

Analysis for House Finance CS for HB 245

By Department of Revenue's Economic Research Group

4/12/2016

Method, Inputs, and Assumptions

- Forecast produced from the Alaska Permanent Fund Protection Act model, *available at* <http://gov.alaska.gov/Walker/priorities/new-sustainable-alaska-plan.html>
- **Permanent Fund Starting Value:** \$52 billion
 - Realized portion of corpus: \$40 billion
 - Realized portion of earnings reserve account(ERA): \$6.5 billion
 - Unrealized earnings held by the fund: \$5.5 billion
- **Investment Return:** Callan Associate's 10-year forecast
 - Total return: 6.9% geometric, 13.90% standard deviation
 - Statutory return: P10 = 3.70%, P50 = 6.01%, P90 = 8.14%
 - Inflation rate: 2.25%

Method, Inputs, and Assumptions

- **Petroleum Revenues:**
 - **Oil price:** mean outcomes from probabilistic analysis of ANS oil prices using a PERT distribution from the fall price forecasting session. *See* Fall 2015 RSB (pages 33 and 104); *also see* note on slide 4 of this document
 - **Production:** Fall 2015 RSB (page 39)
 - **2016 royalty revenue:** Total royalty revenue for FY 2016 used for ratio estimations is approximated to ~\$850
- **Dividend Recipients:** Department of Labor population forecast with dividend participation rate from historic data
- **Dividend Program Costs:** Department of Revenue estimate of \$8 million, increasing with inflation. The forecast does not include any other transfers from the dividend fund.

Method, Inputs, and Assumptions

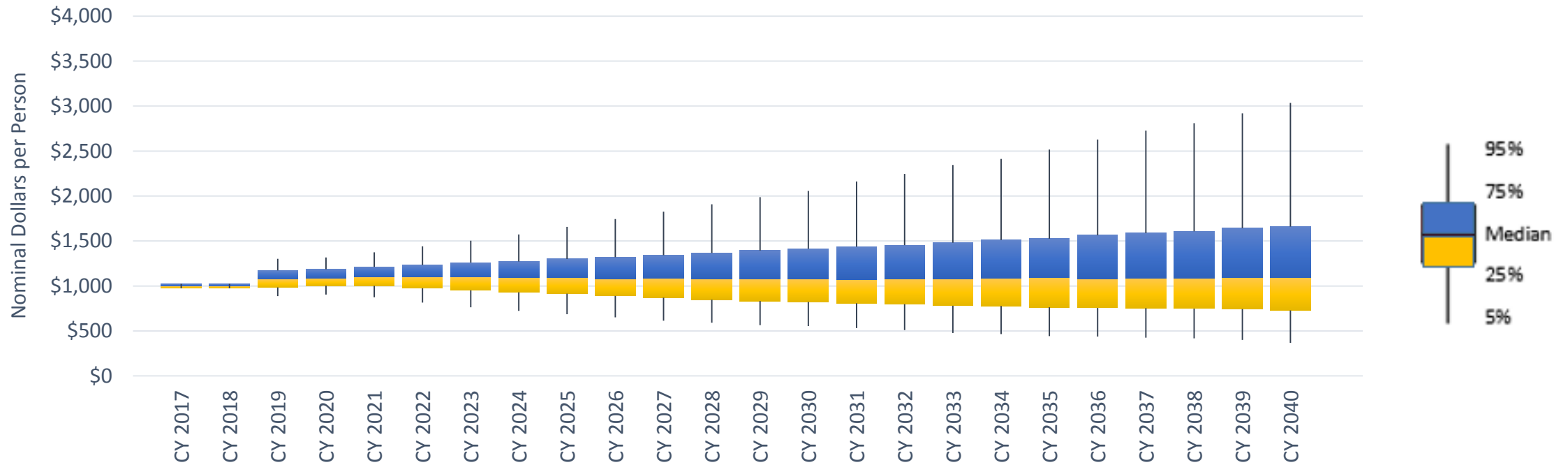
- **Payout Calculation:** Payout is calculated by taking a POMV of the first 5 of the last 6 total fund balance incorporating the earnings reserve and any unrealized gains the fund may have. A POMV percentage of 5.25% was used for this analysis
- **Deposits into the Permanent Fund:** 25% of royalties deposited into the permanent fund corpus.
- **Deposits into the General Fund:** 100% of production tax is deposited into the General Fund and ~59.6% ($74.5\% \times 80\%$) of royalty deposits are placed in the General Fund

Method, Inputs, and Assumptions

- **Dividend Calculation: The sum of :**
 - 20% of the POMV payout from the most recent FY ended, and
 - 20% of the unrestricted royalties (~15% of total royalties) from the most recent FY ended
- Overwriting the above calculation there is a fixed dividend of \$1,000 per person for CY 2017 and CY 2018.

HB 245 CS @ 5.25% POMV

Per Person Dividend Size

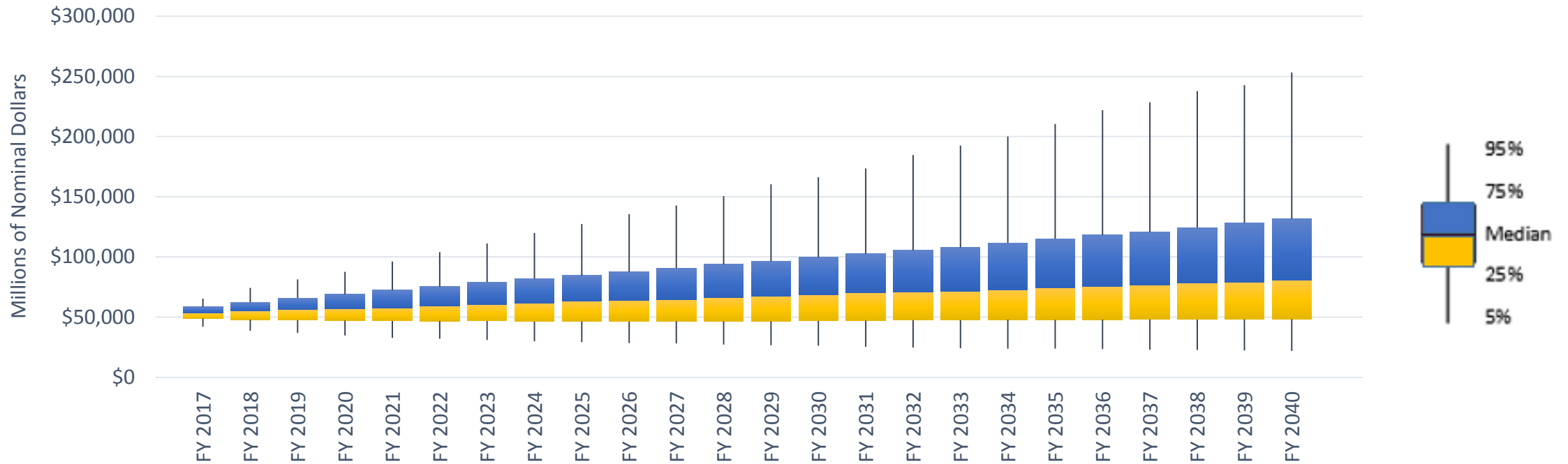


2017 median value: \$1000

2040 median value: \$1091 (\$649 real)

HB 245 CS @ 5.25% POMV

Total EOY Fund Balance

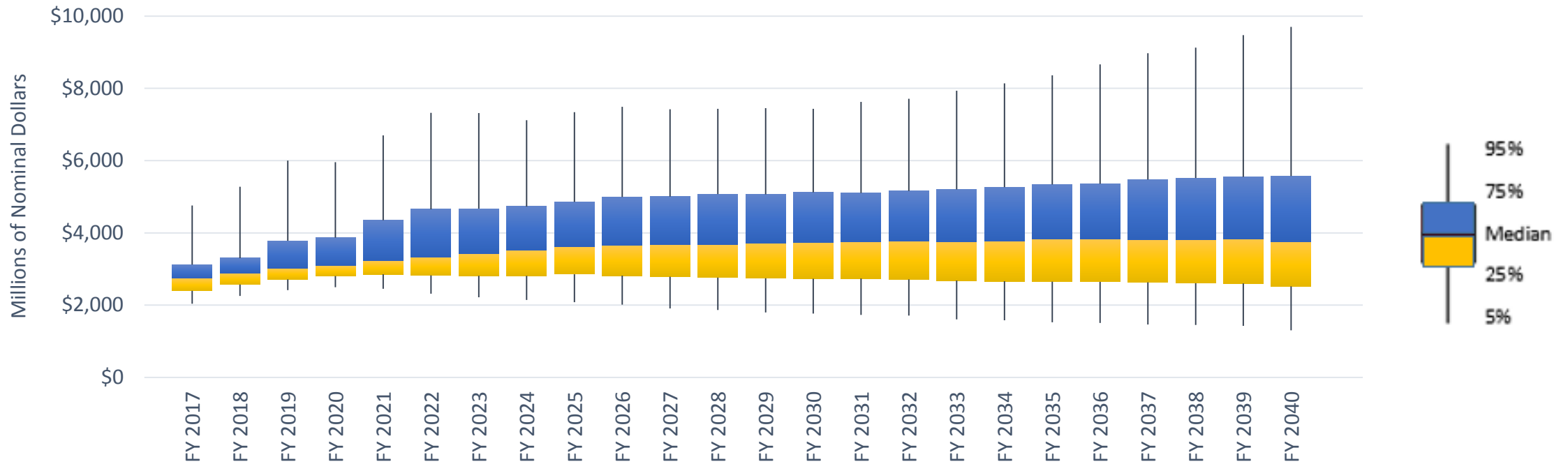


2040 median value: \$80,951 nominal (\$47,457 real) million

ER Depletion Chance: 9.1%

HB 245 CS @ 5.25% POMV

Net Payout To GF plus Production Taxes and Royalties not dedicated to the PF or Dividend



2017 median value: \$2,740 million

2040 median value: \$3,750 (\$2,198 real) million