

# Fall 2019 Revenue Forecast



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# Fall 2019 Revenue Forecast



# Revenue Forecast: 2019 to 2021 Totals

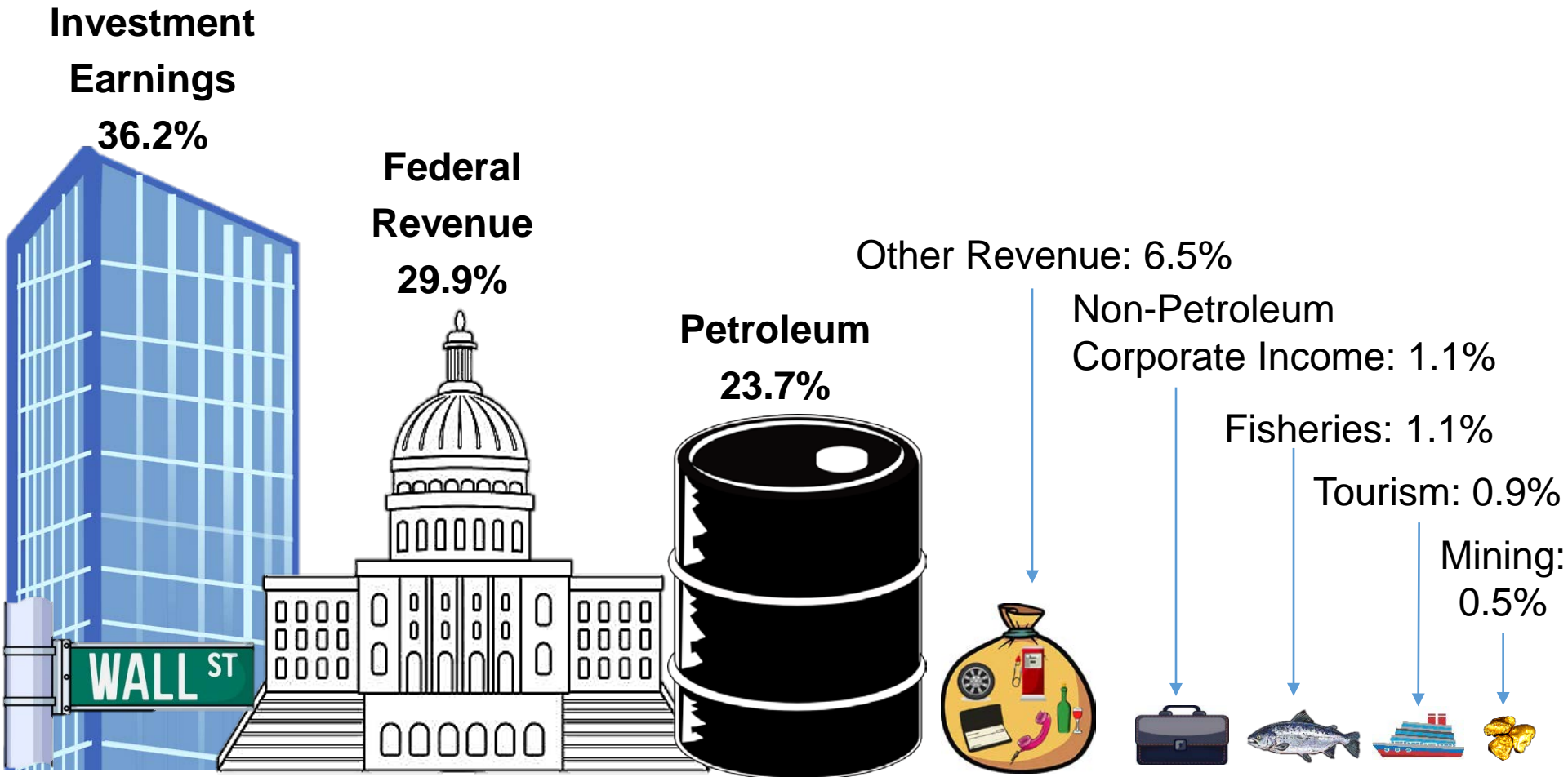
\$ Millions	History	Forecast	
Revenue Type	FY 2019	FY 2020	FY 2021
<b>Unrestricted General Fund</b>			
Petroleum Revenue	2,047.3	1,559.4	1,410.0
Non-Petroleum Revenue	491.4	502.9	505.7
Investment Earnings	2,815.9	2,987.2	3,143.3
<b>Subtotal</b>	<b>5,354.6</b>	<b>5,049.4</b>	<b>5,059.0</b>
<b>Designated General Fund</b>			
Non-Petroleum Revenue	451.4	428.3	430.7
Investment Earnings	53.3	43.7	45.1
<b>Subtotal</b>	<b>504.7</b>	<b>472.0</b>	<b>475.8</b>
<b>Other Restricted Revenue</b>			
Petroleum Revenue	563.5	586.5	418.1
Non-Petroleum Revenue	180.2	250.3	252.4
Investment Earnings	1,134.7	1,244.0	1,421.3
<b>Subtotal</b>	<b>1,878.4</b>	<b>2,080.8</b>	<b>2,091.8</b>
<b>Federal Revenue</b>			
Federal Receipts	3,311.4	3,715.9	3,715.9
Petroleum Revenue	12.3	11.3	9.5
<b>Subtotal</b>	<b>3,323.7</b>	<b>3,727.2</b>	<b>3,725.4</b>
<b>Total State Revenue</b>	<b>11,061.5</b>	<b>11,329.5</b>	<b>11,352.0</b>

Source: Fall 2019 Revenue Sources Book

Note: Petroleum revenue shown in the Federal category includes the state share of rents, royalties, and bonuses received from the National Petroleum Reserve in Alaska (NPR-A).

# Relative Contributions to Total State Revenue: FY 2019

## Total State Revenue: \$11.1 Billion



Source: Fall 2019 Revenue Sources Book

Disclaimer: Numbers may not add due to rounding. Examples may not be to scale.

# Unrestricted Petroleum Revenue Forecast: 2019 to 2021 Totals

\$ Millions	History	Forecast	
Unrestricted General Fund Revenue	FY 2019	FY 2020	FY 2021
<b>Taxes</b>			
Petroleum Property Tax (State Share)	119.5	121.6	117.9
Petroleum Corporate Income Tax	217.7	210.0	215.0
Oil and Gas Production Tax	595.5	380.7	328.1
<b>Subtotal Taxes</b>	<b>932.6</b>	<b>712.4</b>	<b>661.0</b>
<b>Royalties</b>			
Mineral Bonuses and Rents	33.9	28.8	28.8
Oil and Gas Royalties	1,077.2	816.0	718.0
Interest	3.6	2.2	2.2
<b>Subtotal Royalties</b>	<b>1,114.7</b>	<b>847.0</b>	<b>749.0</b>
<b>Total Petroleum Revenue</b>	<b>2,047.3</b>	<b>1,559.4</b>	<b>1,410.0</b>

# Changes to Two-Year Unrestricted Revenue Outlook

## ANS OIL PRICE (Nominal \$ per barrel)

	History FY 2019	Forecast FY 2020	Forecast FY 2021
Spring 19	\$68.90	\$66.00	\$66.00
Fall 19	\$69.46	\$63.54	\$59.00
<b>Change</b>	<b>\$0.56</b>	<b>(\$2.46)</b>	<b>(\$7.00)</b>

## Total Unrestricted Revenue (\$ Millions)

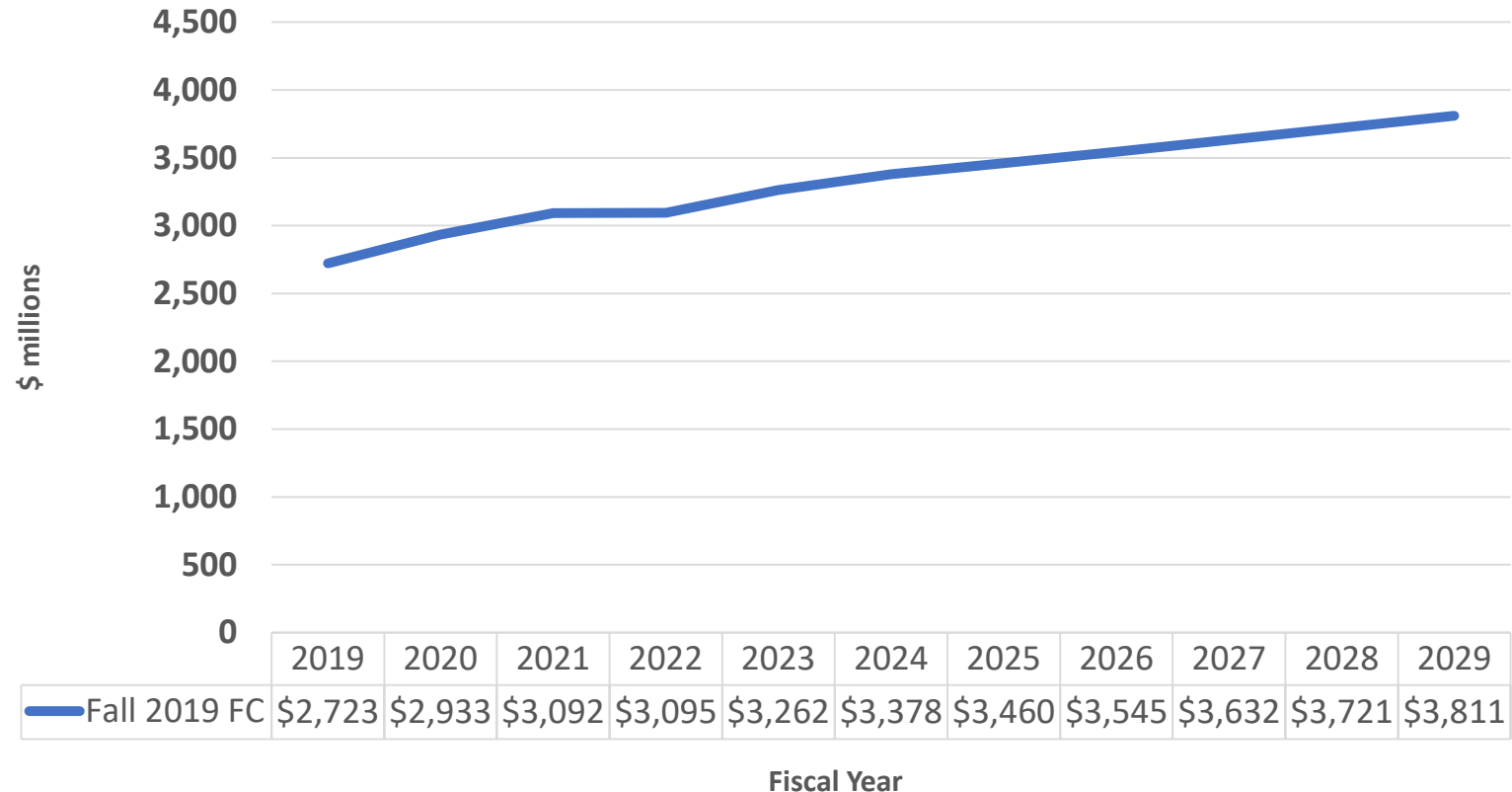
### Including Permanent Fund Transfer

	History FY 2019	Forecast FY 2020	Forecast FY 2021
Spring 19	\$5,406	\$5,237	\$5,332
Fall 19	\$5,355	\$5,049	\$5,059
<b>Change</b>	<b>(\$52)</b>	<b>(\$187)</b>	<b>(\$273)</b>

### Excluding Permanent Fund Transfer

	History FY 2019	Forecast FY 2020	Forecast FY 2021
Spring 19	\$2,683	\$2,304	\$2,242
Fall 19	\$2,632	\$2,116	\$1,967
<b>Change</b>	<b>(\$51)</b>	<b>(\$187)</b>	<b>(\$274)</b>

# Total Percent of Market Value (POMV) Transfer Forecast



- The statutory POMV rate changes to 5% beginning FY 2022.
  - For FY 2019 – FY 2021 this rate is 5.25%.
- Forecast assumes Permanent Fund's long-term total return expectation of 7%.
- Differing Permanent Fund returns and petroleum deposits could significantly alter actual POMV.

# Fall 2019 Price Forecast

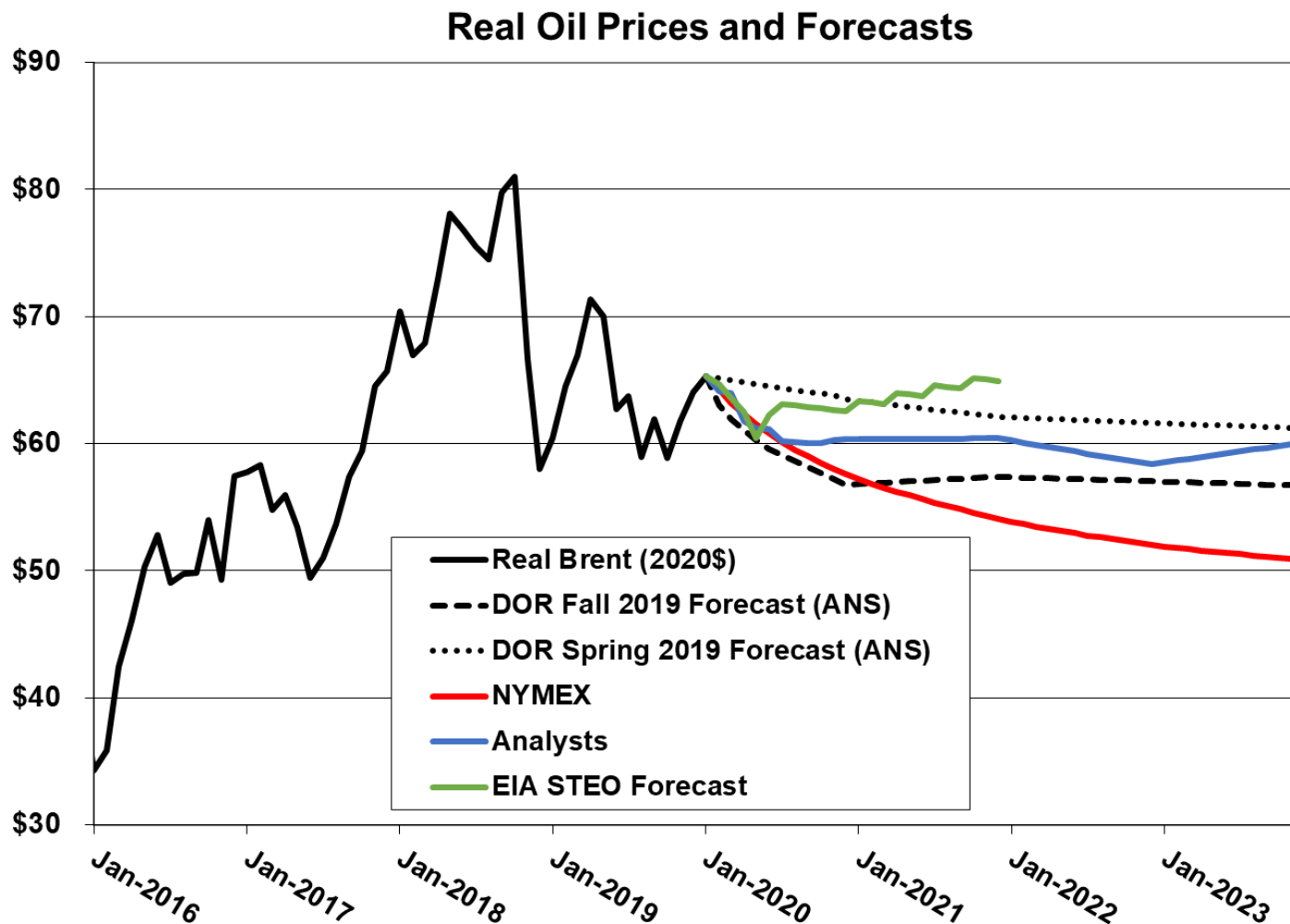




# Price Forecast Methodology

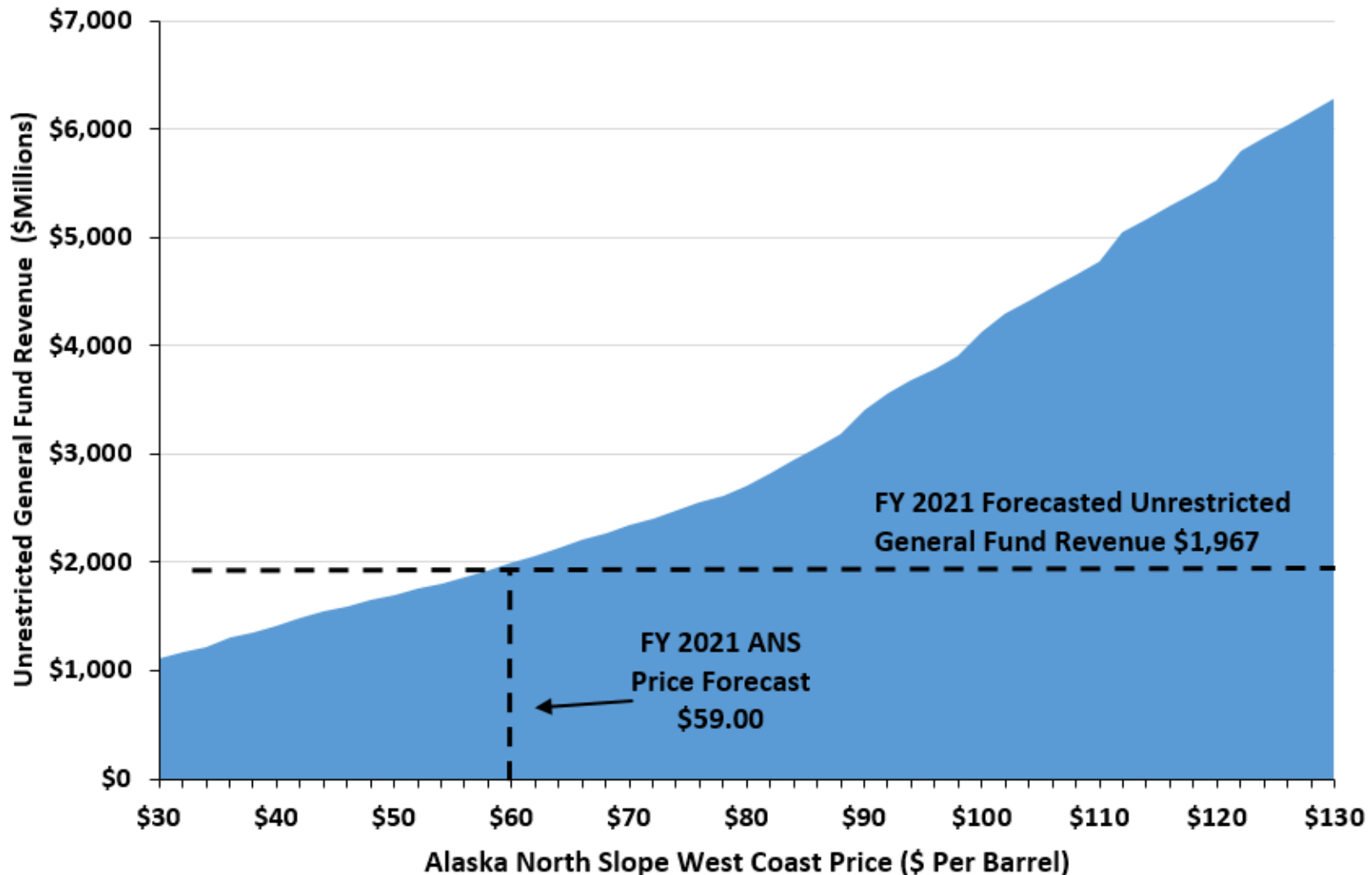
- In prior years, the price forecast was formed based on input from an annual price forecasting session.
  - Depending on the year, the projections were used directly, altered based on market factors, or discarded entirely. This decision would be made in an ad-hoc manner.
- Beginning with the Fall 2019 Revenue Sources Book, the oil price forecast is based on the most recent futures market projections.
- For current and next fiscal year, using Brent crude oil futures traded on the Intercontinental Exchange (ICE).
  - Premium applied to Alaska North Slope crude for FY 2020
- New method allows for a more timely and transparent forecast.

# Brent Forecasts Comparison as of 1/16/2020



Source: Analyst forecast is an average of 5-19 firms from a Bloomberg survey as of January 16, 2020. Futures prices are from the New York Mercantile Exchange (NYMEX) as of January 16, 2020. The U.S. Energy Information Administration (EIA) forecast is from their January 2020 Short-Term Energy Outlook. Forecasts are adjusted using Alaska Department of Revenue's 2.25% inflation assumption.

# UGF Relative to Price per Barrel (without POMV): FY 2021



Source: Fall 2019 Revenue Sources Book

Notes: Near the forecast ANS price, a \$1 change in price leads to an approximately \$30-\$35 million change in UGF revenue.

Breakeven price for Governor's proposed budget is approximately \$91/barrel

# Fall 2019

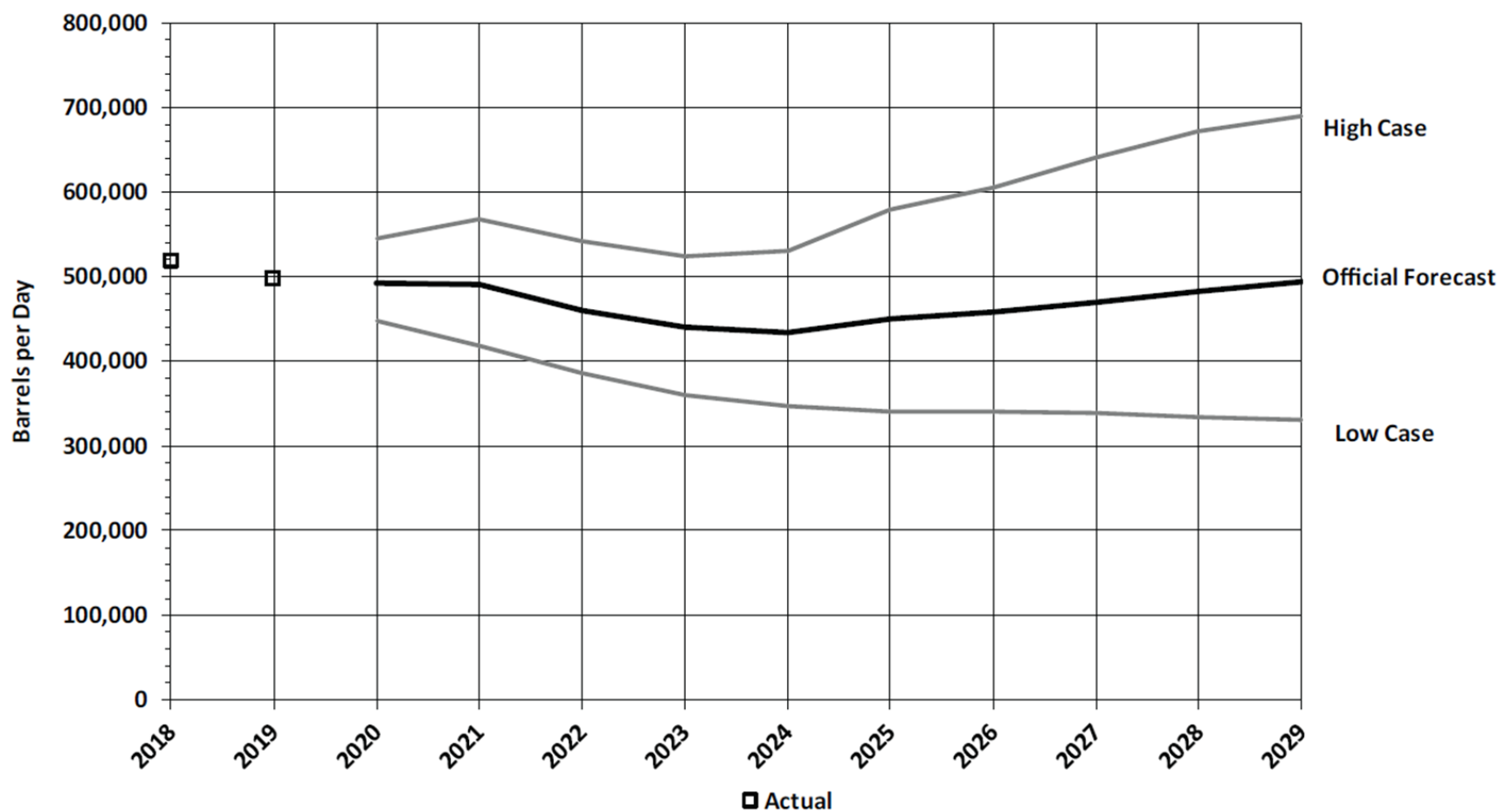
## Production Forecast



# Production Forecast Methodology

- Ten-year oil production forecast for the *Revenue Sources Book* is developed internally by DOR and DNR.
- Official forecast is most likely value taken from a range of possible outcomes consistent with industry best practice.
- Consists of oil volumes produced from three categories of wells/fields:
  - Currently Producing
  - Under Development
  - Under Evaluation

# North Slope Petroleum Production Forecast



Source: Fall 2019 Revenue Sources Book

Note: Fall 2019 Forecast does not include 10,000 barrels per day of NGL shipments from Prudhoe to Kuparuk.

# Fall 2019

## Cost Forecast

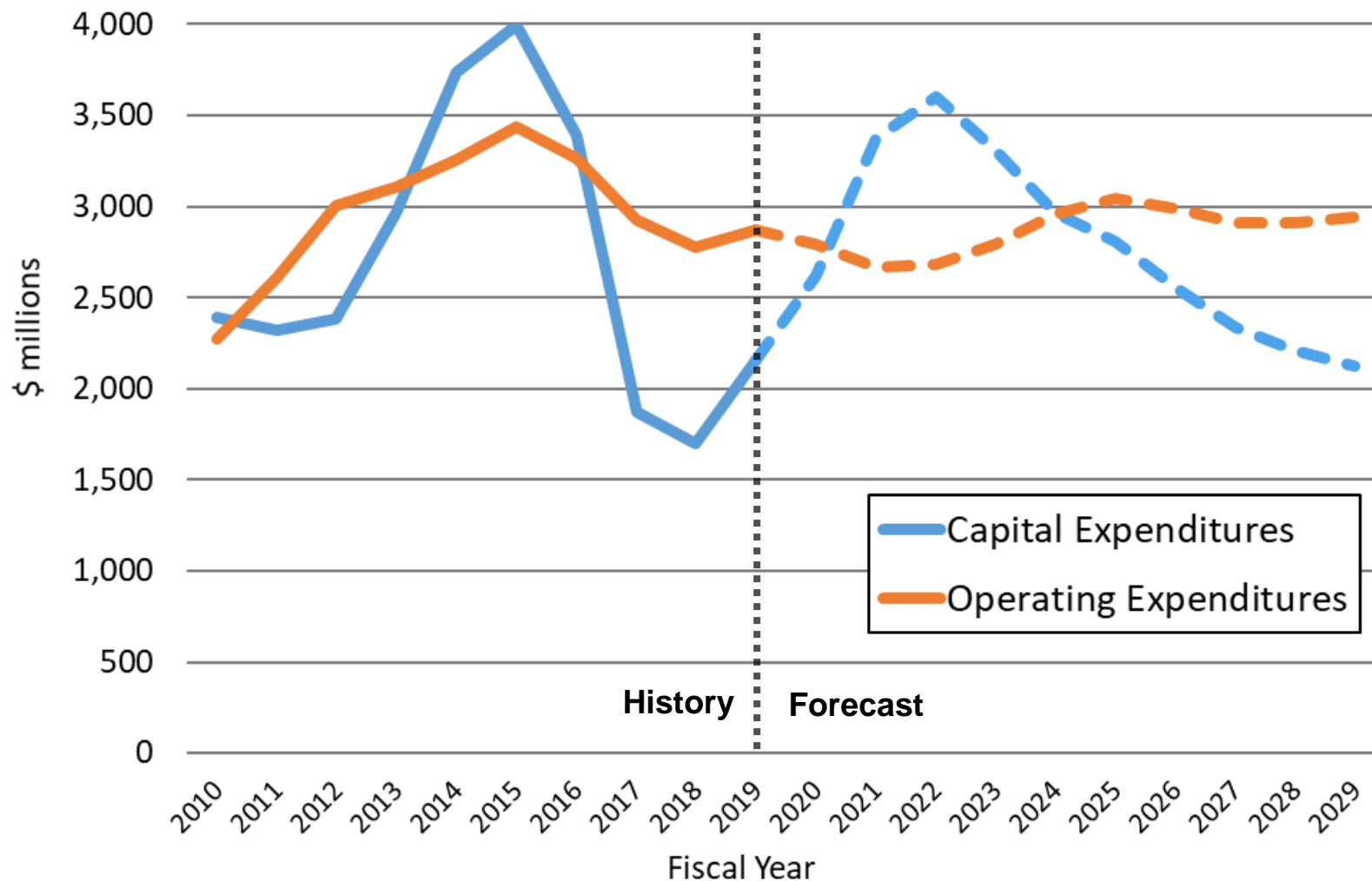


# Allowable Lease Expenditures: Overview

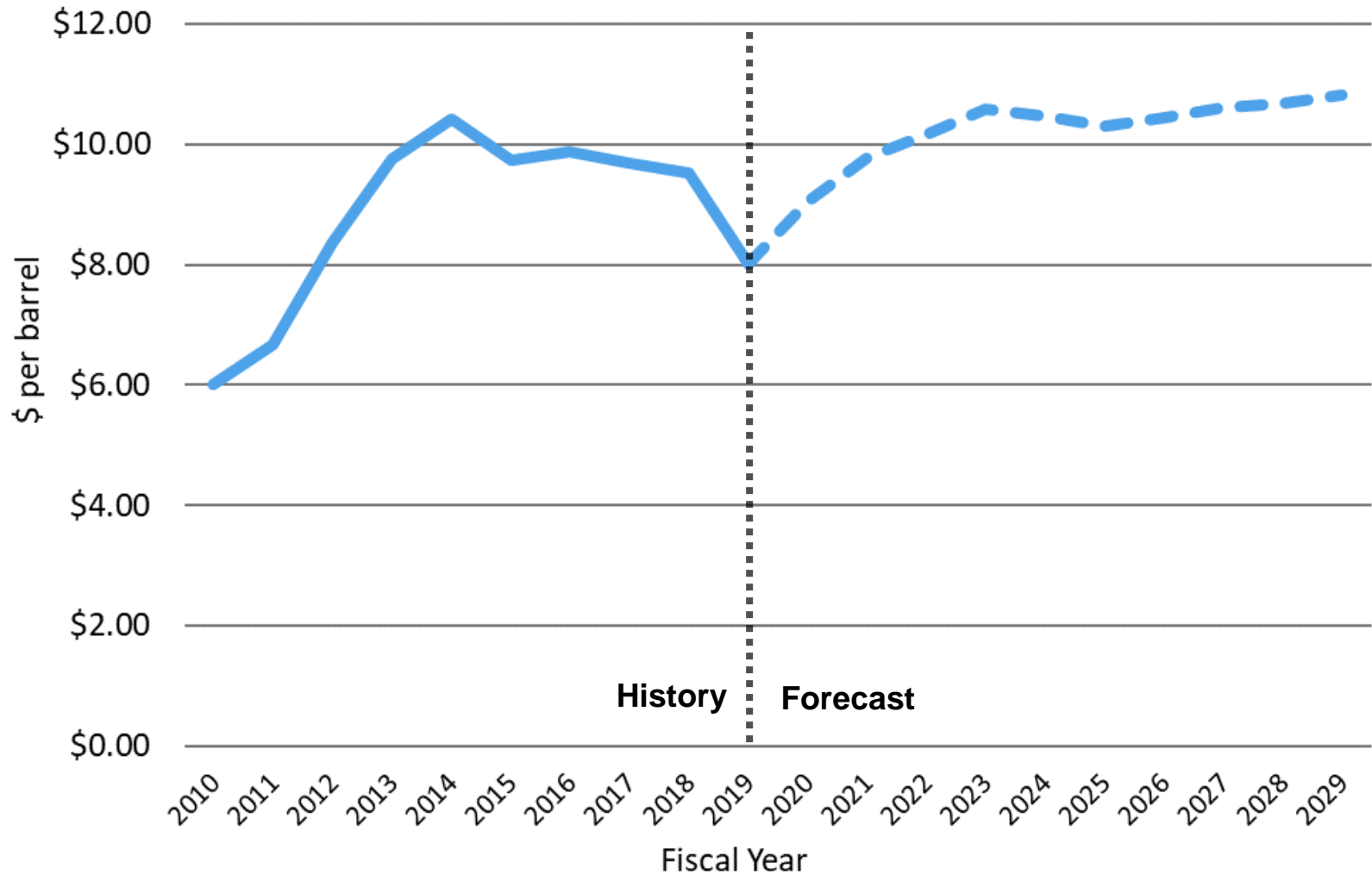
- Costs of production (i.e. allowable lease expenditures) are deductible against gross revenues to calculate net taxable revenues.
  - Includes both operating and capital costs.
  - If a company has insufficient revenues (i.e. net operating loss), remaining (or excess) lease expenditures can be carried forward into a future tax year.
  - Capital costs are not depreciated for production tax purposes.
    - This means that taxes are reduced by development costs prior to production, but are then higher once production starts.
- If 35% of the net taxable revenues are less than 4% of the gross revenues, the minimum tax is due.



# North Slope Allowable Lease Expenditures



# North Slope Transportation Costs



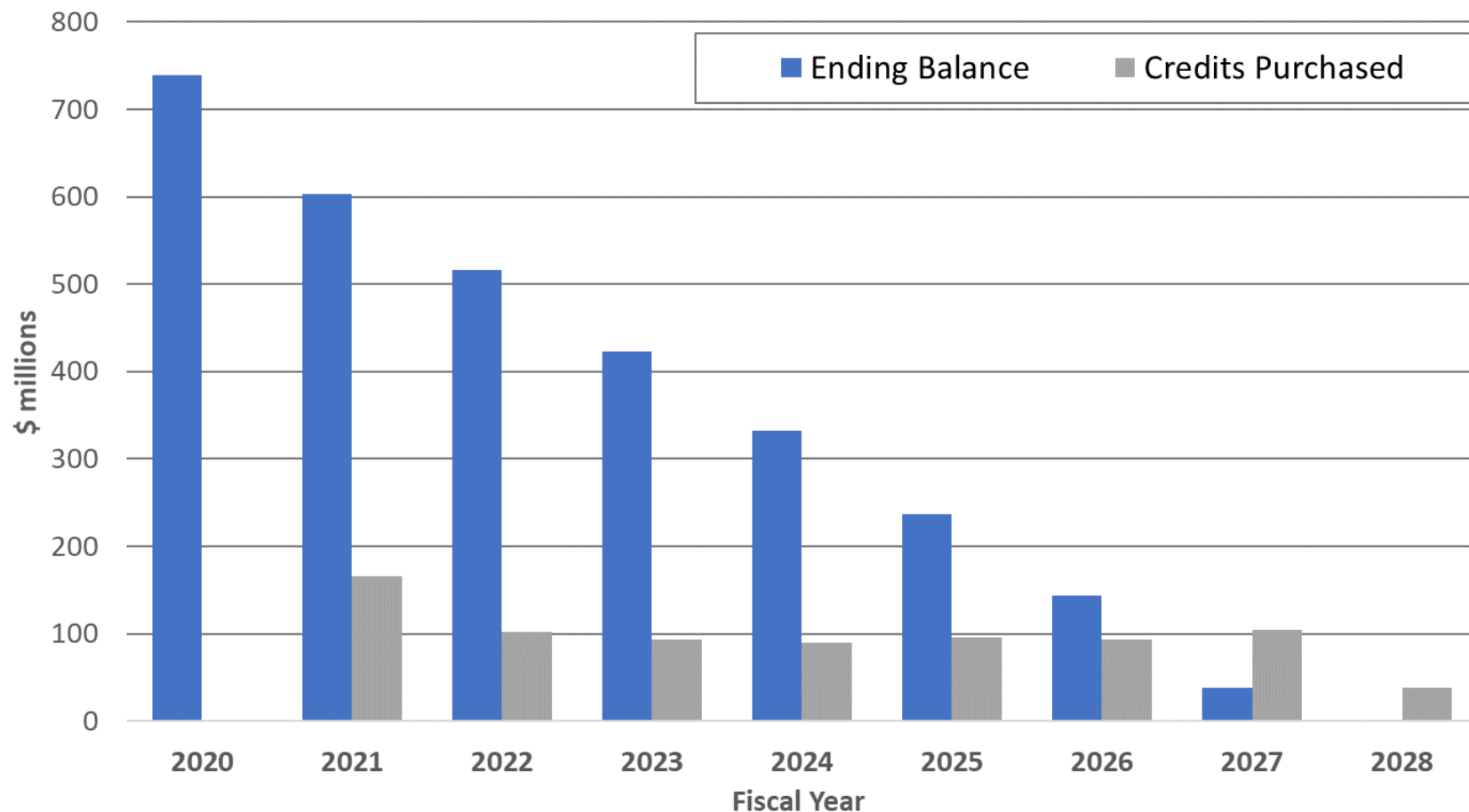
# Fall 2019

## Credits Forecast



# Tax Credits for Purchase Status

Ending balance of credits available for purchase, assuming statutory appropriation for FY 2021+



Source: Fall 2019 Revenue Sources Book

Per AS 43.55.028, 10% of production tax levied, before credits, when ANS price forecast is \$60 or higher and 15% of production tax levied, before credits, when ANS price forecast is below \$60. Does not include changes in company behavior or credit transfers.

# Tax Credit Bonding Update

- House Bill 331 created a Corporation that would purchase outstanding oil and gas tax credits at a discount, and spread the funding out over several years through issuance of bonds.
- The Corporation has not issued any bonds due to pending litigation.
- The Alaska Supreme Court heard oral arguments on September 12, 2019. The court has not committed to a decision date.
- If court rules in favor of state, Corporation will issue bonds up to \$700 million in FY 2020 to finance purchase of tax credit certificates
- No funds appropriated in FY 2020 operating budget for purchase of tax credits outside of bonding program.

# Oil & Gas Production Tax Audit Status Report



# Oil & Gas Production Tax Audit Update

- Audit Status Update:
  - 2013 audits completed in 1<sup>st</sup> quarter 2019
  - On track for backlog reduction timeline:
    - 2014 audits complete by 3<sup>rd</sup> quarter 2020
    - 2015-2017 audits complete by 3<sup>rd</sup> quarter 2021
    - 2018-2019 audits complete by end of 2022
    - Maintain 3-year audit cycle on go-forward basis
- Procedural Improvements:
  - Documented audit plans approved by taxpayer
  - Scheduled routine communications during all phases of the audit
  - Leveraging Tax Revenue Management System (TRMS)
  - Work papers generated from TRMS

# THANK YOU

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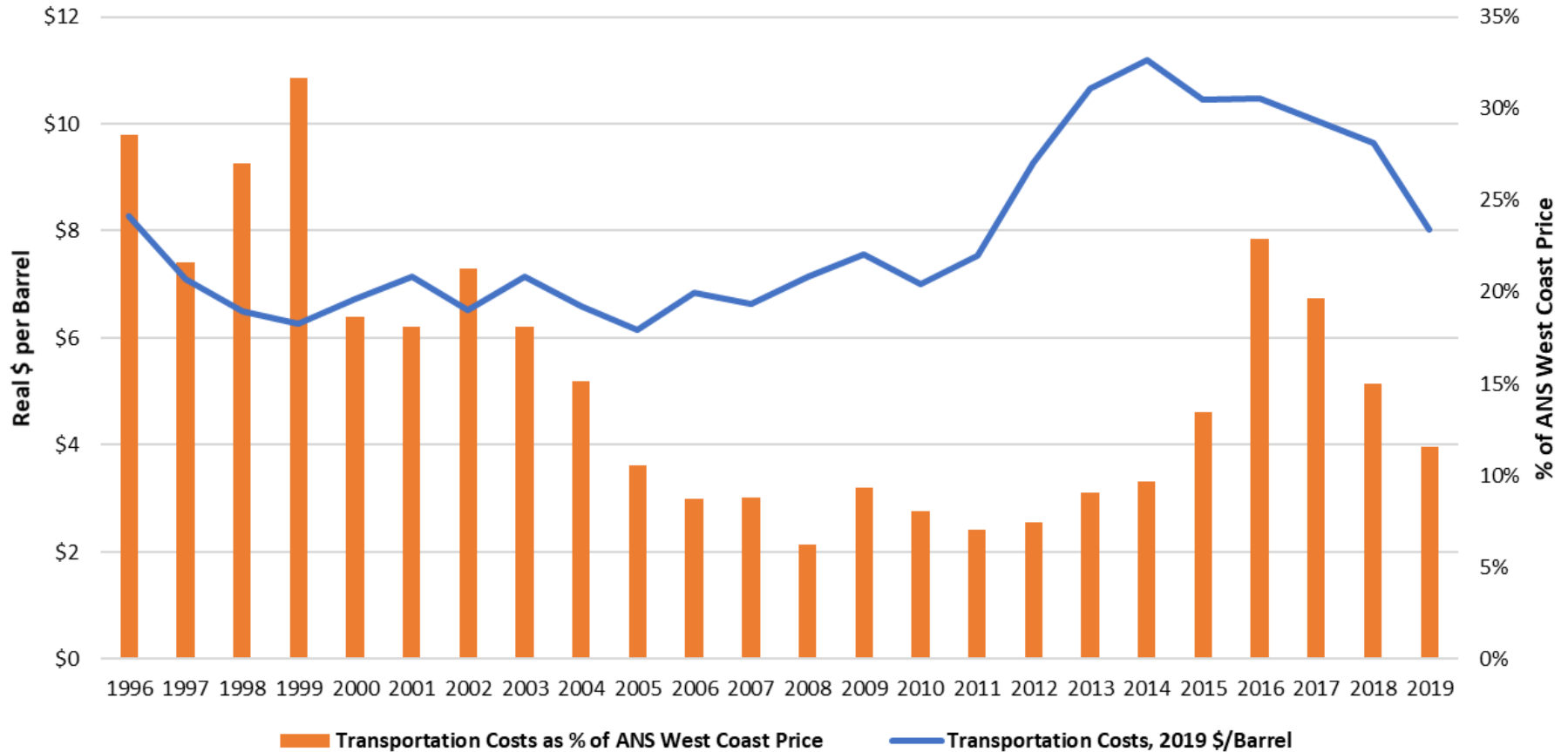




# Addendum – Additional Requested Information

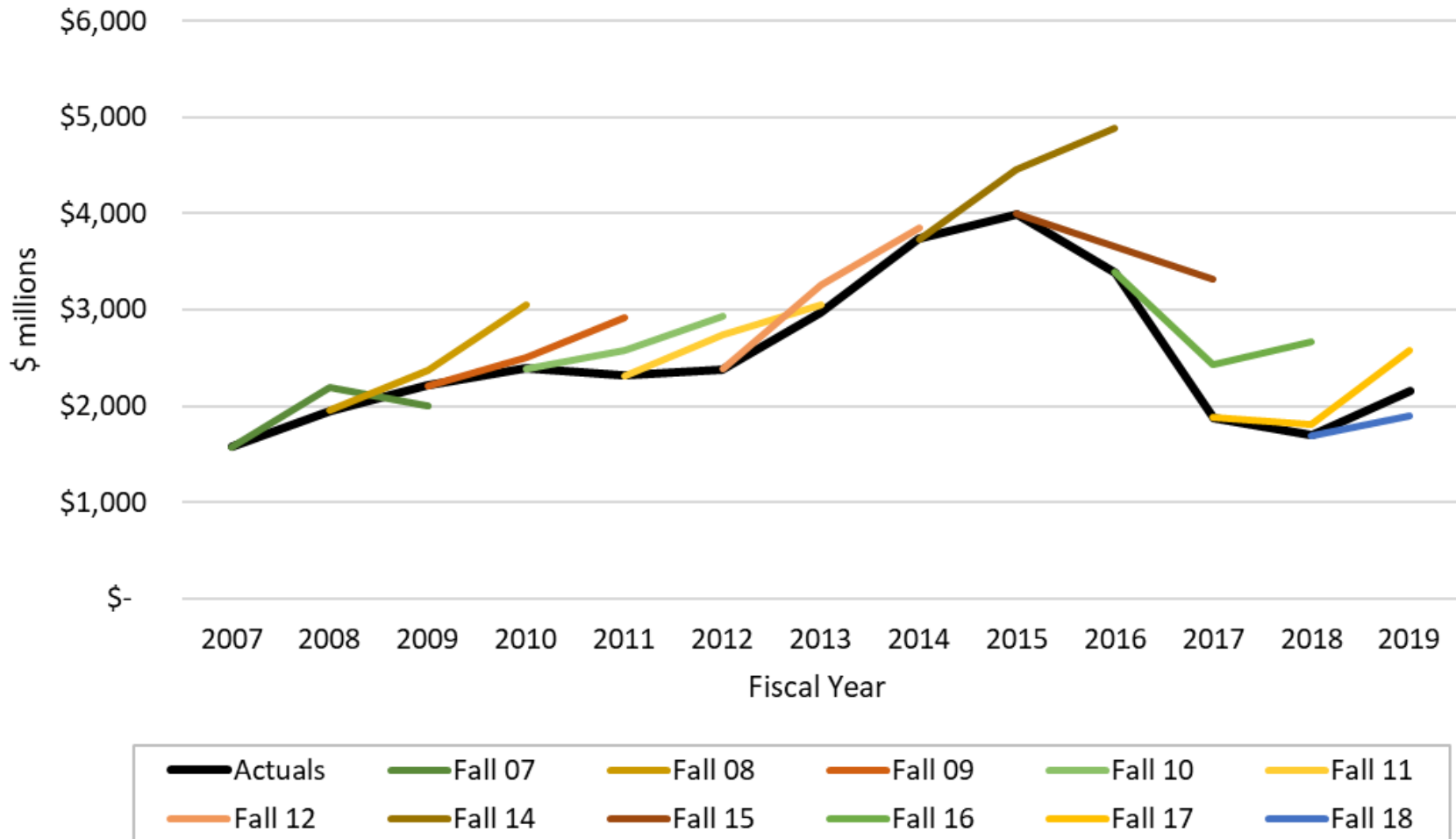
# Alaska North Slope Transportation Costs: FY 1996 – FY 2019

**ANS Transportation Costs by Fiscal Year**



Source: Fall 2019 Revenue Sources Book

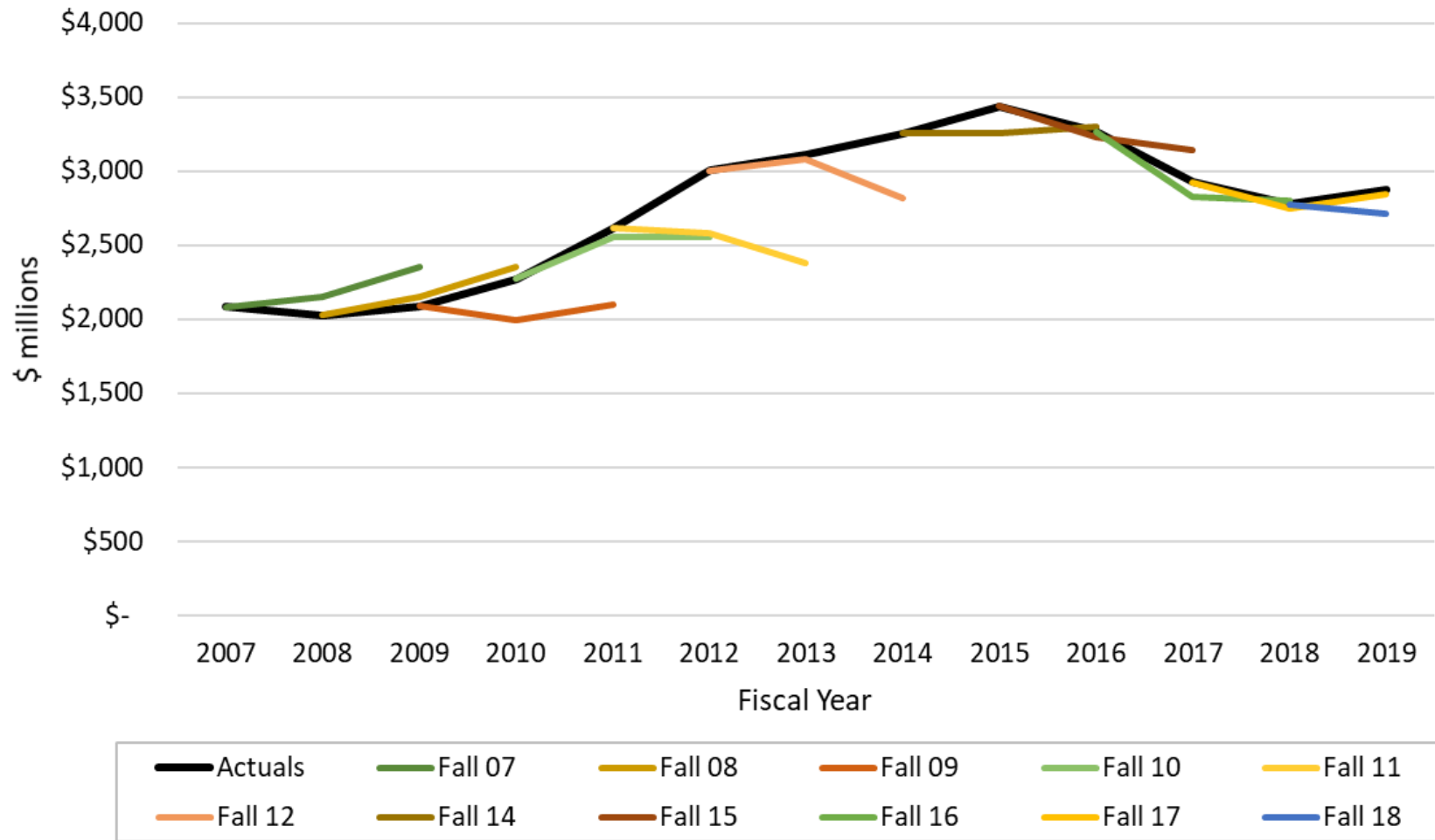
# Capital Expenditures History Compared to Past Forecasts



Source: Fall 2019 and past Revenue Sources Books

Note: These estimates include reported and forecasted allowable lease expenditures only.

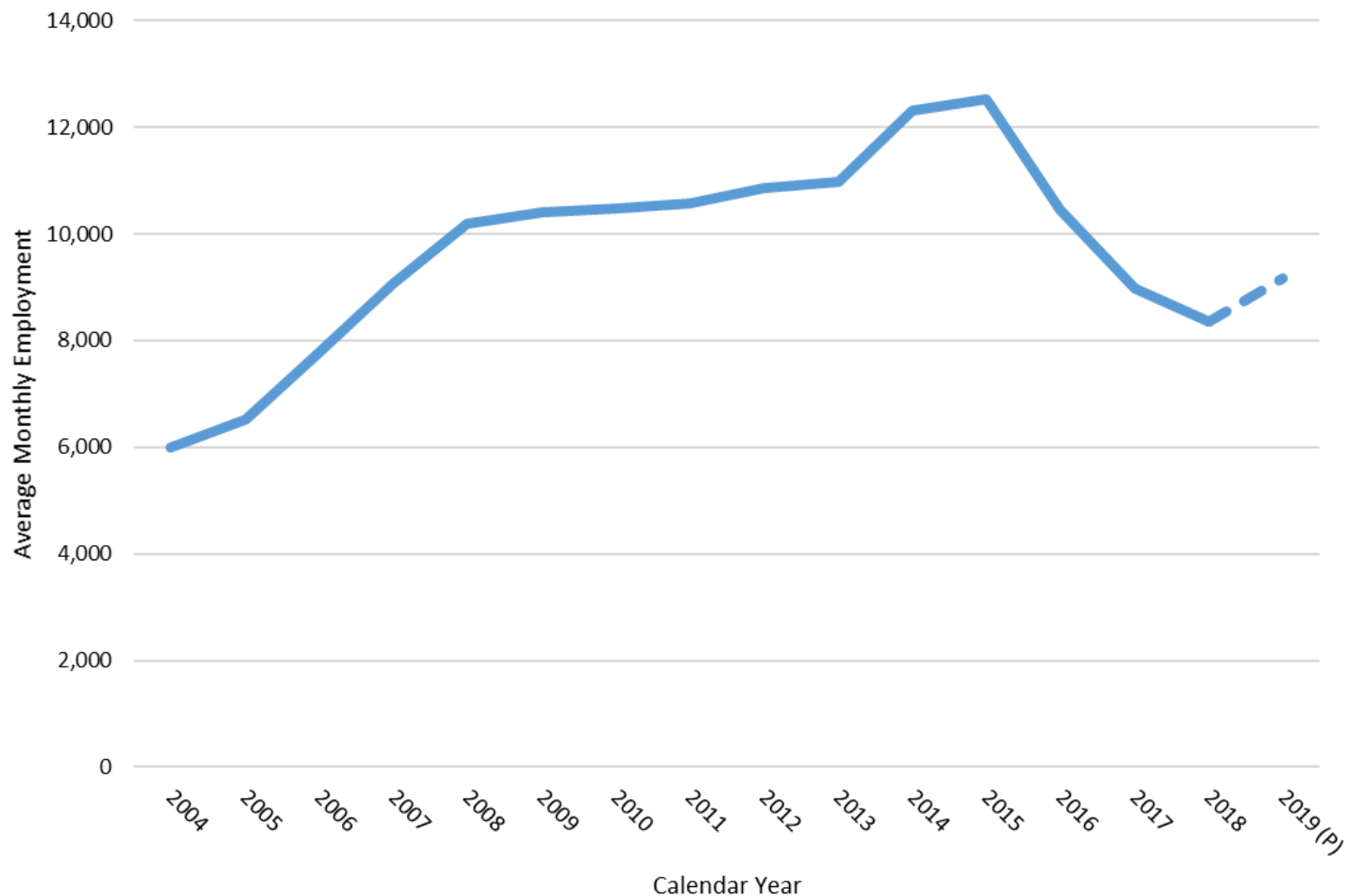
# Operating Expenditures History Compared to Past Forecasts



Source: Fall 2019 and past Revenue Sources Books

Note: These estimates include reported and forecasted allowable lease expenditures only.

# North Slope Oil Patch Historical Employment



Source: Department of Labor, Quarterly Census of Employment & Wages

Notes: Includes employment in all industries in the North Slope's oil patch.

2019 data represents a preliminary estimate.

# GVR Eligible Units versus Non-GVR Eligible Units

- Gross Value Reduction (GVR) allows a company to exclude 20% or 30% of the Gross Value at the Point of Production (GVPP) from the net tax calculation.
- Areas that qualify for GVR include North Slope leases and property:
  1. Unitized after January 1<sup>st</sup>, 2003
  2. Unitized before January 1<sup>st</sup>, 2003 and meet certain conditions
  3. Added to existing participating areas after January 1<sup>st</sup>, 2014 and whose production can be distinguished from the rest of the participating area's production
- Only available for the first seven years of production, ends early if ANS prices average above \$70 per barrel for any three years.
- Oil qualifying for GVR also 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 Credit.

# North Slope Allowable Lease Expenditures Breakout

		History (FY)									
		2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
OPEX	Producing Non-GVR Eligible Units	2,182	2,488	2,838	2,879	3,021	3,161	2,921	2,575	2,426	2,476
	Other Operating Expenditures	88	126	163	231	233	278	346	350	348	396
	<b>Total North Slope OPEX</b>	<b>2,270</b>	<b>2,614</b>	<b>3,001</b>	<b>3,110</b>	<b>3,254</b>	<b>3,439</b>	<b>3,267</b>	<b>2,925</b>	<b>2,774</b>	<b>2,872</b>
CAPEX	Producing Non-GVR Eligible Units	1,343	1,370	1,367	1,563	2,191	2,454	1,921	1,450	1,178	1,352
	Other Capital Expenditures	1,046	947	1,016	1,406	1,547	1,538	1,466	425	518	807
	<b>Total North Slope CAPEX</b>	<b>2,389</b>	<b>2,317</b>	<b>2,383</b>	<b>2,969</b>	<b>3,738</b>	<b>3,992</b>	<b>3,387</b>	<b>1,875</b>	<b>1,696</b>	<b>2,159</b>

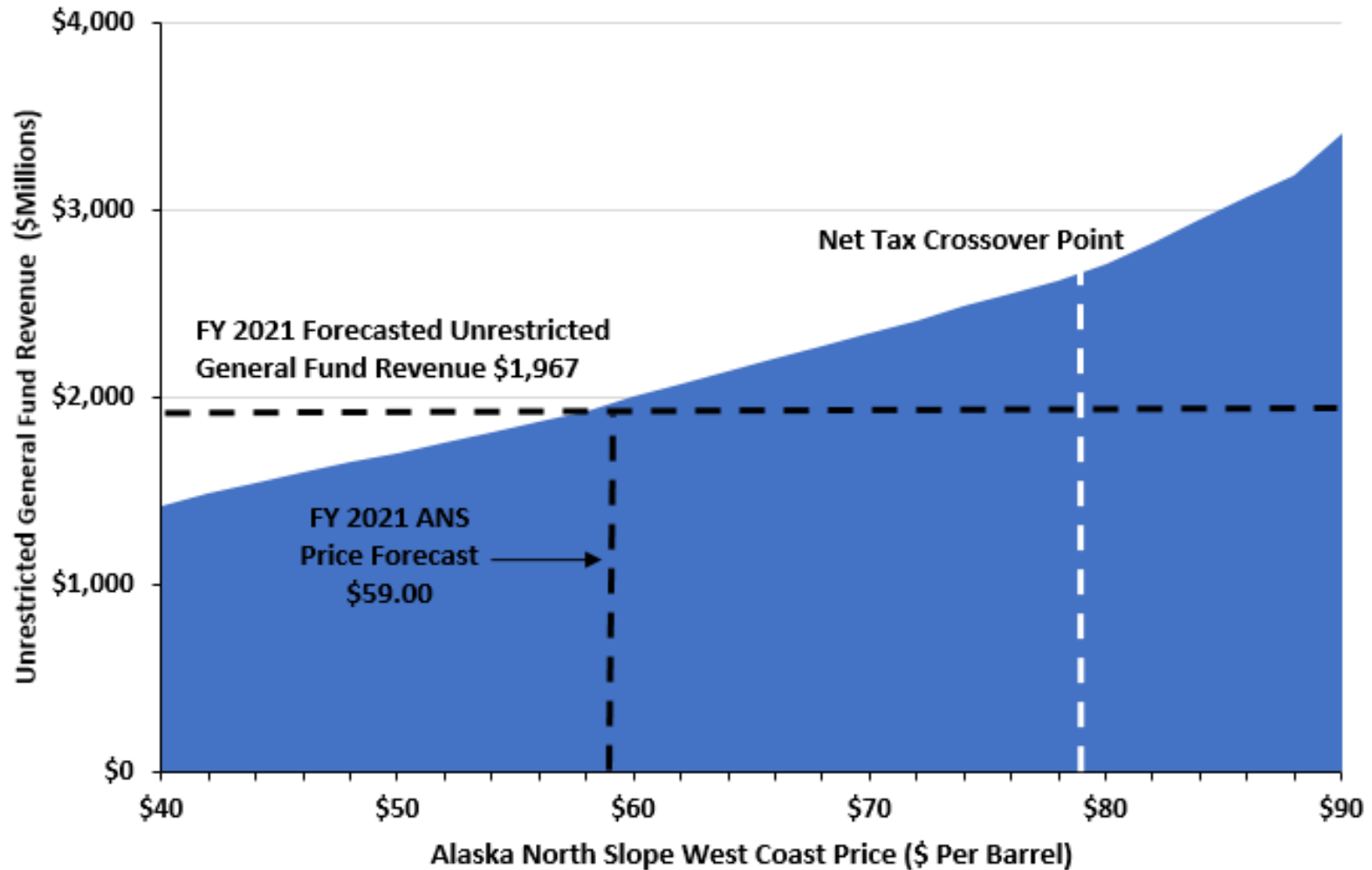
		Forecast (FY)									
		2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
OPEX	Producing Non-GVR Eligible Units	2,386	2,253	2,243	2,386	2,606	2,641	2,556	2,446	2,362	2,293
	Other Operating Expenditures	406	414	438	405	355	406	434	461	552	649
	<b>Total North Slope OPEX</b>	<b>2,792</b>	<b>2,667</b>	<b>2,681</b>	<b>2,791</b>	<b>2,961</b>	<b>3,047</b>	<b>2,990</b>	<b>2,907</b>	<b>2,914</b>	<b>2,942</b>
CAPEX	Producing Non-GVR Eligible Units	1,515	1,330	1,371	1,470	1,471	1,482	1,527	1,371	1,301	1,245
	Other Capital Expenditures	1,102	2,047	2,232	1,842	1,497	1,329	1,027	968	907	878
	<b>Total North Slope CAPEX</b>	<b>2,616</b>	<b>3,377</b>	<b>3,604</b>	<b>3,312</b>	<b>2,968</b>	<b>2,811</b>	<b>2,554</b>	<b>2,339</b>	<b>2,207</b>	<b>2,123</b>

# Forecasted Impact of IMO 2020 Regulations

- Alaska North Slope (ANS) crude oil is currently trading at a ~\$2 premium compared to Brent.
- Reasons for the premium include:
  - Low production of Iranian and Venezuelan crudes
  - Low production of ANS crude in recent months
  - IMO 2020, new low-sulfur marine fuel standards beginning January 2020
- International Maritime Organization (IMO) 2020 has significant and relatively foreseeable effect on ANS prices, so our ANS price includes a premium for FY 2020.
- We anticipate the component of the ANS premium due to IMO 2020 will subside by FY 2021.



# Minimum Tax – Net Tax Crossover: FY 2021



# "Count the Cash": Petroleum Net Fiscal Impact

	History FY 2018	History FY 2019	Forecast FY 2020	Forecast FY 2021
Petroleum Property Tax (State Share)	121.6	119.5	121.6	117.9
Petroleum Corporate Income Tax	66.4	217.7	210.0	215.0
Production Tax (1)	749.9	595.5	380.8	328.1
Oil & Gas Royalties (Includes Rents, Interest & Bonuses)	1,365.4	1,497.0	1,233.5	1,092.1
Other (2)	145.0	193.5	211.3	84.5
<b>Total Petroleum Revenue</b>	<b>2,448.3</b>	<b>2,623.2</b>	<b>2,157.2</b>	<b>1,837.6</b>
<i>Credits Purchased by the State (Assuming Statutory Appropriation in FY 2021)</i>	<i>(78.0)</i>	<i>(100.0)</i>	<i>(1.1)</i>	<i>(166.0)</i>
<i>Lease Expenditures Earned &amp; Carried Forward (Tax Value) (3)</i>	<i>0.0</i>	<i>(190.4)</i>	<i>(164.7)</i>	<i>(462.8)</i>
<b>Petroleum Revenue to State, Net of Above</b>	<b>2,370.3</b>	<b>2,332.8</b>	<b>1,991.4</b>	<b>1,208.8</b>

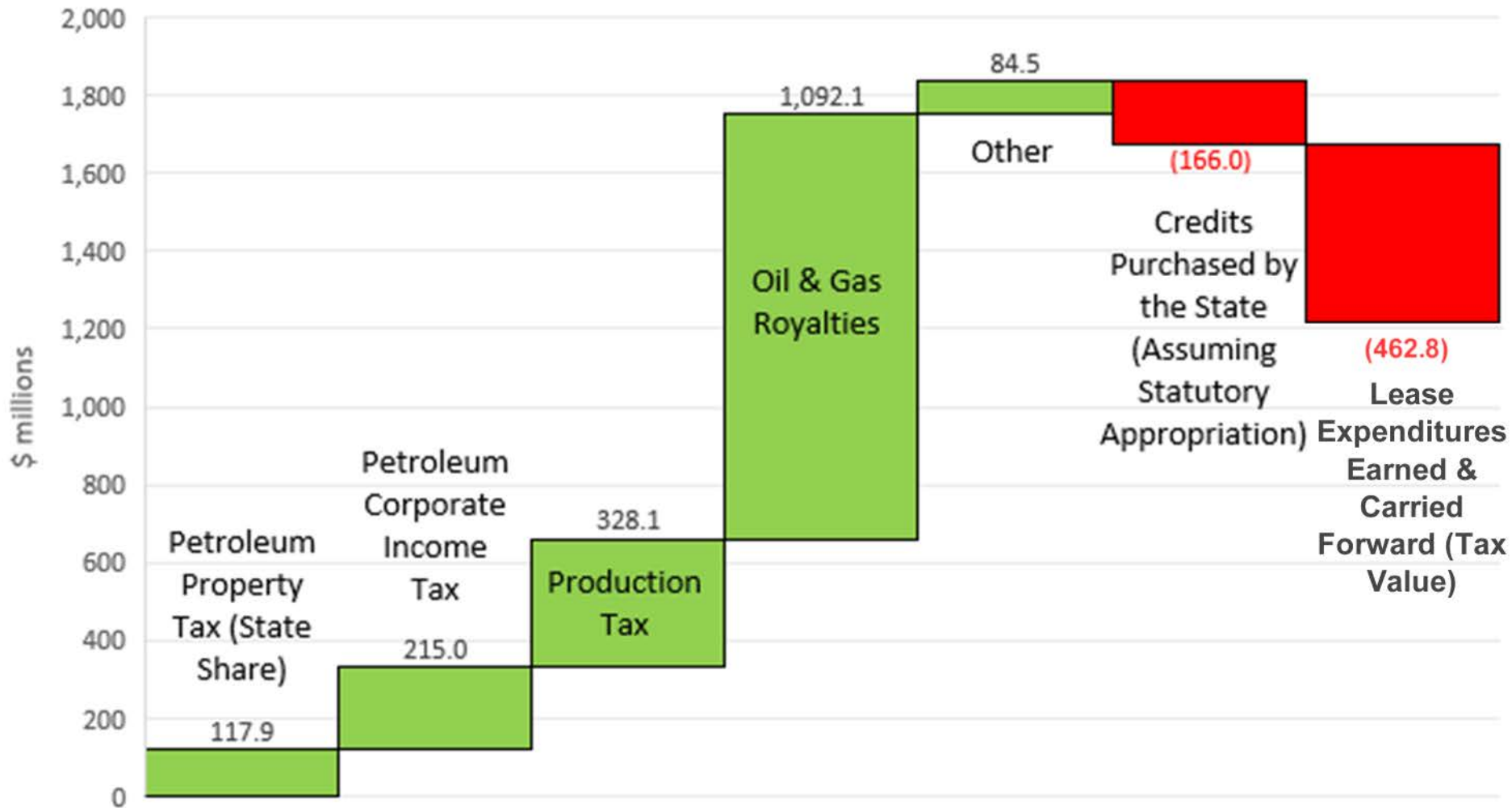
Notes: Includes Restricted and Unrestricted Revenue

(1) Includes Hazardous Release

(2) Includes NPR-A Rents, Royalties, Bonuses, and Constitutional Budget Reserve Fund Deposits

(3) Some lease expenditures earned in FY 2018 may be represented in FY 2019.

# FY 2021 "Count the Cash" Petroleum Breakdown



Source: Fall 2019 Revenue Sources Book

Note: This chart assumes tax credits are paid according to statutory appropriation in FY 2021.

# State Petroleum Revenue by Land Type

Land status	Revenue component			
	Production tax / credits	Royalty	Corporate Income Tax	Property Tax
<b>Offshore beyond 6 miles - Federal OCS</b>	Do not apply	Federal royalties applies; zero shared back to state (in Alaska; other states do receive shared royalties)	Not included in apportionment factor	Does not apply
<b>Offshore 3-6 miles - Federal OCS 8(g) area</b>	Do not apply	Federal royalties applies; 27% shared back to state with no restrictions	Not included in apportionment factor	Does not apply
<b>State lands and offshore 0-3 miles</b>	All credits available; tax applies to all taxable production	State royalty applies	All property, production, and sales included in apportionment factor	Applies to all oil and gas property
<b>NPR-A - federal owned</b>	All credits available; tax applies to all taxable production	Federal royalty applies; 50% of royalties are shared back to state but must be used for benefit of local communities	All property, production, and sales included in apportionment factor	Applies to all oil and gas property
<b>ANWR</b>	All credits available; tax applies to all taxable production	Federal royalty applies; 50% shared back to state with no restrictions (under current law)	All property, production, and sales included in apportionment factor	Applies to all oil and gas property
<b>Other federal land</b>	All credits available; tax applies to all taxable production	Federal royalties applies; 90% shared back to state with no restrictions	All property, production, and sales included in apportionment factor	Applies to all oil and gas property
<b>Private land (including Alaska Native Corporation)</b>	All credits available; tax applies to all taxable production	Privately negotiated royalty applies; not shared with state. However state levies 5% (oil) or 1.667% (gas) gross tax on the value of private landowner royalty interest as part of production tax	All property, production, and sales included in apportionment factor	Applies to all oil and gas property