

REVENUE FORECAST COMPARISON

GENERAL FUND REVENUE FORECASTS

2017-19 Biennium Revised General Fund Revenue Forecasts

The schedule below provides information on the 2017-19 biennium revised general fund revenue forecast based on the December 2018 executive revenue forecast and estimates prepared by IHS Markit.

| | 2017-19 Biennium ¹ | | Increase (Decrease) Amount | Percent | 2019-21 Biennium | |
|------------------------------|-------------------------------------|------------------------------------|-------------------------------|-------------|---------------------------------------|--------------------------------------|
| | December 2018 Executive Forecast | IHS - Baseline January Forecast | | | IHS - Pessimistic January Forecast | IHS - Optimistic January Forecast |
| Sales and use tax | \$1,766,360,206 | \$1,730,148,020 | (\$36,212,186) | (2.1%) | \$1,713,787,520 | \$1,745,417,720 |
| Motor vehicle excise tax | 235,472,237 | 244,488,538 | 9,016,301 | 3.8% | 242,693,578 | 246,206,878 |
| Individual income tax | 772,867,125 | 755,758,188 | (17,108,937) | (2.2%) | 751,074,553 | 760,480,555 |
| Corporate income tax | 155,789,170 | 204,027,317 | 48,238,147 | 31.0% | 186,950,817 | 219,094,977 |
| Total major tax types | \$2,930,488,738 | \$2,934,422,063 | \$3,933,325 | 0.1% | \$2,894,506,468 | \$2,971,200,130 |

2019-21 Biennium Preliminary General Fund Revenue Forecast

The schedule below provides information on the 2019-21 biennium preliminary general fund revenue forecast based on the December 2018 executive revenue forecast and estimates prepared by IHS Markit.

| | 2017-19 Biennium ¹ | | Amount | Percent | 2019-21 Biennium | |
|------------------------------|--|------------------------------------|------------------------|---------------|---------------------------------------|--------------------------------------|
| | December 2018 Executive Forecast ¹ | IHS - Baseline January Forecast | | | IHS - Pessimistic January Forecast | IHS - Optimistic January Forecast |
| Sales and use tax | \$1,928,091,000 | \$1,671,513,400 | (\$256,577,600) | (13.3%) | \$1,491,249,000 | \$1,842,763,300 |
| Motor vehicle excise tax | 245,808,000 | 276,406,730 | 30,598,730 | 12.4% | 251,706,630 | 299,566,920 |
| Individual income tax | 826,059,000 | 833,171,851 | 7,112,851 | 0.9% | 784,154,151 | 877,607,593 |
| Corporate income tax | 93,997,000 | 171,918,370 | 77,921,370 | 82.9% | 146,130,150 | 246,829,900 |
| Total major tax types | \$3,093,955,000 | \$2,953,010,351 | (\$140,944,649) | (4.6%) | \$2,673,239,931 | \$3,266,767,713 |

¹Under the December 2018 executive forecast, the amounts shown for the individual income tax do not include \$6.8 million for an automation credit and a military retiree pay exemption, and the amounts shown for the corporate income tax do not include \$1.3 million for an automation credit, which were recommended in the executive budget.

The December 2018 executive revenue forecast estimate of \$3,094 million for the 2019-21 biennium reflects an increase of \$164 million or 5.6 percent compared to the 2017-19 biennium revised estimate of \$2,930 million. The IHS baseline estimate of \$2,953 million for the 2019-21 biennium reflects an increase of \$19 million or .6 percent compared to the 2017-19 biennium revised estimate of \$2,934 million.

OIL PRICE AND PRODUCTION FORECASTS

The schedule below provides information on the 2017-19 biennium revised general fund revenue forecast based on the December 2018 executive revenue forecast and estimates prepared by IHS Markit.

| | 2017-19 Biennium ¹ | | Amount | Percent | 2019-21 Biennium | |
|------------------------------|--|--|---|------------------------------|--|--------------------------------------|
| | December 2018 Executive Forecast ¹ | IHS - Baseline January Forecast ¹ | | | IHS - Pessimistic January Forecast | IHS - Optimistic January Forecast |
| Average oil price | \$55 to \$46 per barrel (North Dakota price) | \$55 to \$62 per barrel (West Texas Intermediate price) | \$46 to \$50 per barrel (North Dakota price) | 1.34 to 1.35 million barrels | \$61 to \$63 per barrel (West Texas Intermediate price) | 1.4 to 1.3 million barrels |
| Average daily oil production | 1.3 million barrels | 1.35 to 1.4 million barrels | 1.34 to 1.35 million barrels | 1.34 to 1.35 million barrels | 1.4 to 1.3 million barrels | 1.4 to 1.3 million barrels |

¹The amounts shown for the average oil price and production under the 2017-19 biennium reflect the forecasts for the remainder of the biennium.

2019-21 BIENNIIUM OIL TAX REVENUE SCENARIOS - PRICE AND PRODUCTION MATRIX

The schedule below provides information on the total estimated oil and gas tax revenue based on various price and production scenarios for the 2019-21 biennium. The price and production level for each scenario reflect continuous amounts for the entire biennium. For example, if North Dakota oil prices remain at \$30 per barrel and oil production remains at 1,200,000 barrels per day for the entire 2019-21 biennium, oil and gas tax revenue would total \$2,549 million.

| | | 2019-21 Biennium Total Estimated Oil and Gas Tax Revenue (Amounts Shown in Millions) | | | | | | | | | |
|-----------------------------------|-------------------------------------|---|-------------------|-------------------|-------------------|-------------------|-------------------|--------------------------------|-------------------|-------------------|-------------------|
| | | Average Daily Oil Production ¹ | | | | | | | | | |
| West Texas Intermediate Oil Price | North Dakota Oil Price ² | 1,200,000 Barrels | 1,225,000 Barrels | 1,250,000 Barrels | 1,275,000 Barrels | 1,300,000 Barrels | 1,325,000 Barrels | 1,345,000 Barrels ³ | 1,350,000 Barrels | 1,375,000 Barrels | 1,400,000 Barrels |
| \$35.29 | \$30.00 | \$2,549 | \$2,602 | \$2,655 | \$2,708 | \$2,762 | \$2,815 | \$2,868 | \$2,921 | \$2,974 | \$3,027 |
| \$38.24 | \$32.50 | \$2,762 | \$2,819 | \$2,877 | \$2,934 | \$2,992 | \$3,049 | \$3,107 | \$3,164 | \$3,222 | \$3,279 |
| \$41.18 | \$35.00 | \$2,974 | \$3,036 | \$3,098 | \$3,160 | \$3,222 | \$3,284 | \$3,346 | \$3,408 | \$3,470 | \$3,532 |
| \$44.12 | \$37.50 | \$3,186 | \$3,253 | \$3,319 | \$3,386 | \$3,452 | \$3,518 | \$3,585 | \$3,651 | \$3,718 | \$3,784 |
| \$47.06 | \$40.00 | \$3,399 | \$3,470 | \$3,541 | \$3,611 | \$3,682 | \$3,753 | \$3,824 | \$3,895 | \$3,965 | \$4,036 |
| \$50.00 | \$42.50 | \$3,611 | \$3,687 | \$3,762 | \$3,837 | \$3,912 | \$3,987 | \$4,063 | \$4,138 | \$4,213 | \$4,288 |
| \$52.94 | \$45.00 | \$3,824 | \$3,903 | \$3,983 | \$4,063 | \$4,142 | \$4,222 | \$4,302 | \$4,381 | \$4,461 | \$4,541 |
| \$55.88 | \$47.50 | \$4,036 | \$4,120 | \$4,204 | \$4,288 | \$4,373 | \$4,457 | \$4,541 | \$4,625 | \$4,709 | \$4,793 |
| \$57.16 ³ | \$48.59 ³ | \$4,627 | | | | | | | | | |

NOTE: The amounts shown with shading reflect scenarios in which the allocations under the state share ("buckets") total at least \$1.2 billion. When the allocations total at least \$1.2 billion, the general fund would receive \$1 billion based on the statutory changes recommended in the executive budget. For purposes of determining the allocations under the state share, the amounts shown for the scenarios assume the allocations to the Three Affiliated Tribes of the Fort Berthold Reservation average 10 percent of the total tax collections (Between July 2018 and December 2018, the allocations to the Three Affiliated Tribes of the Fort Berthold Reservation averaged 10 percent of the total oil and gas tax collections).

¹North Dakota oil production averaged 1,392,000 barrels per day in October 2018.

²The amounts shown for the North Dakota oil price are based on a 15 percent discount from the West Texas Intermediate (WTI) oil price. North Dakota oil prices averaged \$64.60 per barrel in October 2018 based on the average of the Flint Hills Resources posted prices (\$58.43) and the WTI posted prices (\$70.76). **As of Monday, December 31, 2018, the average North Dakota oil price was \$32.33 based on the average of the Flint Hills Resources posted price (\$19.25) and the WTI posted price (\$45.41).**

³These amounts reflect the December 2018 executive budget, which is based on the following assumptions:

- Oil prices increasing from \$46 to \$50 per barrel in the 1st year and remaining at \$50 per barrel in the 2nd year;
- Oil production increasing from 1,340,000 barrels per day in the 1st year to 1,350,000 barrels per day in the 2nd year;
- Allocations to the Three Affiliated Tribes of the Fort Berthold Reservation averaging 9.6 percent of the total tax collections;
- Changing the allocations under the state share ("buckets") to provide \$1 billion to the general fund.

NOTE: The amounts shown in the schedule reflect preliminary estimates for August 2019 through July 2021. The actual amounts collected and allocated for the 2019-21 biennium may differ significantly based on actual oil price and oil production and any changes to the tax rates or allocation formulas.