

The logo for the province of Alberta, featuring the word "Alberta" in a white, cursive script font, followed by a small white square icon. The logo is set against a background of abstract, overlapping geometric shapes in shades of green and grey.

FISCAL PLAN

REVENUE

The Alberta
JOBS PLAN **BUDGET**
2016

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REVENUE

REVENUE OUTLOOK

Total revenue is forecast to be \$41.4 billion in 2016-17, a decline of \$1.6 billion, or 3.6% from the forecast for 2015-16. This is \$8.1 billion, or 16.4% lower than revenue was in 2014-15, when the dramatic collapse in oil prices began. The negative impact of substantially lower oil prices on business investment, employment, and incomes of both households and corporations has worsened, as prices have dropped more than anticipated and are now expected to take longer to recover. Alberta's economy contracted by an estimated 1.5% in 2015, and is forecast to contract by 1.4% in 2016, as the distress in the energy sector has deepened and spilled over into other sectors of the economy. The government's revenue forecast has continued to deteriorate: 2016-17 non-renewable resource revenue and corporate income tax revenue are forecast to be \$7.6 billion and \$1.5 billion lower than they were in 2014-15.

Total revenue forecast to be \$41.4 billion in 2016-17.

Relative to the October *Budget 2015* forecast, 2015-16 revenue is \$850 million lower, while 2016-17 revenue has decreased by \$4.3 billion, primarily due to the weakness and delay in the oil price recovery. About half of the drop in forecast 2016-17 revenue is from resource revenue and half from income tax revenue. Total revenue in 2018-19 is estimated to be \$1.8 billion lower, but this includes a net \$2.4 billion increase from Climate Leadership Plan revenue initiatives, which helps boost 2018-19 revenue to \$49.6 billion, about the same as 2014-15 revenue. These changes from the forecast produced just six months ago indicate just how rapid and significant the impacts of oil price volatility can be on Albertans, our economy and government revenue.

Total Revenue

(millions of dollars)

	2014-15	2015-16	2015-16	2016-17	2017-18	2018-19
	Actual	Budget	Forecast	Estimate	Target	Target
Personal income tax	11,042	12,047	11,278	11,405	11,759	12,363
Corporate income tax	5,796	4,745	4,972	4,325	4,263	4,819
Other tax revenue	4,598	5,307	5,345	6,037	7,156	7,765
Resource revenue – Bitumen royalties	5,049	1,547	1,144	656	1,586	2,986
Resource revenue – other	3,899	1,221	1,330	708	1,167	1,239
Federal transfers	5,982	6,984	7,236	7,278	7,430	7,667
Investment income	3,113	2,820	2,766	2,115	2,266	2,476
Net income from business enterprises	2,665	2,736	2,537	2,416	2,680	2,816
Premiums, fees and licences	3,564	3,687	3,588	3,649	3,805	3,814
Other revenue	3,773	2,694	2,742	2,787	2,876	3,672
Total Revenue	49,481	43,788	42,938	41,376	44,988	49,617
<i>Change from Budget 2015</i>						
Personal income tax			(769)	(1,246)	(1,423)	(1,549)
Corporate income tax			227	(501)	(586)	(474)
Other tax revenue			38	393	1,384	1,858
Resource revenue – Bitumen royalties			(403)	(1,147)	(1,227)	(1,413)
Resource revenue – other			109	(901)	(385)	(394)
Investment income			(54)	(449)	(246)	(129)
Other revenue			2	(483)	(448)	280
Total Revenue			(850)	(4,334)	(2,931)	(1,821)

Oil prices weak for 2016, but expected to start rising in 2017 when supply-demand imbalance begins to correct.

The revenue forecast is based on oil prices remaining weak for most of 2016, but starting to rise near the end of the year when the excess of global oil supply relative to demand is expected to begin shrinking. After significant job losses in 2016, lower household incomes and two years of significant drops in corporate profits, it is forecast that 2017 will bring employment gains and positive income growth. The economy is expected to expand by 1.9% in 2017, supported by the recovery in oil prices, continued easing of cost pressures, rising oil sands production, a low Canadian dollar and a stronger US economy. The lingering effects of several years of lower energy investment and job losses will persist over the next several years though, with slower personal income, employment and population growth.

Total revenue is forecast to grow by \$8.2 billion, an average of 9.5% per year, between 2016-17 and 2018-19, led mainly by bitumen and crude oil royalties, income taxes and new revenue from Climate Leadership Plan initiatives.

There are a myriad of factors that affect Alberta's revenue, as outlined in the following discussion, but changes to commodity prices, the exchange rate and population growth impact the economic forecast directly and drive most of the other variables factored into the revenue forecast. A more detailed discussion of these elements is provided in the Economic Outlook chapter.

Two new tax credits to encourage investment. Small business rate reduced from 3% to 2%.

Budget 2016 contains several revenue initiatives in support of jobs, investment and diversification and the Climate Leadership Plan. First, two new tax credits are being implemented: one, to encourage investment in eligible small and medium-sized businesses, is reported as expense as it primarily will be a refundable credit; the second, to encourage investment in capital fostering economic diversification, is part of corporate income tax, and reduces revenue by \$15 million in 2016-17 and \$60 million in 2017-18.

Climate Leadership Plan establishes carbon prices to encourage emission reductions. Revenue raised to be fully recycled.

The Climate Leadership Plan imposes an economy-wide price on carbon emissions to discourage consumption with a new carbon levy and new product-based performance standards based on the existing Specified Gas Emitters Regulation (SGER). The carbon levy, included in "Other Tax Revenue," applies to purchases of transportation and heating fuels (\$20/tonne on January 1, 2017, rising to \$30/tonne on January 1, 2018), and is estimated to raise \$274 million in 2016-17, and \$1.7 billion by 2018-19. Large final emitters currently able under SGER to pay for any emissions that exceed their targets, will pay these prices a year earlier (\$20/tonne in 2016; \$30/tonne in 2017). Compliance payments are included in "Other Revenue," and are estimated at \$101 million in 2016-17, and \$917 million by 2018-19. To assist businesses affected by increased costs, the small business corporate income tax (CIT) rate is being reduced effective January 1, 2017, from 3% to 2%, lowering CIT revenue by \$185 million in 2017-18. More details are provided in the Tax Plan chapter.

Climate Leadership Plan Revenue Initiatives (millions of dollars)	2016-17 Estimate	2017-18 Target	2018-19 Target
Climate Leadership Plan:			
Carbon levy	274	1,247	1,709
Specified Gas Emitters Regulation compliance payments	101	146	917
Gross Climate Leadership Plan revenue	375	1,393	2,626
Small business income tax rate decrease	(45)	(185)	(200)
Net Climate Leadership Plan revenue	330	1,208	2,426

NON-RENEWABLE RESOURCE REVENUE

Non-renewable resource revenue in 2016-17 accounts for 3.3% of total revenue, though its share is expected to grow to 8.5% by 2018-19. It is forecast at \$1.4 billion, \$1.1 billion, or 45% lower than in 2015-16, and \$7.6 billion or 85% lower than in 2014-15. Most of the deterioration in revenue is due to the impact of falling global oil prices on bitumen and crude oil royalties. Resource revenue is then estimated to increase by an average of 76% per year between 2016-17 and 2018-19, to \$4.2 billion, with substantial growth in bitumen royalties, mainly due to the slow improvement in oil prices and rising production. However, resource revenue forecast for 2018-19 is still less than half of actual 2014-15 resource revenue. The changes to the royalty regime recommended by the Royalty Review Advisory Panel are intended to be “revenue neutral.”

Resource revenue in 2016-17 is estimated at \$1.4 billion, 85% lower than 2014-15.

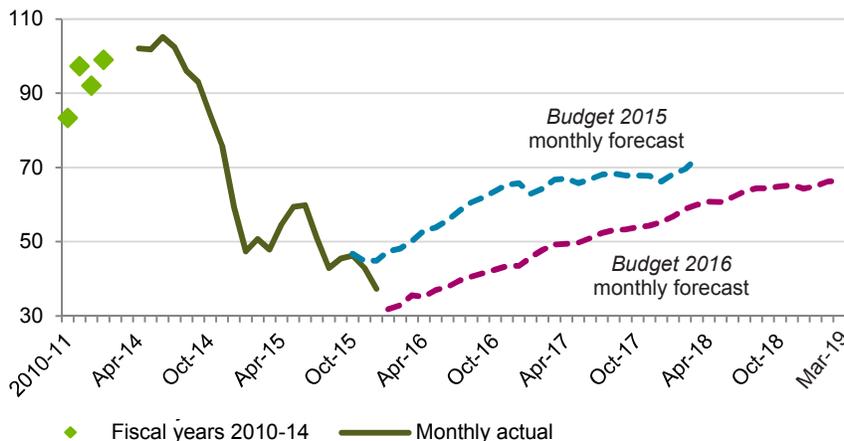
After the West Texas Intermediate (WTI) oil price averaged almost US\$93 per barrel (/bbl) in the previous four fiscal years 2010-11 to 2013-14, the WTI price tumbled by 55%, from US\$105/bbl average in June 2014 to just under \$48/bbl in March 2015. The collapse in prices arose from global supply growth exceeding demand growth. Significant increases in North American production over several previous years, and the return of production from Iraq and Libya boosted supply, while a slowdown in developing economies muted demand growth. OPEC members in late 2014 also decided not to cut production to support prices, but rather sought to force other higher-cost producers to restrain output to correct the “over-supplied” global market.

Increasing supply, slowing demand growth and OPEC’s decision not to cut production resulted in oil price decline.

Global demand exceeded expectations during summer 2015, causing prices to climb in May and June. But this rally was short lived, and prices slumped again in late July and have continued to languish since, sinking to the mid-US\$20 range in January 2016, an over 70% drop from June 2014. Supply growth has not tapered as much as expected, with Saudi Arabia and Iraq increasing output, Canadian, Russian and US production also climbing, and supply from Iran now expected to re-enter the market after the January 2016 nuclear deal removed economic sanctions. Meanwhile, demand growth estimates continue to be tempered by economic uncertainty in China and elsewhere.

Oil Prices, 2010–14 fiscal year actuals; 2014–19 monthly

(US \$ per barrel)



Most analysts now expect oil prices to stay subdued until early 2017.

Most analysts now expect that excess supply and lower oil prices will continue for the remainder of 2016, with supply and demand beginning to rebalance in 2017. The impact of lower drilling in North America, reduced investment elsewhere and production disruptions in war-torn regions should slow supply growth over the next year, even with added Iranian production, while demand should pick up in response to low prices. This in turn will support increasing prices, as a portion of incremental supply comes from higher-cost production.

Revenue forecast based on US\$42 oil price in 2016-17, and US\$64 by 2018-19.

The forecast is based on the WTI oil price averaging US\$42 in 2016-17, \$54 in 2017-18 and \$64 in 2018-19. Other factors affecting oil royalty revenue are the light-heavy oil price differential, the US-Canadian dollar exchange rate, actual Alberta production and producer costs:

Increased reliance on rail transportation widens the differential, lowers prices Alberta producers receive, and reduces royalty revenue.

- ◆ The Western Canadian Select price (WCS), a benchmark price for heavy oil (blended bitumen), is determined by the WTI US dollar price less a “light-heavy differential,” that is largely linked to costs of transporting Alberta production to markets and to refinery demand. Sufficient pipeline capacity lowers costs and the differential, increasing prices Alberta producers can achieve; moving product by rail increases costs and the differential, lowering WCS. In 2016-17, the differential is estimated at US\$15.20/bbl, up from \$13.40 forecast for 2015-16, but about a dollar lower than estimated in *Budget 2015*. With Alberta production ramping up as more projects come on stream, access to Gulf Coast refineries or coastal ports for export is anticipated to remain insufficient or to be achieved through more costly rail transportation. The light-heavy oil price differential is thus forecast to expand to US\$18.50 by 2018-19.

- ◆ A lower US-Canadian dollar exchange rate also supports royalty revenue. The reduction in the exchange rate has been caused mostly by the strength of the US dollar relative to most currencies with US economic performance improving. The bitumen royalty rate is based on the WTI price expressed in Canadian dollars, so the royalty rate is higher with a lower Canadian dollar. A lower dollar also increases oil prices when they are converted from US dollars into Canadian dollars, elevating producers’ revenue and incomes in Canadian dollars. The exchange rate is expected to strengthen over the forecast period.

- ◆ Bitumen production continues to grow, and is estimated to increase 31% between 2015-16 and 2018-19 as projects currently under construction are completed. Conventional crude oil production is expected to slowly decline as drilling levels fall.

- ◆ Low oil prices are dampening Alberta’s labour costs and reducing prices for condensate used to dilute bitumen for transportation (as condensate prices follow oil prices). Natural gas is a significant input for certain oil sands operations and gas prices are forecast to remain weak. Since costs are part of royalty calculations, these support royalty revenue, though it is also the case that royalty rates are sensitive to prices, so that rates are lower with lower prices.

Lower US-Canadian dollar exchange rate, easing business costs and increasing bitumen production help support royalty revenue.

Bitumen royalties are estimated at \$656 million in 2016-17, \$488 million, or 43% lower than in 2015-16, and \$4.4 billion or 87% lower than 2014-15. They are forecast to increase to almost \$3 billion in 2018-19, with an average annual growth rate of 113% between 2016-17 to 2018-19. The main drivers are increasing oil prices and higher production.

Bitumen royalties of \$656 million in 2016-17, 87% lower than in 2014-15.

The government will supply bitumen to the North West Upgrader, tentatively scheduled to begin operations in 2017, which will upgrade bitumen into higher-valued products such as ultra-low sulphur diesel. The Province will receive a portion of the revenue from the sale of the upgraded product, but is also responsible to pay monthly cost of service tolls for the 30-year term of the contract. The financial return from the project is heavily dependent on the costs of constructing and operating the facility, as well as the price differential between bitumen and upgraded products over the term of the contract.

Conventional oil royalties are estimated at \$333 million in 2016-17, \$277 million or 45% lower than in 2015-16, and \$1.9 billion or 85% lower than in 2014-15. While they are anticipated to recover, they are forecast at only \$616 million by 2018-19, with average annual growth of 36% between 2016-17 and 2018-19. Incentives in the royalty system have encouraged the use of new technologies to drill wells that previously would have been too costly to develop. Production has risen since 2011, but an increasing amount of production is from horizontal wells, subject to the same 5% royalty rate as all conventional oil wells for year one of production, but then paying the 5% rate for an additional one to three years, depending on well depth. In 2015, 83% of crude oil wells placed in production were horizontal wells.

Conventional oil royalties of \$333 million in 2016-17, 85% lower than in 2014-15.

Oil Assumptions

	2014-15 Actual	2015-16 Budget	2015-16 Forecast	2016-17 Estimate	2017-18 Target	2018-19 Target
Revenue (\$ millions)						
Bitumen royalty	5,049	1,547	1,144	656	1,586	2,986
Crude oil royalty	2,245	536	610	333	659	616
Prices						
West Texas Intermediate (US\$/bbl)	80.48	50.00	45.00	42.00	54.00	64.00
WCS @ Hardisty (Cdn\$/bbl)	70.78	46.50	41.00	36.40	48.30	59.00
Differential (US\$/bbl)	(17.30)	(13.60)	(13.40)	(15.20)	(17.50)	(18.50)
Production (thousands of barrels / day)						
Conventional	586	560	529	524	506	489
Raw bitumen	2,330	2,473	2,403	2,668	2,890	3,151
Exchange rate (US¢/Cdn\$)						
	88.0	78.0	76.0	73.5	75.5	77.5

Natural gas and by-product royalties are estimated at \$151 million in 2016-17, \$190 million or 56% lower than in 2015-16, and \$838 million or 85% lower than in 2014-15. They are expected to grow at 53% per year on average, out to 2018-19, when they are forecast at \$355 million. Revenue includes royalties from natural gas by-products, such as propane, butane and pentane, whose prices and associated revenue more closely follow oil prices. The recently announced Petrochemicals Diversification Program, which will provide royalty credits for investment in new petrochemical facilities, is estimated to reduce revenue by \$20 million in 2018-19.

Immediate outlook for natural gas prices and royalties remains weak.

The immediate outlook for natural gas prices continues to be weak, with abundant natural gas supplies keeping prices low. North American natural gas storage is at record levels, after weather in both the summer and winter was mild, and from continued growth in US shale gas production. Gas production is anticipated to keep pace with demand growth arising from improving US economic conditions, US liquid natural gas exports and retirement of coal-fired electricity plants over the medium term.

As a result, the Alberta Reference Price (ARP) for 2016-17 is estimated at Cdn\$2.40/GJ, 10 cents higher than 2015-16, but \$1.11 lower than 2014-15. The ARP is forecast to remain low over the next two years, reaching \$3.00/GJ by 2018-19. Natural gas production is forecast to increase slightly in 2015-16 and then to trend down.

Natural Gas Assumptions

	2014-15	2015-16	2015-16	2016-17	2017-18	2018-19
	Actual	Budget	Forecast	Estimate	Target	Target
Revenue (\$ millions)	989	343	341	151	230	355
Price (Cdn\$/GJ)	3.51	2.60	2.30	2.40	2.80	3.00
Production (billions of cubic feet)	4,700	4,778	4,841	4,765	4,648	4,533

Lower demand for Crown leases expected.

Bonuses and sales of Crown land leases revenue has fallen substantially since the \$3.3 billion realized in 2011-12, when the June 1, 2011 sale brought in \$842 million, the highest one-day sale amount in Alberta's history. In 2015-16, revenue from land lease sales is estimated at \$210 million, while in 2016-17 it is estimated at \$95 million. With companies tightening their belts, it is anticipated that fewer hectares will be sold and at lower per hectare prices over the forecast period. In fact, 2015 bonuses were the lowest in 23 years, while average prices per hectare were the lowest in 19 years.

Non-Renewable Resource Revenue

(millions of dollars)

	2014-15	2015-16	2015-16	2016-17	2017-18	2018-19
	Actual	Budget	Forecast	Estimate	Target	Target
Bitumen royalty	5,049	1,547	1,144	656	1,586	2,986
Crude oil royalty	2,245	536	610	333	659	616
Natural gas & by-products royalty	989	343	341	151	230	355
Bonuses & sales of Crown leases	476	181	210	95	157	156
Rentals and fees	173	145	156	118	109	101
Coal royalty	16	15	13	11	12	11
Total Resource Revenue	8,948	2,768	2,474	1,364	2,753	4,225

TAX REVENUE

Tax revenue is forecast at \$21.8 billion in 2016-17. This is an increase of \$172 million, or 1% from 2015-16, but this includes additional revenue of \$274 million from the Climate Leadership Plan carbon levy. The one percentage point increase to the insurance premiums tax, that took effect on April 1, 2016 and was first announced in the March 2015 budget, also adds about \$161 million in estimated revenue in 2016-17. Without these two changes, revenue would be \$21.3 billion, lower than both 2015-16 and 2014-15 revenue. Furthermore, a large portion of the \$588 million increase in “Other taxes” in 2015-16 from 2014-15, that carries forward to subsequent years, is due to the increases to tobacco and fuel taxes implemented in both the March and October 2015 budgets. Finally, personal and corporate income taxes were raised in 2015. The revenue added from these various policy changes obscures the extent of the weakness in revenue Alberta would have experienced, especially in corporate and personal income taxes. Tax revenue is forecast to grow about 7% per year between 2016-17 and 2018-19, reaching \$24.9 billion, but much of this increase is due to the ramping up of the carbon levy. Without the carbon levy, tax revenue would grow by 4% per year, to \$23.2 billion. More details on the carbon levy are provided in the Tax Plan chapter.

Tax revenue forecast at \$21.8 billion in 2016-17.

Personal income tax is estimated at \$11.4 billion in 2016-17. After removing a \$97 million positive prior-years’ adjustments to 2015-16 revenue, base personal income tax revenue is estimated to increase by only \$224 million, or 2% from 2015-16. This is entirely due to the tax rate increases implemented in 2015, as primary household income growth is forecast to be negative 1.4% in 2016, with job losses and negative wage growth. These turn positive in 2017 and beyond. As a result, personal income tax revenue is forecast to increase by an average of 4.1% per year between 2016-17 and 2018-19, though this is well below the pace of growth experienced in recent years.

Personal income tax revenue forecast at \$11.4 billion in 2016-17, and expected to increase by 4.1% per year over the next two years.

Corporate income tax is forecast at \$4.3 billion in 2016-17, \$647 million or 13% lower than 2015-16 and \$1.5 billion or 25% lower than 2014-15. Revenue in 2015-16 is forecast to have increased slightly from the *Budget 2015* estimate despite the deeper drop in oil prices, based on higher-than-expected cash instalment payments from corporations. Corporate income tax revenue is expected to decrease again in 2017-18, before increasing in 2018-19, when it is forecast to be \$4.8 billion. Corporate profits are estimated to have declined by 52% in 2015, and are expected to decline 18% in 2016, before increasing by 49% in 2017, mirroring the swings in oil prices.

Corporate income tax revenue forecast at \$4.3 billion in 2016-17, 25% lower than in 2014-15.

As part of the jobs, investment and diversification package, a two-year Capital Investment Tax Credit for spending on property or other capital in eligible industries is estimated to reduce revenue by \$15 million in 2016-17 and \$60 million in 2017-18. A portion of the revenue raised under the Climate Leadership Plan is being allocated to offset revenue reduced by lowering the small business corporate income tax rate, effective January 1, 2017, from 3% to 2%. This is intended to help small businesses deal with higher costs resulting from the carbon levy, and is estimated to reduce revenue by \$45 million in 2016-17, \$185 million in 2017-18 and \$200 million by 2018-19. More details are provided in the Tax Plan chapter.

Climate Leadership Plan includes small business rate cut.

Education property tax revenue is forecast at \$2.4 billion in 2016-17, an increase of \$153 million, or 6.8% from 2015-16. The increase is due primarily to setting the fiscal year requisition amounts based on 32% of the total education system operating expense target, which was elevated by higher-than-expected K-12 enrolment growth for the 2015-16 school year, and then 1.3% growth for 2016-17. The government intends to determine the approach for setting the requisition amount as part of each annual budget process, providing flexibility with respect to property tax policy.

Education property tax mill rates for 2016 are being reduced by 0.8%. The residential/farm rate will drop 2¢ to \$2.48 per \$1,000 of equalized assessment, and the non-residential rate will fall 3¢ to \$3.64 per \$1,000 of equalized assessment. Since the province took over responsibility for the education property tax in 1994, the proportion of provincial education property tax relative to total provincial and municipal property tax has fallen from 51% to 25%, while the municipal portion has increased from 49% to 75%. Education property tax revenue is forecast to increase \$94 million by 2018-19, an average of 1.9% per year between 2016-17 and 2018-19.

Other tax revenue is forecast at \$3.3 billion in 2016-17, an increase of \$265 million, or 8.6% from 2015-16, but \$853 million or 34% higher than in 2014-15. The change from 2015-16 primarily reflects the one percentage point increase to the insurance premiums tax, effective April 1, 2016, announced March 2015. The change from 2014-15 is mainly from the higher tobacco and fuel tax rates implemented in March and October 2015. Other tax revenue is anticipated to grow at an annual average of 2.9% between 2016-17 and 2018-19, reaching \$3.5 billion.

Tax Revenue

(millions of dollars)

	2014-15	2015-16	2015-16	2016-17	2017-18	2018-19
	Actual	Budget	Forecast	Estimate	Target	Target
Personal income tax	11,042	12,047	11,278	11,405	11,759	12,363
Corporate income tax	5,796	4,745	4,972	4,325	4,263	4,819
Education property tax	2,102	2,253	2,261	2,414	2,463	2,508
Carbon levy	-	-	-	274	1,247	1,709
Other taxes	2,496	3,054	3,084	3,349	3,446	3,548
Total	21,436	22,099	21,595	21,767	23,178	24,947

FEDERAL TRANSFERS

Federal transfers are forecast at \$7.3 billion in 2016-17. This is an increase of \$42 million or 0.6% from 2015-16, though 2015-16 revenue included a one-time payment of \$251 million under the federal Fiscal Stabilization program. Removing this, 2016-17 revenue is up \$293 million or 4.2% from 2015-16.

Federal transfers forecast to be \$7.3 billion in 2016-17.

The Canada Social Transfer and Canada Health Transfer grow in line with the federal annual escalators (3% for CST and 6% for CHT until 2017-18 when the CHT escalator will be based on national nominal GDP growth) and changes to Alberta's share of the national population. Federal transfers are forecast to grow by an average of 2.6% between 2016-17 and 2018-19, reaching \$7.7 billion.

The federal government has committed to providing provinces with significant support for infrastructure, to help deal with current economic difficulties. Since 2012-13, the Alberta Auditor General has required Alberta to adopt the option under accounting standards of deferring revenue recognition of transfers for infrastructure until the related asset is completed, and then to recognize the revenue against the corresponding amortization expense. In other words, Alberta will receive cash from the federal government, spend it on asset acquisition (capital investment), but not record anything in either revenue or expense. When the asset is completed, it will be added to the balance sheet, and then depreciated over time through amortization expense. On the revenue side, a liability is recorded (deferred capital contribution), and it too will be reduced over time as federal revenue is recognized to match amortization expense.

Federal transfers for infrastructure not reported in revenue when cash spent, but rather over multiple future years as related asset is depreciated.

Included in Capital Plan funding is therefore estimated cash to be received and spent, but the revenue is not reported until later and is spread out over the "life" of the asset. *Budget 2016* assumes \$583 million in cash funding previously committed by the federal government for the Calgary ring road and another \$700 million for other projects. Nothing is included related to the additional funding announced in the recent federal budget, as program parameters and other details have not been finalized.

Transfers from Government of Canada

(millions of dollars)

	2014-15	2015-16	2015-16	2016-17	2017-18	2018-19
	Actual	Budget	Forecast	Estimate	Target	Target
Canada Health Transfer	3,601	3,967	4,005	4,223	4,344	4,519
Canada Social Transfer	1,452	1,513	1,516	1,563	1,608	1,659
Transfers to SUCH sector	321	484	484	500	522	523
Agriculture support programs	288	313	273	300	279	289
Infrastructure support	341	289	269	282	263	266
2013 Alberta flood assistance	(423)	-	-	-	-	-
Other transfers	402	418	689	410	414	411
Total	5,982	6,984	7,236	7,278	7,430	7,667

INVESTMENT INCOME

Investment income is forecast at \$2.1 billion in 2016-17 a \$651 million or 23.5% decrease from 2015-16, and \$998 million or 32.1% lower than income in 2014-15. The decline in investment income is mainly due to significant gains from strong equity markets in 2013, and income from those gains being realized in subsequent years as the assets are sold. Indeed, 2013-14 investment income was the second highest level ever, and portions of gains embedded in Heritage and endowment fund assets from that year were realized in 2014, boosting 2014-15 income. A significant gain was also realized in 2015-16 when Alberta's interest in a toll road in Chile was sold.

Investment income drops in 2016-17 from previous years' strong results, but then grows by 8.2% per year as returns reset to normal levels.

Investment income is estimated to increase by an average of 8.2% per year between 2016-17 and 2018-19, as income realized by the Heritage and endowment funds, and overall financial market returns, reset to normal levels. Income now includes about \$260 million from the SUCH sector, primarily reflecting reserves and post-secondary institution endowments.

Investment income from Alberta Capital Finance Authority (ACFA) is forecast to increase by an average of 17.8% per year between 2016-17 and 2018-19. ACFA, which accesses the government's triple A credit rating to borrow and then transfers that advantage to municipalities and other local authorities by on-lending the proceeds, is expecting increased lending activity. A large portion of the government's general debt servicing costs reflect this activity, and ACFA's investment income is approximately offset by the related debt servicing costs.

Investment income of Agriculture Financial Services Corporation (AFSC) is forecast to increase by an average of 12.4% per year between 2016-17 and 2018-19, due to higher interest income from lending programs and higher estimated balances in insurance funds.

Contingency Account employed to offset deficits and protect valued programs during this time of low oil prices and revenue challenges.

Investment income from the Contingency Account is forecast to decrease as its balance is exhausted in 2016-17, as is its function, to deal with the deficits associated with the current revenue challenge. As the government returns to surplus, the Contingency Account will be replenished.

Fund Assets / Investment Income

(millions of dollars)

	Assets as at Mar. 31, 2015	2014-15 Actual	2015-16 Forecast	2016-17 Estimate	2017-18 Target	2018-19 Target
Heritage Savings Trust Fund	14,961	1,825	1,643	1,185	1,325	1,449
Endowment Funds ^a	3,321	354	372	256	283	305
Contingency Account	6,529	116	108	62	-	-
Alberta Capital Finance Authority	15,062	225	190	157	178	218
Agriculture Financial Services Corp.	4,353	132	132	137	153	173
SUCH sector	n.a.	369	264	258	261	256
Other ^b	578	92	57	60	66	75
Total	44,804	3,113	2,766	2,115	2,266	2,476

^a Includes Alberta Heritage Foundation for Medical Research Endowment Fund, Alberta Heritage Scholarship Fund and Alberta Heritage Science and Engineering Research Fund.

^b Assets include the Cancer Prevention Legacy Fund and Alberta Enterprise Corporation; investment income includes income from these sources and other investment income from a variety of smaller funds and accounts.

OTHER REVENUE

Other revenue is forecast at \$8.9 billion in 2016-17, \$15 million lower than 2015-16. The decrease is primarily due to the broader impact of low oil prices on Alberta's economy. Gaming and lottery revenue is down \$94 million, while net income from Alberta Treasury Branches (ATB) is \$55 million lower. This follows an expected severe drop of \$201 million from budget in 2015-16 ATB net income, due to higher loan loss provisions. Lower ATB net income also means that ATB's payment in lieu of taxes reported in "Other premiums, fees and licenses" has also been reduced. Forecasts for other volume-driven revenue sources, such as land titles and motor vehicle licenses are also slightly weaker. The two-year freeze on post-secondary tuition fees remains, saving students \$65 million in 2016-17.

Alberta Treasury Branch net income and other volume-driven revenue also impacted by low oil prices.

Other revenue is estimated to grow by an average of 7.9% per year between 2016-17 and 2018-19, reaching \$10.3 billion. This relatively strong growth is mainly due to increasing compliance payments to the Climate Change and Emissions Management Fund from large emitters who exceed their emissions targets, as part of the Climate Leadership Plan changes. Revenue is estimated to increase by \$816 million between 2016-17 and 2018-19, with deeper emissions reduction targets and the higher carbon prices.

Revenue from Other Sources

(millions of dollars)

	2014-15	2015-16	2015-16	2016-17	2017-18	2018-19
	Actual	Budget	Forecast	Estimate	Target	Target
AGLC - Gaming / lottery	1,526	1,545	1,545	1,451	1,481	1,510
AGLC - Liquor	767	851	854	868	879	895
Alberta Treasury Branches	325	283	82	27	226	272
Post-secondary tuition fees	1,116	1,138	1,138	1,157	1,199	1,199
Health / school board fees	672	669	671	711	724	681
Other premiums, fees and licences	1,776	1,880	1,779	1,781	1,882	1,934
SUCH sales, rentals, services	850	903	906	950	972	966
SUCH fundraising, donations, gifts	667	564	561	568	586	582
Climate Change and Emissions Management Fund	77	91	92	101	146	917
Other	2,226	1,193	1,239	1,238	1,266	1,346
Total	10,002	9,117	8,867	8,852	9,361	10,302

RISKS

Alberta relies heavily on revenue sources that are volatile and unpredictable, including non-renewable resources, corporate income tax and investment income. Since 2004-05, these revenue sources have accounted for anywhere between 35% and 55% of total revenue, but in 2016-17 they are estimated at less than 20% of total revenue. This revenue is linked to factors such as energy prices, equity markets, exchange rates, geopolitical events and global economic swings. These are all clearly unpredictable, can fluctuate rapidly, and are outside Alberta's influence. The drop in resource revenue and corporate income tax is directly tied to the current precipitous drop in oil prices.

Alberta has relied heavily on volatile, unpredictable revenue sources.

The degree of revenue uncertainty exposes the Alberta government uniquely relative to other governments. Like energy companies, banks and other

Budget 2016 contains risk adjustments to bottom lines, to signal possible revenue shortfalls.

investors, Alberta must assess the degree of risk it is willing to take associated with its revenue outlook and spending decisions. The government decided in *Budget 2015* to implement revenue policy changes that broaden the amount of revenue raised from taxes and fees in order to improve sustainability of funding for programs. In *Budget 2016*, the government has decided to build in an annual risk adjustment that reduces the bottom line, as a way to signal the possible extent of a revenue shortfall. The adjustment is \$700 million in the 2016-17 fiscal year, \$1.5 billion in 2017-18 and \$2 billion in 2018-19.

GLOBAL AND US ECONOMIES

- ◆ *Budget 2016* assumes global economic growth of 3.4% in 2016 and 2017, based on solid performance in the US, but ongoing struggles in Europe, and mixed prospects for the emerging economies. Substantial risks remain.
- ◆ Weaker-than-forecast global growth would harm Alberta's revenue forecast, as oil prices would remain lower for longer.

ENERGY PRICES

Oil prices forecast at US\$42 in 2016-17, and to rise to US\$64 by 2018-19.

- ◆ Oil prices are expected to begin recovering at the end of 2016. WTI is forecast to average US\$45 in 2015-16, and US\$42 in 2016-17, and then to slowly ascend towards US\$64 by 2018-19. Energy analysts continue to vary on the speed of recovery and the level prices will recover to, although most expect long-term prices to reach \$70 sometime within the next five years.
- ◆ Price forecasts depend on an array of assumptions about demand and supply. Factors influencing demand include economic growth in disparate regions around the world, from the US to China to Europe, pipeline or refinery outages, and storage and speculative market activities by traders. On the supply side, investment and drilling decisions by producers, geopolitical events, civil unrest or terrorist strikes, economic sanctions, OPEC market-manipulation or simple weather-related production disruptions all have to be factored into forecasting.
- ◆ Without sufficient pipeline capacity, Alberta's growing bitumen production will be transported by more costly rail, increasing the light-heavy differential and lowering prices for Alberta producers and revenue for government.
- ◆ Natural gas prices remain weak due mainly to increasing production of US shale gas that has outstripped demand growth.

INTEREST RATES

- ◆ Interest rates are forecast to remain low with the fragile global economy. Lower rates generally help government investment income. While short-term investments perform poorly, the market value of bonds with higher rates held in endowment portfolios increase.
- ◆ Lower rates also typically encourage business investment, economic activity and consumer spending, all providing economic support to Alberta's resource-based economy harmed by the oil price weakness.
- ◆ Rates eventually will rise, posing a risk for indebted households, consumer spending and the government as substantial borrowing is planned, and higher rates make borrowing or refinancing of debt more expensive.

EXCHANGE RATES

- ◆ The US-Canadian dollar exchange rate has weakened considerably, in large part due to US economic strength relative to other global economies, but also due to the Bank of Canada keeping target interest rates down. The forecast assumes the dollar will remain low at 73.5US¢/Cdn\$ in 2016-17, and move tepidly to 77.5¢ by 2018-19.
- ◆ A weaker Canadian dollar increases the value of oil exports and the demand for exports priced in Canadian dollars, helping Alberta's economic growth. Changes in the exchange rate affect the profitability of energy producers, which can affect investment and government resource revenue as energy prices and contracts are mainly in US dollars. Investment income is also impacted due to significant foreign holdings in the Heritage Savings Trust Fund and endowment funds.

EQUITY MARKETS

- ◆ While equity markets performed well in 2013, and 2014 income benefited, markets can be affected by a wide range of factors, such as the strength of the US economy, uncertainty regarding the European and developing economies, or fluctuations in commodity prices and interest rates.
- ◆ Alberta has significant assets invested globally in a variety of asset classes. The investment income forecast is based on long-term expected rates of return. Annual market performance and, in turn, investment income, could vary considerably from the average.

Alberta has significant assets invested globally in a variety of asset classes.

NET CORPORATE OPERATING SURPLUS

- ◆ Corporate profits in Alberta were hit hard in 2015, and are expected to weaken further in 2016 and take about half a decade to recover from low oil prices. Partly offsetting this are easing of labour and other costs, the positive impact of the low Canadian dollar on exports, and some strength in non-energy sectors. Energy investment also declined dramatically in response to the oil price decline, and as energy projects transition from the construction to production phase. However, it can be difficult to predict how forecast net corporate operating surplus translates to corporate income tax revenue, as taxable income can differ significantly from corporate profits, due to tax changes or discretionary deductions such as depreciation or prior-year losses.

Corporate net operating surplus forecast to take half a decade to recover to 2014 levels. Corporate income tax revenue is difficult to forecast.

Sensitivities to Fiscal Year Assumptions, 2016–17^a

(millions of dollars)

	Change	Net Impact
Oil price (WTI US\$/bbl)	-\$1	-130
Light-heavy oil price differential (US\$/bbl)	+\$1	-70
Natural gas price (Cdn\$/GJ)	-10¢	-25
Exchange rate (US¢/Cdn\$)	+ 1¢	-85
Interest rates	+1%	-230
Primary household income	-1%	-170

^a Sensitivities are based on current assumptions of prices and rates and show the effect for a full 12 month period. Sensitivities can vary significantly at different price and rate levels. The energy price sensitivities do not include the potential impact of price changes on the revenue from land lease sales.

