

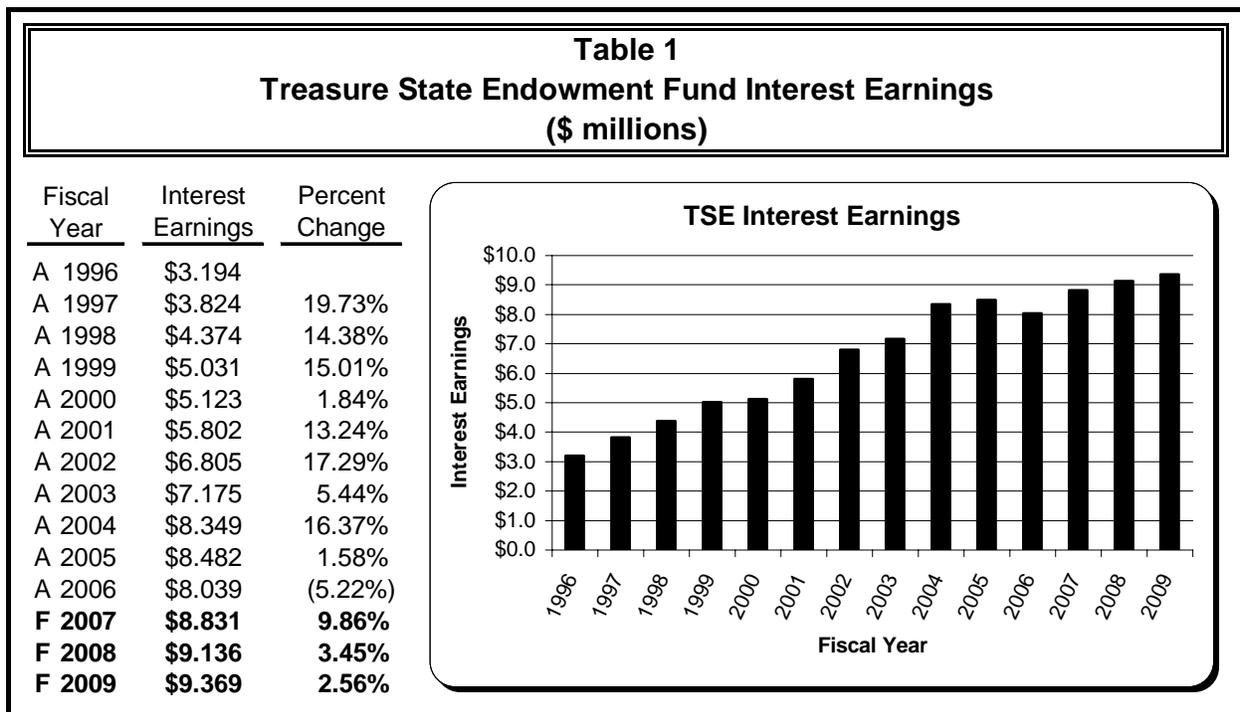
TREASURE STATE ENDOWMENT FUND INTEREST

Revenue Description

Article IX, Section 5 of the Montana Constitution established a permanent trust fund into which at least half of coal severance tax revenue must be deposited. The trust fund is divided into several funds with different purposes, including the treasure state endowment (TSE) fund (17-5-703, MCA). Interest earnings from the TSE fund are used for local government projects (90-6-701, MCA).

Projected Revenue

Table 1 shows actual TSE fund interest earnings from FY 1996 through FY 2006 and forecast interest earnings from FY 2007 through FY 2009.



Earnings grew from FY 1996 through FY 2005, primarily due to the increased fund balance from the coal severance tax deposits. The interest rate dropped in FY 2006, resulting in a 5.22% decrease in TSE interest earnings. After the reduced earnings in FY 2006, interest income is projected to increase 9.86% in FY 2007 to \$8.831 million. Earnings are projected to increase to \$9.136 million in FY 2008 and \$9.369 million in FY 2009, primarily due to increasing investment balances through coal tax contributions.

Forecast Methodology and Projection Calculation

There are three steps to forecasting interest earnings from the TSE fund. First, the annual average balance of the fund is projected. Second, the annual average rate of return for the fund is projected. Third, interest earnings are forecast through multiplying the average balance by the average rate of return and deducting administrative costs.

Average Fund Balance

The trust fund balance currently grows through the deposit of 25% of the coal severance tax revenue. The coal tax revenue is net of funds required by the coal tax bond pool to cover interest and principal payments on coal tax bonds.

The coal tax contributions to the TSE have varied across years. From FY 2001 to FY 2003, the trust fund received 37.5% of net coal tax collections. As shown in Table 2, annual deposits were over \$10 million dollars in those years. Deposits to the trust fund fell in FY 2004 because the TSE fund allocation dropped to 25% of net coal tax collections (SB 10, 2003 Session).

Table 2 shows that the deposits are projected to be \$9.464 million in FY 2007, \$9.813 million in FY 2008 and \$9.960 million in FY 2009 as explained in the *Coal Severance Tax* revenue estimate. Table 2 also shows that the year end balances of the trust fund will increase by the same amount, up to \$165.697 million in FY 2009.

Table 2		
Trust Fund Balance		
(\$ millions)		
Fiscal Year	Trust Fund Balance	Trust Fund Deposits
A 2001	\$87.664	\$10.733
A 2002	\$99.309	\$11.647
A 2003	\$111.590	\$12.384
A 2004	\$118.207	\$6.672
A 2005	\$127.056	\$8.803
A 2006	\$136.459	\$9.393
F 2007	\$145.923	\$9.464
F 2008	\$155.736	\$9.813
F 2009	\$165.697	\$9.960

The fund balance is invested in the short term investment pool (STIP), the trust fund bond pool (TFBP), and commercial loans. Table 3 shows actual average balances for each investment type from FY 2001 to FY 2006 and projected balances for FY 2007 through FY 2009.

Table 3
Treasure State Endowment Fund
Average Balance by Investment Type
(\$ millions)

Fiscal Year	Loan		STIP		TFBP		Average Balance
	Balance	% Total	Balance	% Total	Balance	% Total	
A 2001	\$10.833	13%	\$3.038	4%	\$68.134	83%	\$82.005
A 2002	\$19.468	21%	\$1.879	2%	\$72.426	77%	\$93.772
A 2003	\$20.655	20%	\$2.424	2%	\$82.004	78%	\$105.082
A 2004	\$15.630	14%	\$2.582	2%	\$97.215	84%	\$115.427
A 2005	\$11.582	9%	\$1.957	2%	\$109.431	89%	\$122.970
A 2006	\$6.858	5%	\$1.841	1%	\$123.448	93%	\$132.146
F 2007	\$3.965	3%	\$1.558	1%	\$135.944	96%	\$141.466
F 2008	\$0.558	0%	\$1.720	1%	\$148.837	98%	\$151.116
F 2009	\$0.000	0%	\$1.793	1%	\$159.328	99%	\$161.121

The Board of Investments makes loans from the trust balance primarily to local governments for infrastructure projects. The board is currently making all new coal trust loans from the permanent fund rather than from the TSE fund. The old loans are expected to be paid off by FY 2009 and the loan balance is expected to be \$3.965 million in FY 2007 and \$0.558 million in FY 2008.

The percent of fund balance invested in STIP decreased from 4% of total investment in FY 2001 to 1% in FY 2006 as new loan investment decreased. The trust fund balance is invested in STIP for liquidity reasons and to finance loan commitments. As the loan commitments decrease, the fund balance invested in STIP is forecast to be about 1% for FY 2007 through FY 2009.

The percent of fund balance invested in TFBP increased from 77% of total investment in FY 2002 to 93% in FY 2006 as loan investment decreased. The fund balance invested in TFBP is projected to increase to 96% in FY 2007 and to 98% in FY 2008, and to 99% in FY 2009.

TSE Fund Income and Interest Rate

For each type of investment, there is an estimated annual interest rate on the investment. Table 4 shows actual and projected income and rate of return for each investment type in FY 2001 through FY 2009. The 5% forecast for the loan interest rate is based on the interest rates of current loans for FY 2007 through FY 2009. The forecasts of annual interest rates for the STIP and TFBP are explained in the *Interest Rate Introduction*.

Table 4
Treasure State Endowment Fund
Investment Income and Interest Rate
(\$ millions)

Fiscal Year	Loan Income	Interest Rate	STIP Income	Interest Rate	TFBP Income	Interest Rate	Total Income	Interest Rate
A 2001	\$0.466	4.30%	\$0.205	6.76%	\$4.888	7.17%	\$5.559	6.78%
A 2002	\$1.531	7.86%	\$0.043	2.29%	\$5.140	7.10%	\$6.713	7.16%
A 2003	\$1.365	6.61%	\$0.036	1.47%	\$5.719	6.97%	\$7.119	6.77%
A 2004	\$1.334	8.53%	\$0.027	1.05%	\$6.930	7.13%	\$8.291	7.18%
A 2005	\$0.972	8.40%	\$0.042	2.16%	\$7.272	6.65%	\$8.287	6.74%
A 2006	\$0.523	7.63%	\$0.076	4.11%	\$7.001	5.67%	\$7.600	5.75%
F 2007	\$0.214	5.41%	\$0.076	4.86%	\$7.989	5.88%	\$8.279	5.85%
F 2008	\$0.028	5.01%	\$0.082	4.74%	\$8.521	5.72%	\$8.630	5.71%
F 2009	\$0.000	NA	\$0.085	4.72%	\$8.780	5.51%	\$8.865	5.50%

Total investment income decreased to \$7.600 million in FY 2006 primarily due to a lower TFBP interest rate. Investment of new coal tax deposits will offset declining interest rates for FY 2008 through FY 2009, resulting in increased projected income for FY 2007 through FY 2009. Total investment income is forecast to increase to \$8.279 million in FY 2007, \$8.630 million in FY 2008, and \$8.865 million in FY 2009.

TSE Fund Total Income

Table 5 shows TSE fund interest earnings from FY 2001 through FY 2006 and forecast interest earnings from FY 2007 to FY 2009. TSE fund total interest earnings are the sum of TSE fund investment income and reinvested TSE income fund earnings, less administrative expense.

The reinvested income is generated from the TSE fund interest earnings, which are deposited into the Treasure State income fund. Each biennium the Legislature appropriates funds for projects from the income fund. Money in the income fund that is not appropriated for use on projects is retained by the fund. The

Table 5
TSE Fund Interest Earnings
(\$ millions)

Fiscal Year	TSE Fund Earnings		Reinvested Income Fund Earnings		Admin Costs	=	Total Interest Earnings	Percent Change
A 2001	\$5.559	+	\$0.256	+	(\$0.014)	=	\$5.802	
A 2002	\$6.713	+	\$0.124	+	(\$0.033)	=	\$6.805	17.29%
A 2003	\$7.119	+	\$0.091	+	(\$0.034)	=	\$7.175	5.44%
A 2004	\$8.291	+	\$0.095	+	(\$0.037)	=	\$8.349	16.37%
A 2005	\$8.287	+	\$0.220	+	(\$0.025)	=	\$8.482	1.58%
F 2006	\$7.600	+	\$0.452	+	(\$0.013)	=	\$8.039	(5.22%)
F 2007	\$8.279	+	\$0.561	+	(\$0.009)	=	\$8.831	9.86%
F 2008	\$8.630	+	\$0.507	+	(\$0.001)	=	\$9.136	3.45%
F 2009	\$8.865	+	\$0.504	+	\$0.000	=	\$9.369	2.56%

income fund balance is reinvested in STIP and the interest earnings are deposited back into the income fund. Interest earnings from reinvestment of income fund balances are projected to decrease yearly due to the decline in STIP interest rates. The reinvested income is projected by multiplying the projected income fund balance by the projected STIP rate. Reinvested income is projected to be \$0.561 million in FY 2007, \$0.507 million in FY 2008, and \$0.504 million in FY 2009.

Administrative expenses are charged to the fund for the cost of administering the loan program. They will decrease as loan activity is phased out.

The TSE fund interest earnings decreased 5% in FY 2006 to \$8.039 million due to the 1% decrease in the TFBP rate from FY 2005. Total interest earnings are projected to be \$8.831 million in FY 2007, \$9.136 million in FY 2008, and \$9.369 million in FY 2009 as the fund balance increases with additional coal tax contributions.

HJR 2 Variables

Table 6 shows the average fund balance, rate of return, and interest earnings from the TSE fund. The average fund balance is multiplied by the average rate of return to get total interest earnings. TSE fund interest earnings are projected to be \$8.831 million in FY 2007, \$9.136 million in FY 2008, and \$9.369 million in FY 2009.

Table 6			
TSE Balance, Rate of Return and Interest Earnings			
(\$ millions)			
<u>Fiscal Year</u>	<u>Average Balance</u>	<u>Rate of Return</u>	<u>Interest Earnings</u>
A 2001	\$82.005	X 7.07%	= \$5.802
A 2002	\$93.772	X 7.26%	= \$6.805
A 2003	\$105.082	X 6.83%	= \$7.175
A 2004	\$115.427	X 7.23%	= \$8.349
A 2005	\$122.970	X 6.90%	= \$8.482
A 2006	\$132.146	X 6.08%	= \$8.039
F 2007	\$141.466	X 6.24%	= \$8.831
F 2008	\$151.116	X 6.05%	= \$9.136
F 2009	\$161.121	X 5.81%	= \$9.369

Data Sources

Fund balances and investment earnings were obtained from the Board of Investments and SABHRS.