

# Interest Earnings

**Capital Land Grant**  
**Coal Trust Interest**  
**Common School Interest and Income**  
**Cultural Trust Interest**  
**Deaf & Blind Trust Interest**  
**Parks Trust Interest**

**Pine Hills Trust Interest & Income**  
**Regional Water Trust Interest**  
**Resource Indemnity Trust**  
**Tobacco Trust Interest**  
**Treasure State Endowment Interest**  
**Treasury Cash Account Interest**



**Legislative Fiscal Division**





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# Legislative Fiscal Division

## Revenue Estimate Profile

### Capital Land Grant Interest and Income

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**Revenue Description:** Lands granted by the federal government to the state generate income from a variety of sources. Section 12 of the *Enabling Act* requires that income generated on certain sections of federally granted land be used for public buildings at the state capital for construction, repair, renovation, and other permanent improvements of state buildings. Capital land grant funds can also be used for the acquisition of land for such buildings, as well as the payment of principal and interest on bonds issued for any of these purposes.

Non-permanent sources of revenue generated from capital land grant lands include: grazing fees, agricultural fees, miscellaneous fees and rentals, and oil and natural gas leases and penalties. Statute requires that 3.0 percent of total non-permanent revenue be allocated to the Department of Natural Resources and Conservation (DNRC) for resource development purposes. Senate Bill 48, passed by the 1999 legislature, allows an amount up to 10 percent of the previous year's revenue to be deposited each year in a state special revenue account used to fund the Trust Land Management Division of DNRC. Permanent sources of revenue generated from capital land grant lands include timber sales and oil and natural gas royalties. Timber sale revenue is used by DNRC to fund a portion of its timber program based on the amount appropriated by the legislature (the remaining portion is funded from the common school trust).

**Applicable Tax Rate(s):** N/A

**Distribution:** After deductions for DNRC administration, all capital land grant income is deposited into a capital projects fund to be used for projects on the state capital complex in accordance with the provisions of section 12 of the *Enabling Act*.

**Collection Frequency:** Monthly

**Applicable Assumptions and/or Relevant Indicators:**

- Grazing Fees
- Agricultural Fees
- Oil and Natural Gas Leases
- Oil and Natural Gas Penalties
- Oil and Natural Gas Royalties
- Miscellaneous Fees
- Miscellaneous Rentals
- Timber Sales

**Data Source(s):** SABHRS, *Wall Street Journal*, Department of Natural Resources and Conservation

**Contacts:** Department of Administration, Department of Natural Resources and Conservation

**Statute:** Title 18, Chapter 2, MCA

**% of Total FY 2002 General Fund Revenue:** N/A

**Revenue Estimate Methodology:** The LFD uses a number of analytical techniques to develop relevant assumptions for this source of revenue. Historical data trends, economic conditions, input from industry experts, company surveys, and etc., are examples of information used to formulate these assumptions. The techniques used to develop these assumptions may vary from biennium to biennium and are highly dependent on availability of information, professional intuition/judgment, and a detailed analysis of the revenue source. The applicable methodology (formulas)

# Legislative Fiscal Division

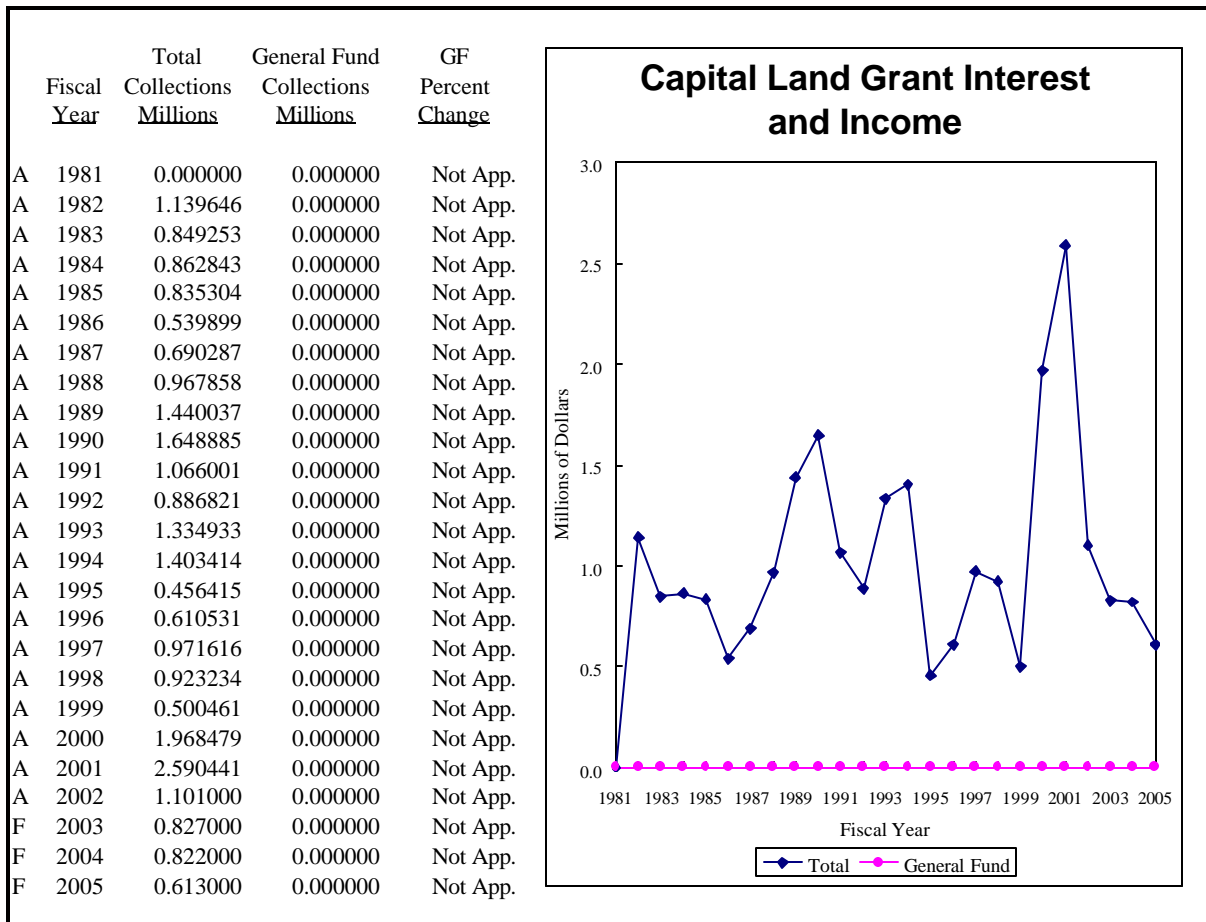
## Revenue Estimate Profile

### Capital Land Grant Interest and Income

and assumptions used by the LFD to develop a revenue estimate for this source are provided in the appendix of this document. The following summarizes the LFD process used to develop the revenue estimate.

Capital land grant income consists of four income and expense sources that are estimated independently: 1) income; 2) permanent income; 3) trust land management administration costs; and 4) resource development expenses. Income is estimated by summing grazing fees, agricultural fees, miscellaneous fees, oil and gas leases and penalties, and miscellaneous rentals. Permanent capital land grant income consists of royalties from the sale of oil, natural gas, miscellaneous income sources, and timber. Timber sale revenue is reduced by a portion of the amount appropriated to DNRC to fund the timber sales program. The amount of income is also reduced by the estimated costs of trust land management administrative costs and a 3 percent resource development allocation to determine the total estimate for the capital land grant income revenue.

#### Revenue Projection:

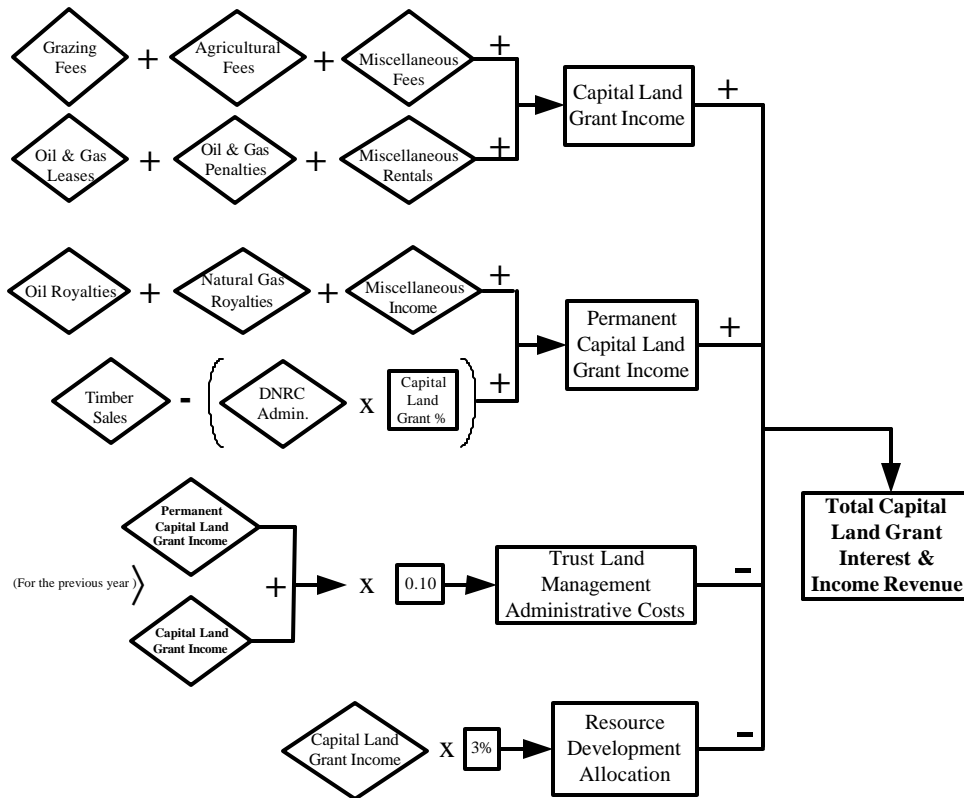


# Legislative Fiscal Division

## Revenue Estimate Profile

### Capital Land Grant Interest and Income

#### Forecast Methodology



#### Distribution Methodology



**Legislative Fiscal Division**  
**Revenue Estimate Profile**  
**Capital Land Grant Interest and Income**

**Revenue Estimate Assumptions**

	t	Total Rev.	GF Rev.	TFBP	STIP	Capital
	Fiscal	Millions	Millions	Interest	Interest	Land Share
				Millions	Millions	T&L
Actual	2000	1.968479	0.000000			0.000000
Actual	2001	2.590441	0.000000			0.000000
Actual	2002	1.100715	0.000000	29.670198	0.102471	0.000000
Forecast	2003	0.827000	0.000000	29.670198	0.233572	0.000000
Forecast	2004	0.822000	0.000000	29.796459	0.322461	0.000000
Forecast	2005	0.613000	0.000000	29.930892	0.446633	0.000000

	t	Trust Income	Trust Land	New Deposit	Non Pool	Non Pool
	Fiscal	New Deposit	Admin.	Long Term	STIP	STIP Bal
		Millions	Millions	Rate	Rate	Millions
Actual	2000	10.962021		7.0160%	5.9500%	11.676486
Actual	2001	12.667782	-0.048140	6.8830%	6.6400%	6.984553
Actual	2002	2.043058	-0.151480	6.3330%	3.5953%	7.334239
Forecast	2003	2.043058	-0.110072	6.1800%	2.4114%	7.334239
Forecast	2004	2.043058	-0.104440	6.5800%	3.5505%	7.334239
Forecast	2005	2.043058	-0.103400	6.9620%	5.1618%	7.334239

	t	Grazing	Agriculture	Misc.	O&G Lease	O&G Bonus	O&G Penalty	Misc.
	Fiscal	Millions	Millions	Millions	Millions	Millions	Millions	Millions
Actual	2000	0.132580	0.044452	0.000000	0.019153	0.009104	0.002343	0.048046
Actual	2001	0.159924	0.043153	0.000000	0.013722	0.002980	0.003287	0.064391
Actual	2002	0.173945	0.030825	0.000000	0.018286	0.002180	0.004428	0.090509
Forecast	2003	0.151045	0.043153	0.000000	0.012627	0.002580	0.003188	0.062491
Forecast	2004	0.154374	0.043153	0.000000	0.012033	0.002380	0.002705	0.066359
Forecast	2005	0.159822	0.043153	0.000000	0.011786	0.002480	0.002514	0.070938

**Legislative Fiscal Division**  
**Revenue Estimate Profile**  
**Capital Land Grant Interest and Income**

	t	Int. Land	Int. STIP	Int. Trust	Res. Dev.	Lease Total	Timber Cost
	Fiscal	Millions	Millions	Millions	Millions	Millions	Millions
Actual	2000	0.000000	0.000000	0.000000	-0.007670	0.248008	
Actual	2001	0.000000	0.000000	0.000000	-0.008268	0.279189	
Actual	2002	0.000000	0.000000	0.000000	-0.008838	0.311335	
Forecast	2003	0.000000	0.000000	0.000000	-0.008253	0.266831	-0.098847
Forecast	2004	0.000000	0.000000	0.000000	-0.008430	0.272574	-0.099236
Forecast	2005	0.000000	0.000000	0.000000	-0.008721	0.281972	-0.038793

	t	Oil Roy.	Gas Roy.	Timber	Misc.	Perm. Total
	Fiscal	Millions	Millions	Millions	Millions	Millions
Actual	2000	0.004394	0.004489	1.675671	0.028247	1.712801
Actual	2001	0.005659	0.008068	2.278363	0.010894	2.302984
Actual	2002	0.003264	0.002190	0.769197	0.005891	0.780542
Forecast	2003	0.003384	0.007773	0.745000	0.013157	0.670467
Forecast	2004	0.003265	0.006811	0.730000	0.012921	0.653761
Forecast	2005	0.003047	0.006579	0.450000	0.013659	0.434492

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# Legislative Fiscal Division

## Revenue Estimate Profile

### Coal Trust Interest

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**Revenue Description:** Article IX, Section 5 of the Montana Constitution requires that 50.0 percent of all coal severance tax revenue be deposited in a permanent coal trust fund and that the principal of the trust "shall forever remain inviolate unless appropriated by a three-fourths vote of each house". Coal severance tax funds flowing into the trust fund are first used to secure state bonds issued to finance water resource and renewable resource development projects and activities. Through fiscal 2003, the funds are then split 75 percent to the treasure state endowment trust fund and 25 percent to the treasure state endowment regional water system trust fund. With the enactment of House Bill 610 by the 2001 legislature, beginning fiscal 2004 the funds are then split 50 percent to the treasure state endowment trust fund, 25 percent to the treasure state endowment regional water system trust fund, and 25 percent to the permanent trust fund. By statute, interest earned on the permanent trust that is not earmarked to other programs is deposited to the general fund. When calculating interest earnings, the impact of loans made from the trust, such as the in-state investment program, are taken into account.

As of October 1, 1995, all fixed-income investments held by the state's major trust funds were transferred to a newly-created trust fund bond pool (TFBP). The majority of permanent coal tax trust funds are invested as part of the TFBP. Some funds, however, are invested on a short-term basis in the state's short-term investment pool (STIP). In addition, state law provides that trust funds may be used for in-state commercial loans to stimulate economic development. The state Constitution prohibits the investment of the permanent trust in common stock.

**Applicable Tax Rate(s):** N/A

**Distribution:** Interest earned on the permanent coal tax trust fund is deposited into the general fund.

**Collection Frequency:** Monthly

**Applicable Assumptions and/or Relevant Indicators:**

- Long Term Interest Rates
- Short Term Interest Rates
- Coal Severance Tax Collections

Coal severance tax collections are estimated via the coal severance tax methodology.



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# Legislative Fiscal Division

## Revenue Estimate Profile

### Coal Trust Interest

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**Data Source(s):** Board of Investments, SABHRS, *Wall Street Journal*, DRI-WEFA

**Contacts:** Board of Investments

**Statute:** Title 17, Chapter 6, MCA

**% of Total FY 2002 General Fund Revenue:** 2.97%

**Revenue Estimate Methodology:** The LFD uses a number of analytical techniques to develop relevant assumptions for this source of revenue. Historical data trends, economic conditions, input from industry experts, company surveys, and etc., are examples of information used to formulate these assumptions. The techniques used to develop these assumptions may vary from biennium to biennium and are highly dependent on availability of information, professional intuition/judgment, and a detailed analysis of the revenue source. The applicable methodology (formulas) and assumptions used by the LFD to develop a revenue estimate for this source are provided in the appendix of this document. The following summarizes the LFD process used to develop the revenue estimate.

The methodology used to forecast permanent trust interest earnings is a multi-step process. In order to estimate total investment earnings for the trust, income must be calculated on five separate components: 1) permanent trust pool interest; 2) interest on new deposits; 3) in-state investment interest; 4) short-term interest earnings; and 5) interest earned on other non-pool balances.

The first step involves determining the permanent trust TFBP earnings. For the first year to be estimated, the previous year's earnings are adjusted by an annualization factor to derived a full-year's worth of earnings for the fund balance at the end of the previous year including any shifts between the TFBP and other investments. Subsequent years are estimated by adding to the first year estimate the coal tax allocation (less the applicable percentage of the water bond subsidy) multiplied by the long-term interest rate summed for all previous years except the first year estimated.

Investment income on new deposits is calculated by multiplying the forecast amount for quarterly coal severance tax collections (less a portion of the water bond subsidy) by the appropriate interest rate. The invested balance used varies in accordance with the timing of when new monies become available. For example, coal severance tax collections due for the first quarter of the biennium will earn interest at the short-term (STIP) rate for one month, after which they will earn interest at the long-term rate for the remainder of the biennium. (Coal severance tax collections are forecast as part of the coal severance tax methodology.)

In-state investment interest is determined by multiplying the amount of principal loaned times the interest rate charged on the loans. Additionally, because a portion of the trust is invested on a short-term basis, an assumption is made for the balance of trust funds in STIP. This balance is then multiplied by the short-term interest rate to determine short-term interest income. Other non-TFBP investment balances are estimated and multiplied by the applicable interest rates.

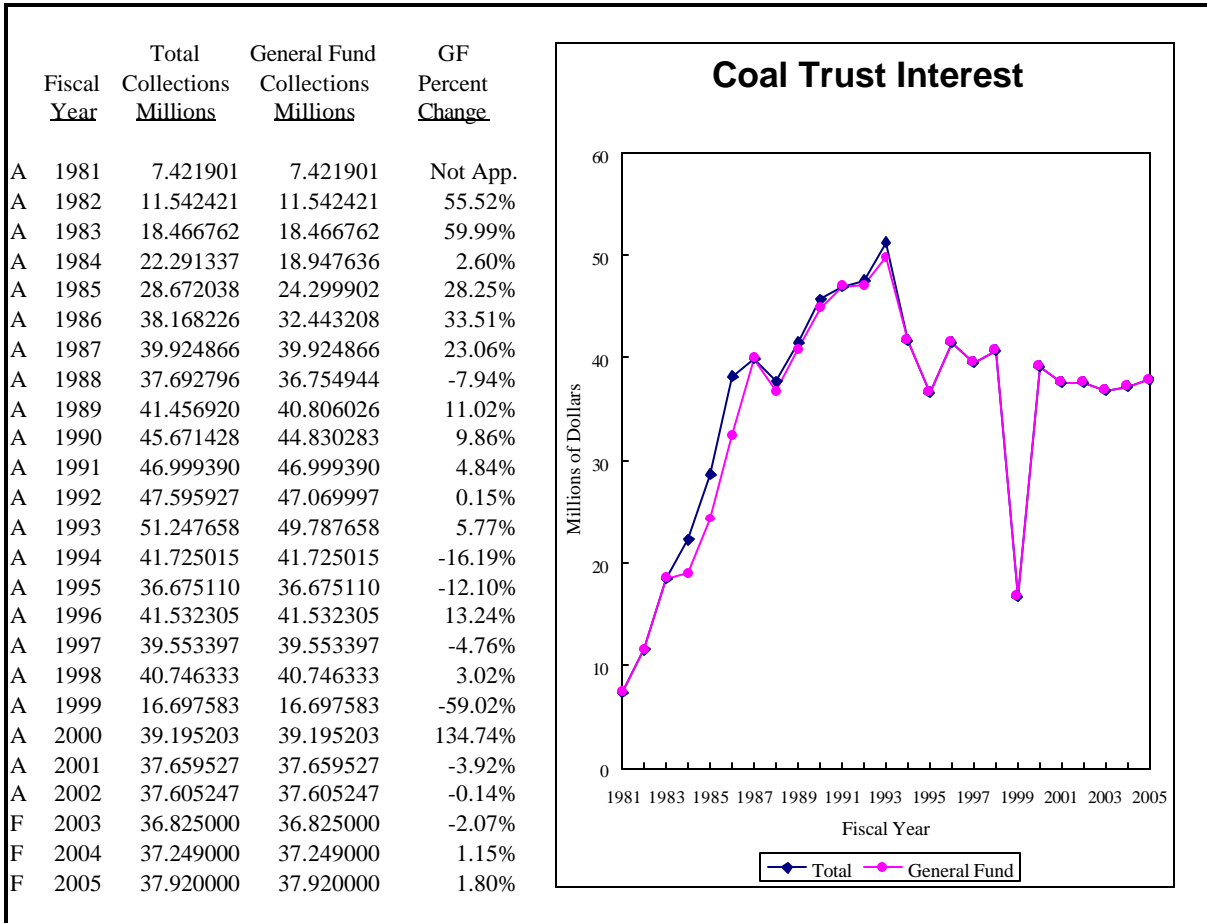
Once investment income has been calculated for these five components, the sum of these comprises total permanent trust investment income.

# Legislative Fiscal Division

## Revenue Estimate Profile

### Coal Trust Interest

#### Revenue Projection:

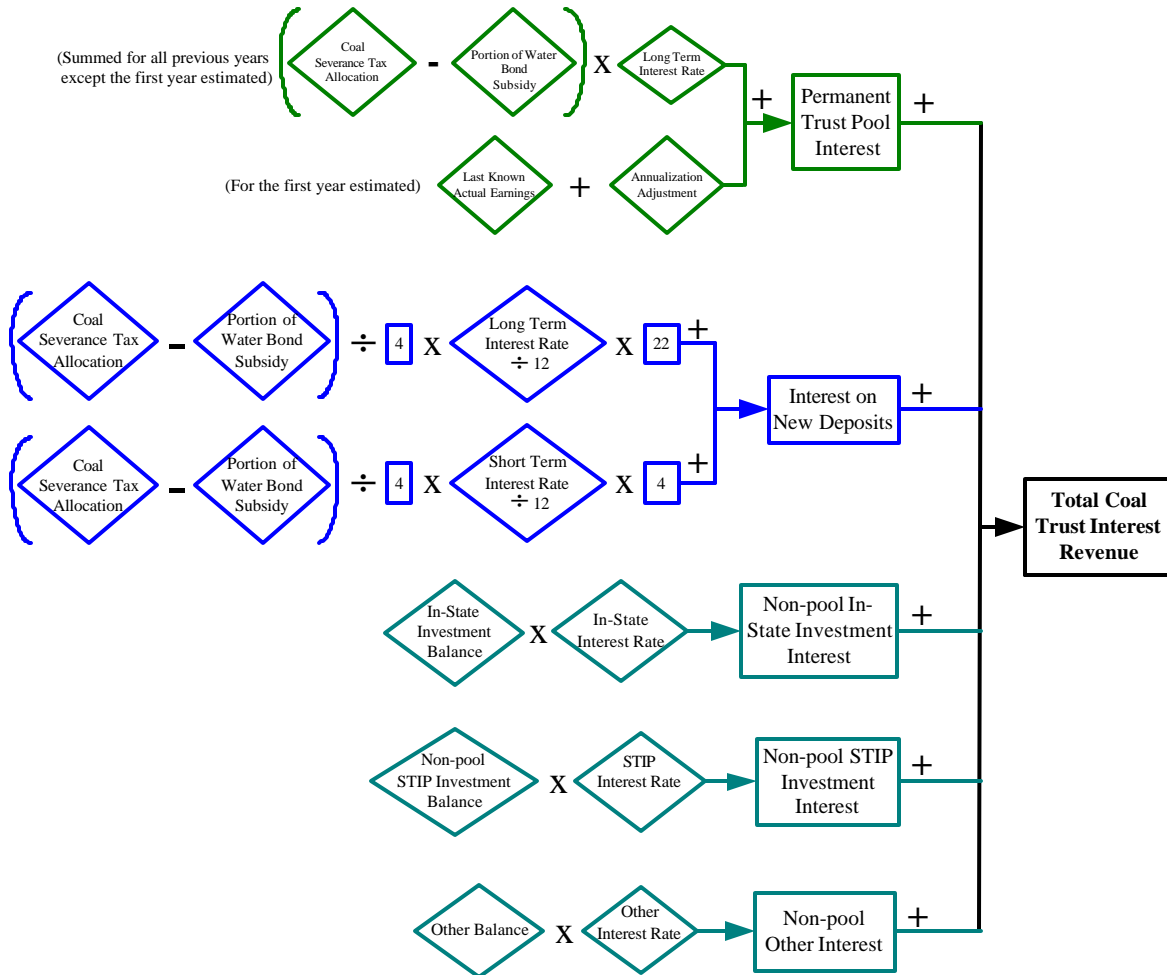


# Legislative Fiscal Division

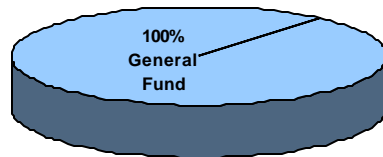
## Revenue Estimate Profile

### Coal Trust Interest

#### Forecast Methodology



#### Distribution Methodology



# Legislative Fiscal Division

## Revenue Estimate Profile

### Coal Trust Interest

#### Revenue Estimate Assumptions

	t	Total Rev.	GF Rev.	TFBP	In_State	Loan	STIP
	<u>Fiscal</u>	<u>Millions</u>	<u>Millions</u>	<u>Interest</u>	<u>Interest</u>	<u>Interest</u>	<u>Interest</u>
				<u>Millions</u>	<u>Millions</u>	<u>Millions</u>	<u>Millions</u>
Actual	2000	39.195203	39.195203				
Actual	2001	37.659527	37.659527				
Actual	2002	37.605247	37.605247	24.373985	8.764717	3.369611	1.096936
Forecast	2003	36.825000	36.825000	23.536278	9.398409	3.245683	0.644370
Forecast	2004	37.249000	37.249000	23.536278	9.398409	3.245683	1.068774
Forecast	2005	37.920000	37.920000	23.774737	9.398409	3.245683	1.501464

	t	Net Coal Tax	Bond	New Deposit	Non Pool	Non Pool	Non Pool
	<u>Fiscal</u>	<u>New Deposit</u>	<u>Subsidy</u>	<u>Long Term</u>	<u>STIP</u>	<u>In State</u>	<u>Loan</u>
		<u>Millions</u>	<u>Millions</u>	<u>Rate</u>	<u>Rate</u>	<u>Rate</u>	<u>Rate</u>
Actual	2000	0.000000	0.512615	6.3330%	5.9500%	5.9500%	0.0000%
Actual	2001	0.000000	0.439908	6.8830%	6.6400%	5.7700%	0.0000%
Actual	2002	0.000000	0.715186	6.3330%	3.5953%	5.5860%	7.2673%
Forecast	2003	0.000000	0.193782	6.1800%	2.4114%	5.5860%	7.0000%
Forecast	2004	3.624000	0.480790	6.5800%	3.5505%	5.5860%	7.0000%
Forecast	2005	3.373000	0.264847	6.9620%	5.1618%	5.5860%	7.0000%

	t	Non Pool	Non Pool	Non Pool
	<u>Fiscal</u>	<u>STIP Bal</u>	<u>In-State Bal</u>	<u>Loan Bal</u>
		<u>Millions</u>	<u>Millions</u>	<u>Millions</u>
Actual	2000	15.334577	127.567412	0.000000
Actual	2001	22.784722	145.401756	0.000000
Actual	2002	26.721811	168.249355	46.366904
Forecast	2003	26.721811	168.249355	46.366904
Forecast	2004	26.721811	168.249355	46.366904
Forecast	2005	26.721811	168.249355	46.366904

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# Legislative Fiscal Division

## Revenue Estimate Profile

### Common School Interest and Income

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**Revenue Description:** Lands granted by the federal government to the state for the benefit of public schools generate income. The common school trust is actually part of the trust and legacy trust fund that includes nine other trusts. Prior to fiscal 1996, interest and income from the common school trust was deposited in the state equalization account. Beginning in fiscal 1996, this interest and income was deposited in the general fund, as mandated by SB 83, passed by the 1995 legislature. Beginning fiscal 2003, House Bill 7 from the August 2002 special legislative session changed the deposit to the guarantee account in state special revenue fund and statutorily appropriated the money for schools.

Common school lands produce two kinds of revenue: 1) distributable income such as interest earnings, agricultural rents or crop shares, and timber sale revenue; and 2) permanent income that is returned to the trust such as income from the sale of minerals (see below), land, and easements. Excluding timber sale revenue and after a 3.0 percent deduction of the revenue for use by the Department of Natural Resources and Conservation (DNRC), 95 percent of distributable revenues are available to fund schools and, due to Senate Bill 48 (discussed below), the remaining 5.0 percent is available to fund the Trust Land Management Division of DNRC. The 3.0 percent allocation to DNRC is used for resource development purposes. Timber revenue is allocated: 1) first by DNRC to fund a portion of its timber program based on the amount appropriated by the legislature (the remaining portion is funded from the capital land grant trust); 2) the amount received above the value of 18 million board feet is deposited into the state special revenue fund for technology equipment and training and is statutorily appropriated (House Bill 41 enacted by the 2001 legislature and House Bill 7 from the August 2002 special legislative session); and 3) any remainder for the support of public schools.

Senate Bill 48, passed by the 1999 legislature, provides for the diversion of the following funds for the purpose of funding the Trust Land Management Division in the DNRC: 1) mineral royalties; 2) revenues from the sale of easements; and 3) 5.0 percent of interest and income previously credited to the common school trust. The amount of the money diverted from the common school trust reduces the growth of the trust fund balance and, hence, reduces the amount of distributable interest earnings.

As of October 1, 1995, all fixed-income investments held by the state's major trust funds (which includes the trust and legacy fund of which the common school trust is a part), were transferred to a newly-created Trust Fund Bond Pool (TFBP). The majority of common school trust funds are invested as part of the TFBP. Some funds, however, are invested on a short-term basis in the state's Short Term Investment Pool (STIP). The state Constitution prohibits the investment of common school trust funds in common stock.

Senate Bill 495 (enacted by the 2001 legislature) authorized DNRC to purchase the mineral production rights (with a loan from the coal severance trust) from the common school trust. The department subsequently purchased \$138.9 million of future mineral royalties (over an approximate 30-year period) from the school trust for \$46.4 million. Since these royalties will no longer be deposited to the trust, interest earnings from the trust corpus are decreased. However, additional interest earnings are generated from the proceeds of the sale.

#### LFD COMMENT

For further information and analysis on Senate Bill 495, contact the Legislative Fiscal Division for a copy of the two-part report: "Senate Bill 495 - Implementation, Impacts and Implications".

#### LFD COMMENT

Staff from the Department of Natural Resource and Conservation, Trust Land Management Division, Special Use Management Bureau, have stated that additional revenues may be available in fiscal years 2003 through 2005 from three sources:

1. The Montana Department of Transportation needs an easement through Section 36 north of Kalispell to construct a bypass of Kalispell. DNRC are now in negotiations with the department, but estimates the easement may generate \$1.0 million. The easement could be sold in fiscal 2003, but a lawsuit by the local school district may delay the sale.

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# Legislative Fiscal Division

## Revenue Estimate Profile

### Common School Interest and Income

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2. Commercial leases in section 36 north of Kalispell could begin to generate lease revenue in fiscal 2004 estimated to be about \$500,000 per year.
3. The Lewis & Clark Subdivision near Bozeman is on state trust land. The infrastructure, to be completed next April, will increase the marketability of the property. Revenues could be generated in fiscal 2004. There are 8 lots that could each be sold for \$30,000-\$40,000.

Since the occurrence and timing of these events are uncertain, the additional revenues have not been included in the Legislative Fiscal Division's revenue estimates. The Revenue and Transportation Committee may want to question Department of Natural Resource and Conservation staff further to determine the likelihood of the events occurring and make revenue adjustments accordingly.

**Applicable Tax Rate(s):** N/A

**Distribution:** As described above, interest and income from common school lands (excluding timber sales and amounts deducted to fund DNRC) is distributed 95.0 percent to the state special revenue fund and is statutorily appropriated for schools. The remaining 5.0 percent is available to fund the Trust Land Management Division with the remainder deposited to the trust fund.

**Collection Frequency:** Revenue is received monthly, however, distribution to the general fund takes place three times per year.

**Applicable Assumptions and /or Relevant Indicators:**

Long Term Interest Rates  
Short Term Interest Rates  
Trust and Legacy Income

**Data Source(s):** Board of Investments, DNRC - Centralized Services, SABHRS, *Wall Street Journal*, DRI-WEFA

**Contacts:** Department of Natural Resources and Conservation

**Statute:** Title 20, Chapter 9 and Title 77, Chapter 1, MCA

**% of Total FY 2002 General Fund Revenue:** 3.87%

**Revenue Estimate Methodology:** The LFD uses a number of analytical techniques to develop relevant assumptions for this source of revenue. Historical data trends, economic conditions, input from industry experts, company surveys, and etc., are examples of information used to formulate these assumptions. The techniques used to develop these assumptions may vary from biennium to biennium and are highly dependent on availability of information, professional intuition/judgment, and a detailed analysis of the revenue source. The applicable methodology (formulas) and assumptions used by the LFD to develop a revenue estimate for this source are provided in the appendix of this document. The following summarizes the LFD process used to develop the revenue estimate.

The methodology used to forecast common school interest and income is a multi-step process. Estimating total interest and income revenue involves calculating interest income and income derived from school lands, including timber sale revenue.

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# Legislative Fiscal Division

## Revenue Estimate Profile

### Common School Interest and Income

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Interest Income - Interest income is derived from investment of the common school trust funds, as well as interest on land sales. In order to calculate total investment earnings for the common school trust, income must be calculated on three separate components: 1) common school trust portion of the TFBP interest; 2) interest on new deposits; and 3) short-term interest earnings.

The first step involves determining the trust and legacy pool interest earnings. For the first year to be estimated, the previous year's earnings are adjusted by an annualization factor to derived a full-year's worth of earnings based on the fund balance at the end of the previous year. Subsequent years are estimated by adding to the first year estimate the trust and legacy income (less amounts used to fund the Trust Land Management Division) multiplied by the long-term interest rate summed for all previous years except the first year estimated.

Interest on new deposits (less amounts used to fund the Trust Land Management Division) is calculated by multiplying the forecast amount for trust and legacy income by the appropriate interest rate. The interest rate and invested balance varies in accordance with the timing of when new monies become available. For example, revenues received for the first month of the biennium will earn interest at the short-term (STIP) rate for one month, after which they will earn interest at the long-term rate for the remainder of the biennium. In addition, because a portion of the trust is invested on a short-term basis, an assumption is made for the balance of trust funds in STIP. This balance is then multiplied by the short-term interest rate to determine short-term interest income.

Once the three components have been calculated, the sum of the three is multiplied by the percent of income attributable to the common school trust portion of the trust and legacy trust fund. The product is added to the amount of interest expected from land sales, mineral royalties, and interest on STIP investments, to comprise total common school interest income.

Income From School Lands - Common school income is estimated by first computing the total of six different types of revenue: grazing fees, agricultural fees, miscellaneous fees, oil and gas leases, oil and gas penalties, and miscellaneous rentals. The estimate used for each of these sources comes from historical data trends, economic trends, industry input, and similar sources. Once total income from common school lands (excluding timber sales) is determined, the 3.0 percent of revenues allocated to DNRC for resource development is calculated.

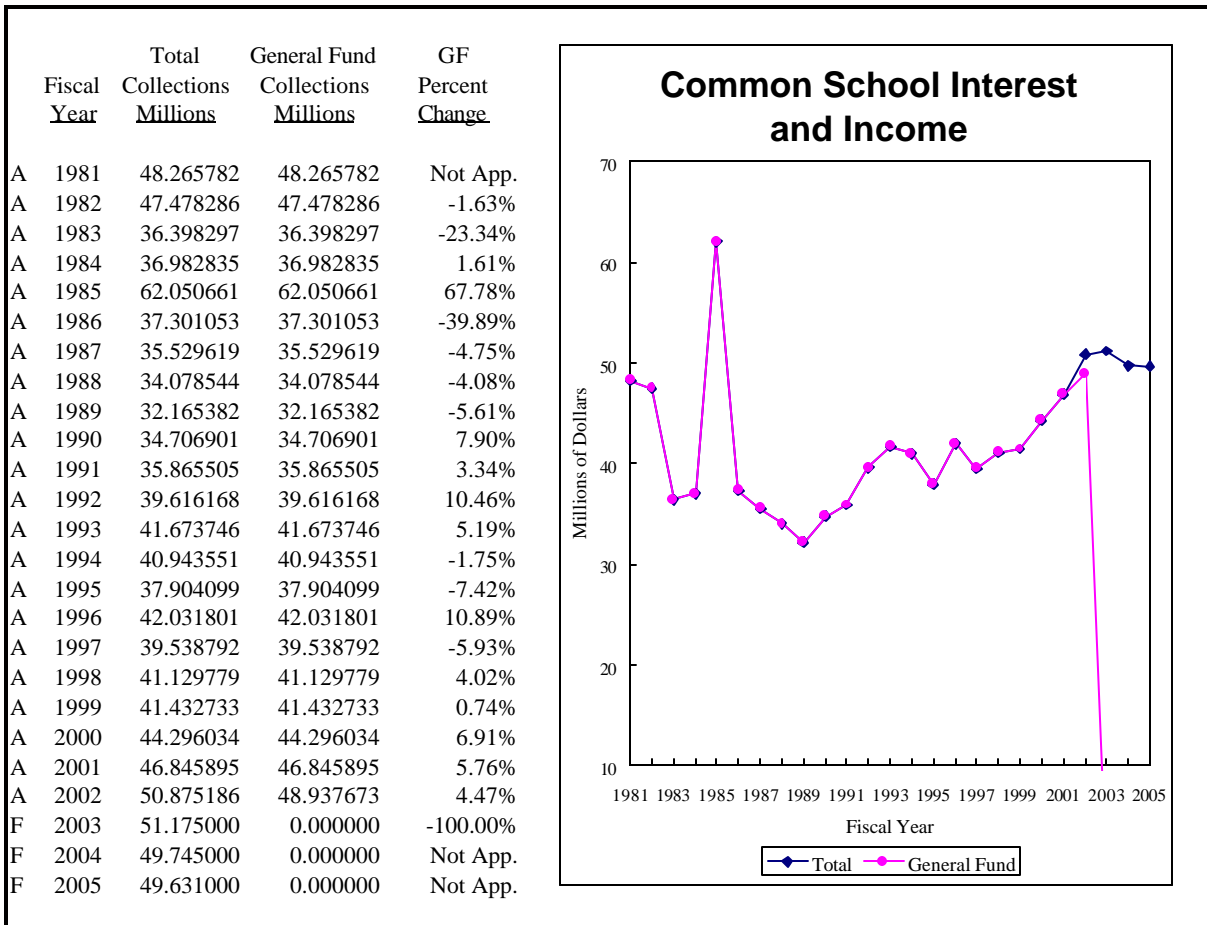
Interest and income revenue is calculated by adding common school income (excluding timber sales) and common school interest then subtracting the resource development allocation. Of this amount, 95 percent is distributed to the guarantee account for schools. Timber sale income is reduced by the portion of DNRC timber sale program appropriations that is applicable to the common school trust and, beginning fiscal 2004, is also deposited to the guarantee account. However, the value of timber in excess of 18 million board feet must be used for school technology acquisition.

# Legislative Fiscal Division

## Revenue Estimate Profile

### Common School Interest and Income

#### Revenue Projection:



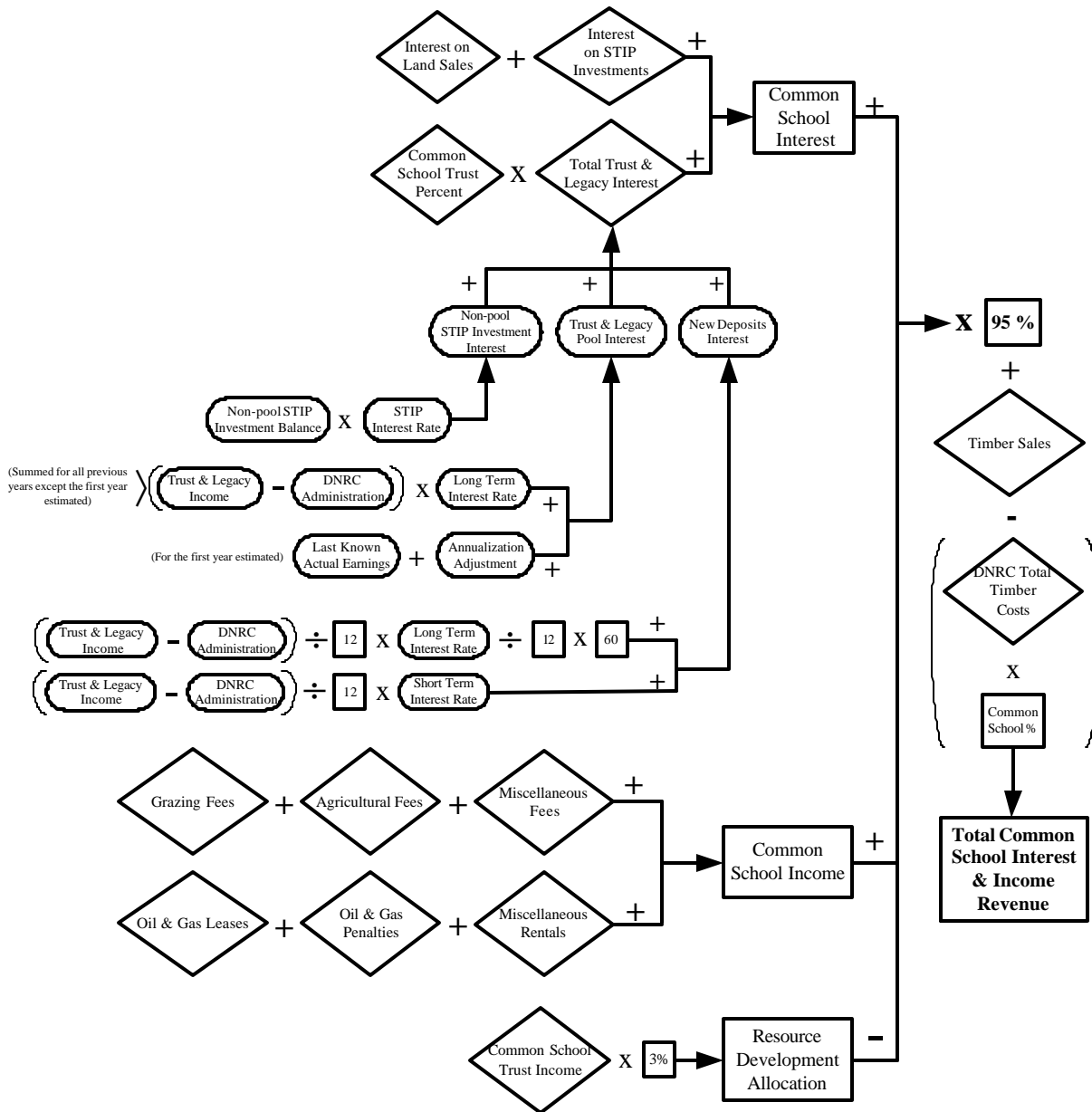


# Legislative Fiscal Division

## Revenue Estimate Profile

### Common School Interest and Income

#### Forecast Methodology

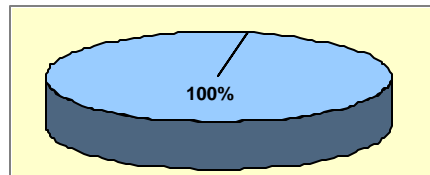


# Legislative Fiscal Division

## Revenue Estimate Profile

### Common School Interest and Income

#### Distribution Methodology



■ State Special Revenue Fund

#### Revenue Estimate Assumptions

	t	Total Rev.	GF Rev.	TFBP	STIP	Common	SB495	Trust Land
	<u>Fiscal</u>	<u>Millions</u>	<u>Millions</u>	<u>Interest</u>	<u>Interest</u>	<u>School Share</u>	<u>Loan Pay.</u>	<u>Expense</u>
				<u>Millions</u>	<u>Millions</u>	<u>T&amp;L</u>	<u>Millions</u>	<u>Millions</u>
Actual	2000	44.296034	44.296034			0.938562		
Actual	2001	46.845895	46.845895			0.923235		
Actual	2002	50.875186	48.937673	29.670198	0.102471	0.932906		
Forecast	2003	51.175000	0.000000	29.670198	0.233572	0.932906	0.000000	-3.385928
Forecast	2004	49.745000	0.000000	29.796459	0.322461	0.932906	-1.966733	-3.528336
Forecast	2005	49.631000	0.000000	29.930892	0.446633	0.932906	-1.749681	-3.564557

	t	Trust Income	New Deposit	Non Pool	Non Pool
	<u>Fiscal</u>	<u>New Deposit</u>	<u>Long Term</u>	<u>STIP</u>	<u>STIP Bal</u>
		<u>Millions</u>	<u>Rate</u>	<u>Rate</u>	<u>Millions</u>
Actual	2000	10.962021	7.0160%	5.9500%	11.676486
Actual	2001	12.667782	6.8830%	6.6400%	6.984553
Actual	2002	2.043058	6.3330%	3.5953%	7.334239
Forecast	2003	2.043058	6.1800%	2.4114%	7.334239
Forecast	2004	2.043058	6.5800%	3.5505%	7.334239
Forecast	2005	2.043058	6.9620%	5.1618%	7.334239

	t	Grazing	Agriculture	Misc.	O&G Lease	O&G Bonus	O&G Penalty	Misc.
	<u>Fiscal</u>	<u>Millions</u>	<u>Millions</u>	<u>Millions</u>	<u>Millions</u>	<u>Millions</u>	<u>Millions</u>	<u>Millions</u>
Actual	2000	4.065911	9.053155	0.000000	1.328220	1.277231	0.261334	1.127779
Actual	2001	4.850839	8.376539	0.000000	1.448285	7.118093	0.355322	1.121433
Actual	2002	5.467322	6.998644	0.000000	1.540472	0.478224	0.334699	1.243778
Forecast	2003	5.067322	8.574211	0.000000	1.646624	0.835178	0.246712	1.388803
Forecast	2004	5.067322	8.443955	0.000000	1.731182	0.909486	0.249024	1.488605
Forecast	2005	5.067322	8.464902	0.000000	1.805486	0.961307	0.257168	1.635993

**Legislative Fiscal Division**  
**Revenue Estimate Profile**  
**Common School Interest and Income**

	<u>t</u>	<u>Int. Land</u>	<u>Int. STIP</u>	<u>Int. Trust</u>	<u>Timber</u>	<u>Res. Dev.</u>
	<u>Fiscal</u>	<u>Millions</u>	<u>Millions</u>	<u>Millions</u>	<u>Millions</u>	<u>Millions</u>
Actual	2000	0.000566	0.706653	23.905761	5.379555	-0.513416
Actual	2001	0.000290	0.715090	24.206450	1.623592	-0.698124
Actual	2002	0.000063	0.305319	27.775111	3.624785	-0.504023
Forecast	2003	0.000032	0.323862	27.897406	1.699978	-0.532766
Forecast	2004	0.000015	0.470830	28.098121	0.781040	-0.536687
Forecast	2005	0.000007	0.694935	28.339375	0.950628	-0.545765

	<u>t</u>	<u>Total</u>	<u>Timber</u>	<u>School</u>	<u>Oil</u>	<u>Gas</u>	<u>Coal</u>	<u>Other</u>
	<u>Fiscal</u>	<u>Timber</u>	<u>Sales Pgm.</u>	<u>Technology</u>	<u>Royalties</u>	<u>Royalties</u>	<u>Royalties</u>	<u>Royalties</u>
		<u>Millions</u>	<u>Millions</u>	<u>Millions</u>	<u>Millions</u>	<u>Millions</u>	<u>Millions</u>	<u>Millions</u>
Actual	2000	7.067954	-1.688399	0.000000				
Actual	2001	3.200298	-1.576706	0.000000				
Actual	2002	5.753895	-2.129110	1.822162	2.390492	1.523062	2.836919	0.144369
Forecast	2003	4.870000	-2.426022	0.744000	2.536706	1.744642	4.502788	0.158044
Forecast	2004	4.640000	-2.858960	1.000000	2.490362	2.218812	4.966447	0.158044
Forecast	2005	4.770000	-2.919372	0.900000	2.465581	2.298635	3.826143	0.158044

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# Legislative Fiscal Division

## Revenue Estimate Profile

### Cultural Trust Interest

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**Revenue Description:** Beginning in fiscal 1976, a portion of coal severance tax revenue was deposited into the Parks Acquisition and Arts Protection trust fund. The 1991 legislature split the principal of this trust into two separate trusts, the Parks Acquisition trust and the Arts Protection trust (cultural trust), with coal severance taxes allocated to each one. The 1997 legislature appropriated \$3.9 million from the cultural trust fund for the immediate purchase of Virginia and Nevada City properties. This action resulted in a loss of trust interest revenue that otherwise would be used to fund cultural and aesthetic (C&A) projects in the state during the 1999 biennium. Thus, beginning July 1, 1997, and ending June 30, 1999, 0.87 percent in coal severance tax revenue was allocated to an account in the state special revenue fund to compensate for the lost interest earnings and the previous 0.63 percent distribution of coal severance tax to the cultural trust was eliminated. Except for fiscal 2003, beginning July 1, 1999, the amount of 0.63 percent is once again statutorily allocated to the cultural trust, the interest from which is to be used for the purpose of protection of works of art in the capitol and for other cultural and aesthetic projects.

**Applicable Tax Rate(s):** N/A

**Distribution:** All income from the trust must be appropriated for protection of works of art in the state capitol and for other cultural and aesthetic projects.

**Collection Frequency:** Monthly

**Applicable Assumptions and/or Relevant Indicators:**

- Long Term Interest Rates
- Short Term Interest Rates
- Coal Severance Tax Collections

Coal severance tax collections are estimated via the coal severance tax methodology.

**Data Source(s):** Board of Investments, SABHRS, *Wall Street Journal*, DRI-WEFA

**Contacts:**

**Statute:** Title 15, Chapter 35, MCA

**% of Total FY 2002 General Fund Revenue:** N/A

**Revenue Estimate Methodology:** The LFD uses a number of analytical techniques to develop relevant assumptions for this source of revenue. Historical data trends, economic conditions, input from industry experts, company surveys, and etc., are examples of information used to formulate these assumptions. The techniques used to develop these assumptions may vary from biennium to biennium and are highly dependent on availability of information, professional intuition/judgment, and a detailed analysis of the revenue source. The applicable methodology (formulas) and assumptions used by the LFD to develop a revenue estimate for this source are provided in the appendix of this document. The following summarizes the LFD process used to develop the revenue estimate.

The methodology used to forecast Cultural trust interest earnings is a multi-step process. In order to estimate total investment earnings for the trust, income must be calculated on three separate components: 1) cultural trust pool interest; 2) interest on new deposits; and 3) short-term interest earnings.

# Legislative Fiscal Division

## Revenue Estimate Profile

### Cultural Trust Interest

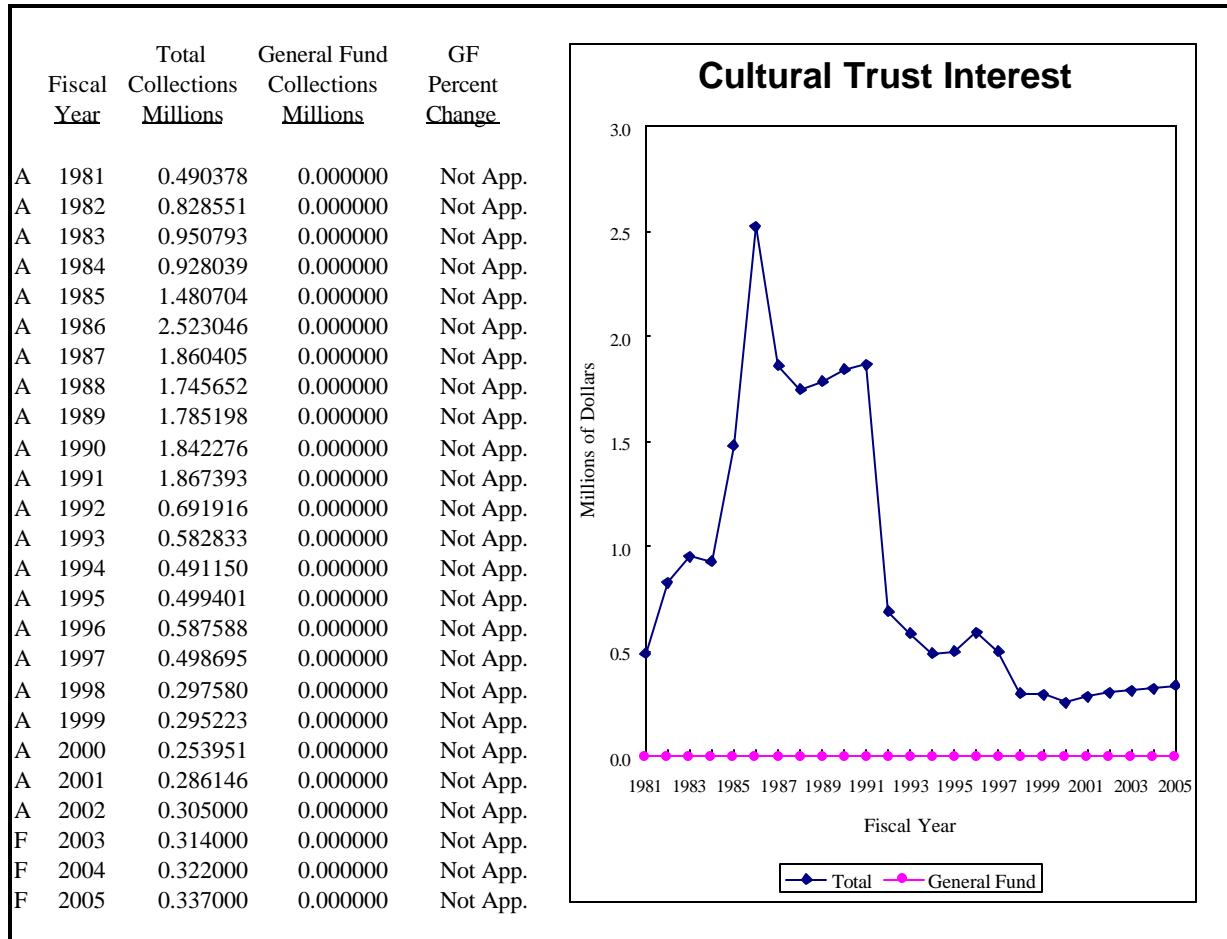
As of October 1, 1995, all fixed-income investments held by the state's major trust funds were transferred to a newly-created Trust Fund Bond Pool (TFBP). The first step involves determining the cultural trust TFBP earnings. For the first year to be estimated, the previous year's earnings are adjusted by an annualization factor to derive a full-year's worth of earnings for the fund balance at the end of the previous year. Subsequent years are estimated by adding to the first year estimate the coal tax allocation multiplied by the long-term interest rate summed for all previous years except the first year estimated.

Investment income on new deposits is calculated by multiplying the forecast amount for quarterly coal severance tax collections by the appropriate interest rate. The invested balance varies in accordance with the timing of when new monies become available. For example, coal severance tax collections due for the first quarter of the biennium will earn interest at the short-term (STIP) rate for one month, after which they will earn interest at the long-term rate for the remainder of the biennium. (Coal severance tax collections are forecast as part of the coal severance tax methodology.)

Finally, because a portion of the trust is invested on a short-term basis, an assumption is made for the balance of trust funds in STIP. This balance is then multiplied by the short-term interest rate to determine short-term interest income.

Once investment income has been calculated for these three components, the sum of these comprises total cultural trust investment income.

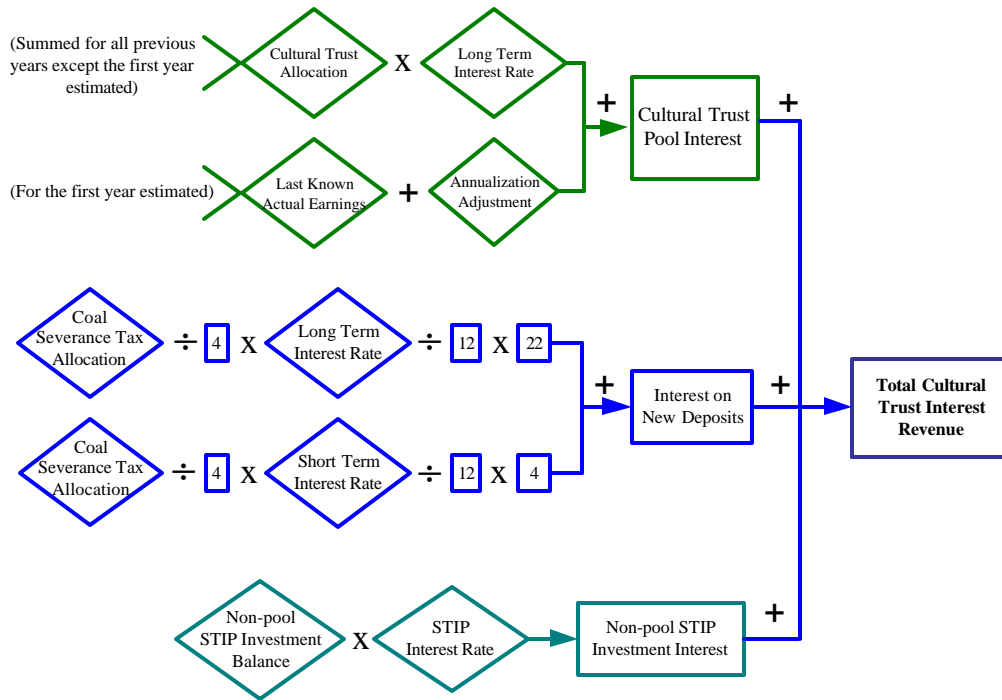
#### Revenue Projection:



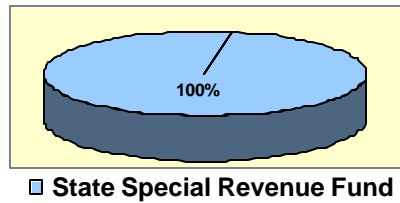
# Legislative Fiscal Division

## Revenue Estimate Profile Cultural Trust Interest

### Forecast Methodology



### Distribution Methodology



# Legislative Fiscal Division

## Revenue Estimate Profile

### Cultural Trust Interest

#### Revenue Estimate Assumptions

	t	Total Rev.	GF Rev.	TFBP	STIP
	<u>Fiscal</u>	<u>Millions</u>	<u>Millions</u>	<u>Interest</u>	<u>Interest</u>
				<u>Millions</u>	<u>Millions</u>
Actual	2000	0.253951	0.000000		
Actual	2001	0.286146	0.000000		
Actual	2002	0.305355	0.000000	0.304399	0.000955
Forecast	2003	0.314000	0.000000	0.311093	0.002467
Forecast	2004	0.322000	0.000000	0.311093	0.010023
Forecast	2005	0.337000	0.000000	0.323792	0.011834

	t	Net Coal Tax	New Deposit	Non Pool	Non Pool
	<u>Fiscal</u>	<u>New Deposit</u>	<u>Long Term</u>	<u>STIP</u>	<u>STIP Bal</u>
		<u>Millions</u>	<u>Rate</u>	<u>Rate</u>	<u>Millions</u>
Actual	2000	0.212426	7.0160%	5.9500%	0.249639
Actual	2001	0.203724	6.8830%	6.6400%	0.028633
Actual	2002	0.199168	6.3330%	3.5953%	0.102287
Forecast	2003	0.000000	6.1800%	2.4114%	0.102287
Forecast	2004	0.193000	6.5800%	3.5505%	0.102287
Forecast	2005	0.181000	6.9620%	5.1618%	0.102287

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# Legislative Fiscal Division

## Revenue Estimate Profile

### Deaf and Blind Trust Interest and Income

---

**Revenue Description:** Lands granted by the federal government to the state for the benefit of public schools and various state institutions generate income. These lands produce revenue through rents or crop shares for agricultural purposes, royalties from the sale of mineral rights, and sales of timber. Income from certain portions of public school/institution lands has been designated for support of the School for the Deaf and Blind. Thus, some of these funds are deposited into a component of the trust and legacy trust fund referred to as the Deaf and Blind trust, which generates interest earnings for the state. As of October 1, 1995, all fixed-income investments held by the state's major trust funds were transferred to a newly-created Trust Fund Bond Pool (TFBP). The majority of trust and legacy trust funds are invested as part of the TFBP. Some funds, however, are invested on a short-term basis in the state's Short Term Investment Pool (STIP). The state constitution prohibits the investment of any trust funds in common stock.

In accordance with statute, 3.0 percent of Deaf and Blind trust interest and income is allocated to the Department of Natural Resources and Conservation (DNRC) to be used for resource development purposes. Senate Bill 48, passed by the 1999 legislature, provides for the diversion of the following funds for the purpose of funding the Trust Land Management Division in the DNRC: 1) mineral royalties; 2) revenues from the sale of easements; and 3) 5.0 percent of interest and income previously credited to the common school trust. The amount of the money diverted from the Deaf and Blind trust reduces the growth of the trust fund balance and, hence, reduces the amount of distributable interest earnings.

**Applicable Tax Rate(s):** N/A

**Distribution:** Interest and income from the trust, less amounts to fund DNRC administration, is allocated to the School for the Deaf and Blind.

**Collection Frequency:** Monthly

**Applicable Assumptions and/or Relevant Indicators:**

- Long Term Interest Rates
- Short Term Interest Rates
- Trust and Legacy Income



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# Legislative Fiscal Division

## Revenue Estimate Profile

### Deaf and Blind Trust Interest and Income

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**Data Source(s):** Board of Investments, SABHRS, *Wall Street Journal*, DRI-WEFA, Department of Natural Resources and Conservation

**Contacts:** Department of Natural Resources and Conservation

**Statute:** N/A

**% of Total FY 2002 General Fund Revenue:** N/A

**Revenue Estimate Methodology:** The LFD uses a number of analytical techniques to develop relevant assumptions for this source of revenue. Historical data trends, economic conditions, input from industry experts, company surveys, and etc., are examples of information used to formulate these assumptions. The techniques used to develop these assumptions may vary from biennium to biennium and are highly dependent on availability of information, professional intuition/judgment, and a detailed analysis of the revenue source. The applicable methodology (formulas) and assumptions used by the LFD to develop a revenue estimate for this source are provided in the appendix of this document. The following summarizes the LFD process used to develop the revenue estimate.

The methodology used to forecast Deaf and Blind trust interest and income is a multi-step process.

#### Interest

Interest is derived from investment of the Deaf and Blind trust fund, as well as from interest on land sales. In order to calculate total investment earnings for the trust, income must be calculated on three separate components: 1) trust and legacy trust pool interest; 2) interest on new deposits; and 3) short-term interest earnings.

The first step involves determining the trust and legacy pool interest earnings. For the first year to be estimated, the previous year's earnings are adjusted by an annualization factor to derive a full-year's worth of earnings based on the fund balance at the end of the previous year. Subsequent years are estimated by adding to the first year estimate the trust and legacy income (less amounts used to fund the Trust Land Management Division) multiplied by the long-term interest rate summed for all previous years except the first year estimated.

Interest on new deposits (less amounts used to fund the Trust Land Management Division) is calculated by multiplying the forecast amount for trust and legacy income by the appropriate interest rate. The interest rate and invested balance varies in accordance with the timing of when new monies become available. For example, revenues received for the first month of the biennium will earn interest at the short-term (STIP) rate for one month, after which they will earn interest at the long-term rate for the remainder of the biennium. In addition, because a portion of the trust is invested on a short-term basis, an assumption is made for the balance of trust funds in STIP. This balance is then multiplied by the short-term interest rate to determine short-term interest income.

Once interest has been calculated for these three components, the sum of the three is multiplied by the percent of income attributable to the Deaf and Blind trust portion of the trust and legacy trust fund. This number is added to the amount of interest expected from land sales and interest on STIP investments, to comprise total Deaf and Blind trust interest income.

#### Income

Deaf and Blind trust income is estimated by computing the total of six different types of revenue: grazing fees, agricultural fees, miscellaneous fees, oil and gas leases, oil and gas penalties, and miscellaneous rentals. Once total income is determined, the 3.0 percent allocation to DNRC is calculated.

Total interest and income is calculated by taking the sum of total Deaf and Blind trust income, total Deaf and Blind trust

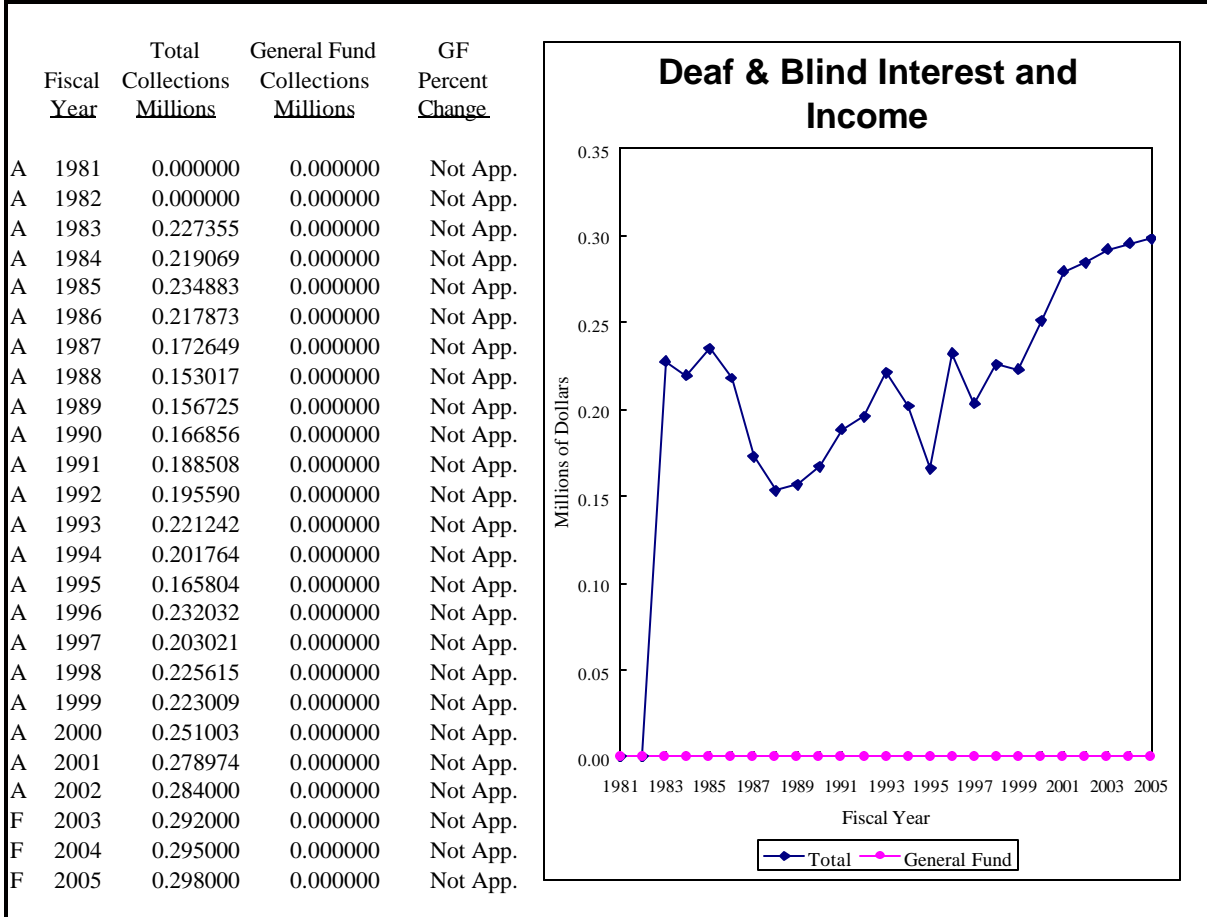
# Legislative Fiscal Division

## Revenue Estimate Profile

### Deaf and Blind Trust Interest and Income

interest, and timber sale revenue, less the resource development allocation.

#### Revenue Projection:

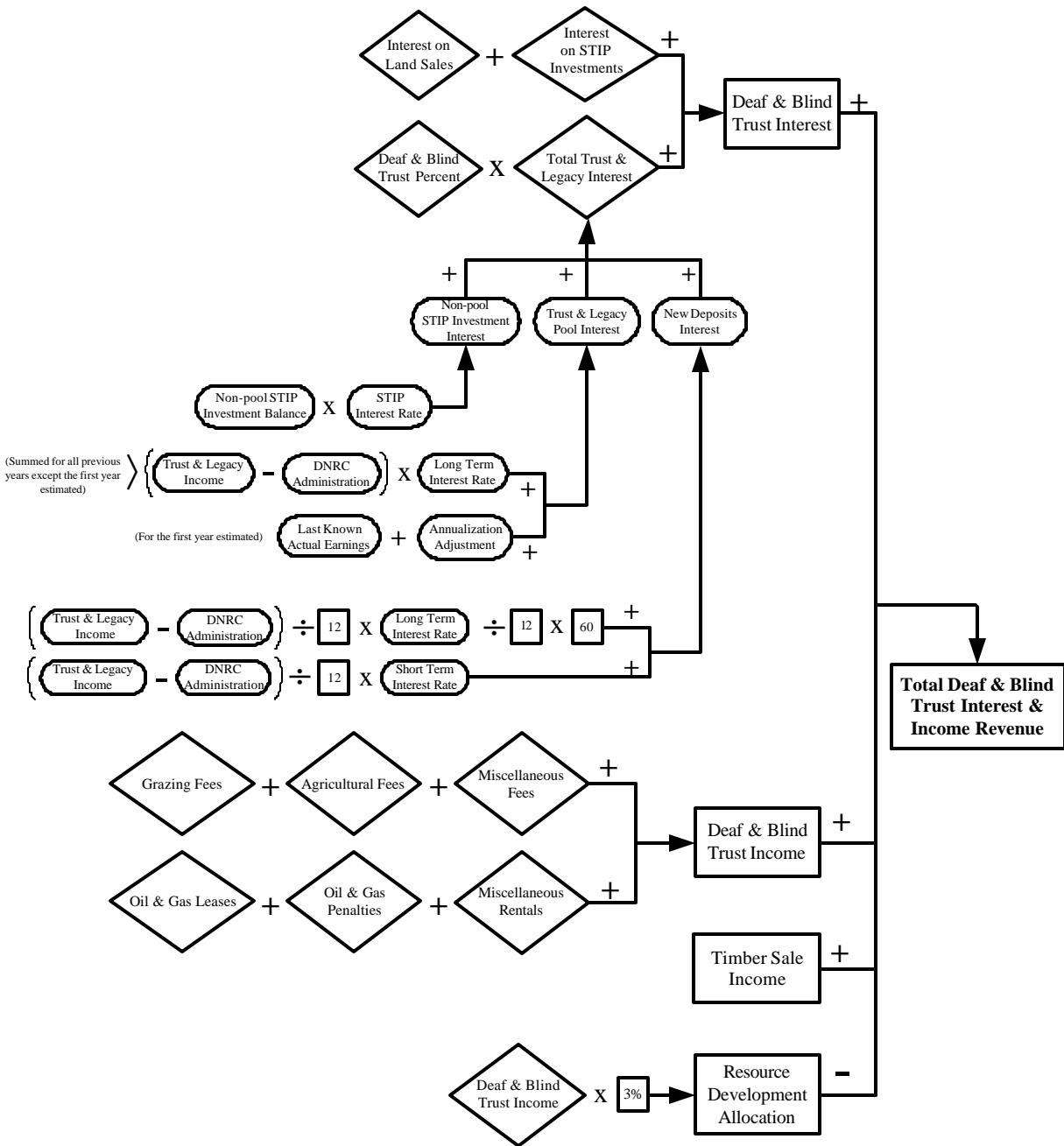


# Legislative Fiscal Division

## Revenue Estimate Profile

### Deaf and Blind Trust Interest and Income

#### Forecast Methodology

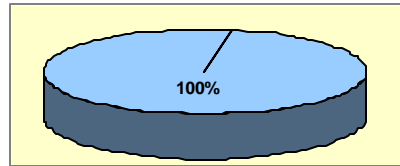


# Legislative Fiscal Division

## Revenue Estimate Profile

### Deaf and Blind Trust Interest and Income

#### Distribution Methodology



■ State Special Revenue Fund

#### Revenue Estimate Assumptions

	<u>t</u>	<u>Total Rev.</u>	<u>GF Rev.</u>	<u>TFBP</u>	<u>STIP</u>	<u>Deaf &amp;</u>
	<u>Fiscal</u>	<u>Millions</u>	<u>Millions</u>	<u>Interest</u>	<u>Interest</u>	<u>Blind Share</u>
				<u>Millions</u>	<u>Millions</u>	<u>T&amp;L</u>
Actual	2000	0.251003	0.000000			0.006369
Actual	2001	0.278974	0.000000			0.007485
Actual	2002	0.284290	0.000000	29.670198	0.102471	0.006697
Forecast	2003	0.292000	0.000000	29.670198	0.233572	0.006697
Forecast	2004	0.295000	0.000000	29.796459	0.322461	0.006697
Forecast	2005	0.298000	0.000000	29.930892	0.446633	0.006697

	<u>t</u>	<u>Trust Income</u>	<u>Trust Land</u>	<u>New Deposit</u>	<u>Non Pool</u>	<u>Non Pool</u>
	<u>Fiscal</u>	<u>New Deposit</u>	<u>Admin.</u>	<u>Long Term</u>	<u>STIP</u>	<u>STIP Bal</u>
		<u>Millions</u>	<u>Millions</u>	<u>Rate</u>	<u>Rate</u>	<u>Millions</u>
Actual	2000	10.962021		7.0160%	5.9500%	11.676486
Actual	2001	12.667782	0.000000	6.8830%	6.6400%	6.984553
Actual	2002	2.043058	0.000000	6.3330%	3.5953%	7.334239
Forecast	2003	2.043058	0.000000	6.1800%	2.4114%	7.334239
Forecast	2004	2.043058	0.000000	6.5800%	3.5505%	7.334239
Forecast	2005	2.043058	0.000000	6.9620%	5.1618%	7.334239

	<u>t</u>	<u>Grazing</u>	<u>Agriculture</u>	<u>Misc.</u>	<u>O&amp;G Lease</u>	<u>O&amp;G Bonus</u>	<u>O&amp;G Penalty</u>	<u>Misc.</u>
	<u>Fiscal</u>	<u>Millions</u>	<u>Millions</u>	<u>Millions</u>	<u>Millions</u>	<u>Millions</u>	<u>Millions</u>	<u>Millions</u>
Actual	2000	0.030113	0.008628	0.000000	0.001980	0.001280	0.000000	0.046783
Actual	2001	0.040496	0.020937	0.000000	0.001440	0.000480	0.000000	0.019365
Actual	2002	0.040733	0.014776	0.000000	0.001740	0.000050	0.000000	0.027618
Forecast	2003	0.040615	0.022709	0.000000	0.001720	0.000000	0.000000	0.029133
Forecast	2004	0.040674	0.023265	0.000000	0.001633	0.000000	0.000000	0.030563
Forecast	2005	0.040645	0.022721	0.000000	0.001698	0.000000	0.000000	0.032029

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**Legislative Fiscal Division**  
Revenue Estimate Profile  
**Deaf and Blind Trust Interest and Income**

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	<u>t</u> <u>Fiscal</u>	<u>Int. Land</u> <u>Millions</u>	<u>Int. STIP</u> <u>Millions</u>	<u>Int. Trust</u> <u>Millions</u>	<u>Timber</u> <u>Millions</u>	<u>Res. Dev.</u> <u>Millions</u>
Actual	2000	0.000000	0.000000	0.162218	0.000000	-0.002664
Forecast	2001	0.000000	0.000000	0.196256	0.000000	-0.002482
Forecast	2002	0.000000	0.000000	0.199373	0.000000	-0.002548
Forecast	2003	0.000000	0.000000	0.200266	0.000000	-0.002825
Forecast	2004	0.000000	0.000000	0.201706	0.000000	-0.002884
Forecast	2005	0.000000	0.000000	0.203438	0.000000	-0.002913

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# Legislative Fiscal Division

## Revenue Estimate Profile

### Parks Trust Interest

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**Revenue Description:** Beginning in fiscal 1976, a portion of coal severance tax revenue was deposited into the Parks Acquisition and Arts Protection trust fund. The 1991 legislature split the principal of this trust into two separate trusts, the Parks Acquisition trust (parks trust) and the Arts Protection trust (cultural trust), with coal severance taxes allocated to each one. Except for fiscal 2003, the amount of 1.27 percent of coal tax revenues is statutorily allocated to the parks trust for the purpose of parks acquisition or management. Income from the parks trust must be appropriated for the acquisition, development, operation, and maintenance of state parks, state recreational areas, state monuments, and state historical sites under control of the Department of Fish, Wildlife and Parks.

**Applicable Tax Rate(s):** N/A

**Distribution:** Interest earnings on the parks trust are allocated to the Department of Fish, Wildlife, and Parks.

**Collection Frequency:** Monthly

**Applicable Assumptions and/or Relevant Indicators:**

- Long Term Interest Rates
- Short Term Interest Rates
- Coal Severance Tax Collections

Coal severance tax collections are estimated via the coal severance tax methodology.

**Data Source(s):** Board of Investments, SABHRS, *Wall Street Journal*, DRI-WEFA

**Contacts:**

**Statute:** Title 15, Chapter 35 and Title 23, Chapter 1, MCA

**% of Total FY 2002 General Fund Revenue:** N/A

**Revenue Estimate Methodology:** The LFD uses a number of analytical techniques to develop relevant assumptions for this source of revenue. Historical data trends, economic conditions, input from industry experts, company surveys, and etc., are examples of information used to formulate these assumptions. The techniques used to develop these assumptions may vary from biennium to biennium and are highly dependent on availability of information, professional intuition/judgment, and a detailed analysis of the revenue source. The applicable methodology (formulas) and assumptions used by the LFD to develop a revenue estimate for this source are provided in the appendix of this document. The following summarizes the LFD process used to develop the revenue estimate.

The methodology used to forecast parks trust interest earnings is a multi-step process. In order to estimate total investment earnings for the trust, income must be calculated on three separate components: 1) parks trust pool interest; 2) interest on new deposits; and 3) short-term interest earnings.

As of October 1, 1995, all fixed-income investments held by the state's major trust funds were transferred to a newly-created Trust Fund Bond Pool (TFBP). The first step involves determining the TFBP earnings for the trust. For the first year to be estimated, the previous year's earnings are adjusted by an annualization factor to derived a full-year's worth of earnings based on the fund balance at the end of the previous year. Subsequent years are estimated by adding to the first year estimate the coal tax allocation multiplied by the long-term interest rate for all previous years except the first year

# Legislative Fiscal Division

## Revenue Estimate Profile

### Parks Trust Interest

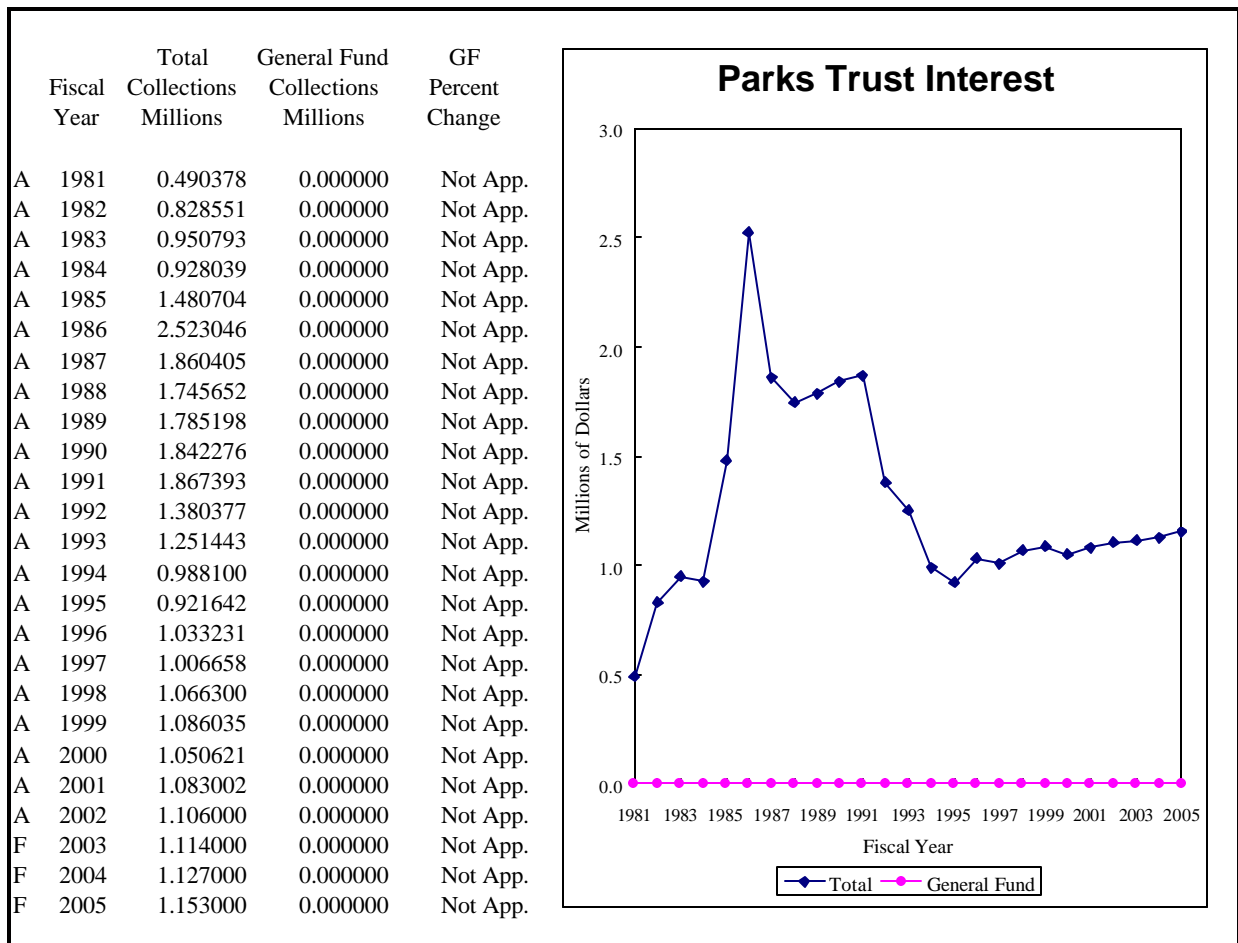
estimated.

Investment income on new deposits is calculated by multiplying the forecast amount for quarterly coal severance tax collections by the appropriate interest rate. The invested balance varies in accordance with the timing of when new monies become available. For example, coal severance tax collections due for the first quarter of the biennium will earn interest at the short-term (STIP) rate for one month, after which they will earn interest at the long-term rate for the remainder of the biennium. (Coal severance tax collections are forecast as part of the coal severance tax methodology.)

Finally, because a portion of the trust is invested on a short-term basis, an assumption is made for the balance of trust funds in STIP. This balance is then multiplied by the short-term interest rate to determine short-term interest income.

Once investment income has been calculated for these three components, the sum of these comprises total parks trust investment income.

#### Revenue Projection:

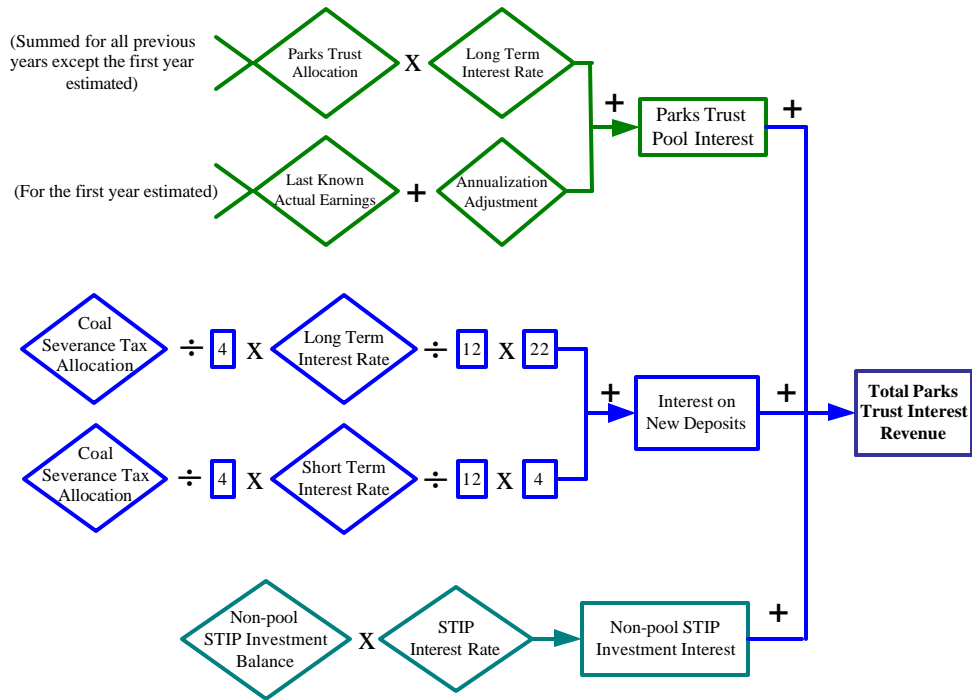


# Legislative Fiscal Division

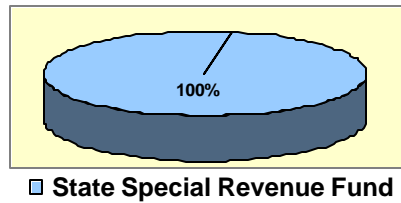
## Revenue Estimate Profile

### Parks Trust Interest

#### Forecast Methodology



#### Distribution Methodology





# Legislative Fiscal Division

## Revenue Estimate Profile

### Parks Trust Interest

#### Revenue Estimate Assumptions

	t	Total Rev.	GF Rev.	TFBP	STIP
	<u>Fiscal</u>	<u>Millions</u>	<u>Millions</u>	<u>Interest</u>	<u>Interest</u>
				<u>Millions</u>	<u>Millions</u>
Actual	2000	1.050621	0.000000		
Actual	2001	1.083002	0.000000		
Actual	2002	1.105962	0.000000	1.100428	0.005534
Forecast	2003	1.114000	0.000000	1.113922	0.000000
Forecast	2004	1.127000	0.000000	1.113922	0.012882
Forecast	2005	1.153000	0.000000	1.139518	0.013181

	t	Net Coal Tax	New Deposit	Non Pool	Non Pool
	<u>Fiscal</u>	<u>New Deposit</u>	<u>Long Term</u>	<u>STIP</u>	<u>STIP Bal</u>
		<u>Millions</u>	<u>Rate</u>	<u>Rate</u>	<u>Millions</u>
Actual	2000	0.450466	6.3330%	5.9500%	0.301775
Actual	2001	0.410682	6.8830%	6.6400%	0.177151
Actual	2002	0.401498	6.3330%	3.5953%	0.308520
Forecast	2003	0.000000	6.1800%	2.4114%	0.308520
Forecast	2004	0.389000	6.5800%	3.5505%	0.308520
Forecast	2005	0.364000	6.9620%	5.1618%	0.308520

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# Legislative Fiscal Division

## Revenue Estimate Profile

### Pine Hills Interest and Income

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**Revenue Description:** Lands granted by the federal government to the state for the benefit of public schools and various state institutions generate income. These lands produce revenue through rents or crop shares for agricultural purposes, royalties from the sale of mineral rights, and sales of timber. Income from certain portions of public school/institution lands has been designated for the support of the Pine Hills youth correctional facility. Thus, some of these funds are deposited into a component of the trust and legacy trust fund referred to as the Pine Hills trust, which generates interest earnings for the state. As of October 1, 1995, all fixed-income investments held by the state's major trust funds were transferred to a newly-created Trust Fund Bond Pool (TFBP). The majority of trust and legacy trust funds are invested as part of the TFBP. Some funds, however, are invested on a short-term basis in the state's Short Term Investment Pool (STIP). The state constitution prohibits the investment of any trust funds in common stock.

In accordance with statute, 3.0 percent of Pine Hills interest and income is allocated to the Department of Natural Resources and Conservation (DNRC) to be used for resource development purposes. Senate Bill 48, passed by the 1999 legislature, provides for the diversion of the following funds for the purpose of funding the Trust Land Management Division in the DNRC: 1) mineral royalties; 2) revenues from the sale of easements; and 3) 5.0 percent of interest and income previously credited to the common school trust. The amount of the money diverted from the Pine Hills trust reduces the growth of the trust fund balance and, hence, reduces the amount of distributable interest earnings.

**Applicable Tax Rate(s):** N/A

**Distribution:** Interest and income from the trust, less amounts to fund DNRC administration, is allocated to the Department of Corrections for support of the Pine Hills youth correctional facility.

**Collection Frequency:** Monthly

**Applicable Assumptions and/or Relevant Indicators:**

- Long Term Interest Rates
- Short Term Interest Rates
- Trust and Legacy Income

**Data Source(s):** Board of Investments, SABHRS, *Wall Street Journal*, DRI-WEFA, Department of Natural Resources and Conservation

**Contacts:** Department of Natural Resources and Conservation

**Statute:** N/A

**% of Total FY 2002 General Fund Revenue:** N/A

**Revenue Estimate Methodology:** The LFD uses a number of analytical techniques to develop relevant assumptions for this source of revenue. Historical data trends, economic conditions, input from industry experts, company surveys, and etc., are examples of information used to formulate these assumptions. The techniques used to develop these assumptions may vary from biennium to biennium and are highly dependent on availability of information, professional intuition/judgment, and a detailed analysis of the revenue source. The applicable methodology (formulas) and assumptions used by the LFD to develop a revenue estimate for this source are provided in the appendix of this document. The following summarizes the LFD process used to develop the revenue estimate.

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# Legislative Fiscal Division

## Revenue Estimate Profile

### Pine Hills Interest and Income

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The methodology used to forecast Pine Hills interest and income is a multi-step process.

#### **Interest**

Interest is derived from investment of the Pine Hills trust fund, as well as from interest on land sales. In order to calculate total investment earnings for the trust, income must be calculated on three separate components: 1) trust and legacy trust pool interest; 2) interest on new deposits; and 3) short term interest earnings.

The first step involves determining the trust and legacy pool interest earnings. For the first year to be estimated, the previous year's earnings are adjusted by an annualization factor to derived a full-year's worth of earnings based on the fund balance at the end of the previous year. Subsequent years are estimated by adding to the first year estimate the trust and legacy income (less amounts used to fund the Trust Land Management Division) multiplied by the long-term interest rate summed for all previous years exc ept the first year estimated.

Interest on new deposits (less amounts used to fund the Trust Land Management Division) is calculated by multiplying the forecast amount for trust and legacy income by the appropriate interest rate. The interest rate and invested balance varies in accordance with the timing of when new monies become available. For example, revenues received for the first month of the biennium will earn interest at the short-term (STIP) rate for one month, after which they will earn interest at the long-term rate for the remainder of the biennium. In addition, because a portion of the trust is invested on a short-term basis, an assumption is made for the balance of trust funds in STIP. This balance is then multiplied by the short-term interest rate to determine short-term interest income.

Once interest has been calculated for these three components, the sum of the three is multiplied by the percent of income attributable to the Pine Hills trust portion of the trust and legacy trust fund. This number is added to the amount of interest expected from land sales and interest on STIP investments, to comprise total Pine Hills trust interest income.

#### **Income**

Pine Hills trust income is estimated by computing the total of six different types of revenue: grazing fees, agricultural fees, miscellaneous fees, oil and gas leases, oil and gas penalties, and miscellaneous rentals. Once total income is determined, the 3.0 percent allocation to DNRC is calculated.

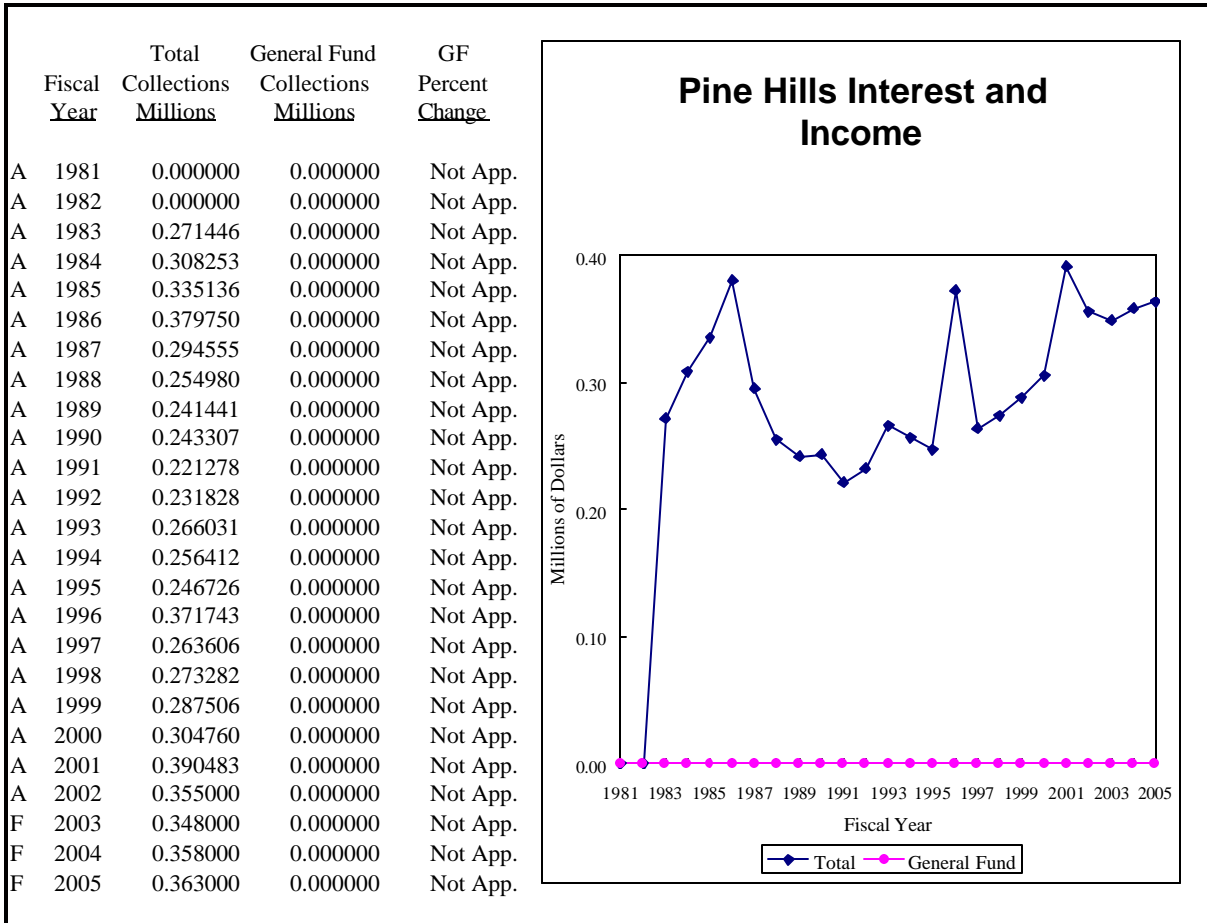
Total interest and income is calculated by taking the sum of total Pine Hills trust income, total Pine Hills trust interest, and timber sale revenue, less the resource development allocation.

# Legislative Fiscal Division

## Revenue Estimate Profile

### Pine Hills Interest and Income

#### Revenue Projection:

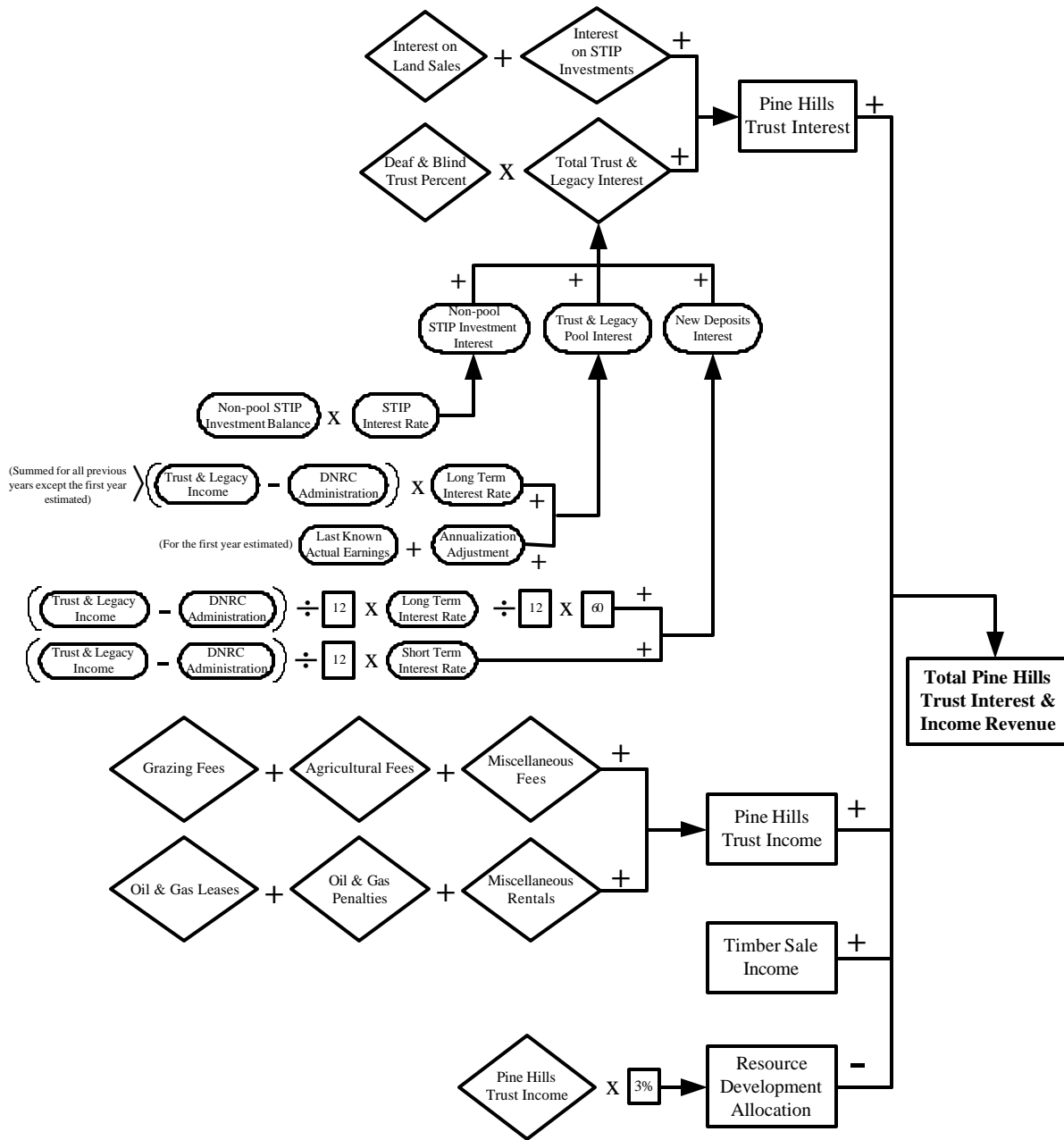


# Legislative Fiscal Division

## Revenue Estimate Profile

### Pine Hills Interest and Income

#### Forecast Methodology

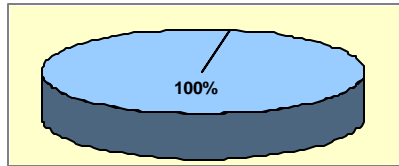


# Legislative Fiscal Division

## Revenue Estimate Profile

### Pine Hills Interest and Income

#### Distribution Methodology



■ State Special Revenue Fund

#### Revenue Estimate Assumptions

	<u>t</u>	<u>Total Rev.</u>	<u>GF Rev.</u>	<u>TFBP</u>	<u>STIP</u>	<u>Pine</u>
	<u>Fiscal</u>	<u>Millions</u>	<u>Millions</u>	<u>Interest</u>	<u>Interest</u>	<u>Hills Share</u>
				<u>Millions</u>	<u>Millions</u>	<u>T&amp;L</u>
Actual	2000	0.304760	0.000000			0.006048
Actual	2001	0.390483	0.000000			0.006167
Actual	2002	0.355497	0.000000	29.670198	0.102471	0.005835
Forecast	2003	0.348000	0.000000	29.670198	0.233572	0.005835
Forecast	2004	0.358000	0.000000	29.796459	0.322461	0.005835
Forecast	2005	0.363000	0.000000	29.930892	0.446633	0.005835

	<u>t</u>	<u>Trust Income</u>	<u>Trust Land</u>	<u>New Deposit</u>	<u>Non Pool</u>	<u>Non Pool</u>
	<u>Fiscal</u>	<u>New Deposit</u>	<u>Admin.</u>	<u>Long Term</u>	<u>STIP</u>	<u>STIP Bal</u>
		<u>Millions</u>	<u>Millions</u>	<u>Rate</u>	<u>Rate</u>	<u>Millions</u>
Actual	2000	10.962021		7.0160%	5.9500%	11.676486
Actual	2001	12.667782	0.000000	6.8830%	6.6400%	6.984553
Actual	2002	2.043058	0.000000	6.3330%	3.5953%	7.334239
Forecast	2003	2.043058	0.000000	6.1800%	2.4114%	7.334239
Forecast	2004	2.043058	0.000000	6.5800%	3.5505%	7.334239
Forecast	2005	2.043058	0.000000	6.9620%	5.1618%	7.334239

	<u>t</u>	<u>Grazing</u>	<u>Agriculture</u>	<u>Misc.</u>	<u>O&amp;G Lease</u>	<u>O&amp;G Bonus</u>	<u>O&amp;G Penalty</u>	<u>Misc.</u>
	<u>Fiscal</u>	<u>Millions</u>	<u>Millions</u>	<u>Millions</u>	<u>Millions</u>	<u>Millions</u>	<u>Millions</u>	<u>Millions</u>
Actual	2000	0.054682	0.022855	0.047965	0.021231	0.000000	0.003895	0.000000
Actual	2001	0.063912	0.013002	0.056236	0.023526	0.066599	0.005510	0.000000
Actual	2002	0.077707	0.016967	0.058062	0.021550	0.000000	0.007482	0.000000
Forecast	2003	0.070810	0.020064	0.057149	0.025608	0.000000	0.005510	0.000000
Forecast	2004	0.074259	0.020185	0.057606	0.031065	0.000000	0.005510	0.000000
Forecast	2005	0.072535	0.020621	0.057378	0.036279	0.000000	0.005510	0.000000

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# Legislative Fiscal Division

## Revenue Estimate Profile

### Pine Hills Interest and Income

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	t	Int. Land	Int. STIP	Int. Trust	Timber	Res. Dev.
	Fiscal	Millions	Millions	Millions	Millions	Millions
Actual	2000	0.000000	0.000086	0.154047	0.000000	-0.004521
Actual	2001	0.000000	0.000000	0.161698	0.000000	-0.006864
Actual	2002	0.000000	0.000000	0.173729	0.000000	-0.005450
Forecast	2003	0.000000	0.000000	0.174488	0.000000	-0.005374
Forecast	2004	0.000000	0.000000	0.175744	0.000000	-0.005659
Forecast	2005	0.000000	0.000000	0.177253	0.000000	-0.005770

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# Legislative Fiscal Division

## Revenue Estimate Profile

### Regional Water Trust Interest

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**Revenue Description:** The 1999 legislature (Senate Bill 220) created the Treasure State Endowment (TSE) Regional Water System Fund within the permanent coal tax trust fund. The fund receives 12.5 percent of total coal severance tax collections from July 1999 through June 2013. Interest earned on the fund is used to provide matching funds to plan and construct regional drinking water systems in Montana. Each state dollar must be matched equally by local funds. The funds in the account are further restricted to finance regional drinking water systems from the waters of the Tiber reservoir and the Missouri River within specific geographic areas.

**Applicable Tax Rate(s):** NA

**Distribution:** Interest earnings are allocated to the Department of Commerce to fund eligible projects.

**Collection Frequency:** Monthly

**Applicable Assumptions and/or Relevant Indicators:**

- Long Term Interest Rates
- Short Term Interest Rates
- Coal Severance Tax Collections

Coal severance tax collections are forecast as part of the coal severance tax methodology.

**Data Source(s):** Board of Investments, SABHRS, *Wall Street Journal*, DRI-WEFA

**Contacts:**

**Statute:** Title 15, Chapter 35; Title 17, Chapter 5; and Title 90, Chapter 6, MCA

**% of Total FY 2002 General Fund Revenue:** N/A

**Revenue Estimate Methodology:** The LFD uses a number of analytical techniques to develop relevant assumptions for this source of revenue. Historical data trends, economic conditions, input from industry experts, company surveys, and etc., are examples of information used to formulate these assumptions. The techniques used to develop these assumptions may vary from biennium to biennium and are highly dependent on availability of information, professional intuition/judgment, and a detailed analysis of the revenue source. The applicable methodology (formulas) and assumptions used by the LFD to develop a revenue estimate for this source are provided in the appendix of this document. The following summarizes the LFD process used to develop the revenue estimate.

The methodology used to forecast the regional water trust interest earnings is a multi-step process. In order to estimate total investment earnings for the trust, income must be calculated on three separate components: 1) regional water trust pool interest; 2) interest on new deposits; and 3) interest earned on other non-pool balances.

As of October 1, 1995, all fixed-income investments held by the state's major trust funds were transferred to a newly-created Trust Fund Bond Pool (TFBP). Thus, the first step involves determining the regional water trust TFBP earnings. For the first year to be estimated, the previous year's earnings are adjusted by an annualization factor to derived a full-year's worth of earnings for the fund balance at the end of the previous year. Subsequent years are estimated by adding to the first year estimate the coal tax allocation (less a portion of the water bond subsidy) multiplied by the long-term interest rate summed for all previous years except the first year estimated.



# Legislative Fiscal Division

## Revenue Estimate Profile

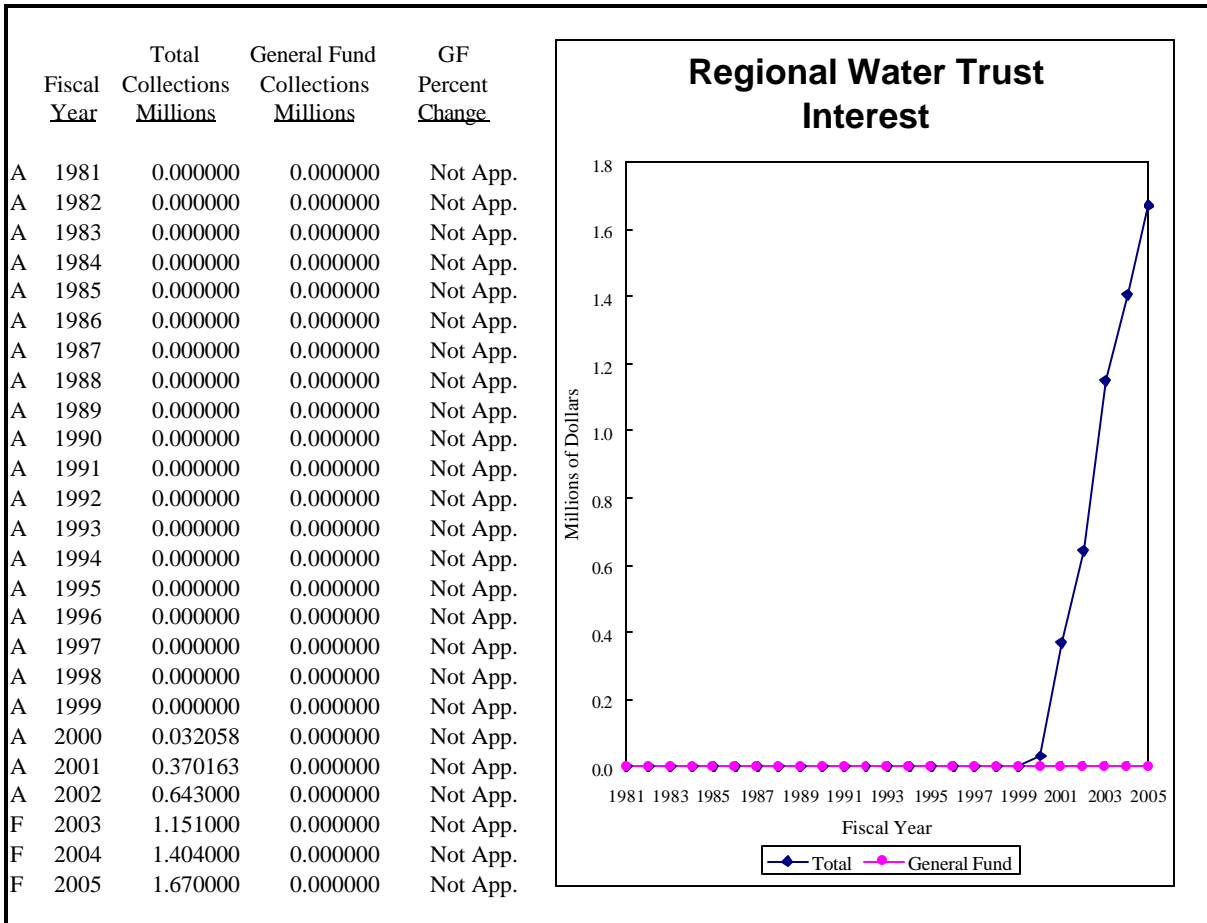
### Regional Water Trust Interest

Investment income on new deposits is calculated by multiplying the forecast amount for quarterly coal severance tax collections (less a portion of the water bond subsidy) by the appropriate interest rate. The invested balance used varies in accordance with the timing of when new monies become available. For example, coal severance tax collections due for the first quarter of the biennium will earn interest at the short-term (STIP) rate for one month, after which they will earn interest at the long-term rate for the remainder of the biennium. (Coal severance tax collections are forecast as part of the coal severance tax methodology.)

Finally, because a portion of the trust is invested on a short-term basis, an assumption is made for the balance of trust funds in STIP. This balance is then multiplied by the short-term interest rate to determine short-term interest income.

Once investment income has been calculated for these three components, the sum of these comprises total TSE Regional Water System investment income.

#### Revenue Projection:

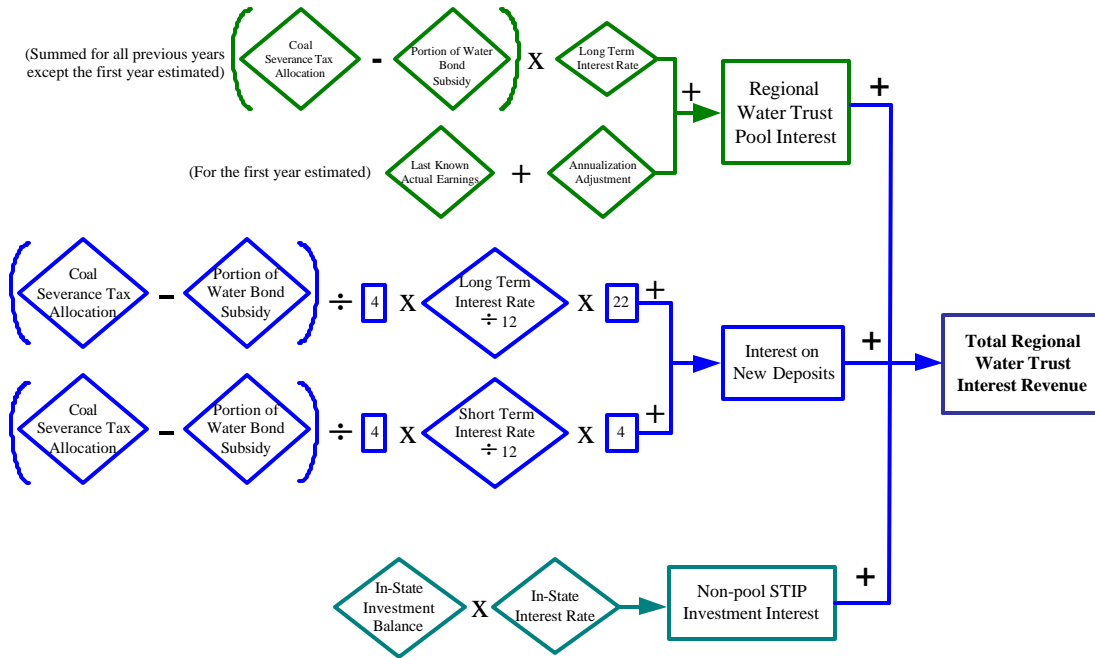


# Legislative Fiscal Division

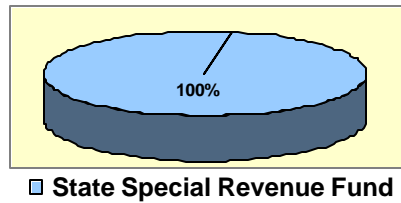
## Revenue Estimate Profile

### Regional Water Trust Interest

#### Forecast Methodology



#### Distribution Methodology



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# Legislative Fiscal Division

## Revenue Estimate Profile

### Regional Water Trust Interest

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#### Revenue Estimate Assumptions

	t	Total Rev.	GF Rev.	TFBP	STIP	Loan
	<u>Fiscal</u>	<u>Millions</u>	<u>Millions</u>	<u>Interest</u>	<u>Interest</u>	<u>Interest</u>
				<u>Millions</u>	<u>Millions</u>	<u>Millions</u>
Actual	2000	0.032058	0.000000			
Actual	2001	0.370163	0.000000			
Actual	2002	0.643133	0.000000	0.610589	0.032544	0.000000
Forecast	2003	1.151000	0.000000	1.002024	0.148969	0.000000
Forecast	2004	1.404000	0.000000	1.227965	0.176064	0.000000
Forecast	2005	1.670000	0.000000	1.466424	0.203622	0.000000

	t	Net Coal Tax	New Deposit	Non Pool	Non Pool
	<u>Fiscal</u>	<u>New Deposit</u>	<u>Long Term</u>	<u>STIP</u>	<u>STIP Bal</u>
		<u>Millions</u>	<u>Rate</u>	<u>Rate</u>	<u>Millions</u>
Actual	2000	4.433724	6.3330%	5.9500%	3.441977
Actual	2001	4.042147	6.8830%	6.6400%	0.845223
Actual	2002	3.951756	6.3330%	3.5953%	1.578601
Forecast	2003	3.656000	6.1800%	2.4114%	1.578601
Forecast	2004	3.624000	6.5800%	3.5505%	1.578601
Forecast	2005	3.373000	6.9620%	5.1618%	1.578601

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# Legislative Fiscal Division

## Revenue Estimate Profile

### Resource Indemnity Trust Interest

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**Revenue Description:** Article IX, Section 2 of the Montana Constitution and Title 15, Chapter 38, MCA, require that certain resource extraction taxes, as determined by the legislature, be placed in a trust. The principal of the Resource Indemnity Trust (RIT) "shall forever remain inviolate in an amount of one hundred million dollars (\$100,000,000), guaranteed by the state against loss or diversion." Once the principal of the trust reaches \$100.0 million, any additional tax deposits may be appropriated. Interest earnings on the RIT are to be spent to improve the total environment and rectify damage to the environment. It is also the legislature's intent that interest earnings not be appropriated for general operating expenses of state agencies.

Prior to July 1, 2002 when the Governor by executive order certified to the Secretary of State that the RIT balance had reached \$100 million, the RIT had received revenue from the resource indemnity and ground water assessment tax and the oil and gas tax. Because these allocations of revenue are no longer deposited to the trust, the trust balance will remain constant and interest earnings will be dependent only on the interest rates.

**Applicable Tax Rate(s):** N/A

**Distribution:** Statute allocates RIT interest earnings in the following manner:

- 1) at the beginning of the biennium, an amount not to exceed \$175,000 to the environmental contingency fund to bring the balance up to \$750,000. Money in this account is statutorily appropriated for unanticipated public needs arising from certain disasters and emergencies, which may be used upon authorization of the Governor.
- 2) at the beginning of the biennium, an amount not to exceed \$50,000 to the oil and gas mitigation account to bring the balance up to \$200,000. Money in this account is statutorily appropriated to the Board of Oil and Gas Conservation for the cost of plugging wells that have been abandoned and for which no responsible party can be found.
- 3) at the beginning of the biennium, \$500,000 to the water storage state special revenue account to provide loans and grants for water storage projects
- 4) \$2.0 million annually to the renewable resource grant and loan program state special revenue account for distribution as grants
- 5) \$1.2 million annually through fiscal 2005 to the reclamation and development grant state special revenue account for distribution as grants, \$1.5 million annually after fiscal 2005.
- 6) \$350,000 annually through fiscal 2005 to the future fisheries program for bull trout and cutthroat trout recovery, \$500,000 annually after fiscal 2005.
- 7) \$300,000 annually to the ground water assessment account to improve ground water management and protection
- 8) \$240,000 annually to MSU Northern for the environmental science-water quality instructional programs. This amount is statutorily appropriated.
- 9) Of the remaining RIT interest earnings: a) through fiscal 2005, 25.5 percent (30 percent after fiscal 2005) goes to the renewable resource grant and loan account for program and administrative costs; b) through fiscal 2005, 45.0 percent (35 percent after fiscal 2004) goes to the reclamation and development grant account for program and administrative costs; c) 22.0 percent through fiscal 2005 (26 percent after fiscal 2005) goes to the hazardous waste/CERCLA account for superfund activities; and d) 7.5 percent through fiscal 2005 (9.0 percent after fiscal 2005) goes to the environmental quality protection fund for additional clean-up activities.

The Department of Natural Resources and Conservation administers two of the RIT interest accounts which are used for grants, loans, and administrative costs: the renewable resource grant and loan program account and the reclamation and development grant account. These accounts also receive funding from other sources. All grants and loans made from these accounts require legislative approval. Grants must also be appropriated.

**Collection Frequency:** Monthly

**Applicable Assumptions and/or Relevant Indicators:**

Long Term Interest Rates

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# Legislative Fiscal Division

## Revenue Estimate Profile

### Resource Indemnity Trust Interest

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Short Term Interest Rates  
RIGWA Tax Collections  
Oil and Natural Gas Tax Collections

RIGWA, oil, and natural gas tax collections are estimated under separate methodologies.

**Data Source(s):** Board of Investments, SABHRS, *Wall Street Journal*, DRI-WEFA

**Contacts:**

**Statute:** Title 15, Chapter 38, MCA

**% of Total FY 2002 General Fund Revenue:** N/A

**Revenue Estimate Methodology:** The LFD uses a number of analytical techniques to develop relevant assumptions for this source of revenue. Historical data trends, economic conditions, input from industry experts, company surveys, and etc., are examples of information used to formulate these assumptions. The techniques used to develop these assumptions may vary from biennium to biennium and are highly dependent on availability of information, professional intuition/judgement, and a detailed analysis of the revenue source. The applicable methodology (formulas) and assumptions used by the LFD to develop a revenue estimate for this source are provided in the appendix of this document. The following summarizes the LFD process used to develop the revenue estimate.

The methodology used to forecast RIT interest earnings is a multi-step process. In order to estimate total investment earnings for the trust, income must be calculated on three separate components: 1) RIT pool interest; 2) interest on new deposits; and 3) short-term interest earnings.

As of October 1, 1995, all fixed-income investments held by the state's major trust funds were transferred to a newly-created Trust Fund Bond Pool (TFBP). Thus, the first step involves determining the RIT TFBP earnings. For the first year to be estimated, the previous year's earnings are adjusted by an annualization factor to derive a full-year's worth of earnings for the fund balance at the end of the previous year. Subsequent years are estimated by adding to the first year the estimate of resource indemnity and groundwater assessment (RIGWA) tax (if any) multiplied by the long-term interest rate<sup>7</sup> summed for all previous years except the first year estimated.

Investment income on new deposits is calculated by multiplying the forecast amount (if any) for the RIGWA tax and oil and gas tax collections, by the appropriate interest rate. The invested balance varies in accordance with the timing of when new monies become available. Because a portion of the trust is invested on a short-term basis, an assumption is made for the balance of trust funds in STIP. This balance is then multiplied by the short-term interest rate<sup>8</sup> to determine short-term interest income.

Once investment interest has been calculated for these three components, the sum of these comprises total RIT income.

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<sup>7</sup> The estimate of long term interest rates is derived by making a simple average of corporate Aaa bonds, corporate Baa bonds, 10 year T notes, and 30 year T bonds.

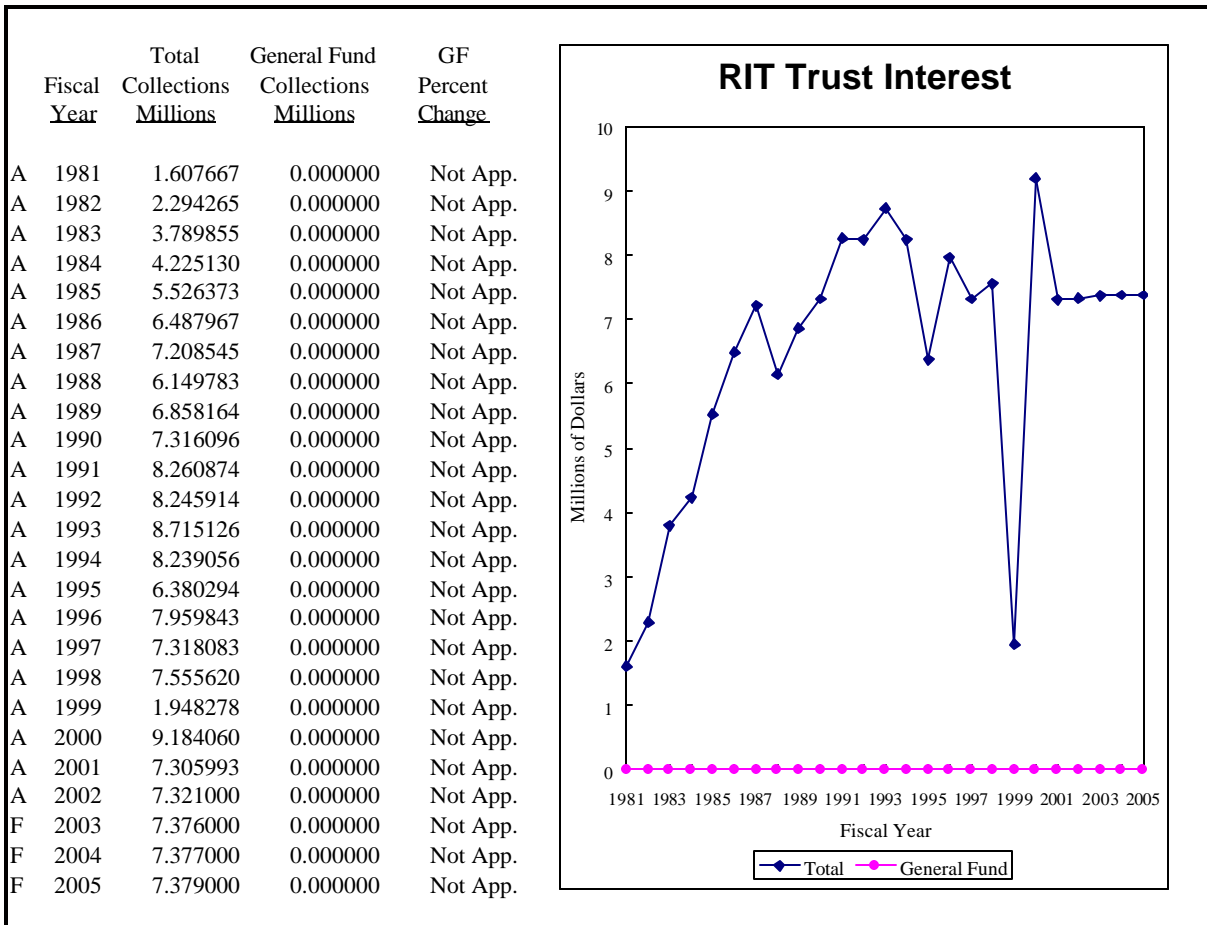
<sup>8</sup> The estimate of short term interest rates is developed by making a simple average of 3 month corporate paper, 6 month corporate paper, 3 month T bills, and 6 month T bills.

# Legislative Fiscal Division

## Revenue Estimate Profile

### Resource Indemnity Trust Interest

**Revenue Projection:**

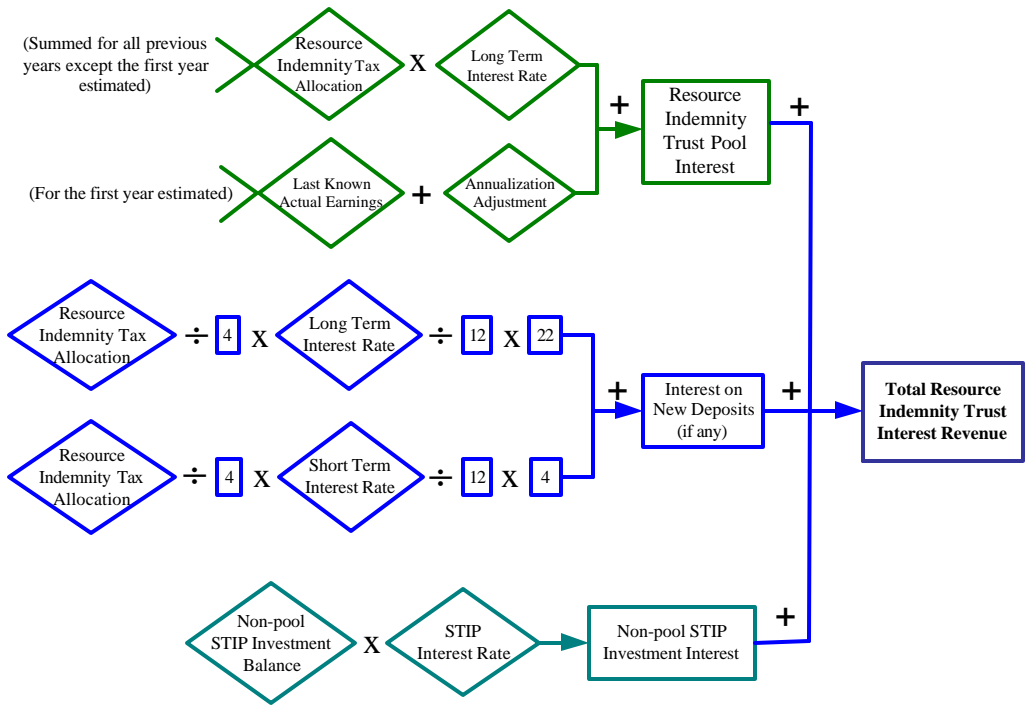


# Legislative Fiscal Division

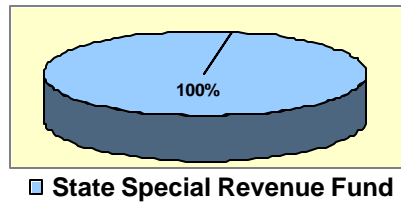
## Revenue Estimate Profile

### Resource Indemnity Trust Interest

#### Forecast Methodology



#### Distribution Methodology



# Legislative Fiscal Division

## Revenue Estimate Profile

### Resource Indemnity Trust Interest

#### Revenue Estimate Assumptions:

	t	Total Rev.	GF Rev.	TFBP	STIP
	<u>Fiscal</u>	<u>Millions</u>	<u>Millions</u>	<u>Interest</u>	<u>Interest</u>
				<u>Millions</u>	<u>Millions</u>
Actual	2000	9.184060	0.000000		
Actual	2001	7.305993	0.000000		
Actual	2002	7.320563	0.000000	7.286148	0.034415
Forecast	2003	7.376000	0.000000	7.373519	0.002794
Forecast	2004	7.377000	0.000000	7.373519	0.004114
Forecast	2005	7.379000	0.000000	7.373519	0.005981

	t	Net Tax	New Deposit	Non Pool	Non Pool
	<u>Fiscal</u>	<u>New Deposit</u>	<u>Long Term</u>	<u>STIP</u>	<u>STIP Bal</u>
		<u>Millions</u>	<u>Rate</u>	<u>Rate</u>	<u>Millions</u>
Actual	2000	3.391472	6.3330%	5.9500%	3.712675
Actual	2001	2.205880	6.8830%	6.6400%	1.557391
Actual	2002	1.588631	6.3330%	3.5953%	2.175871
Forecast	2003	0.000000	6.1800%	2.4114%	0.115871
Forecast	2004	0.000000	6.5800%	3.5505%	0.115871
Forecast	2005	0.000000	6.9620%	5.1618%	0.115871

	t	Hazardous	Environmental	Renewable	Reclamation	Environmental
	<u>Fiscal</u>	<u>Waste</u>	<u>Quality</u>	<u>Resource</u>	<u>Development</u>	<u>Contingency</u>
		<u>Millions</u>	<u>Millions</u>	<u>Millions</u>	<u>Millions</u>	<u>Millions</u>
Actual	2000	0.941319	0.319852	3.721445	3.176444	0.175000
Actual	2001	0.796322	0.274126	3.259425	2.676120	0.000000
Actual	2002	0.534446	0.185001	3.356669	2.219447	0.175000
Forecast	2003	0.612920	0.208950	2.950430	2.453700	0.000000
Forecast	2004	0.563640	0.192150	2.893310	2.352900	0.175000
Forecast	2005	0.723580	0.246675	3.078695	2.680050	0.000000

	t	Water	Oil & Gas	FWP	Groundwater
	<u>Fiscal</u>	<u>Storage</u>	<u>Receipts</u>	<u>Receipts</u>	<u>Receipts</u>
		<u>Millions</u>	<u>Millions</u>	<u>Millions</u>	<u>Millions</u>
Actual	2000	0.500000	0.050000	0.000000	0.300000
Actual	2001	0.000000	0.000000	0.000000	0.300000
Actual	2002	0.500000	0.050000	0.000000	0.300000
Forecast	2003	0.000000	0.000000	0.850000	0.300000
Forecast	2004	0.500000	0.050000	0.350000	0.300000
Forecast	2005	0.000000	0.000000	0.350000	0.300000



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# Legislative Fiscal Division

## Revenue Estimate Profile

### Tobacco Trust Interest

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**Revenue Description:** Due to passage of Montana Constitutional Amendment 35 by the electorate in November 2000, the legislature is required to dedicate not less than 40 percent of tobacco settlement money to a permanent trust fund. Since the legislature has not yet determined the exact percentage to be deposited to the trust fund, the revenue estimate assumes 40 percent. Due to passage of Initiative 146 by the electorate in November 2002, 32 percent of the tobacco settlement money is to fund tobacco prevention programs and 17 percent is to fund the Children's Health Insurance Program. The remaining 11 percent of the money is deposited to the general fund.

**Applicable Tax Rate(s):** NA

**Distribution:** Interest earnings from the trust fund are distributed:

1. 90 percent to a state special revenue account for appropriation by the legislature for disease prevention programs and state programs providing benefits, services, or coverage that are related to the health care needs of the people of Montana; and
2. 10 percent to the tobacco settlement trust fund.

**Collection Frequency:** Trust interest earnings are deposited monthly to the state special revenue account and the trust.

**Applicable Assumptions and/or Relevant Indicators:**

Tobacco Settlement Revenue  
Long Term Interest Rates  
Short Term Interest Rates

Tobacco settlement revenue is forecast as part of the tobacco settlement revenue methodology.

**Data Source(s):** Board of Investments, SABHRS, *Wall Street Journal*, DRI-WEFA

**Contacts:** Department of Justice

**Statute:** Montana Constitution, Article XII, Section 4

**% of Total FY 2002 General Fund Revenue:** N/A

**Revenue Estimate Methodology:** The LFD uses a number of analytical techniques to develop relevant assumptions for this source of revenue. The LFD uses a number of analytical techniques to develop relevant assumptions for this source of revenue. Historical data trends, economic conditions, input from industry experts, company surveys, and etc., are examples of information used to formulate these assumptions. The techniques used to develop these assumptions may vary from biennium to biennium and are highly dependent on availability of information, professional intuition/judgment, and a detailed analysis of the revenue source. The applicable methodology (formulas) and assumptions used by the LFD to develop a revenue estimate for this source are provided in the appendix of this document. The following summarizes the LFD process used to develop the revenue estimate.

The methodology used to forecast the tobacco settlement trust interest earnings is a multi-step process. In order to estimate total investment earnings for the trust, income must be calculated on three separate components: 1) tobacco settlement trust pool interest; 2) interest on new deposits; and 3) short-term interest earnings.

# Legislative Fiscal Division

## Revenue Estimate Profile

### Tobacco Trust Interest

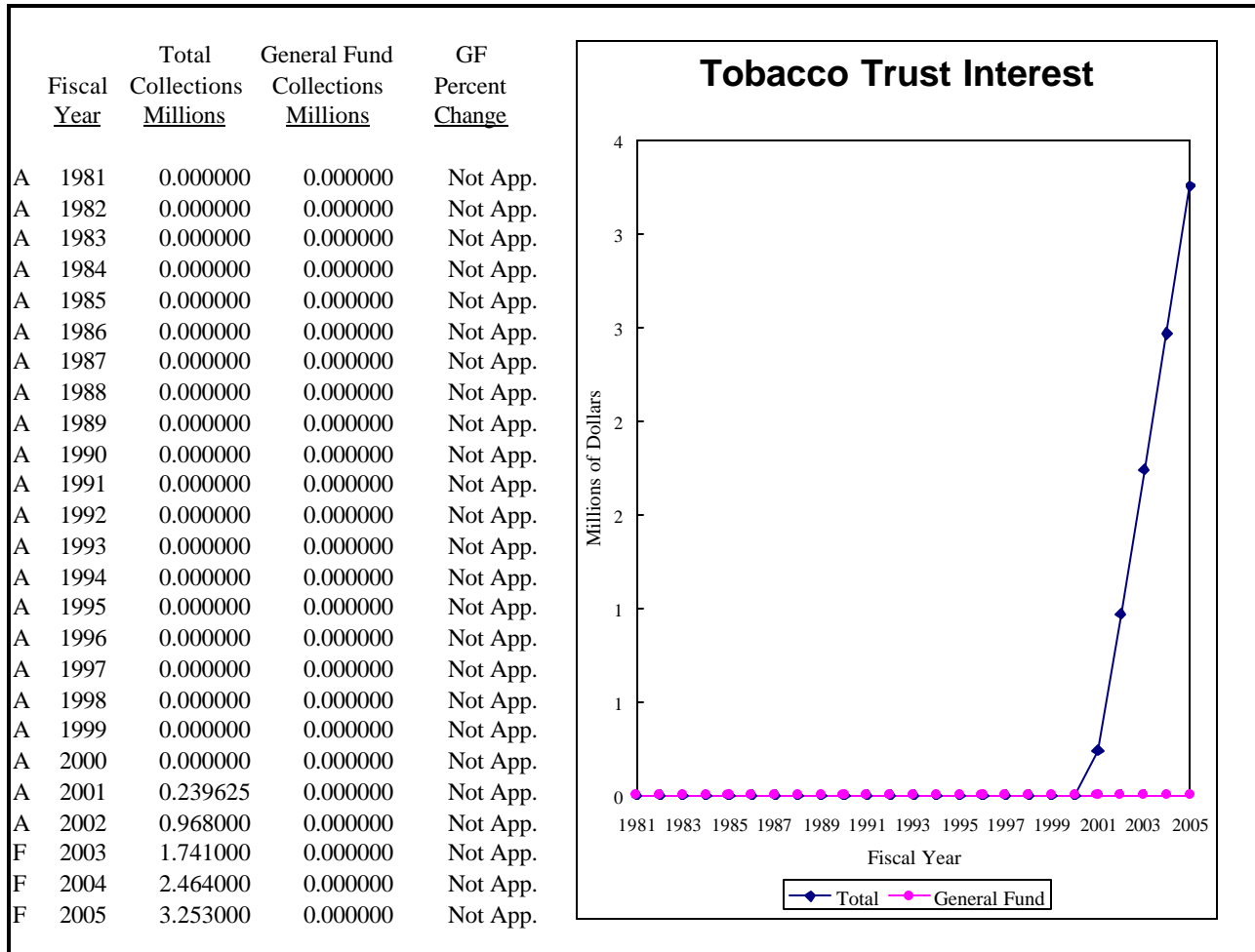
As of October 1, 1995, all fixed-income investments held by the state's major trust funds were transferred to a newly-created Trust Fund Bond Pool (TFBP). Thus, the first step involves determining the tobacco trust TFBP earnings. For the first year to be estimated, the previous year's earnings are adjusted by an annualization factor to derive a full-year's worth of earnings for the fund balance at the end of the previous year. Subsequent years are estimated by adding to the first year the estimate of the tobacco trust allocation multiplied by the long-term interest rate summed for all previous years except the first year estimated.

Investment income on new deposits from the tobacco settlement plus 10 percent of interest earnings from the trust is calculated by multiplying the forecast amounts by the appropriate interest rate. The invested balance varies in accordance with the timing of when new revenue becomes available. For example, the revenue from the settlement received around April 15 of each year will earn interest at the short-term (STIP) rate for one month, after which they will earn interest at the long-term rate for the remainder of the biennium. (Tobacco settlement revenue is forecast as part of the tobacco revenue settlement methodology.)

Finally, because a portion of the trust is invested on a short-term basis, an assumption is made for the balance of trust funds in STIP. This balance is then multiplied by the short-term interest rate to determine short-term interest income.

Once interest has been calculated for these three components, the sum of these comprises total tobacco settlement trust investment income.

#### Revenue Projection:

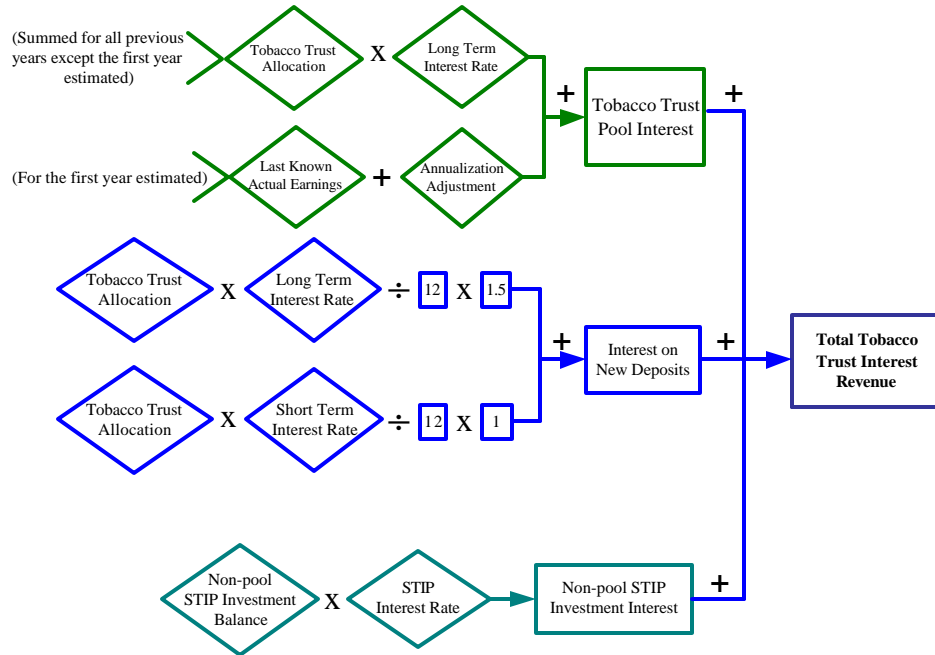


# Legislative Fiscal Division

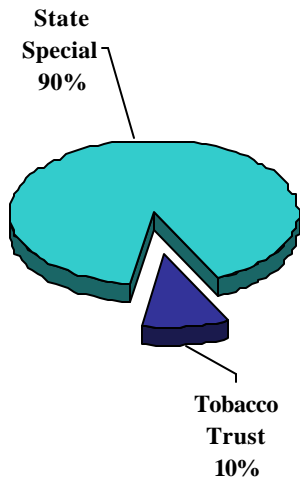
## Revenue Estimate Profile

### Tobacco Trust Interest

#### Forecast Methodology



#### Distribution Methodology



# Legislative Fiscal Division

## Revenue Estimate Profile

### Tobacco Trust Interest

#### Revenue Estimate Assumptions

	t	Total Rev.	GF Rev.	TFBP	STIP
	<u>Fiscal</u>	<u>Millions</u>	<u>Millions</u>	<u>Interest</u>	<u>Interest</u>
				<u>Millions</u>	<u>Millions</u>
Actual	2000	0.000000	0.000000		
Actual	2001	0.239625	0.000000		
Actual	2002	0.967687	0.000000	0.955252	0.012435
Forecast	2003	1.741000	0.000000	1.701552	0.039787
Forecast	2004	2.464000	0.000000	2.410175	0.054682
Forecast	2005	3.253000	0.000000	3.173003	0.081025

	t	Tobacco	New Deposit	Non Pool	Non Pool
	<u>Fiscal</u>	<u>New Deposit</u>	<u>Long Term</u>	<u>STIP</u>	<u>STIP Bal</u>
		<u>Millions</u>	<u>Rate</u>	<u>Rate</u>	<u>Millions</u>
Actual	2000	0.000000	6.3330%	5.9500%	0.000000
Forecast	2001	10.650750	6.8830%	6.6400%	0.249457
Forecast	2002	12.432000	6.3330%	3.5953%	0.584877
Forecast	2003	12.781000	6.1800%	2.4114%	0.584877
Forecast	2004	11.463000	6.5800%	3.5505%	0.584877
Forecast	2005	11.818000	6.9620%	5.1618%	0.584877

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# Legislative Fiscal Division

## Revenue Estimate Profile

### Treasure State Endowment Trust Interest

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**Revenue Description:** In the June 1992 election, voters approved a referendum to create the Treasure State Endowment Fund (TSEF) within the permanent coal tax trust fund. The TSEF received a \$10.0 million grant from the permanent trust principal in fiscal 1994 and receives 37.5 percent of total coal severance tax collections from July 1999 through June 2003. Beginning fiscal 2004, the trust receives 25 percent of total collections. Interest earned on the TSEF is used to finance local infrastructure projects, as prioritized by the Departments of Commerce and Natural Resources and Conservation and authorized by the legislature via the Treasure State Endowment Program (TSEP).

**Applicable Tax Rate(s):** N/A

**Distribution:** Interest earnings are allocated to the Department of Commerce to fund TSEP.

**Collection Frequency:** Monthly

**Applicable Assumptions and/or Relevant Indicators:**

Long Term Interest Rates  
Short Term Interest Rates  
Coal Severance Tax Collections

Coal severance tax collections are estimated via the coal severance tax methodology.

**Data Source(s):** Board of Investments, SABHRS, *Wall Street Journal*, DRI-WEFA

**Contacts:**

**Statute:** Title 15, Chapter 35; Title 17, Chapter 5; and Title 90, Chapter 6, MCA

**% of Total FY 2002 General Fund Revenue:** N/A

**Revenue Estimate Methodology:** The LFD uses a number of analytical techniques to develop relevant assumptions for this source of revenue. Historical data trends, economic conditions, input from industry experts, company surveys, and etc., are examples of information used to formulate these assumptions. The techniques used to develop these assumptions may vary from biennium to biennium and are highly dependent on availability of information, professional intuition/judgment, and a detailed analysis of the revenue source. The applicable methodology (formulas) and assumptions used by the LFD to develop a revenue estimate for this source are provided in the appendix of this document. The following summarizes the LFD process used to develop the revenue estimate.

The methodology used to forecast TSEF interest earnings is a multi-step process. In order to estimate total investment earnings for the trust, income must be calculated on three separate components: 1) TSEF pool interest; 2) interest on new deposits; and 3) short-term interest earnings.

As of October 1, 1995, all fixed-income investments held by the state's major trust funds were transferred to a newly-created Trust Fund Bond Pool (TFBP). Thus, the first step involves determining the TSEF TFBP earnings. For the first year to be estimated, the previous year's earnings are adjusted by an annualization factor to derived a full-year's worth of earnings for the fund balance at the end of the previous year. Subsequent years are estimated by adding to the first year estimate the coal tax allocation (less a portion of the water bond subsidy) multiplied by the long-term interest rate summed for all previous years except the first year estimated.

# Legislative Fiscal Division

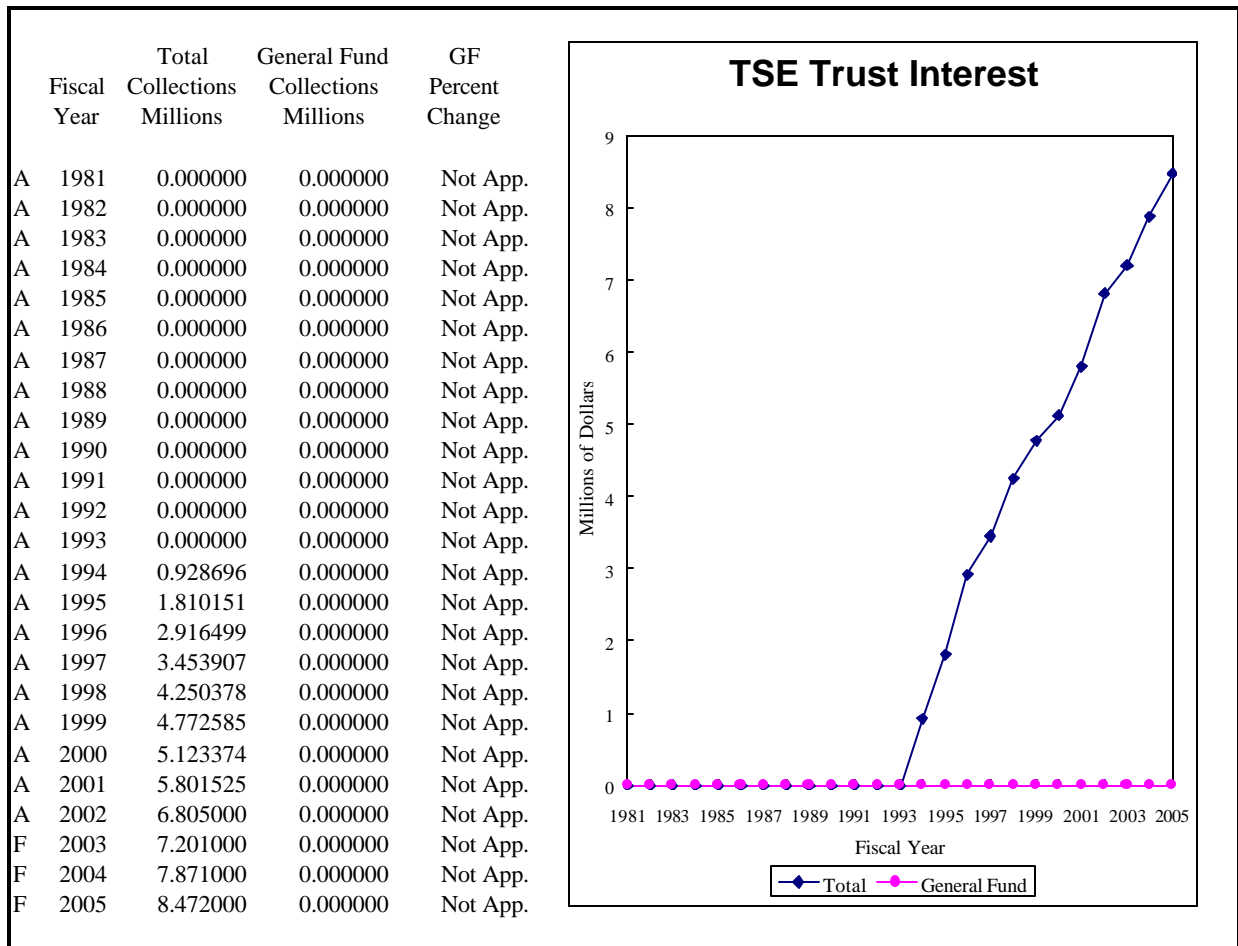
## Revenue Estimate Profile

### Treasure State Endowment Trust Interest

Investment income on new deposits is calculated by multiplying the forecast amount for quarterly coal severance tax collections (less a portion of the water bond subsidy) by the appropriate interest rate. The invested balance used varies in accordance with the timing of when new monies become available. For example, coal severance tax collections due for the first quarter of the biennium will earn interest at the short-term (STIP) rate for one month, after which they will earn interest at the long-term rate for the remainder of the biennium. (Coal severance tax collections are forecast as part of the coal severance tax methodology.)

Once investment income has been calculated for these three components, the sum of these comprises total TSEF investment income.

#### Revenue Projection:

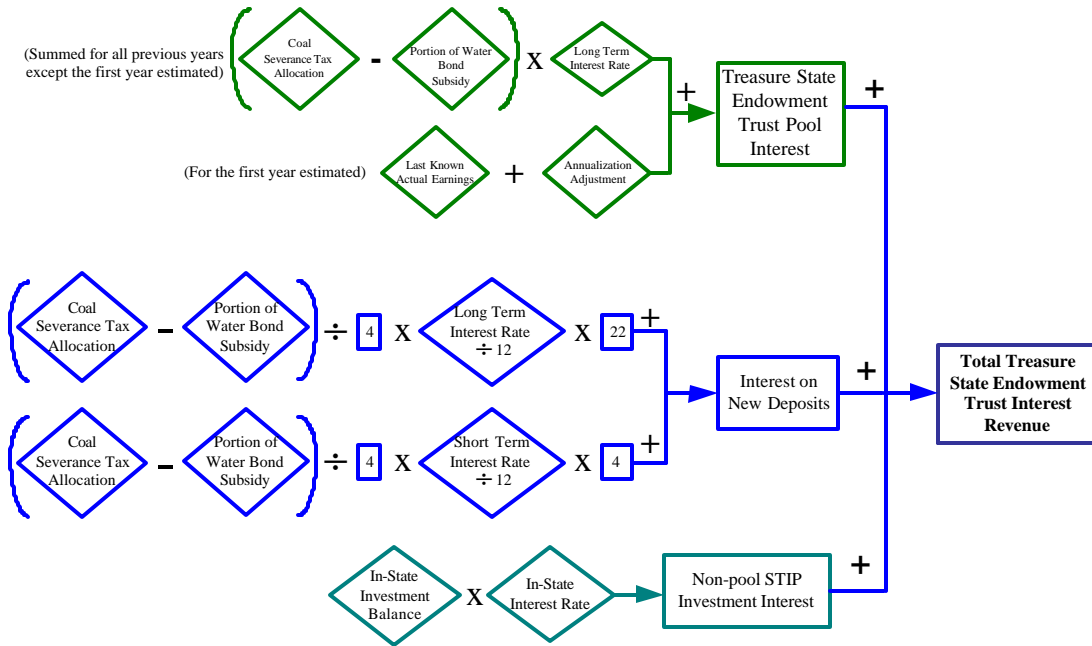


# Legislative Fiscal Division

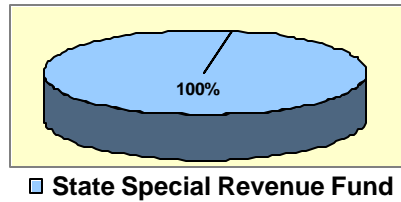
## Revenue Estimate Profile

### Treasure State Endowment Trust Interest

#### Forecast Methodology



#### Distribution Methodology



**Legislative Fiscal Division**  
**Revenue Estimate Profile**  
**Treasure State Endowment Trust Interest**

**Revenue Estimate Assumptions**

	t	Total Rev.	GF Rev.	TFBP	STIP	Loan
	Fiscal	Millions	Millions	Interest	Interest	Interest
				Millions	Millions	Millions
Actual	2000	5.123374	0.000000			
Actual	2001	5.801525	0.000000			
Actual	2002	6.804839	0.000000	5.107385	0.166917	1.530537
Forecast	2003	7.201000	0.000000	5.548860	0.511829	1.139990
Forecast	2004	7.871000	0.000000	6.226744	0.503721	1.139990
Forecast	2005	8.472000	0.000000	6.703662	0.627599	1.139990

	t	Net Coal Tax	New Deposit	Non Pool	Non Pool	Non Pool	Non Pool
	Fiscal	New Deposit	Long Term	STIP	Loan	STIP Bal	Loan Bal
		Millions	Rate	Rate	Rate	Millions	Millions
Actual	2000	13.301172	7.0160%	5.9500%	0.0000%	12.385400	0.000000
Actual	2001	12.126440	6.8830%	6.6400%	2.4244%	4.384216	19.223452
Actual	2002	11.855268	6.3330%	3.5953%	6.3834%	7.426826	17.858672
Forecast	2003	10.969000	6.1800%	2.4114%	6.3834%	7.426826	17.858672
Forecast	2004	7.248000	6.5800%	3.5505%	6.3834%	7.426826	17.858672
Forecast	2005	6.745000	6.9620%	5.1618%	6.3834%	7.426826	17.858672



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# Legislative Fiscal Division

## Revenue Estimate Profile

### Treasury Cash Account Interest

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**Revenue Description:** The Department of Commerce, Board of Investments is responsible for investing all state funds. Title 17, Chapter 6, MCA, provides guidelines under which the funds must be invested. Unless specifically stated by statute, all interest earned on these investments is deposited in the general fund. Treasury cash is invested in a mixture of short and medium-term investments. Consequently, the interest assumptions adopted by the legislature incorporate a blend of short and intermediate-term rates. When needed to address cash flow problems, the state typically issues tax and revenue anticipation notes (TRANS). The legislature would then adopt TRANS issuance assumptions, since this affects the average invested balance. TRANS are anticipated at \$92.8 million in fiscal 2003 and \$65.0 million in each year of the 2005 biennium.

**Applicable Tax Rate(s):** N/A

**Distribution:** All investment earnings on the treasury cash account (TCA) are deposited into the general fund.

**Collection Frequency:** On-going.

**Applicable Assumptions and/or Relevant Indicators:**

- Short Term Interest Rate
- TCA Interest Rate
- TRANS Interest Spread (if needed)
- Treasury Cash Average Balance
- TRANS Issue Size (if needed)

**Data Source(s):** SABHRS, Department of Administration, *Wall Street Journal*, DRI-WEFA

**Contacts:** Department of Administration

**Statute:** Title 17, Chapter 6, MCA

**% of Total FY 2002 General Fund Revenue:** 1.04%

**Revenue Estimate Methodology:** The LFD uses a number of analytical techniques to develop relevant assumptions for this source of revenue. Historical data trends, economic conditions, input from industry experts, company surveys, and etc., are examples of information used to formulate these assumptions. The techniques used to develop these assumptions may vary from biennium to biennium and are highly dependent on availability of information, professional intuition/judgment, and a detailed analysis of the revenue source. The applicable methodology (formulas) and assumptions used by the LFD to develop a revenue estimate for this source are provided in the appendix of this document. The following summarizes the LFD process used to develop the revenue estimate.

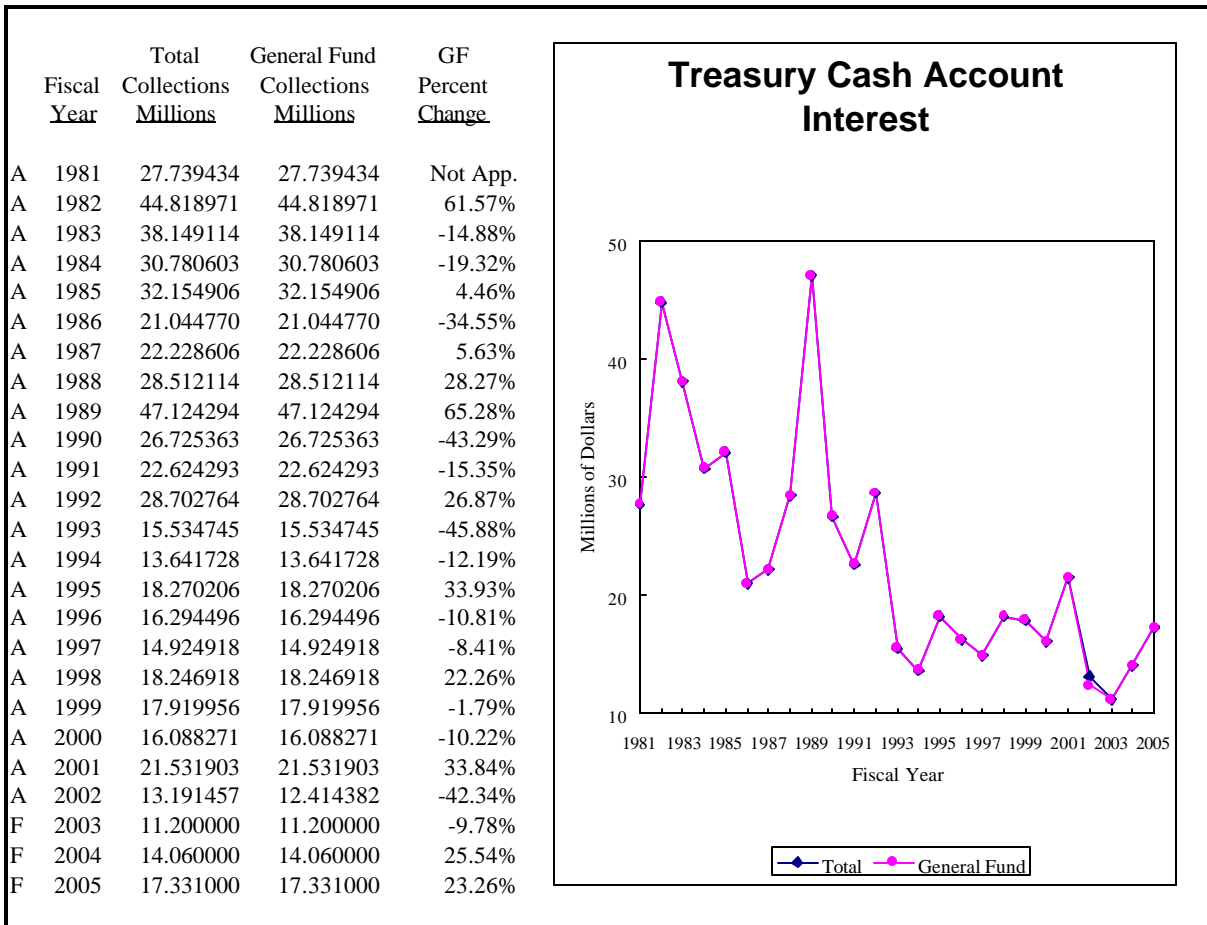
To estimate TCA investment earnings, the LFD determines the level of cash that will be available to earn interest. This step involves consideration of four key variables: 1) the average balance of the TCA; 2) the level and term of TRANS to be issued, if needed; 3) major legislation changes impacting cash; and 4) any other major cash balance changes that may occur. The sum of these variables, multiplied by the short-term interest rate, provides the estimated revenue for TCA earnings.

# Legislative Fiscal Division

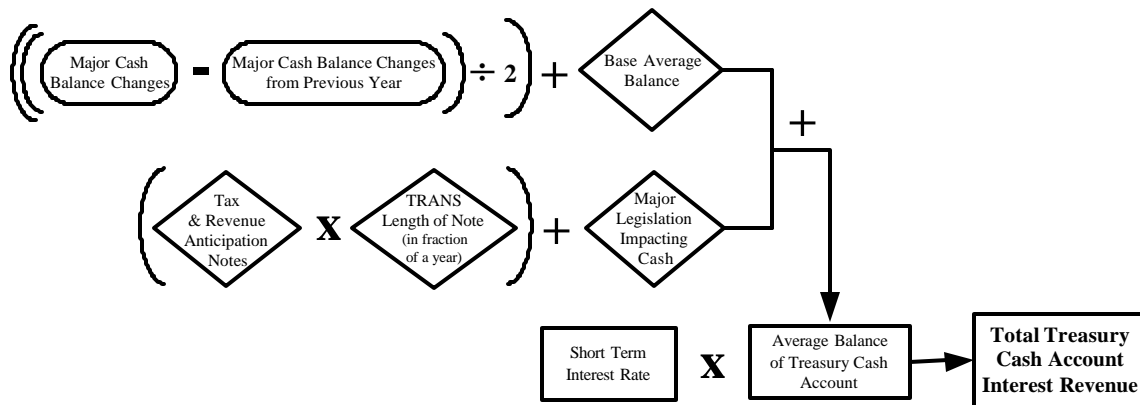
## Revenue Estimate Profile

### Treasury Cash Account Interest

#### Revenue Projection:



#### Forecast Methodology

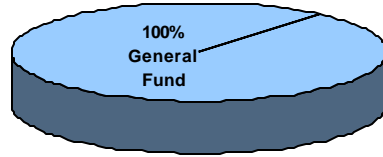


# Legislative Fiscal Division

## Revenue Estimate Profile

### Treasury Cash Account Interest

#### Distribution Methodology



#### Revenue Estimate Assumptions

	<u>t</u>	<u>Total Rev.</u>	<u>GF Rev.</u>	<u>Avg. Bal.</u>	<u>Interest</u>	<u>Issue</u>	<u>TRANS</u>
	<u>Fiscal</u>	<u>Millions</u>	<u>Millions</u>	<u>Millions</u>	<u>Rate</u>	<u>Rate</u>	<u>Cost</u>
Actual	2000	16.088271	16.088271	303.627590	0.052987	0.000000	0.000000
Actual	2001	21.531903	21.531903	334.705188	0.064331	0.000000	0.000000
Actual	2002	13.191457	12.414382	273.343304	0.048260	0.000000	0.000000
Forecast	2003	11.200000	11.200000	302.847049	0.036981	0.023877	1.477191
Forecast	2004	14.060000	14.060000	302.175699	0.046526	0.030040	1.311747
Forecast	2005	17.331000	17.331000	302.344944	0.057319	0.037008	1.616017

	<u>t</u>	<u>Base Bal.</u>	<u>TRANS</u>	<u>TRANS</u>	<u>GF Bal.</u>
	<u>Fiscal</u>	<u>Millions</u>	<u>Millions</u>	<u>Length</u>	<u>Millions</u>
Actual	2000	303.628000	0.000000	0.000000	144.484872
Actual	2001	334.705000	0.000000	0.000000	154.734744
Actual	2002	273.343000	0.000000	0.000000	62.938467
Forecast	2003	211.476606	92.800000	0.666667	22.700000
Forecast	2004	229.676616	65.500000	0.666667	50.000000
Forecast	2005	229.676616	65.500000	0.666667	50.000000

