and fall 2020 forecast

	Fiscal Year	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
		Thousand Barrels per Day										
	Spring 2020 Forecast [1]											
1	Alaska North Slope	486.4	486.5	458.0	438.2	433.2	448.9	457.0	466.2	479.0	491.0	495.6
2	Non-North Slope	14.2	15.9	14.6	12.9	11.8	11.0	10.3	9.9	9.7	9.5	9.2
3	**Total**	**500.7**	**502.4**	**472.6**	**451.1**	**445.1**	**459.8**	**467.3**	**476.1**	**488.7**	**500.6**	**504.8**
	Fall 2020 Forecast [1]											
4	Alaska North Slope	471.8	477.3	439.6	447.0	463.3	461.5	455.7	458.8	466.5	475.9	481.8
5	Non-North Slope	13.6	11.6	11.3	11.3	12.7	14.9	16.9	17.1	15.8	13.9	12.3
6	**Total**	**485.3**	**488.9**	**450.9**	**458.2**	**476.1**	**476.5**	**472.6**	**475.9**	**482.3**	**489.8**	**494.1**
	Volume Change from Prior Forecast											
7	Alaska North Slope	-14.7	-9.2	-18.4	8.8	30.1	12.7	-1.3	-7.4	-12.5	-15.2	-13.8
8	Non-North Slope	-0.6	-4.3	-3.3	-1.7	0.9	4.0	6.6	7.2	6.1	4.4	3.1
9	**Total**	**-15.3**	**-13.5**	**-21.7**	**7.1**	**31.0**	**16.6**	**5.3**	**-0.2**	**-6.4**	**-10.8**	**-10.7**
	Percent Change from Prior Forecast											
10	Alaska North Slope	-3.0%	-1.9%	-4.0%	2.0%	6.9%	2.8%	-0.3%	-1.6%	-2.6%	-3.1%	-2.8%
11	Non-North Slope	-4.3%	-26.9%	-22.7%	-12.8%	7.6%	36.3%	63.6%	72.5%	62.7%	46.4%	33.5%
12	**Total**	**-3.1%**	**-2.7%**	**-4.6%**	**1.6%**	**7.0%**	**3.6%**	**1.1%**	**0.0%**	**-1.3%**	**-2.1%**	**-2.1%**

[1] Spring 2020 and Fall 2020 Forecasts assume that for all years of the forecast, 10,000 barrels per day of Natural Gas Liquids (NGLs) will be shipped from Prudhoe Bay to Kuparuk for use in a large scale enhanced oil recovery project. These NGLs are excluded from production forecasts reported in this table.

Appendix C

2

Annual Average Daily Crude Oil Production

By production area

	Fiscal Year	2011	2012	2013	2014	2015	2016	2017	2018	2019[1]	2020
		Thousand Barrels per Day									
		History									
	Alaska North Slope										
1	Prudhoe Bay[2]	267.6	265.2	247.4	247.5	228.5	232.1	239.8	218.2	206.3	196.9
2	PBU Satellites/Milne Point[3]	55.4	50.7	46.5	44.3	41.4	44.0	38.9	41.8	44.3	47.1
3	Greater Point McIntyre[4]	30.8	29.7	26.3	26.2	22.4	23.3	27.7	30.5	30.3	28.0
4	Kuparuk	91.0	91.6	86.4	85.9	78.5	78.4	80.6	82.8	72.2	64.2
5	Kuparuk Satellites[5]	31.9	27.5	25.3	25.1	26.6	26.0	24.4	27.5	32.7	30.0
6	Endicott[6]	11.7	11.3	10.4	9.5	9.0	9.1	8.6	8.1	9.1	8.2
7	Alpine[7]	84.6	78.2	64.5	56.8	47.8	55.2	58.9	64.6	52.5	49.1
8	Offshore[8]	27.0	25.2	24.8	35.0	46.8	46.4	44.3	40.4	33.2	35.8
9	NPR-A[9]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	8.3	6.5
10	Point Thomson	0.0	0.0	0.0	0.0	0.0	0.2	3.1	4.5	6.1	5.9
11	Other[10]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	**Total Alaska North Slope**	**599.9**	**579.4**	**531.6**	**530.4**	**501.0**	**514.7**	**526.4**	**518.5**	**495.0**	**471.8**
13	**Cook Inlet**	**10.4**	**10.7**	**12.2**	**16.3**	**18.3**	**16.6**	**14.1**	**15.7**	**14.9**	**13.6**
14	**Total Alaska**	**610.3**	**590.1**	**543.8**	**546.6**	**519.2**	**531.3**	**540.5**	**534.1**	**509.9**	**485.3**

(Table continued, next page)

Appendix C 2

Annual Average Daily Crude Oil Production

By production area *(Continued)*

		Thousand Barrels per Day									
		Forecast									
	Fiscal Year	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
	Alaska North Slope										
1	Prudhoe Bay [2]	197.7	182.2	178.7	174.1	169.1	164.1	159.3	154.5	149.9	145.4
2	PBU Satellites/Milne Point [3]	56.0	51.6	45.9	41.4	36.7	33.2	31.0	29.1	27.0	24.8
3	Greater Point McIntyre [4]	27.0	22.8	20.7	18.8	17.2	15.7	14.4	13.2	12.2	11.2
4	Kuparuk	66.3	65.0	64.2	62.5	62.6	63.8	62.4	59.5	57.2	55.4
5	Kuparuk Satellites [5]	30.9	26.7	26.9	25.8	22.8	21.2	23.1	27.6	31.8	33.6
6	Endicott [6]	8.0	7.5	7.0	6.6	6.3	5.9	5.7	5.4	5.1	4.9
7	Alpine [7]	46.9	44.5	47.9	52.1	48.7	43.5	39.2	35.9	33.1	30.4
8	Offshore [8]	33.7	28.8	25.5	23.1	22.6	21.1	19.8	19.0	18.8	18.6
9	NPR-A [9]	2.2	2.3	19.9	41.4	44.1	37.0	34.6	38.3	46.6	55.0
10	Point Thomson	8.6	8.2	8.2	8.1	8.0	7.8	7.4	6.9	6.4	6.0
11	Other [10]	0.0	0.1	2.1	9.3	23.6	42.4	62.0	77.1	87.9	96.5
12	**Total Alaska North Slope**	**477.3**	**439.6**	**447.0**	**463.3**	**461.5**	**455.7**	**458.8**	**466.5**	**475.9**	**481.8**
13	**Cook Inlet**	**11.6**	**11.3**	**11.3**	**12.7**	**14.9**	**16.9**	**17.1**	**15.8**	**13.9**	**12.3**
14	**Total Alaska**	**488.9**	**450.9**	**458.2**	**476.1**	**476.5**	**472.6**	**475.9**	**482.3**	**489.8**	**494.1**

[1] FY 2019 production figures have been revised from the *Fall 2019 Revenue Sources Book* due to revised company submissions.

[2] Includes Natural Gas Liquids (NGLs) from Central Gas Facility shipped to TAPS. Fall 2020 Forecast assumes that for all years of the forecast, 10,000 barrels per day of NGLs will be shipped from Prudhoe Bay to Kuparuk for use in a large scale enhanced oil recovery project. These NGLs are excluded from production actuals and forecasts reported in this table.

[3] Aurora, Borealis, Midnight Sun, Orion, Polaris, Sag River, Schrader Bluff, Ugnu, Milne Point.

[4] Lisburne, Niakuk, Point McIntyre, Raven, West Beach, West Niakuk.

[5] Meltwater, NEWS, Nuna-Torok, Tabasco, Tarn, West Sak.

[6] Endicott, Minke, Sag Delta, Eider, Badami.

[7] Alpine, Fiord, Nanuq, Qannik, Mustang, Fiord West.

[8] Northstar, Oooguruk, Nikaitchuq, Liberty.

[9] GMT1, GMT2, Willow, Umiat.

[10] Projects under development and under evaluation that are outside of the preceding areas. Includes Alkaid, Guitar, Narwhal, Pikka, Placer, Smith Bay.

Note: Totals may show slight differences from other sources due to rounding and aggregation differences.

Appendix D **1**

Allowable Lease Expenditures[1]

Operating and capital expenditures by geographic region

		Millions of Dollars									
		History									
	Fiscal Year	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
	North Slope Lease Expenditures										
1	Operating Expenditures (OPEX)	2,614	3,001	3,110	3,254	3,439	3,267	2,925	2,774	2,872	2,911
2	Capital Expenditures (CAPEX)	2,317	2,383	2,969	3,738	3,992	3,387	1,875	1,696	2,159	2,633
3	**Total North Slope Lease Expenditures**	**4,931**	**5,385**	**6,079**	**6,992**	**7,431**	**6,654**	**4,801**	**4,470**	**5,030**	**5,544**
	Non-North Slope (includes Cook Inlet)										
4	Operating Expenditures (OPEX)	191	245	261	252	242	285	285	285	282	313
5	Capital Expenditures (CAPEX)	123	350	415	595	640	382	314	248	169	158
6	**Total Non-North Slope Lease Expenditures**	**314**	**594**	**676**	**848**	**881**	**668**	**598**	**533**	**452**	**471**
	Total Statewide Lease Expenditures										
7	Operating Expenditures (OPEX)	2,805	3,246	3,370	3,506	3,680	3,552	3,210	3,059	3,154	3,224
8	Capital Expenditures (CAPEX)	2,440	2,733	3,384	4,333	4,632	3,769	2,189	1,944	2,328	2,791
9	**Total Statewide Lease Expenditures**	**5,245**	**5,979**	**6,754**	**7,839**	**8,312**	**7,322**	**5,399**	**5,003**	**5,482**	**6,015**
	Additional Detail for North Slope Lease Expenditures										
	Operating Expenditures (OPEX)										
10	Producing Non-GVR Eligible Units	2,488	2,838	2,879	3,021	3,161	2,921	2,575	2,426	2,476	2,442
11	Other Operating Expenditures	126	163	231	233	278	346	350	348	396	469
12	**Total North Slope OPEX**	**2,614**	**3,001**	**3,110**	**3,254**	**3,439**	**3,267**	**2,925**	**2,774**	**2,872**	**2,911**
	Capital Expenditures (CAPEX)										
13	Producing Non-GVR Eligible Units	1,370	1,367	1,563	2,191	2,454	1,921	1,450	1,178	1,352	1,638
14	Other Capital Expenditures	947	1,016	1,406	1,547	1,538	1,466	425	518	807	995
15	**Total North Slope CAPEX**	**2,317**	**2,383**	**2,969**	**3,738**	**3,992**	**3,387**	**1,875**	**1,696**	**2,159**	**2,633**

(Table continued, next page)

Appendix D 1

Allowable Lease Expenditures[1]

Operating and capital expenditures by geographic region *(Continued)*

		Millions of Dollars									
		Forecast									
	Fiscal Year	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
	North Slope Lease Expenditures										
1	Operating Expenditures (OPEX)	2,351	2,374	2,502	2,631	2,646	2,634	2,660	2,688	2,694	2,692
2	Capital Expenditures (CAPEX)	1,546	2,514	3,046	2,801	2,099	2,290	2,314	2,370	2,353	2,312
3	**Total North Slope Lease Expenditures**	**3,897**	**4,887**	**5,547**	**5,432**	**4,745**	**4,924**	**4,974**	**5,058**	**5,047**	**5,003**
	Non-North Slope (includes Cook Inlet)										
4	Operating Expenditures (OPEX)	269	277	290	287	273	288	296	296	294	292
5	Capital Expenditures (CAPEX)	159	170	137	124	99	101	103	105	107	109
6	**Total Non-North Slope Lease Expenditures**	**428**	**446**	**427**	**411**	**372**	**389**	**399**	**401**	**401**	**402**
	Total Statewide Lease Expenditures										
7	Operating Expenditures (OPEX)	2,620	2,650	2,792	2,918	2,919	2,922	2,956	2,984	2,988	2,984
8	Capital Expenditures (CAPEX)	1,705	2,684	3,183	2,925	2,198	2,391	2,417	2,475	2,460	2,421
9	**Total Statewide Lease Expenditures**	**4,325**	**5,334**	**5,974**	**5,842**	**5,117**	**5,313**	**5,373**	**5,459**	**5,448**	**5,405**
	Additional Detail for North Slope Lease Expenditures										
	Operating Expenditures (OPEX)										
10	Producing Non-GVR Eligible Units	1,908	1,951	2,105	2,288	2,329	2,258	2,206	2,170	2,291	2,250
11	Other Operating Expenditures	443	422	396	343	317	377	454	518	403	442
12	**Total North Slope OPEX**	**2,351**	**2,374**	**2,502**	**2,631**	**2,646**	**2,634**	**2,660**	**2,688**	**2,694**	**2,692**
	Capital Expenditures (CAPEX)										
13	Producing Non-GVR Eligible Units	902	1,436	1,764	1,673	1,331	1,286	1,257	1,244	1,394	1,405
14	Other Capital Expenditures	643	1,078	1,282	1,128	768	1,004	1,057	1,126	959	907
15	**Total North Slope CAPEX**	**1,546**	**2,514**	**3,046**	**2,801**	**2,099**	**2,290**	**2,314**	**2,370**	**2,353**	**2,312**

[1]All lease expenditures in this table represent claimed or forecast allowable lease expenditures, as defined in production tax statutes.

Appendix E
1

Production Tax Estimate for FY 2020

Using income statement format

Note: 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 of Dollars)
1	Average ANS Oil Price (dollars per barrel) and Daily Production	$52.12	471.8	$24.6
	Annual Production			
2	Total [1]		172,664	$8,999.3
3	Royalty, Federal and Other Barrels [2]		-21,298	($1,110.0)
4	**Taxable Barrels**		151,367	$7,889.2
	Downstream (Transportation) Costs (dollars per barrel)			
5	ANS Marine Transportation	-$2.84		
6	TAPS Tariff	-$4.82		
7	Other	-$0.50		
8	**Total Transportation Costs**	-$8.16	151,367	($1,234.9)
9	**Gross Value at Point of Production (GVPP)**			$6,654.4
	Deductible Lease Expenditures [3]			
10	Deductible Operating Expenditures	-$14.84		($2,245.8)
11	Deductible Capital Expenditures	-$13.42		($2,031.8)
12	**Total Lease Expenditures**	-$28.26	151,367	($4,277.5)
	Production Tax			
13	Gross Minimum Tax (4%*GVPP)			$266.2
14	Production Tax Value (PTV)			$2,376.8
15	Gross Value Reduction (GVR)			($82.7)
16	Production Tax Value (PTV) after GVR			$2,294.1
17	Base Tax (35%*PTV after GVR)			$802.9
18	**Current-Year Tax Before Credits (base tax or minimum tax)**			**$802.9**
19	**Per-Taxable-Barrel Credits**			**($586.3)**
20	**Current-Year Tax After Per-Taxable-Barrel Credits**			**$216.6**
21	**Adjustments [4]**			**$68.5**
22	**Total Tax After Credits and Adjustments**			**$285.1**

[1] Fall 2020 Forecast assumes that for all years of the forecast, 10,000 barrels per day of Natural Gas Liquids (NGLs) will be shipped from Prudhoe Bay to Kuparuk for use in a large-scale enhanced oil recovery project. Beginning with FY 2019, these NGLs are excluded from actual and forecast production reported in this table. With new information, future NGL shipment estimates may change, and these changes will be included in subsequent production forecasts.

[2] Royalty, Federal and Other Barrels represents the Department of Revenue's best estimate of barrels that are not taxed. This estimate includes state and federal royalty barrels, barrels produced from federal offshore property, and barrels used in production.

[3] Deductible Lease Expenditures represents the portion of allowable lease expenditures actually applied in the tax calculation in the year incurred. The per-barrel expenditures reflect expenditures per taxable barrel and are higher than if this was shown as expenditures per all barrels produced.

[4] Adjustments include:

- Any credits other than Per-Taxable-Barrel Credits, such as Small-Producer Credits or Net Operating Loss Credits from prior years.
- Private landowner royalty tax, and conservation surcharge.
- Cook Inlet production tax.
- Any prior-year tax payments other than those deposited into the Constitutional Budget Reserve Fund.
- Additional detail captured in company-specific revenue models that produces results that can differ slightly from the estimates in the simple model above.

Appendix E 2

Production Tax Estimate for FY 2021

Using income statement format

Note: 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 of Dollars)
1	Average ANS Oil Price (dollars per barrel) and Daily Production	$45.32	477.3	$21.6
	Annual Production			
2	Total [1]		174,212	$7,894.8
3	Royalty, Federal and Other Barrels [2]		-20,917	($947.9)
4	**Taxable Barrels**		153,295	$6,946.9
	Downstream (Transportation) Costs (dollars per barrel)			
5	ANS Marine Transportation	-$3.01		
6	TAPS Tariff	-$5.60		
7	Other	-$0.60		
8	**Total Transportation Costs**	-$9.21	153,295	($1,412.2)
9	**Gross Value at Point of Production (GVPP)**			$5,534.7
	Deductible Lease Expenditures [3]			
10	Deductible Operating Expenditures	-$14.81		($2,270.1)
11	Deductible Capital Expenditures	-$8.86		($1,358.2)
12	**Total Lease Expenditures**	-$23.67	153,295	($3,628.4)
	Production Tax			
13	Gross Minimum Tax (4%*GVPP)			$221.4
14	Production Tax Value (PTV)			$1,906.4
15	Gross Value Reduction (GVR)			($55.3)
16	Production Tax Value (PTV) after GVR			$1,851.1
17	Base Tax (35%*PTV after GVR)			$647.9
18	**Current-Year Tax Before Credits (base tax or minimum tax)**			**$647.9**
19	**Per-Taxable-Barrel Credits**			**($422.3)**
20	**Current-Year Tax After Per-Taxable-Barrel Credits**			**$225.6**
21	**Adjustments [4]**			**($53.8)**
22	**Total Tax After Credits and Adjustments**			**$171.8**

[1] Fall 2020 Forecast assumes that for all years of the forecast, 10,000 barrels per day of Natural Gas Liquids (NGLs) will be shipped from Prudhoe Bay to Kuparuk for use in a large-scale enhanced oil recovery project. Beginning with FY 2019, these NGLs are excluded from actual and forecast production reported in this table. With new information, future NGL shipment estimates may change, and these changes will be included in subsequent production forecasts.

[2] Royalty, Federal and Other Barrels represents the Department of Revenue's best estimate of barrels that are not taxed. This estimate includes state and federal royalty barrels, barrels produced from federal offshore property, and barrels used in production.

[3] Deductible Lease Expenditures represents the portion of allowable lease expenditures actually applied in the tax calculation in the year incurred. The per-barrel expenditures reflect expenditures per taxable barrel and are higher than if this was shown as expenditures per all barrels produced.

[4] Adjustments include:

- Any credits other than Per-Taxable-Barrel Credits, such as Small-Producer Credits or Net Operating Loss Credits from prior years.
- Private landowner royalty tax, and conservation surcharge.
- Cook Inlet production tax.
- Any prior-year tax payments other than those deposited into the Constitutional Budget Reserve Fund.
- Additional detail captured in company-specific revenue models that produces results that can differ slightly from the estimates in the simple model above.

Appendix E
3

Production Tax Estimate for FY 2022

Using income statement format

Note: 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 of Dollars)
1	Average ANS Oil Price (dollars per barrel) and Daily Production	$48.00	439.6	$21.1
	Annual Production			
2	Total [1]		160,449	$7,701.6
3	Royalty, Federal and Other Barrels [2]		-19,018	($912.9)
4	**Taxable Barrels**		141,432	$6,788.7
	Downstream (Transportation) Costs (dollars per barrel)			
5	ANS Marine Transportation	-$3.24		
6	TAPS Tariff	-$6.05		
7	Other	-$0.62		
8	**Total Transportation Costs**	-$9.91	141,432	($1,401.0)
9	**Gross Value at Point of Production (GVPP)**			$5,387.7
	Deductible Lease Expenditures [3]			
10	Deductible Operating Expenditures	-$15.96		($2,257.1)
11	Deductible Capital Expenditures	-$14.20		($2,008.3)
12	**Total Lease Expenditures**	-$30.16	141,432	($4,265.3)
	Production Tax			
13	Gross Minimum Tax (4%*GVPP)			$215.5
14	Production Tax Value (PTV)			$1,122.4
15	Gross Value Reduction (GVR)			($74.5)
16	Production Tax Value (PTV) after GVR			$1,047.9
17	Base Tax (35%*PTV after GVR)			$366.8
18	**Current-Year Tax Before Credits (base tax or minimum tax)**			**$366.8**
19	**Per-Taxable-Barrel Credits**			**($185.8)**
20	**Current-Year Tax After Per-Taxable-Barrel Credits**			**$181.0**
21	**Adjustments [4]**			**($17.7)**
22	**Total Tax After Credits and Adjustments**			**$163.3**

[1] Fall 2020 Forecast assumes that for all years of the forecast, 10,000 barrels per day of Natural Gas Liquids (NGLs) will be shipped from Prudhoe Bay to Kuparuk for use in a large-scale enhanced oil recovery project. Beginning with FY 2019, these NGLs are excluded from actual and forecast production reported in this table. With new information, future NGL shipment estimates may change, and these changes will be included in subsequent production forecasts.

[2] Royalty, Federal and Other Barrels represents the Department of Revenue's best estimate of barrels that are not taxed. This estimate includes state and federal royalty barrels, barrels produced from federal offshore property, and barrels used in production.

[3] Deductible Lease Expenditures represents the portion of allowable lease expenditures actually applied in the tax calculation in the year incurred. The per-barrel expenditures reflect expenditures per taxable barrel and are higher than if this was shown as expenditures per all barrels produced.

[4] Adjustments include:

- Any credits other than Per-Taxable-Barrel Credits, such as Small-Producer Credits or Net Operating Loss Credits from prior years.
- Private landowner royalty tax, and conservation surcharge.
- Cook Inlet production tax.
- Any prior-year tax payments other than those deposited into the Constitutional Budget Reserve Fund.
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