## LIQUOR EXCISE AND LICENSE TAXES

## Revenue Description

Sections 16-1-401 and 16-1-404, MCA, direct the Department of Revenue to collect an excise tax of $16 \%$ and a license tax of $10 \%$ of the retail selling price on all liquor sold and delivered in the state and manufactured by distillers producing 200,000 or more proof gallons of alcohol annually. Both the excise and license tax rates are smaller for distillers that produce less than 200,000 proof gallons of alcohol. However, all Montana liquor is supplied by distillers that produce at least 200,000 proof gallons of alcohol annually.

A small portion of liquor excise tax revenue is refunded to three Indian tribes that have revenue sharing agreements with the state. The remaining revenue, approximately $98 \%$ of the liquor excise tax, is deposited in the state general fund. The liquor license tax is deposited $34.5 \%$ in the state general fund and $65.5 \%$ to the Department of Public Health and Human Services to fund alcohol and chemical dependency programs.

## Historical and Projected Revenue

Table 1 shows actual general fund revenue from liquor excise and liquor license taxes for FY 1996 through FY 2006 and forecast revenue for FY 2007 through FY 2009.


Liquor excise and license tax general fund revenue spiked in FY 1996 due to sales from privatizing the state-owned liquor stores. When privatization occurred, the state sold
state-owned liquor merchandise in the state liquor stores to the new store owners, resulting in higher dollar and unit sales, but not increased consumption. FY 1997 shows a decline in sales due to sale of the liquor inventory to the private liquor store owners in FY 1996.

HB 124 (2001 Session) changed the distribution of the liquor license tax. Prior to FY 2002, 30\% of the liquor license tax was distributed to local governments. Beginning in FY 2002, $65.5 \%$ of liquor license tax revenue goes to the Department of Health and Human Services and $34.5 \%$ of revenue goes to the state general fund. This change explains the $29.56 \%$ growth in state general fund revenue in FY 2002 from this source.

The forecast projects liquor excise and license tax general fund revenue to increase 6.09\% in FY 2007, and 6.11\% annually in FY 2008 and FY 2009.

## Forecast Methodology and Projection Calculation

There are four steps for estimating general fund revenues from the liquor excise and license tax: calculate gross sales; calculate retail selling value; calculate gross liquor excise and license tax collections; and calculate liquor excise and license tax general fund revenue.

## Calculate Gross Sales

The first step in estimating liquor excise and license tax receipts is to calculate gross sales. There are three components to this calculation: the number of liquor units sold; the cost per liquor unit; and the gross sales-to-cost ratio. Table 2 shows actual and projected liquor units sold from FY 1998 through FY 2009.


The number of liquor units sold in FY 2007 through FY 2009 is projected to increase 3.84\% annually, which is the average of annual growth rates from FY 1998 through FY 2006. As can be seen from the graph in Table 2, use of the average growth rate produces projected units sold that are very consistent with the trend over time.

The cost per liquor unit sold is the cost of goods sold divided by the number of liquor units sold. The actual cost per liquor unit and the annual percent change for FY 1998 through FY 2006 is shown in Table 3. The cost per liquor unit sold for FY 2007 through FY 2009 is projected to increase 2.18\% per year, which is the annual growth rate from FY 1998 through FY 2006. In line with Table 2, FY 1998 through FY 2006 are used to establish this average.

| Table 3 <br> Actual and Projected Cost per Liquor Unit FY 1998 through FY 2009 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fiscal Year | Cost of Goods Sold | 1 | Number of Units | $=$ | Cost per Unit | Annual \% Change |
| 1998 | \$29,121,673 | 1 | 4,714,471 |  | 6.177 | 1.84\% |
| 1999 | \$30,201,100 | 1 | 4,878,759 | = | 6.190 | 0.21\% |
| 2000 | \$32,318,269 | 1 | 5,162,128 | = | 6.261 | 1.14\% |
| 2001 | \$33,666,541 | 1 | 5,143,384 | = | 6.546 | 4.55\% |
| 2002 | \$35,279,453 | 1 | 5,279,610 | = | 6.682 | 2.09\% |
| 2003 | \$37,321,005 | 1 | 5,490,769 | $=$ | 6.797 | 1.72\% |
| 2004 | \$39,933,421 | 1 | 5,781,289 | = | 6.907 | 1.62\% |
| 2005 | \$42,693,308 | 1 | 6,027,734 | = | 7.083 | 2.54\% |
| 2006 | \$47,324,246 | 1 | 6,429,236 | = | 7.361 | 3.92\% |
| Average Growth FY 1998 - FY 2006 |  |  |  |  |  | 2.18\% |
| 2007 | \$50,214,099 | 1 | 6,676,213 | = | 7.521 | 2.18\% |
| 2008 | \$53,280,421 | 1 | 6,932,678 | $=$ | 7.685 | 2.18\% |
| 2009 | \$56,533,988 | 1 | 7,198,995 | = | 7.853 | 2.18\% |

The sales-to-cost ratio is gross sales divided by the cost of goods sold. Table 4 shows this ratio and the annual percent change for FY 1998 through FY 2009. Historically, there is little year-to-year variation in this ratio. Since FY 2002, the ratio has only changed 0.002 . The sales-tocost ratio for FY 2007 through FY 2009 is projected to be 1.773.

| Table 4 <br> Historical and Projected Sales to Cost Ratio FY 1995 through FY 2009 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fiscal Year | Gross Sales |  | Cost of Goods Sold |  | Sales to Cost Ratio | \% Chg. |
| A 1998 | \$51,381,137 | 1 | \$29,121,673 |  | 1.764 | 0.05\% |
| A 1999 | \$53,679,508 | 1 | \$30,201,100 |  | 1.777 | 0.74\% |
| A 2000 | \$57,467,696 | 1 | \$32,318,269 |  | 1.778 | 0.04\% |
| A 2001 | \$58,844,284 | / | \$33,666,541 |  | 1.748 | -1.71\% |
| A 2002 | \$62,514,926 | / | \$35,279,453 |  | 1.772 | 1.38\% |
| A 2003 | \$66,123,983 | / | \$37,321,005 |  | 1.772 | -0.01\% |
| A 2004 | \$70,827,539 | 1 | \$39,933,421 |  | 1.774 | 0.11\% |
| A 2005 | \$75,686,686 | 1 | \$42,693,308 |  | 1.773 | -0.05\% |
| A 2006 | \$83,916,480 | 1 | \$47,324,246 |  | 1.773 | 0.02\% |
| F 2007 | \$89,040,837 | 1 | \$50,214,099 |  | 1.773 | 0.00\% |
| F 2008 | \$94,478,112 | 1 | \$53,280,421 |  | 1.773 | 0.00\% |
| F 2009 | \$100,247,414 | 1 | \$56,533,988 |  | 1.773 | 0.00\% |

As shown in Table 5, gross sales for FY 2007 through FY 2009 are calculated as the product of the projected number of liquor units sold, the estimated cost per unit, and the projected sales-to-cost ratio. Total liquor sales are estimated at $\$ 89.0$ million in FY 2007, $\$ 94.5$ million in FY 2008, and $\$ 100.2$ million in FY 2009.


## Calculate Retail Selling Value

The liquor store owner pays both liquor excise (16\%) and liquor license (10\%) taxes. As shown in Table 6, to estimate the pre-tax retail value of liquor sales, gross liquor sales are divided by the combined liquor excise and liquor license tax rate of $26 \%$. Estimated liquor retail value is $\$ 70.7$ million in FY 2007, $\$ 75.0$ million in FY 2008, and \$79.6 million in FY 2009.


## Calculate Gross Liquor Excise and License Tax Collections

Liquor excise tax receipts for FY 2007 through FY 2009 are estimated by multiplying the retail value of liquor sales by the liquor excise tax rate as shown in Table 7. Liquor excise tax revenue is $\$ 11.3$ million in FY 2007, $\$ 12.0$ million in FY 2008, and $\$ 12.7$ million in FY 2009.

| Table 7 <br> Calculation of Gross Liquor Excise Tax FY 2007 through FY 2009 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Fiscal Year | Estimated Retail Value | x | Liquor Excise Tax Rate | $=$ | Estimated Gross Liquor Excise Tax |
| 2007 | \$70,667,331 | x | 16\% | = | \$11,306,773 |
| 2008 | \$74,982,628 | x | 16\% | = | \$11,997,221 |
| 2009 | \$79,561,439 | x | 16\% | = | \$12,729,830 |

Liquor license tax receipts for FY 2007 through FY 2009 are estimated by multiplying the retail value of liquor sales by the liquor license tax rate as shown in Table 8. Liquor license tax revenue is $\$ 7.1$ million in $F Y$ 2007, $\$ 7.5$ million in $F Y 2008$, and $\$ 8.0$ million in FY 2009.

| Table 8 <br> Calculation of Gross Liquor License Tax FY 2007 through FY 2009 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Fiscal Year | Estimated Retail Value | x | Liquor License Tax Rate |  | Estimated Gross Liquor License Tax |
| 2007 | \$70,667,331 | $x$ | 10\% |  | \$7,066,733 |
| 2008 | \$74,982,628 | x | 10\% |  | \$7,498,263 |
| 2009 | \$79,561,439 | x | 10\% | = | \$7,956,144 |

## Calculate Liquor Excise and License Tax General Fund Revenue

The liquor excise tax receipts that are transferred to the general fund are calculated by subtracting the estimated amount of tribal refunds from the gross liquor excise tax projection. As shown in Table 9, payments to the tribal governments averaged $2.31 \%$ of the general fund alcohol collections for FY 2004 through FY 2006. Tribal refunds are estimated to remain $2.31 \%$ of the liquor excise tax general fund allocation for FY 2007 through FY

| Table 9 <br> Tribal Payments from Liquor Excise Tax FY 2004 - FY 2006 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Fiscal Year | Tribal Payment | 1 | Liquor Excise Tax |  | Tribal Percent of Liquor Excise Tax |
| 2004 | \$216,395 | 1 | \$8,995,460 |  | 2.41\% |
| 2005 | \$216,693 | 1 | \$9,613,276 |  | 2.25\% |
| 2006 | \$242,086 | 1 | \$10,654,439 | = | 2.27\% |
| Average Percent to Tribes |  |  |  |  | 2.31\% | 2009.

As shown in Table 10, liquor excise and license tax general fund revenue is estimated to be $\$ 13.5$ million for FY 2007, $\$ 14.3$ million for $F Y$ 2008, and $\$ 15.2$ million for $F Y$ 2009.

| Table 10 <br> Calculation of Liquor Excise Tax and Liquor License Tax General Fund Revenue FY 2007 through FY 2009 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Fiscal Year | Estimated Gross Liquor Excise Tax |  | Estimated Tribal Refunds | Estimated <br> Liquor Excise Tax General Fund Revenue |
| 2007 | \$11,306,773 |  | \$261,257 | \$11,045,516 |
| 2008 | \$11,997,221 |  | \$277,210 | \$11,720,010 |
| 2009 | \$12,729,830 | - | \$294,138 | \$12,435,692 |
| Fiscal Year | Estimated Gross Liquor License Tax |  | General Fund Share | Estimated Liquor License Tax General Fund Revenue |
| 2007 | \$7,066,733 | x | 34.5\% | \$2,438,023 |
| 2008 | \$7,498,263 | x | 34.5\% | \$2,586,901 |
| 2009 | \$7,956,144 | x | 34.5\% | \$2,744,870 |
| $\begin{gathered} \text { Fiscal } \\ \text { Year } \\ \hline \end{gathered}$ |  |  |  | $\qquad$ |
| 2007 |  |  |  | \$13,483,539 |
| 2008 |  |  |  | \$14,306,911 |
| 2009 |  |  |  | \$15,180,562 |

## Data Sources

Data is from the Department of Revenue monthly cost of sales report, the Department of Revenue Liquor Distribution annual financial schedules, and SABHRS Report MTGL109.

