

3/30/00

GO

Bond

Discuss.

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General  
Obligation  
Bonds  
1/27/00

*Presentation to*

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AT The Print Shop

H. Fin 199 - 2000

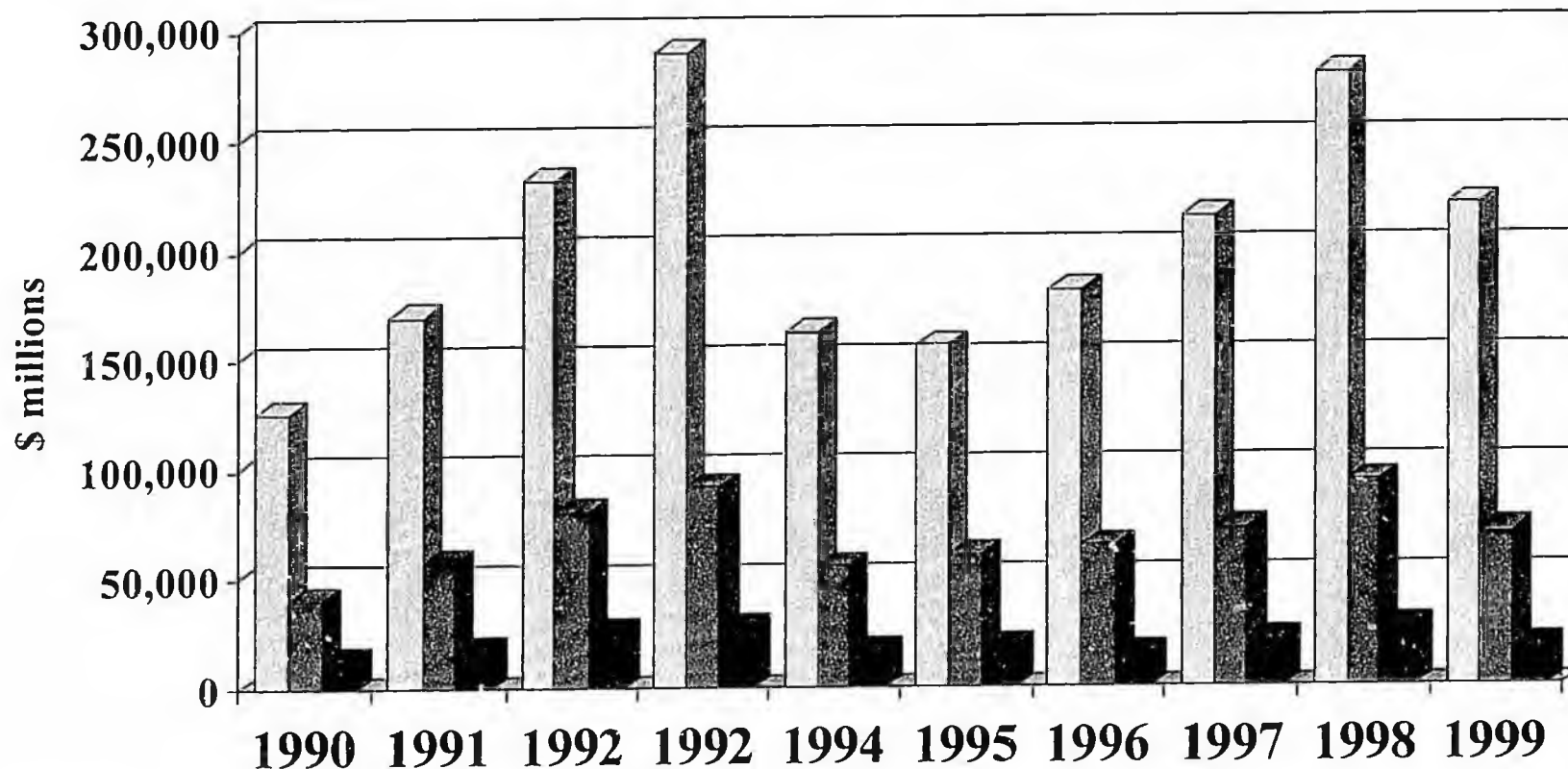
**House Finance Committee  
State of Alaska Twenty-First Legislature**

General Obligation Bond Financing

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January 26, 2000

# Overview of the Municipal Bond Market

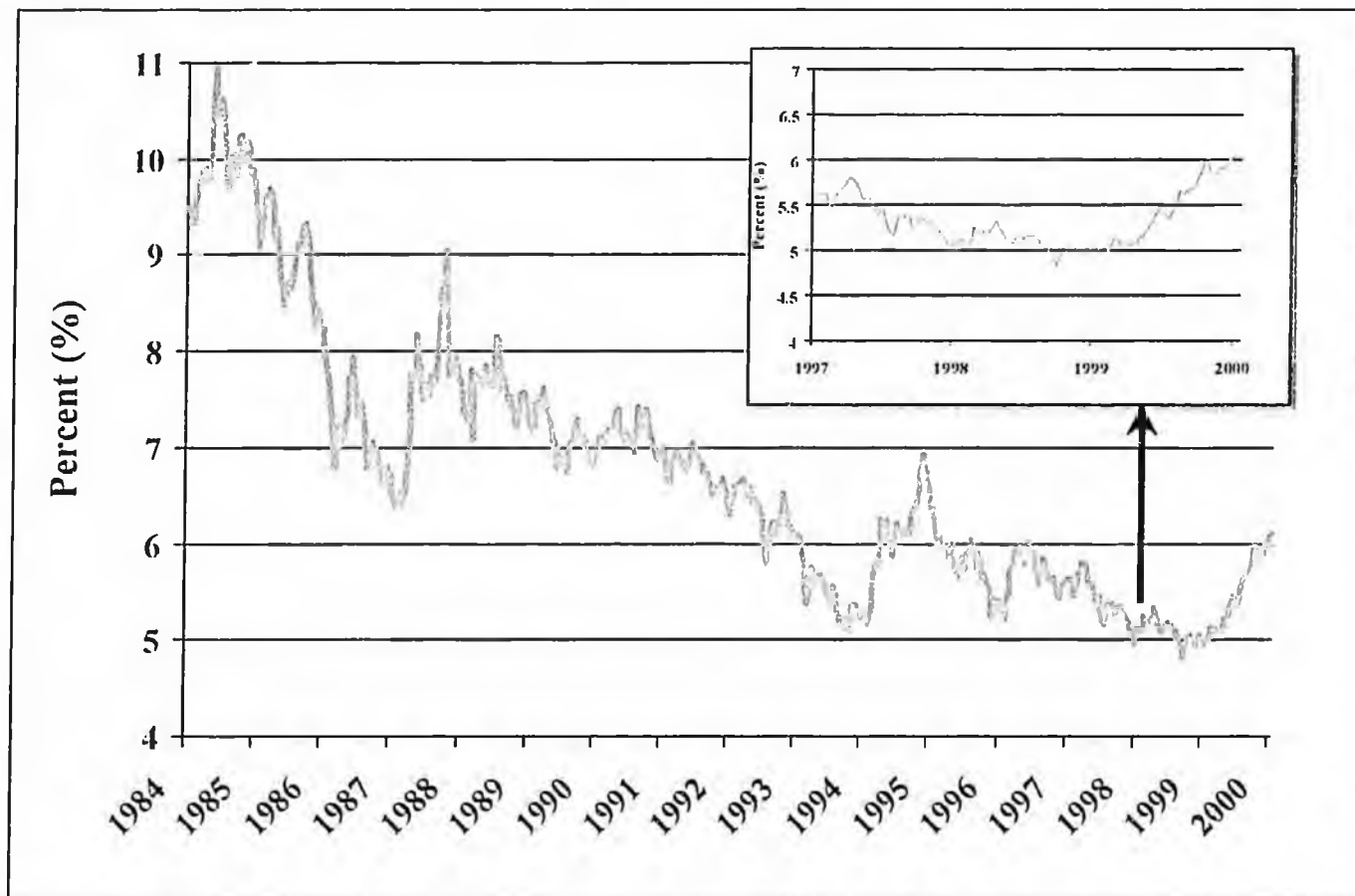


Overall Municipal Volume
  G.O. Bond Volume
  State Issued G.O. Bond Volume

Average Annual Volume: \$203.0 billion  
 Average Annual G.O. Bond Volume: \$68.4 billion  
 Average Annual State G.O. Bond Volume: \$19.9 billion

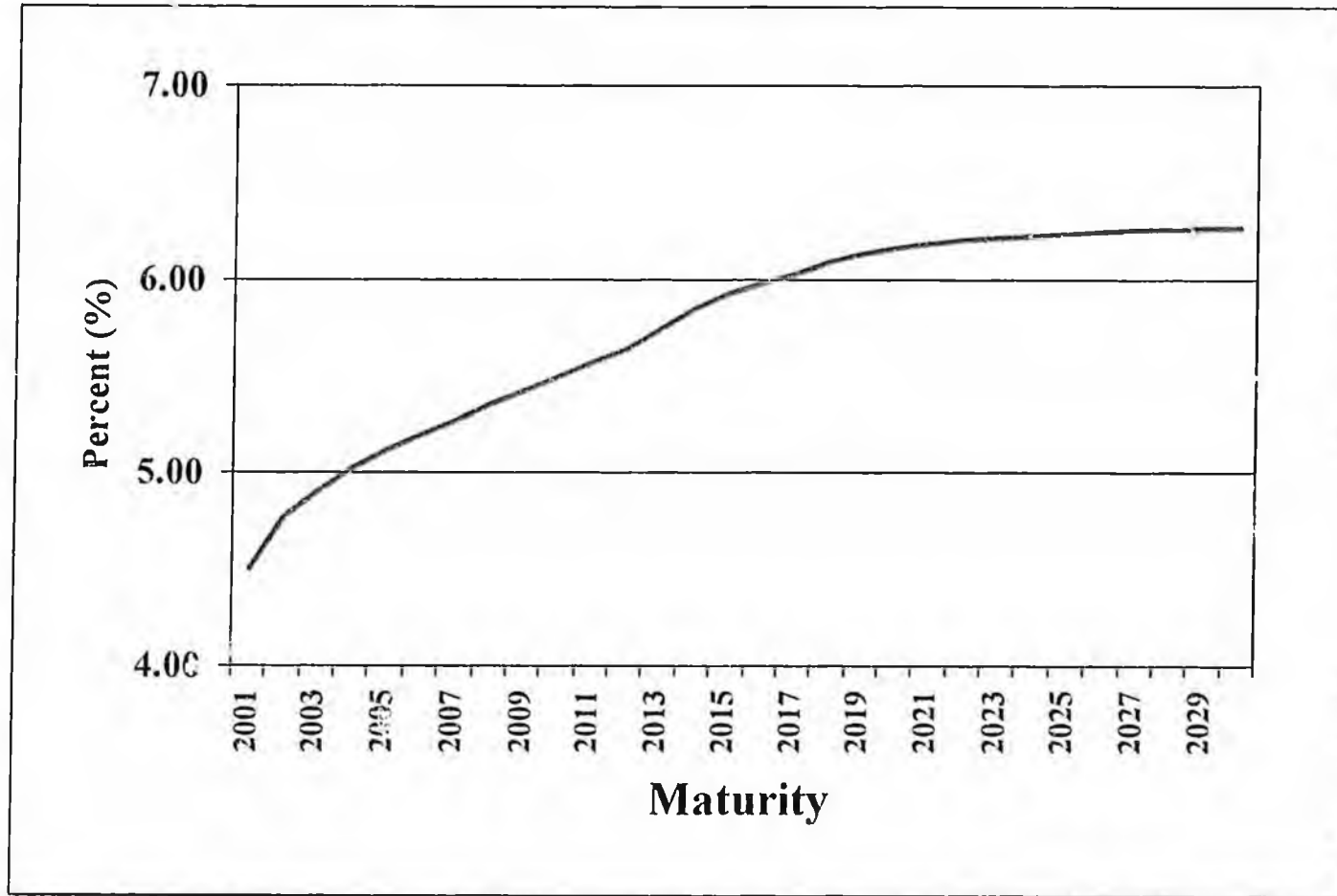
# Historical Municipal Market Interest Rates

Bond Buyer General Obligation Bond Index  
1984 to Present



# Indicative Interest Rates for Alaska G.O. Bonds

(As of January 24, 2000)



## Total Net Tax-Supported Debt (\$ millions)

1	New York	\$36,097	17	Hawaii	\$3,418	34	Oregon	\$921
2	California	\$22,181	18	Kentucky	\$2,980	35	New Mexico	\$859
3	Massachusetts	\$14,974	19	Minnesota	\$2,480	36	Oklahoma	\$815
4	New Jersey	\$13,469	20	Louisiana	\$2,309	37	Nevada	\$796
5	Florida	\$12,872	21	Mississippi	\$2,158	38	New Hampshire	\$735
6	Connecticut	\$10,251	22	North Carolina	\$2,059	39	Vermont	\$563
7	Illinois	\$8,710	23	Arizona	\$1,769	40	Maine	\$520
8	Ohio	\$7,270	24	Rhode Island	\$1,651	41	Arkansas	\$317
9	Pennsylvania	\$6,977	25	Utah	\$1,481	42	Iowa	\$303
10	Washington	\$6,744	26	Alabama	\$1,378	43	Montana	\$290
11	Texas	\$5,847	27	Missouri	\$1,265	44	South Dakota	\$237
12	Georgia	\$5,188	28	Indiana	\$1,257	45	Wyoming	\$112
13	Maryland	\$4,892	29	Kansas	\$1,239	46	Idaho	\$102
14	Michigan	\$4,261	30	South Carolina	\$1,230	47	North Dakota	\$83
15	Virginia	\$3,505	31	Delaware	\$1,176	48	Alaska	\$54
16	Wisconsin	\$3,499	32	Tennessee	\$1,162	49	Colorado	\$44
			33	West Virginia	\$1,146	50	Nebraska	\$40

## Net Tax-Supported Debt per Capita

1	Connecticut	\$3,131	17	California	\$679	34	South Carolina	\$321
2	Hawaii	\$2,865	18	Wisconsin	\$670	35	Alabama	\$317
3	Massachusetts	\$2,436	19	Ohio	\$649	36	Texas	\$296
4	New York	\$1,986	20	West Virginia	\$633	37	Oregon	\$281
5	Rhode Island	\$1,670	21	New Hampshire	\$620	38	North Carolina	\$273
6	New Jersey	\$1,660	22	Pennsylvania	\$581	39	Oklahoma	\$243
7	Delaware	\$1,581	23	Louisiana	\$528	40	Missouri	\$233
8	Washington	\$1,185	24	Minnesota	\$525	41	Wyoming	\$232
9	Maryland	\$953	25	Virginia	\$516	42	Tennessee	\$214
10	Vermont	\$953	26	New Mexico	\$495	43	Indiana	\$213
11	Florida	\$863	27	Kansas	\$471	44	North Dakota	\$130
12	Mississippi	\$785	28	Nevada	\$456	45	Arkansas	\$125
13	Kentucky	\$757	29	Michigan	\$434	46	Iowa	\$105
14	Illinois	\$723	30	Maine	\$418	47	Alaska	\$88
15	Utah	\$705	31	Arizona	\$388	48	Idaho	\$83
16	Georgia	\$679	32	Montana	\$329	49	Nebraska	\$24
			33	South Dakota	\$322	50	Colorado	\$11

Mean: \$697

Median: \$505

## Net Tax-Supported Debt as a % of 1997 Personal Income

1	Hawaii	11.2%	17	Wisconsin	2.8%	34	Alabama	1.5%
2	Connecticut	8.7%	18	Ohio	2.7%	35	South Dakota	1.5%
3	Massachusetts	7.8%	19	California	2.6%	36	Texas	1.3%
4	New York	6.6%	20	Illinois	2.6%	37	Oklahoma	1.2%
5	Rhode Island	6.5%	21	Louisiana	2.6%	38	North Carolina	1.2%
6	Delaware	5.7%	22	New Mexico	2.6%	39	Oregon	1.2%
7	New Jersey	5.2%	23	Pennsylvania	2.3%	40	Wyoming	1.0%
8	Washington	4.6%	24	New Hampshire	2.3%	41	Missouri	1.0%
9	Mississippi	4.4%	25	Minnesota	2.0%	42	Tennessee	1.0%
10	Vermont	4.2%	26	Kansas	2.0%	43	Indiana	0.9%
11	Kentucky	3.7%	27	Virginia	2.0%	44	Arkansas	0.6%
12	Utah	3.6%	28	Maine	1.9%	45	North Dakota	0.6%
13	Florida	3.5%	29	Arizona	1.9%	46	Iowa	0.5%
14	West Virginia	3.4%	30	Nevada	1.8%	47	Idaho	0.4%
15	Maryland	3.3%	31	Michigan	1.7%	48	Alaska	0.4%
16	Georgia	2.9%	32	Montana	1.7%	49	Nebraska	0.1%
			33	South Carolina	1.6%	50	Colorado	0.0%

**Mean:** 2.7%

**Median:** 2.0%

# General Obligation Bonds

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## ◆ Overview

- Strongest form of repayment and generally lowest borrowing cost
- Secured by the full faith and credit of an issuer
- Issuer pledges to repay the debt with all revenues and resources within its powers
- The issuer pledges to repay general obligation debt without limitation as to rate or amount

## ◆ State General Obligation Bonds

- Primary financing vehicle for states
- Forty states currently have outstanding General Obligation Bonds
- Ten states that do not issue General Obligation Bonds generally issue other types of bonds and/or lease obligations
- State General Obligation Bonds are the highest rated class of bonds and generally the most secure debt offered in the municipal bond market

## Bond Ratings Discussion

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- ✦ A bond rating is:
  - A shorthand symbol denoting credit quality and expresses the level of risk of repayment
  - An assessment of the ability, willingness and legal obligation of an issuer to make full and timely payments of principal and interest
  - An objective assessment of relative creditworthiness
  - An independent opinion about the future
  - Designed to rank within a consistent framework, the relative repayment risk of each debt issuer
  
- ✦ A bond rating is not:
  - A rating of government, but a rating of relative credit quality
  - An audit
  - Denoting quality of life
  - A measure of the relative worth of an issuer

## Investment Grade Categories

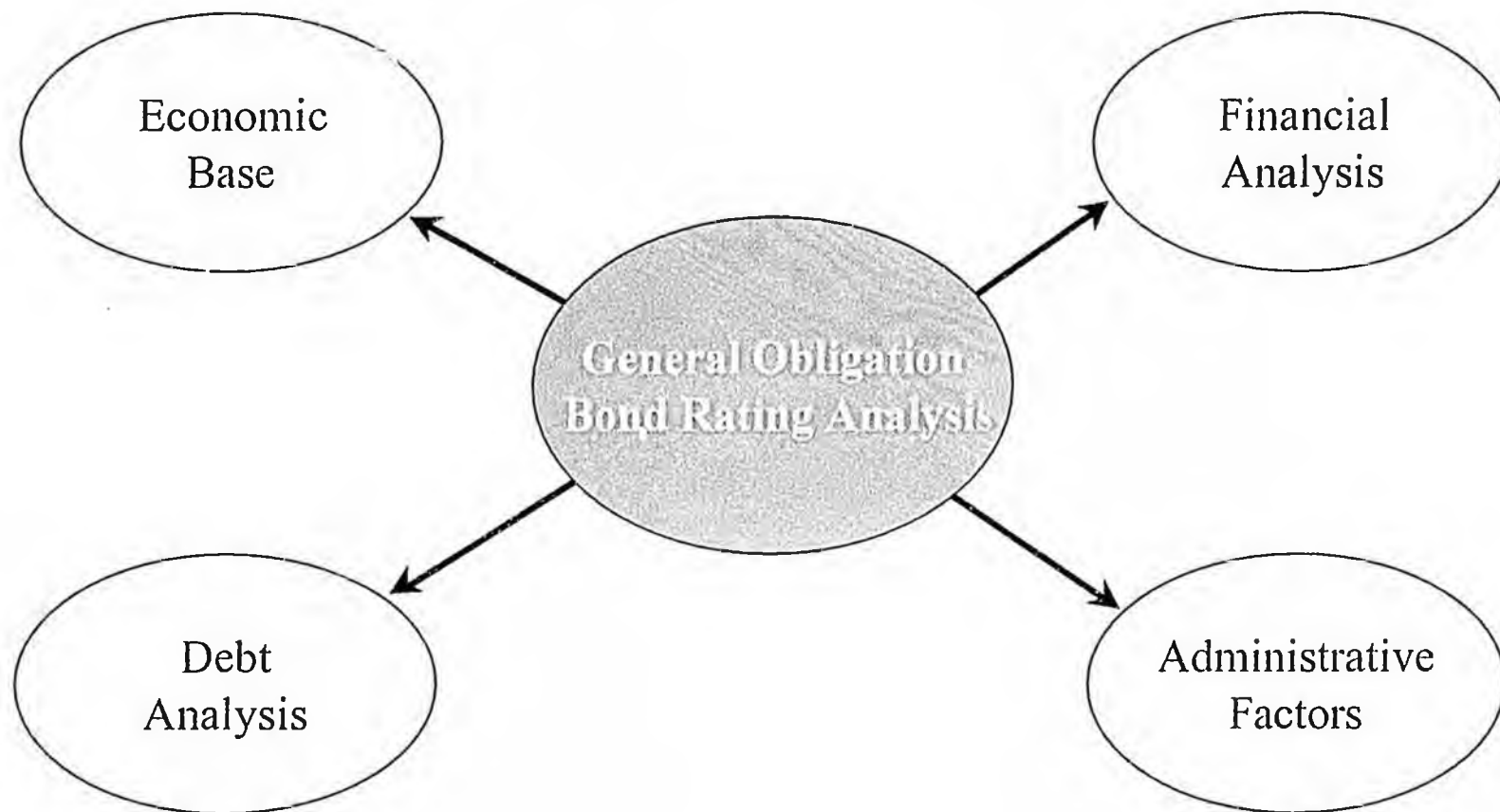
- ◆ Bond ratings for the majority of municipal bonds are in the investment grade categories

*Investment Grade Rating Symbols for the Three Major Rating Agencies*

	Moody's	Standard & Poor's	Fitch
Prime Grade	Aaa	AAA	AAA
High Grade	Aa1	AA+	AA+
	Aa2	AA	AA
	Aa3	AA-	AA-
Upper Medium High Grade	A1	A+	A+
	A2	A	A
	A3	A-	A-
Medium Grade	Baa1	BBB+	BBB+
	Baa2	BBB	BBB
	Baa3	BBB-	BBB-

- ◆ State of Alaska's General Obligation bonds are rated Aa2/AA(prior)/AA and its limited obligations and certificates of participation are rated A1/A+/NR
- ◆ A majority of state general obligations are rated prime grade or high grade
- ◆ Only four states have ratings in the medium grade category

# Rating Analysis Factors for General Obligation Bonds



## Rating Factors for General Obligation Bonds

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- ✦ Economic Base
  - Income levels
  - Rate of income growth
  - Employment mix analysis
  - Population growth
- ✦ Financial Analysis
  - Historical budget and audit report analyses
  - Ability to meet present needs as well as its future needs
  - Concentrate on the main operating funds that are basically tax-supported
- ✦ Debt Analysis
  - Debt history
  - Debt payout schedules
  - Ability to operate within a budget that meets the ongoing capital needs along with the debt obligations
  - Past voter-approved bond authorization trends
- ✦ Administrative Factors
  - Management controls
  - Long-range planning
  - Budgeting techniques
  - Tax rates, levies, collection and property valuation and assessment trends

## Rating Factors for Alaska's General Obligation Bonds

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### ◆ Economic Base

- Dependent on natural resource industries
  - non-renewable oil extraction industries
  - renewable resources fishing and timber
- Tourism
- Military bases

### ◆ Financial Analysis

- Trend in expenditures
- Revenue dependency and volatility and the Prudhoe Curve
- Reserves (Constitutional Budget Reserve and Alaska Permanent Fund)

### ◆ Debt Analysis

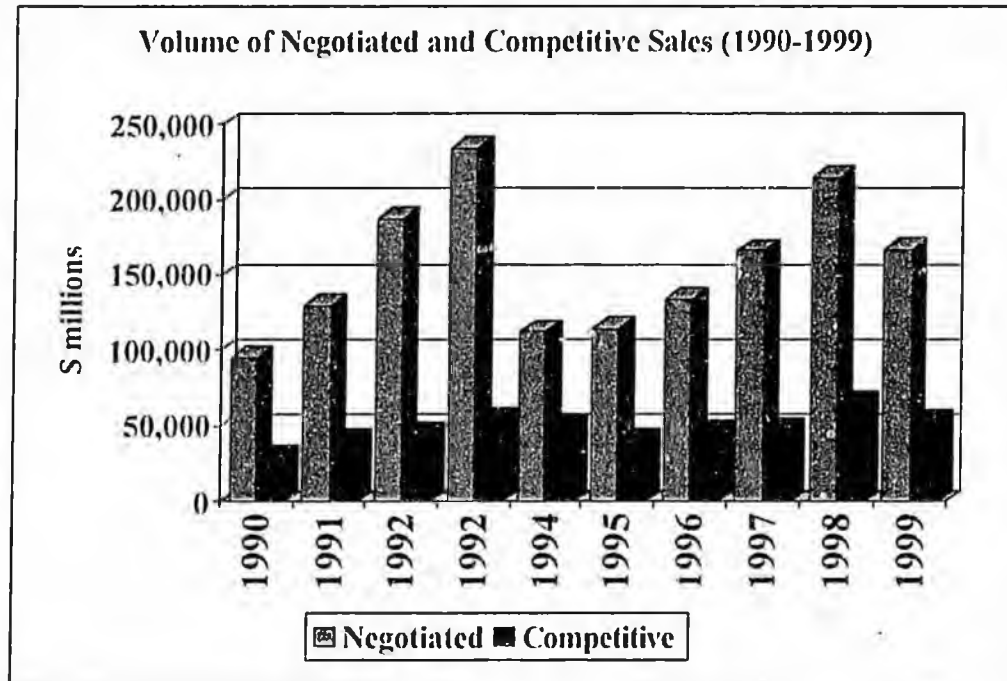
- Very low net debt after deductions for self-supporting and guaranteed debts
- Debt conservatively managed and structured to the Prudhoe Curve

### ◆ Administrative Factors

- Forecasting ability
- Investment strategies and performance
- Reserving policies
- Services provided

## Method of Bond Sales: Negotiated vs. Competitive

- ✦ **Negotiated Underwriting** - The sale of bonds is by negotiation with an underwriter rather than by competitive bidding
- ✦ **Competitive Underwriting** - A sale of bonds in which underwriters or syndicates of underwriters submit sealed bids to purchase securities and award is based solely on interest cost



- ✦ Issues to consider:
  - Frequency of issuance
  - Ratings
  - In-state priority
  - Size
  - Market familiarity
  - Complexity/structuring issues

## Impact of Amortization Schedule on Annual Debt Service

### \$100,000,000 of General Obligation Bonds

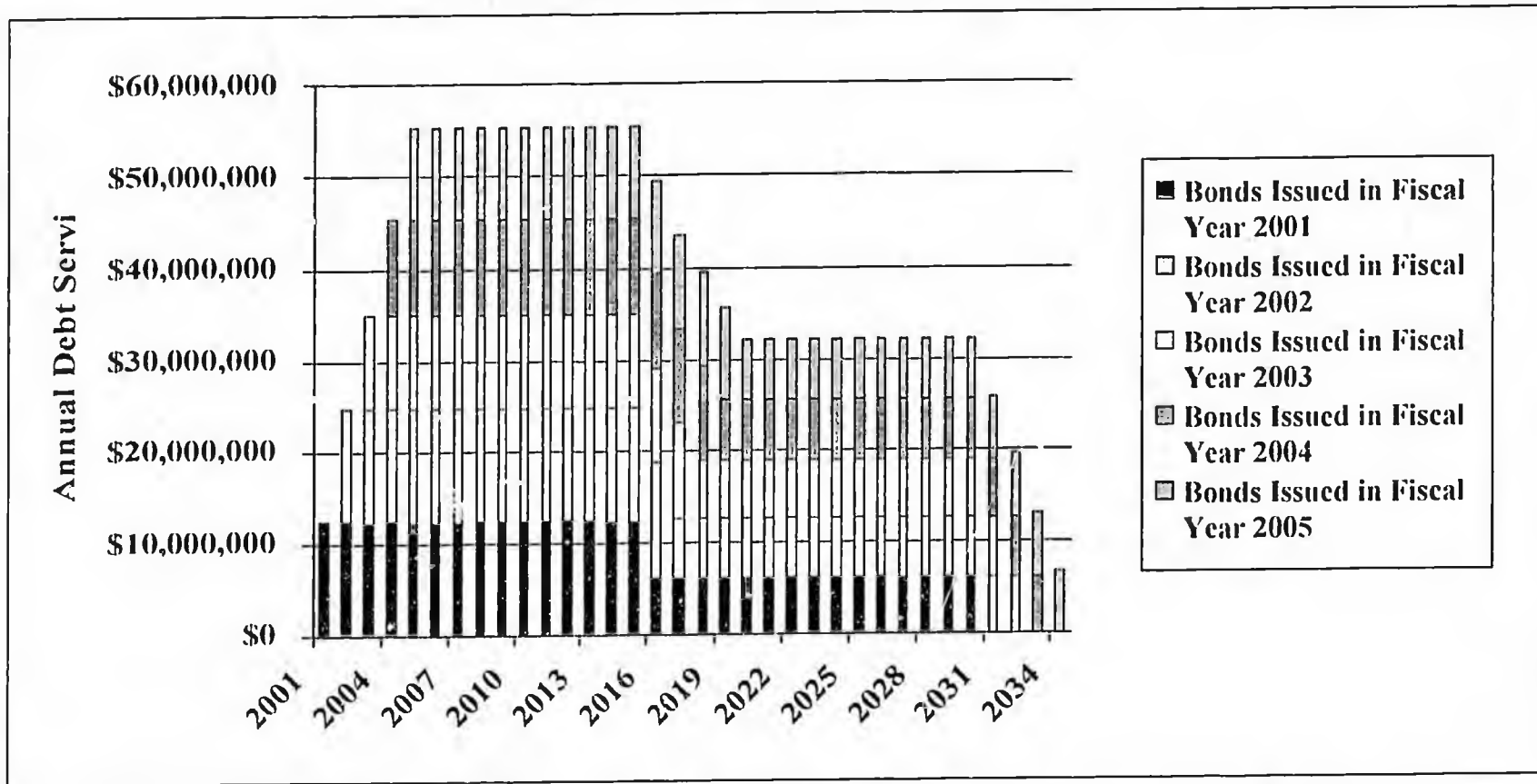
<u>Amortization</u>	<u>Annual Debt Service</u>
10 years	\$13,586,796
15 years	10,296,276
20 years	8,718,456
30 years	7,264,891

## Contemplated Schedule of G.O. Bond Issuance

		FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	Total
	<u>Amortization</u>	<u>(\$ mils)</u>	<u>(\$ mils)</u>	<u>(\$ mils)</u>	<u>(\$ mils)</u>	<u>(\$ mils)</u>	<u>(\$ mils)</u>
School Construction Grant Fund	30 years	\$82.0	\$82.0	\$82.0	\$82.0	\$82.0	\$410.0
School Major Maint. Grant Fund	15 years	18.0	18.0	18.0	18.0	18.0	90.0
Harbors	15 years	10.0	10.0	10.0	5.0	--	35.0
State Facilities	15 years	20.0	20.0	--	--	--	40.0
University of Alaska							
- Facilities	15 years	10.0	10.0	10.0	15.0	15.0	60.0
- Library	30 years	<u>5.0</u>	<u>5.0</u>	<u>5.0</u>	<u>5.0</u>	<u>10.0</u>	<u>30.0</u>
Total		<u>\$145.0</u>	<u>\$145.0</u>	<u>\$125.0</u>	<u>\$125.0</u>	<u>\$125.0</u>	<u>\$665.0</u>

# Aggregate Debt Service Schedule

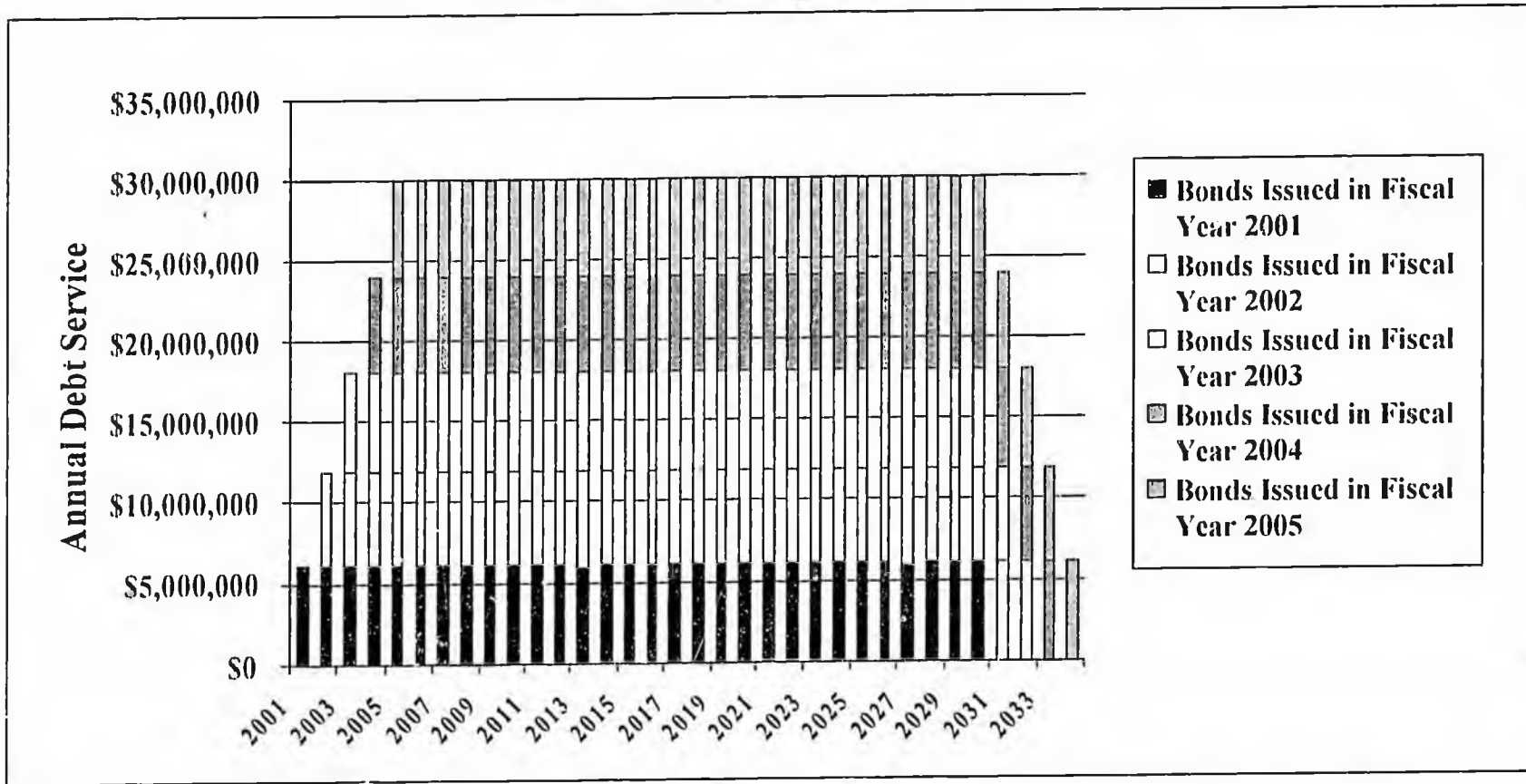
*\$665 Million Issued from FY 2001 to 2005*



FY 2001 (\$ mils)	FY 2002 (\$ mils)	FY 2003 (\$ mils)	FY 2004 (\$ mils)	FY 2005 (\$ mils)	Total (\$ mils)
\$145.0	\$145.0	\$125.0	\$125.0	\$125.0	\$665.0

# School Construction Grant Fund Debt Service Schedule

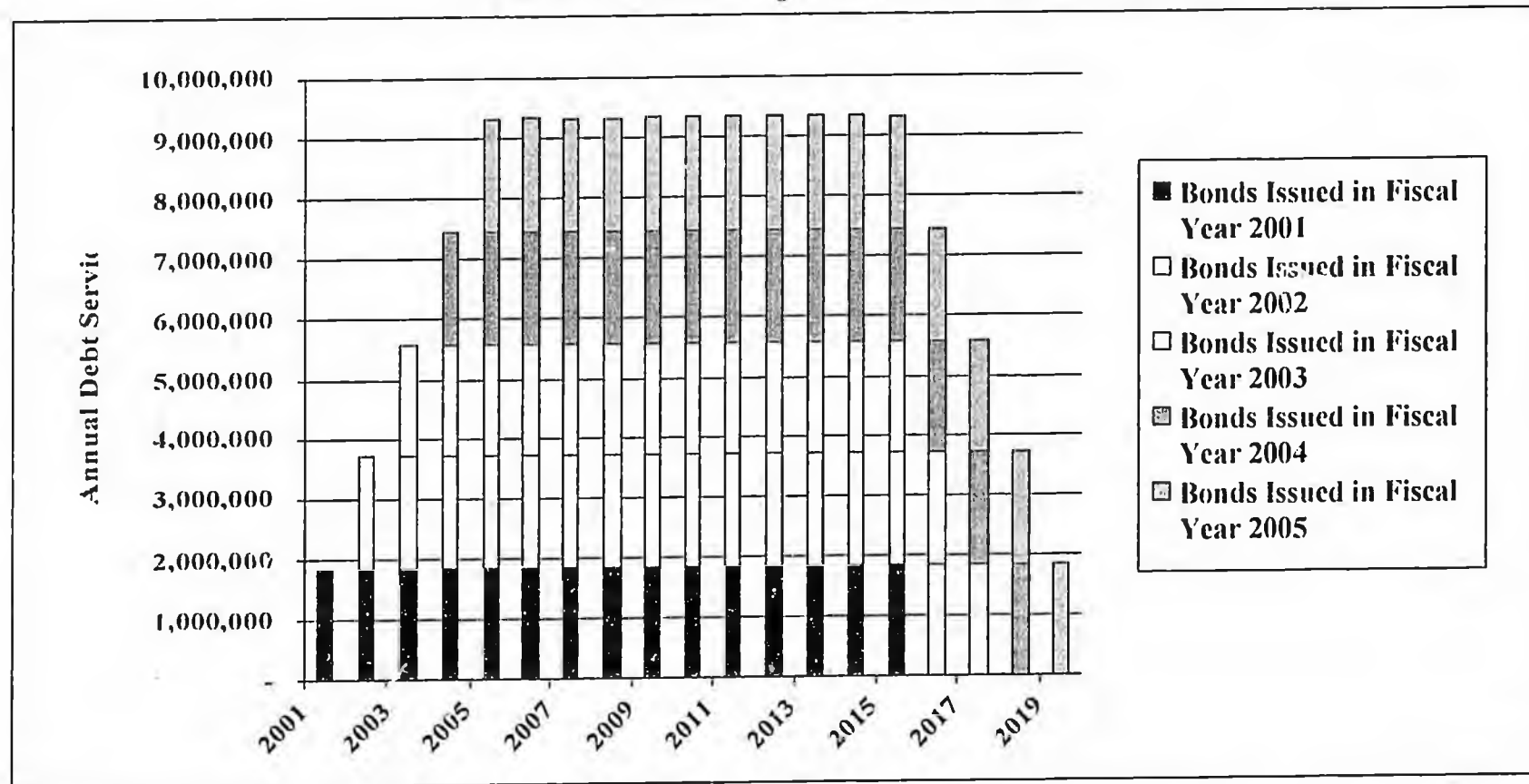
*\$410 Million Issued from FY 2001 to 2005*



FY 2001 (\$ mils)	FY 2002 (\$ mils)	FY 2003 (\$ mils)	FY 2004 (\$ mils)	FY 2005 (\$ mils)	Total (\$ mils)
\$82.0	\$82.0	\$82.0	\$82.0	\$82.0	\$410.0

# School Major Maint. Grant Fund Debt Service Schedule

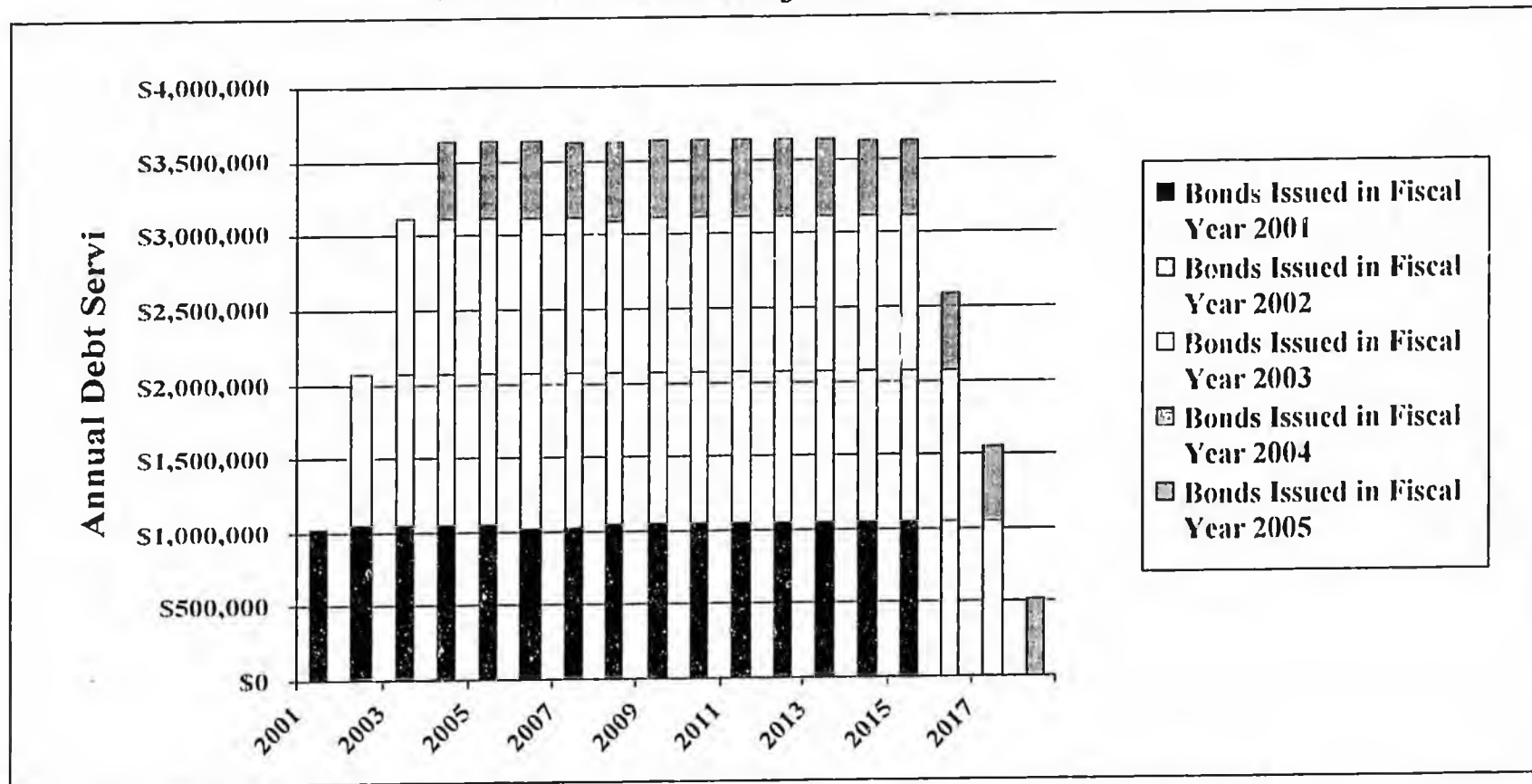
*\$90 Million Issued from FY 2001 to 2005*



FY 2001 (\$ mils)	FY 2002 (\$ mils)	FY 2003 (\$ mils)	FY 2004 (\$ mils)	FY 2005 (\$ mils)	Total (\$ mils)
\$18.0	\$18.0	\$18.0	\$18.0	\$18.0	\$90.0

# Harbors Debt Service Schedule

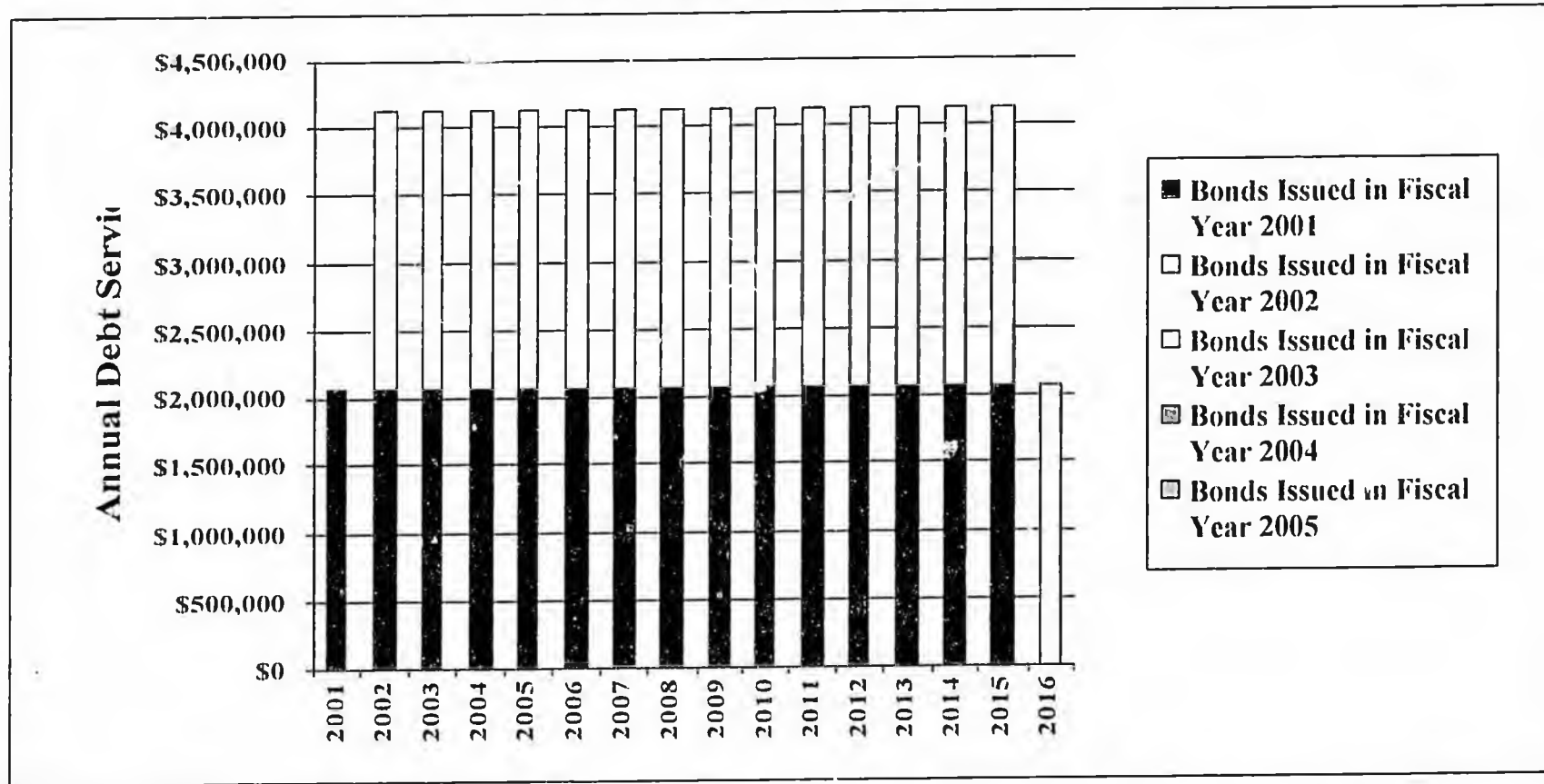
*\$35 Million Issued from FY 2001 to 2005*



FY 2001 (\$ mils)	FY 2002 (\$ mils)	FY 2003 (\$ mils)	FY 2004 (\$ mils)	FY 2005 (\$ mils)	Total (\$ mils)
\$10.0	\$10.0	\$10.0	\$10.0	\$10.0	\$35.0

# State Facilities Debt Service Schedule

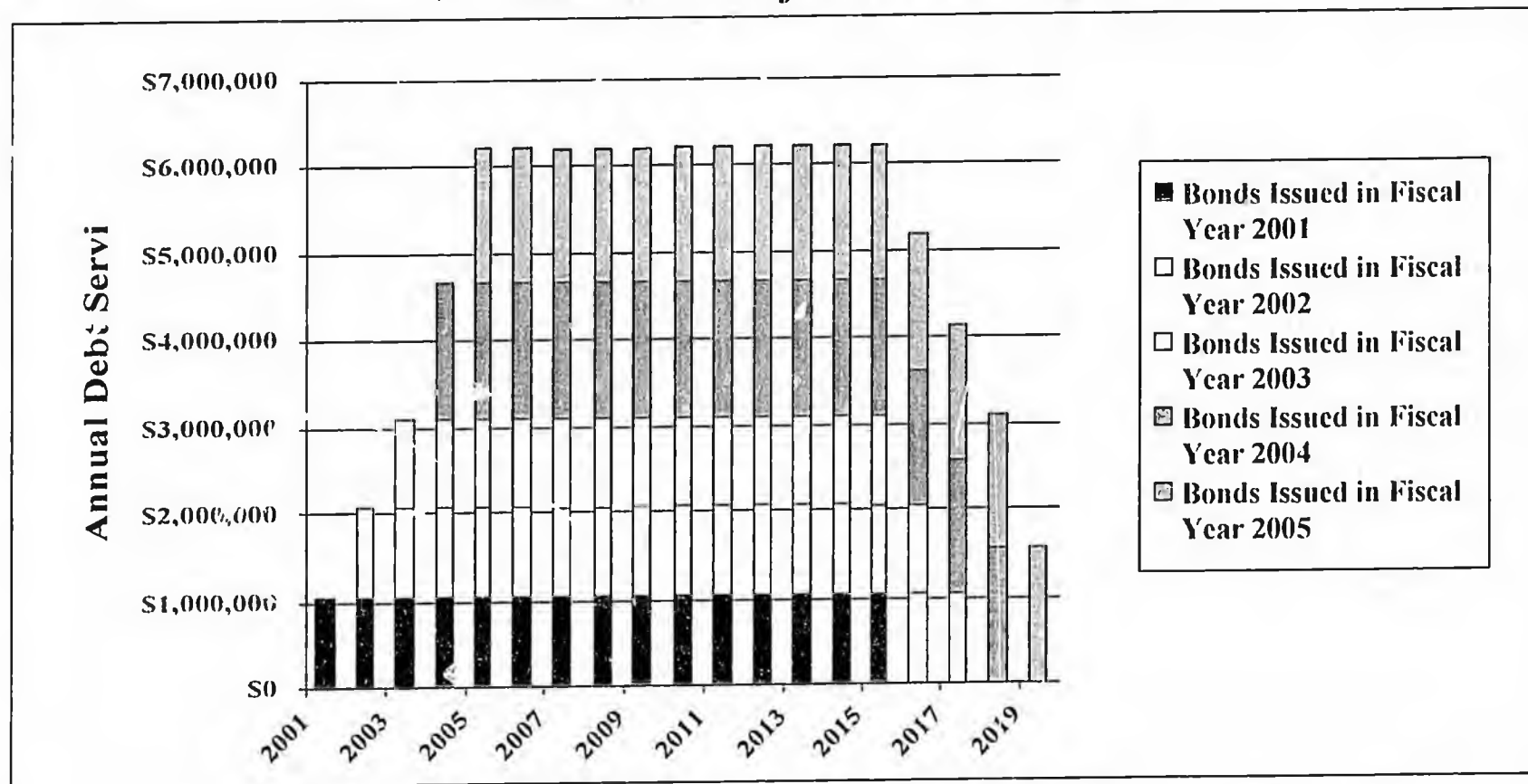
*\$40 Million Issued from FY 2001 to 2002*



FY 2001 (\$ mils)	FY 2002 (\$ mils)	FY 2003 (\$ mils)	FY 2004 (\$ mils)	FY 2005 (\$ mils)	Total (\$ mils)
\$20.0	\$20.0	--	--	--	\$40.0

# University of Alaska/Educational Facilities Debt Service Schedule

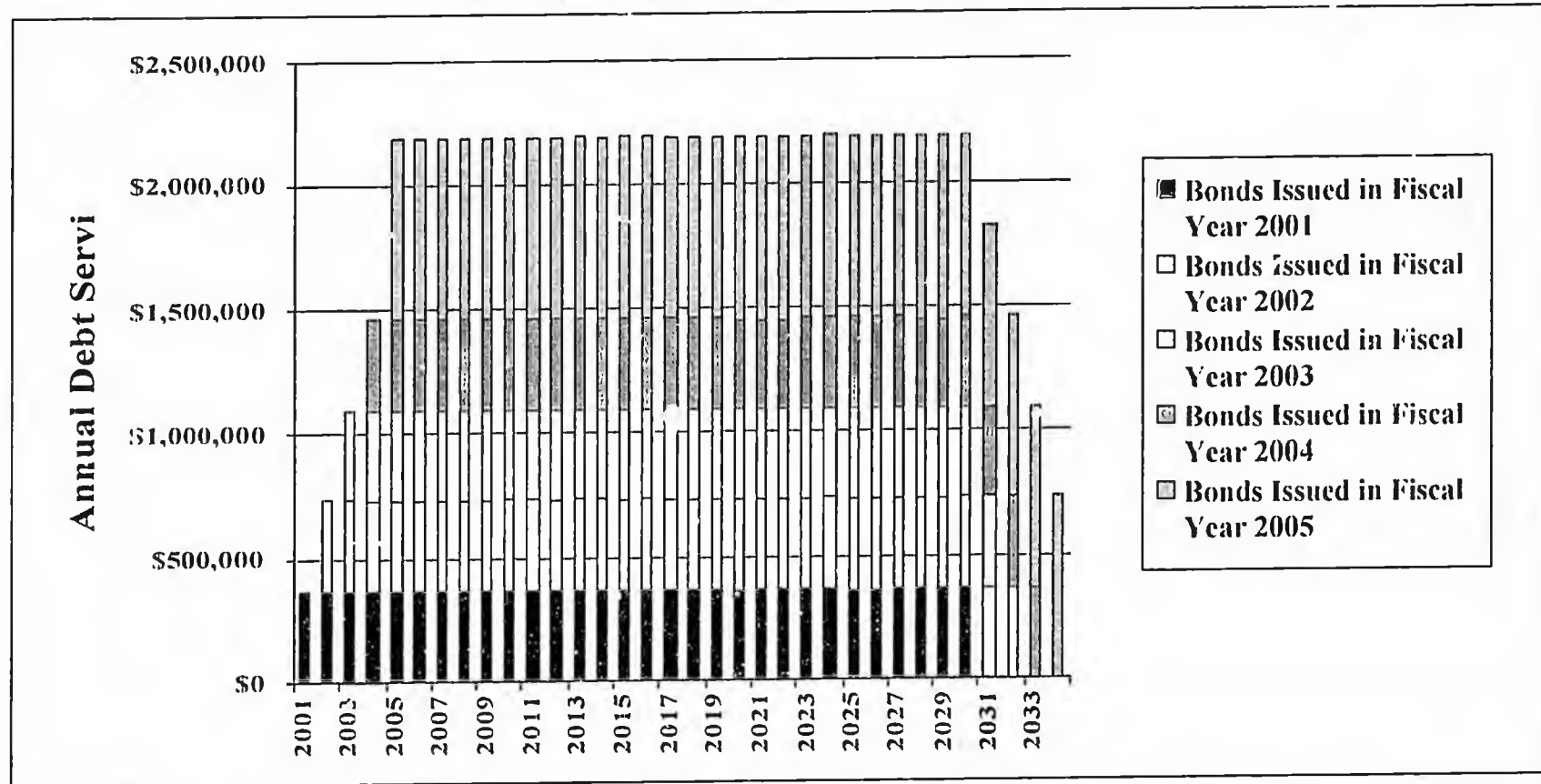
*\$60 Million Issued from FY 2001 to 2005*



FY 2001 (\$ mils)	FY 2002 (\$ mils)	FY 2003 (\$ mils)	FY 2004 (\$ mils)	FY 2005 (\$ mils)	Total (\$ mils)
\$10.0	\$10.0	\$10.0	\$15.0	\$15.0	\$60.0

# University of Alaska/Anchorage Library Debt Service Schedule

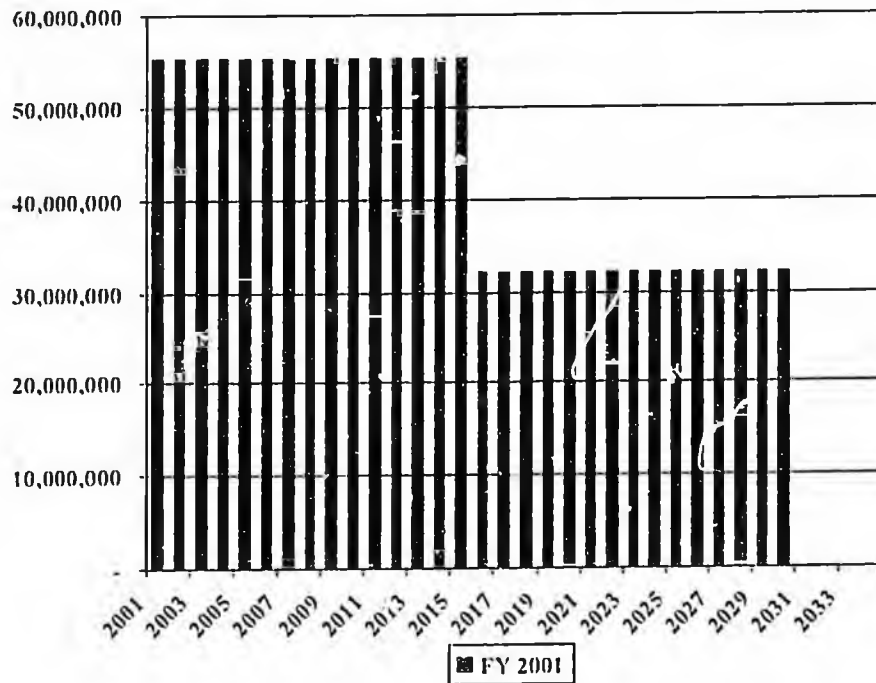
*\$30 Million Issued from FY 2001 to 2005*



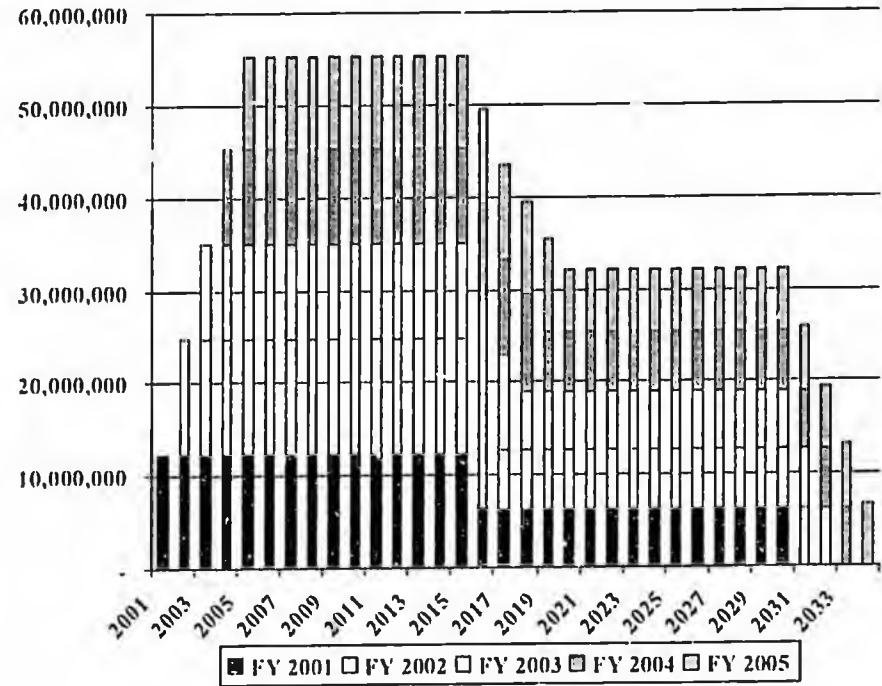
FY 2001 (\$ mils)	FY 2002 (\$ mils)	FY 2003 (\$ mils)	FY 2004 (\$ mils)	FY 2005 (\$ mils)	Total (\$ mils)
\$5.0	\$5.0	\$5.0	\$5.0	\$10.0	\$30.0

# Alternative of Upfront Issuance

*\$665 Million Issued in FY 2001*



*\$665 Million Issued from FY 2001 to 2005*



- ◆ Earlier upfront issuance can accelerate construction projects and/or produce significant additional interest earnings for additional projects
- ◆ These benefits need to be weighed against additional debt service in the earlier years

## Upfront Issuance: Potential Additional Interest Earnings

	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>Total</u>
School Construction Grant Fund	\$14,760,000	\$ 15,990,000	\$11,070,000	\$6,150,000	\$1,230,000	\$49,200,000
School Major Maintenance Grant Fund	3,240,000	3,510,000	2,430,000	1,350,000	270,000	10,800,000
Harbor Fund	1,125,000	1,050,000	450,000	75,000	-	2,700,000
State Facilities	900,000	300,000	-	-	-	1,200,000
U. of Alaska -- Educational Facilities	2,250,000	2,550,000	1,950,000	1,125,000	225,000	8,100,000
U. of Alaska -- Anchorage Library	<u>1,125,000</u>	<u>1,275,000</u>	<u>975,000</u>	<u>675,000</u>	<u>150,000</u>	<u>4,200,000</u>
Total:	<u>\$23,400,000</u>	<u>\$24,675,000</u>	<u>\$16,875,000</u>	<u>\$9,375,000</u>	<u>\$1,875,000</u>	<u>\$76,200,000</u>

January 26, 2000

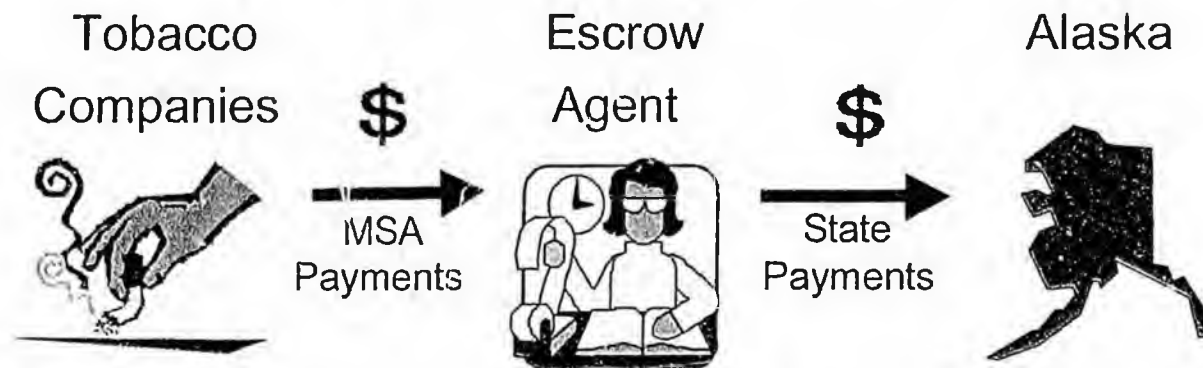
Tobacco Settlement Securitization

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# State of Alaska

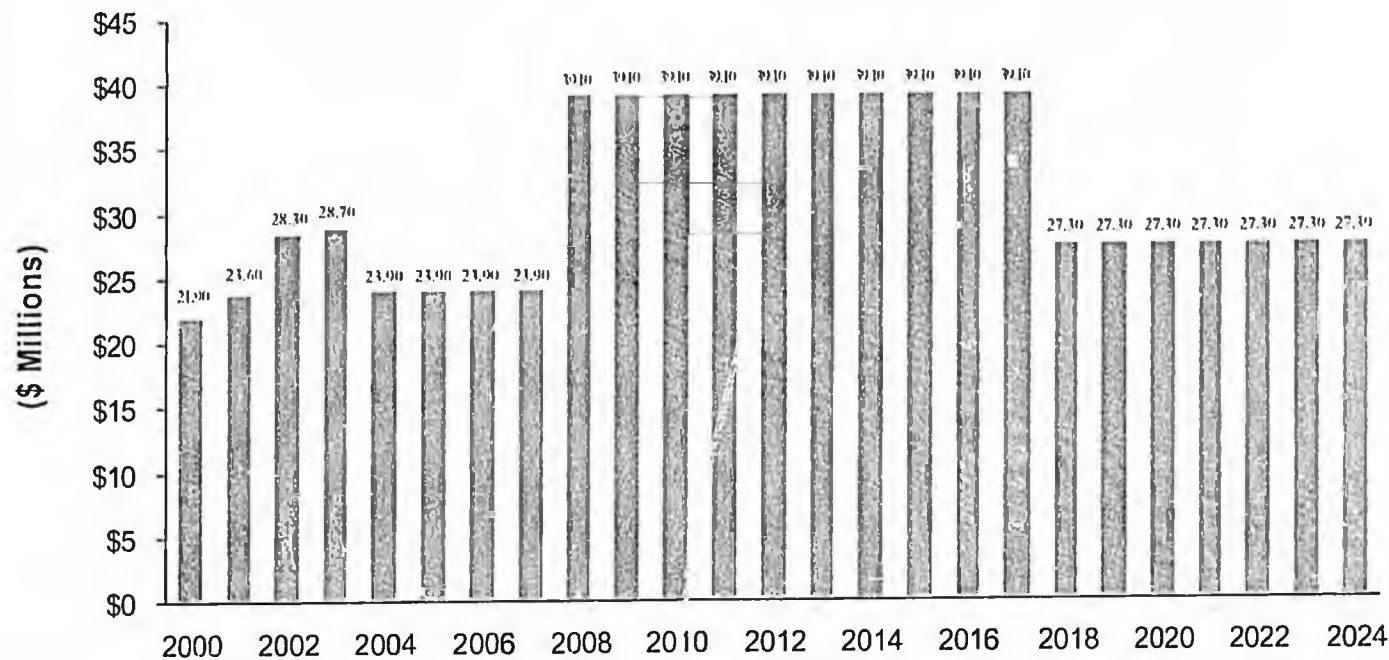
# Master Settlement Agreement

- ◆ The Master Settlement Agreement (“MSA”) is an agreement between settling tobacco companies and 46 states, including Alaska
- ◆ The settling companies have agreed to make payments to the states in perpetuity, based on domestic cigarette consumption
- ◆ The State of Alaska is entitled to receive 0.3414187% of the base payments under the MSA



# Payments to the State of Alaska

- ◆ Alaska is projected to receive approximately \$781 million over the next 25 years\*



\* Excludes first initial payment. Settlement stream does not reflect inflation or consumption projections.  
Includes initial, annual and strategic payments.

# Payment Adjustments

## Original Participating Manufacturer Payments

### Initial Payment Adjustments

- ✦ Volume Adjustment
- ✦ Non-Settling States Reduction
- ✦ Offset for Miscalculated or Disputed Payments

### Annual Payment Adjustments

- ✦ Inflation Adjustment
- ✦ Volume Adjustment
- ✦ Previously-Settled States Reduction
- ✦ Non-Settling States Reduction
- ✦ NPM Adjustment
- ✦ Offset for Miscalculated or Disputed Payments
- ✦ Federal Tobacco Legislation Offset
- ✦ Litigating Releasing Parties Offset

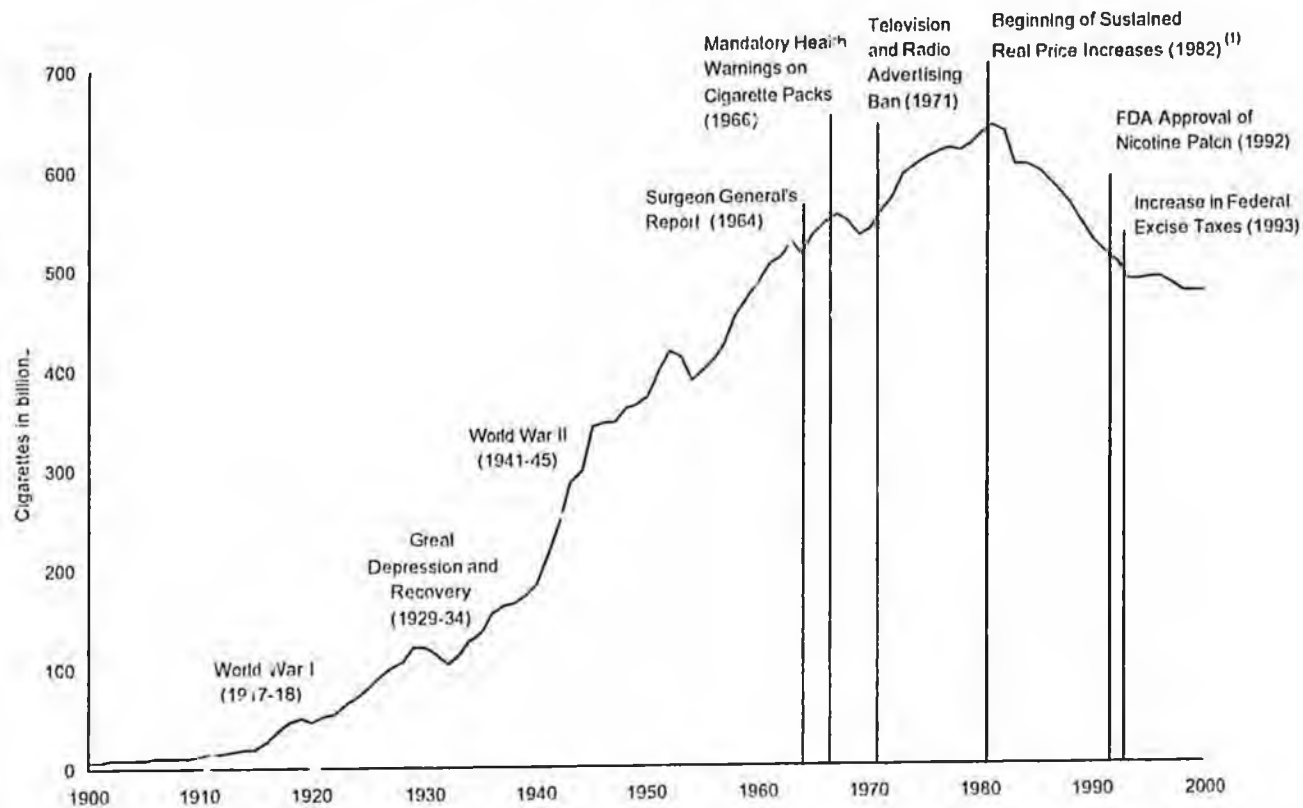
## Subsequent Participating Manufacturer Payments

### Annual Payment Adjustments

- ✦ Inflation Adjustment
- ✦ Volume Adjustment
- ✦ Non-Settling States Reduction
- ✦ NPM Adjustment
- ✦ Offset for Miscalculated or Disputed Payments
- ✦ Federal Tobacco Legislation Offset
- ✦ Litigating Releasing Parties Offset

# U.S. Cigarette Consumption Trends

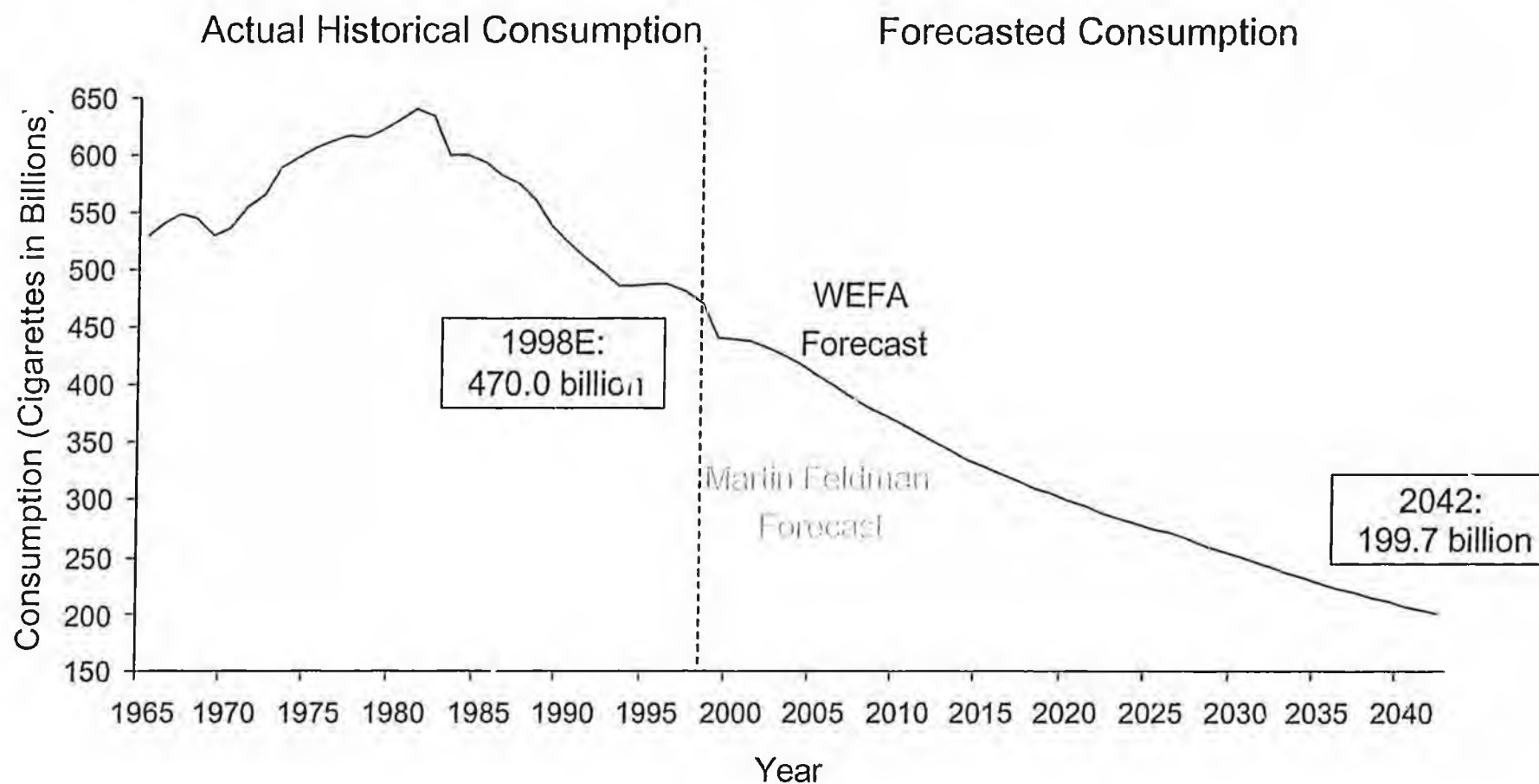
Cigarette Consumption, 1900-1998



Source: U.S. Department of Agriculture

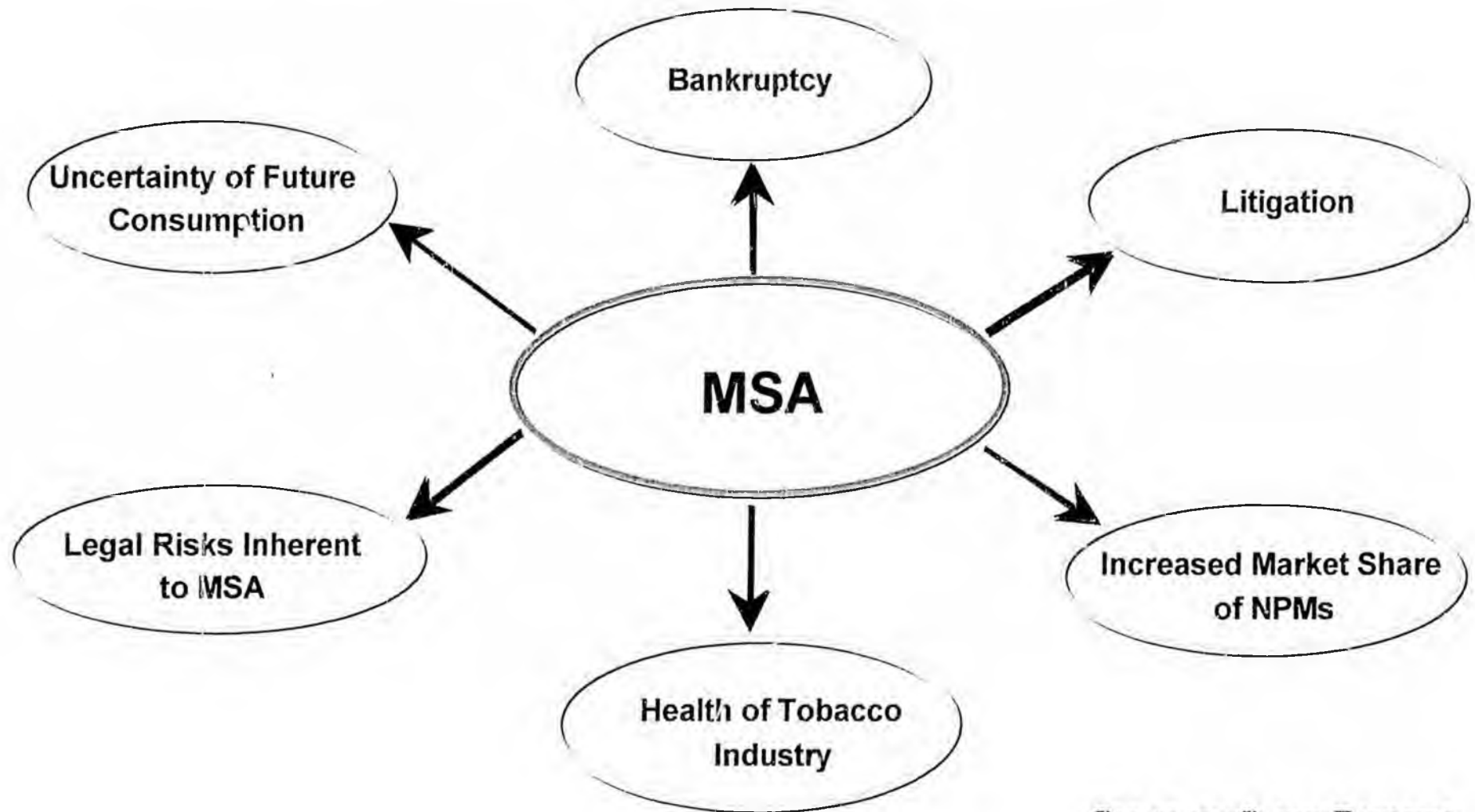
(1) Jeffrey E. Harris, "A Working Model for Predicting Consumption and Revenue Impacts of Large Increases in the U.S. Federal Cigarette Excise Tax" 1994

# WEFA Forecasts a 58% Decline in Total U.S. Consumption of Cigarettes Over the Next 43 Years



# Credit Concerns Regarding Payments under the MSA

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# Credit Concerns Regarding Payments Under the MSA

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## Credit Concerns

Uncertainty of future cigarette consumption

Bankruptcy of a PM

Increased NPM market share

Legal risks inherent to the MSA

## Mitigating Factors

- Utilize an independent consultant
- Provide potential investors objective and accurate forecasts
- Strategic bankruptcy is unlikely due to benefits of MSA
- Credit bankruptcy is unlikely due to the strength of the tobacco industry
- The widespread enactment of the model statute and the strong incentives of MSA
- Viewed as an executory contract, reducing risk of nonpayment in bankruptcy

# Credit Concerns Regarding Payments Under the MSA

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## Credit Concerns

Litigation

Health of Industry

## Mitigating Factors

- Third party provider suits largely unsuccessful
- Florida Supreme Court is reviewing class-wide punitive damages issue in Engle
- Aggregate individual awards unlikely to pose financial threat
- 36 states require more than 50% comparative fault for recovery
  
- PMs are enormously profitable (Phillip Morris EBIT >40%; RJR >20%)
- Credit quality greater than rating
- Liquidity and interest coverage in AA category

# Should Alaska Leverage Its Funds?

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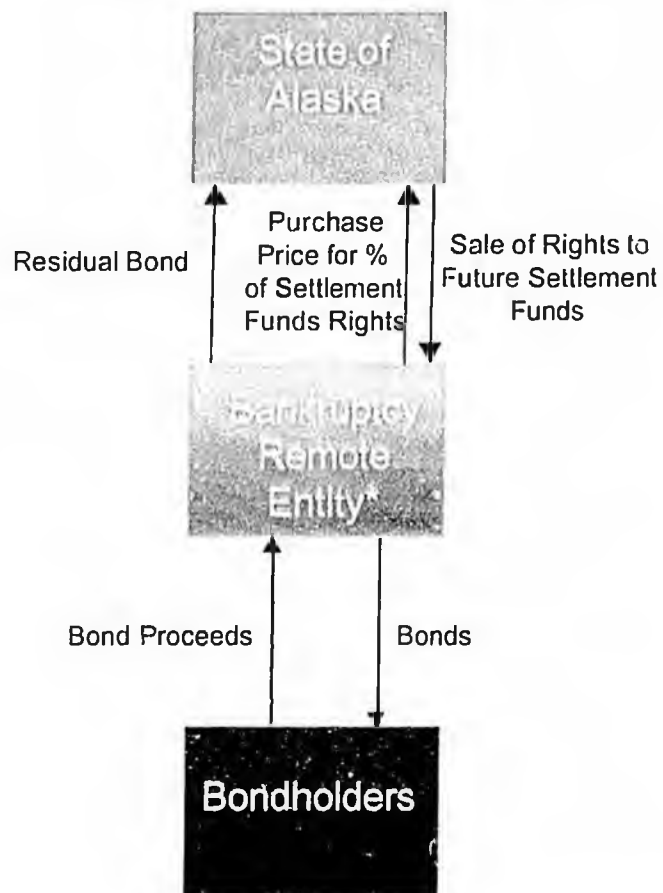
- ✦ Future receipt of tobacco settlement revenues uncertain
- ✦ Tobacco settlement revenues are not a diversified source of income for the state
- ✦ Alaska can receive residual tobacco settlement revenues after debt service payments
- ✦ Alaska can choose whether to issue the funds for capital spending or invest them
- ✦ Alaska may employ an endowment strategy to diversify revenue from tobacco settlement payments

## Securitization Benefits

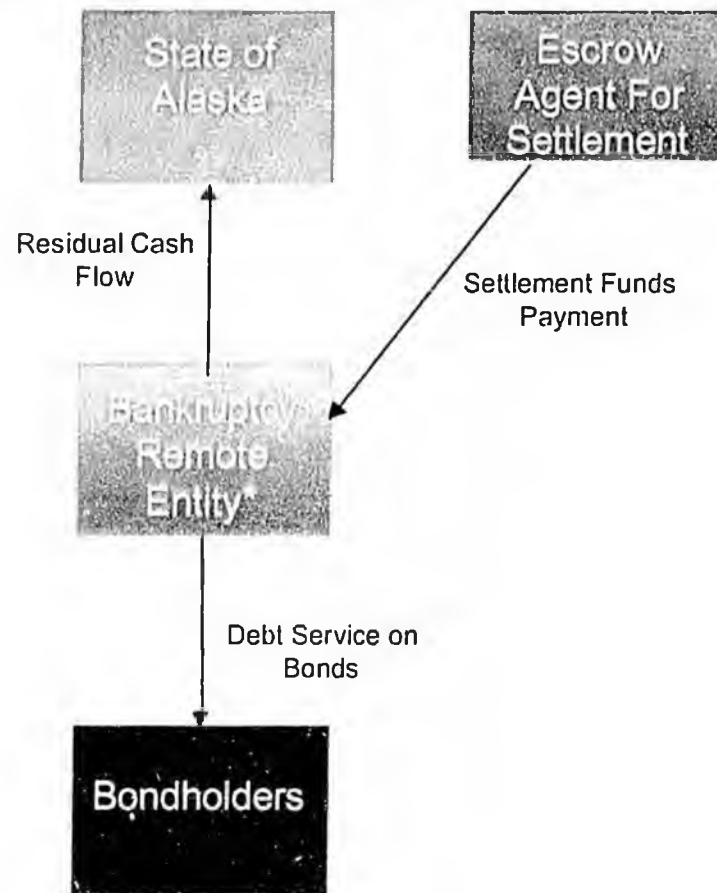
- Keep upside of residuals
- Eliminate downside risks of Tobacco Settlement Revenues

# Structured Credit or Securitization

## STRUCTURE AT ISSUANCE



## ONGOING DEBT SERVICE



\* Could be an existing State authority/issuer or a newly created not-for-profit corporation

# Why Securitize?

## State of Alaska Results

	<b>GROSS VALUE</b>	<b>PRESENT VALUE*</b>	<b>RISK</b>
<b>Tobacco Settlement Revenues over 30 years</b>	<b>\$1,009,029,562</b>	<b>\$405,932,133</b>	<b>Uncertain</b>
<b>Net Proceeds from Securitization</b>	<b>307,570,730</b>	<b>307,570,730</b>	<b>Certain</b>
<b>Residual after Debt Service</b>	<b>240,238,958</b>	<b>93,733,330</b>	<b>Uncertain</b>

\* Based upon 7% discount rate.

# Legislative Considerations

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- ✦ Must direct payments to a bankruptcy-remote or separate state entity
  - Occurs through a “sale” or non-recourse transfer of Settlement Funds
  - Should clarify that the State no longer “owns” the Settlement Funds
- ✦ Legislation should include non-impairment covenants
  - Alaska will enforce MSA
  - State will not impair the Settlement Funds, the financing structure or the rights of bondholders
  - State will not allow the Authority (or the entity issuing bonds) to file for bankruptcy
- ✦ Declare the Authority or issuing entity does not have authority - today or in the future - to file for bankruptcy
- ✦ Authorize Authority or issuing entity to create a non-profit entity to serve purely as a financing vehicle
  - This will enable future transfers of Settlement Funds
  - Non-impairment covenants would be necessary again

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Alternative State Transportation  
Financing Techniques

January 26, 2000

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## Highway Revenue Bonds

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- ◆ Supported by dedicated revenue stream rather than unlimited full faith and general obligation pledge
- ◆ Typically secured by State highway user tax receipts and/or excise taxes
  - Motor fuel taxes
  - Motor vehicle registration fees
  - Motor vehicle license fees
  - Penalties and fines
- ◆ Rating criteria
  - Diversity and stability of the pledged revenue stream
  - Governmental support
  - Program management, quality of planning, construction management, maintenance and inspection
  - Coverage of debt service (both historic and projected)
  - Legal and practical restrictions to additional debt issuance

# Highway Revenue Bonds - State Comparisons

Issuer	Issuer's Rating	State's Rating	Pledged Revenues	Rate Covenant	Additional Bonds Test	Debt Service Reserve	Debt Service Coverage
Alabama Highway Authority	A1/AA-	Aa/AA	Motor vehicle tag taxes, Gasoline & motor fuel taxes, Petroleum inspection fees, Vehicle identification marker fees, Liquefied petroleum gas permit fees	2.0xM.A.D.S.	Statutorily determined.	A.A.D.S.	2.39x
Arizona Transportation Board (Regional Area Road Fund)	AAA-	NA/NA	1/2 cent general sales tax in Maricopa County only	N/A	2.0xM.A.D.S.	N/A	3.00x
Arizona Transportation Board (Highway User Revenue Fund)	Aa1/AAA	NA/NA	Miscellaneous user fees, Fuel tax, Motor vehicle fees	N/A	3.0xM.A.D.S. \$800 Million issuance cap	N/A	6.73x Senior 4.68x Junior
State of Connecticut Department of Transportation	A1NA	Aa3/AA-	Motor fuels tax, Motor vehicle receipts, I.P.F. revenue, FTA grants	2.0xM.A.D.S.	2.0xM.A.D.S. (based on adjusted revenues)	M.A.D.S.	2.6x
Delaware Transportation Authority	A1/AA	Aa1/AA+	Motor fuels tax, Vehicle document/registration fees, Miscellaneous transportation revenue, Delaware Turnpike revenue	N/A	1.75xM.A.D.S. Senior 3.0xM.A.D.S. Junior on pledged revenues net senior debt service	0.5xM.A.D.S. unless revenues are less than 2.00x M.A.D.S. during last 12 months (then 1.00x M.A.D.S.)	N/A
State of Florida Department of Transportation (Full Faith and Credit Bonds)	Aa2/AA+	Aa2/AA+	Gasoline tax, Supplemental G.O. Pledge	N/A	New A.D.S. can not exceed 90% of Pledged Revenues 1.11xM.A.D.S. minimum coverage	N/A	12.96x
State of Hawaii Department of Transportation	Aa3/A+	Aa3/A+	Highway fuel license taxes, Vehicle registration fees, Vehicle weight taxes, Rental motor vehicle and tour vehicle surcharge taxes	N/A	2.0xM.A.D.S. Senior 1.30xM.A.D.S. Junior	0.5xM.A.D.S.	22.7x-24.31x Historical 14.0x Actual 10.9x-7.01x Projected

## Highway Revenue Bonds - State Comparisons (cont'd)

Issuer	Issuer's Rating	State's Rating	Pledged Revenues	Rate Covenant	Additional Bonds Test	Debt Service Reserve	Debt Service Coverage
State of Kansas Department of Transportation	Aa2/AA	NA/NA	State Highway Fund (Motor fuel tax, driver's lic. & vehicle registration tax, and a portion of state sales and use tax)	3.0xM.A.D.S	3.0xM.A.D.S.	Required to be funded only if can not maintain rate covenant.	6.88x
State of Maryland Department of Transportation	Aa/AA	Aaa/AAA	Corporate income tax, Motor vehicle fuels tax, Motor vehicle titling tax, Plus others if needed	N/A	2.0xM.A.D.S. \$1.2 billion maximum allowable debt outstanding	N/A	3.55x
Commonwealth of Massachusetts (Special Obligations Revenue Bonds)	Aa3/AA	A1/AA-	Gasoline tax	N/A	Existing lien is closed	0.50xM.A.D.S.	Actual-3.29x
State of Michigan State Trunk Line Fund	A1/AA-	Aa2/AA+	Motor fuels taxes Motor vehicle registration fees Title fees License plate fees	N/A	2.0xM.A.D.S.	N/A	6.7x-8.2x Historical 8.4x Actual
State of Mississippi Department of Highways	A1/AA	Aa3/AA	Gasoline Tax Privileged tax on earmarked revenues, Fuel identification	N/A	2.0xM.A.D.S.	M.A.D.S.	9.12x
State of Montana Department of Highways	A1/AA-	Aa3/AA-	Diesel License tax Gasoline license tax Diesel fuel tax Gasoline fuel tax Gross vehicle weight tax Coal severance tax	N/A	3.0xM.A.D.S. \$150 million maximum allowable debt outstanding	M.A.D.S. only if coverage drops below 3.0x	6.10x
State of Nevada Department of Transportation	Aa/AA	Aa2/AA	Motor vehicle fuels tax Special fuels tax Federal aid	N/A	2.0xM.A.D.S. only if specifically authorized by legislature	M.A.D.S.	6.51x
New Jersey Transportation Trust Fund Authority	Aa3/A+	Aa1/AA+	Transportation Trust Fund (State appropriation)	N/A	N/A	N/A	N/A

# Highway Revenue Bonds - State Comparisons (cont'd)

Issuer	Issuer's Rating	State's Rating	Pledged Revenues	Rate Covenant	Additional Bonds Test	Debt Service Reserve	Debt Service Coverage
State of New Mexico (Senior State Highway Debentures) (Senior Subordinate Lien Rev.)	Aa/AAA A/INR	Aa1/AA+	Gasoline excise taxes Motor vehicle registration fees Federal Highway Funds	Revenue amount constitutionally protected.	5.0x Senior 2.5x Sr. Sub. 1.75x Subordinate	Required only if coverage falls below 2.0x A.D.S.	9.8x
New York State Thruway Authority	A/A-	A/A-	Petroleum business tax Motor vehicle registration fee Highway use tax Motor fuel gasoline tax	N/A	2.0x A.A.D.S.	0.5x M.A.D.S. or 10% of Par	5.5x
State of Ohio (Highway Obligation Bonds)	Aa/AAA	Aa/AA+	Motor vehicle license tax Driver's license fee Highway use fee Gasoline tax Motor transportation companies tax Private motor carriers tax Motor vehicle fuel tax	N/A	N/A	N/A	N/A
Oklahoma Capital Improvement Authority (State Hwy Capital Improvement Rev. Bonds)	A/A+	Aa/AA	Appropriation lease	N/A	Statutorily determined.	0.5x A.A.D.S.	N/A
State of Oregon Department of Transportation	Aa/AA	Aa2/AA-	Motor vehicle fuels tax Motor carrier tax Fuel use tax	N/A	3.0x A.A.D.S.	N/A	28.0x
Puerto Rico Highway Authority	Baa/AA	Baa/AA	Fuels tax Motor vehicle license fees Tolls Oil tax (subordinate to GO but has never happened)	N/A	1.5x M.A.D.S.	M.A.D.S., but can use L.O.C. or surety	N/A

## Highway Revenue Bonds - State Comparisons (cont'd)

Issuer	Issuer's Rating	State's Rating	Pledged Revenues	Rate Covenant	Additional Bonds Test	Debt Service Reserve	Debt Service Coverage
State of Utah (General Obligation Highway Bonds)	Aaa/AAA	Aaa/AAA	Annual tax on all real and personal property within the State subject to taxation	N/A	N/A	N/A	N/A
Commonwealth of Virginia Transportation Board	Aa2/AA	Aaa/AAA	Transportation Trust Fund (State appropriation)	N/A	N/A	N/A	N/A
State of Wisconsin Department of Transportation	A/AA-	Aa2/AA	Vehicle registration	1.0x debt service	1.75xM.A.D.S.	Requirement established for each individual series.	3.8x

# Grant Anticipation Revenue Vehicles (“GARVEEs”)

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## *Two Types of GARVEEs*

- ◆ Direct and Indirect
- ◆ Direct: Only Federal Aid Highway Projects are eligible; state must abide by federal statutes and regulations
- ◆ Indirect: Both federal and state projects are eligible; state subject to its own statutes and regulations

# Grant Anticipation Revenue Vehicles (“GARVEEs”)

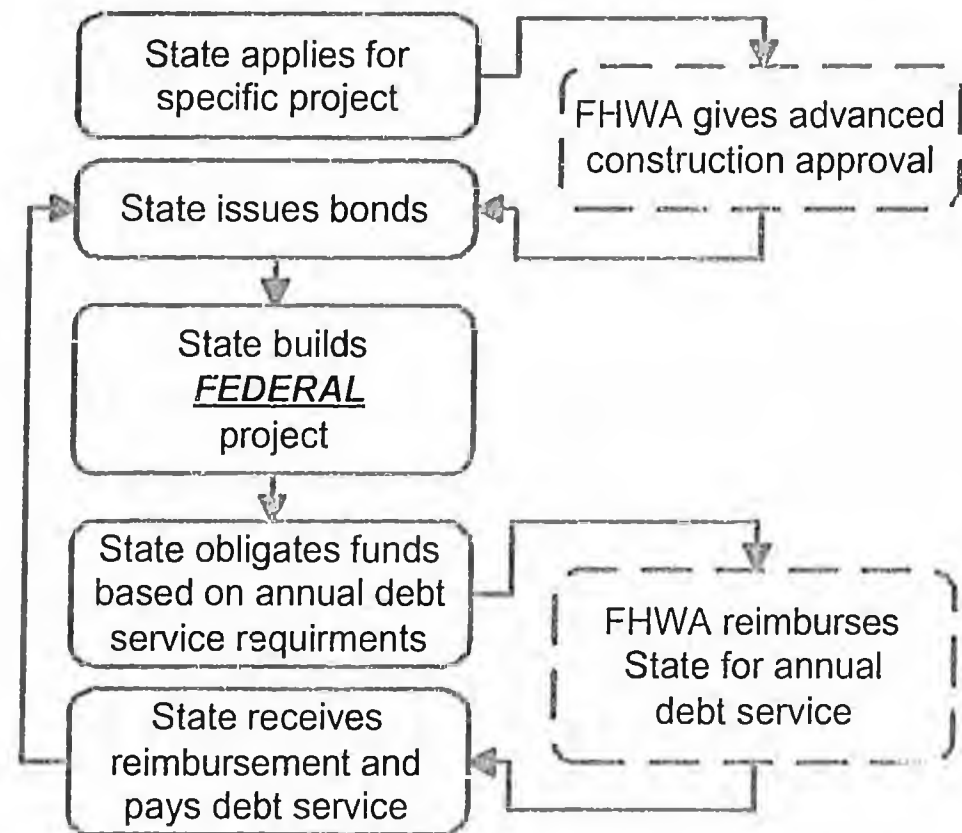
## *Direct GARVEEs*

- ◆ Program FHWA funds for debt service payments
- ◆ Only Federal Aid Highway Projects are eligible
- ◆ Principal and interest payments are reimbursed by the FHWA
- ◆ Secured only by FHWA funds

# Grant Anticipation Revenue Vehicles (“GARVEEs”)

## *Direct GARVEEs*

- ◆ Used to finance a specific project or projects
- ◆ DOT submits the debt service schedule for approval (this is called “programming”)
- ◆ All proceeds need to be spent on the specific project or projects that were approved leaving no spending discretion or flexibility
- ◆ DOT submits for reimbursement three days before each principal/interest payment and DOT receives a reimbursement before the payment is actually made



# Grant Anticipation Revenue Vehicles (“GARVEEs”)

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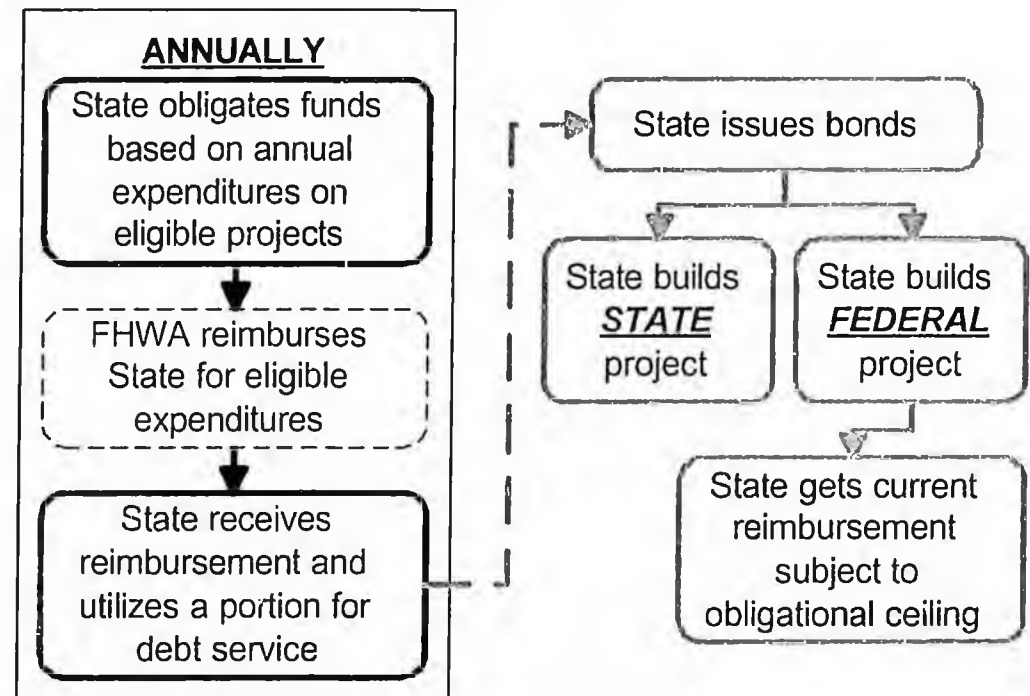
## *Indirect GARVEEs*

- ◆ After receiving FHWA reimbursements, State DOT repledges those funds to pay principal and interest on a new series of GARVEEs
- ◆ Federal interest in FHWA reimbursements has been extinguished
  - Both state and federal projects are eligible
  - State labor wage rates, environmental law and regulations, construction standards and WBE/MBE goals are used - not federal
- ◆ GARVEEs can be secured only with FHWA funds
- ◆ State DOT management of projects is critical since a timely flow of reimbursements is necessary

# Grant Anticipation Revenue Vehicles (“GARVEEs”)

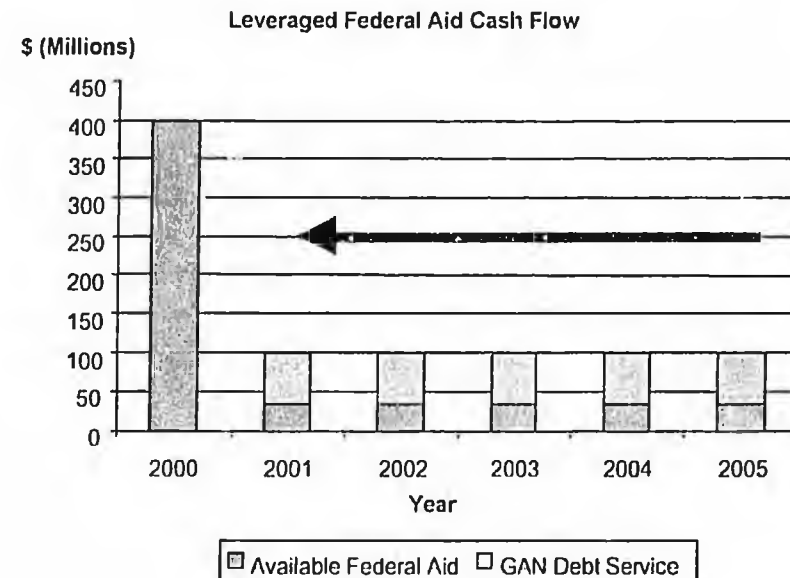
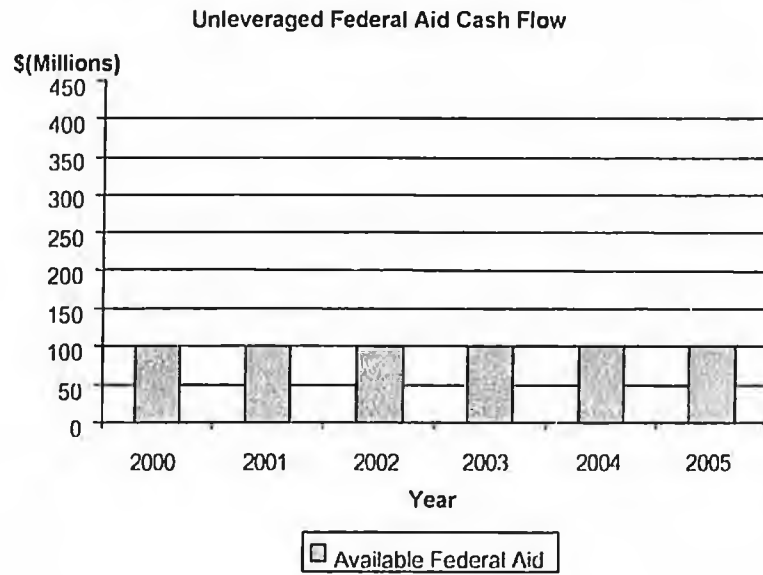
## *Indirect GARVEEs*

- ✦ No restrictions on the usage of bond proceeds - treated as any other State funds - can spend on either Federal or State projects
- ✦ Issued without FHWA approval
- ✦ Backed by future federal reimbursements for future federally eligible expenditures
- ✦ DOT continues its federal aid program, seeking annual reimbursements for eligible expenses
- ✦ Reimbursements used to amortize the GARVEE bonds



# Example of Leveraging Federal Funds

*Utilizing GARVEEs can allow a state to bring forward approximately \$300 million of additional Federally Funded Projects into 2000 from FY 2001-2005 for every \$100 million to be received annually*



Note: These cash flows are exemplary of leveraging of Federal highway funds and do not reflect either specific project related leveraging or specified cash flow leveraging

## Credit and Ratings Issues

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- ◆ Federal Aid Highway Program
  - Multi-year program authorization and support
  - Annual review and obligation levels
  - Congressional authorization/appropriation
  - Structural change in program
  
- ◆ Structural Issues
  - Single project versus program
  - State's ability to match
  - Reimbursement cash flow and lien
  - Coverage stress tests for future potential FHWA \$ reductions

## Credit and Ratings Solutions

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- ◆ Conservative approach aimed toward high credit quality
  - Authorizes low cost revenue debt financing of the State's transportation projects for short-term or long-term borrowing
  - Project-specific or programmatic
- ◆ Structured around the FHWA and federal budget principle of contract authority (creditworthy funding commitment)
  - Passage of Federal Transportation Equity Authorization Act for the 21st Century (TEA-21) creates Federal commitment for the apportioned amounts for the current authorization period of five years plus two additional years
- ◆ Distinctions made between bonds maturing within the current authorization period and those maturing beyond the current authorization period
- ◆ Capital markets acceptance:
  - Standard & Poor's, Moody's and Fitch will provide investment grade ratings within and beyond the current reauthorization period in the A level
  - MBIA and AMBAC will insure debt issuance within and beyond the current reauthorization period