

Memorandum

To: CHAIR AND COMMISSIONERS

CTC Meeting: May 25-26, 2005

Reference No.: 4.6
Information Item

Ref: **ANNUAL ANALYSIS BY STATE TREASURER OF BONDING CAPACITY
(GARVEE) OF FEDERAL TRANSPORTATION FUNDS**

These analyses are provided to the California Transportation Commission (Commission) to assist in its compliance with the provisions of SB 928 (Burton) (Chapter 862, Statutes of 1999) requiring the Commission to prepare, in conjunction with the State Treasurer's Office (STO), an annual analysis of California's bonding capacity for issuing Grant Anticipation Revenue Vehicles, or GARVEE bonds and notes, which are capital market borrowings repaid by federal transportation funds deposited in the State Highway Account.

The State's authority for issuance of GARVEE obligations derives both from federal legislation and from the passage of SB 928 in 1999, which established Government Code Sections 14550 through 14555.9. The bill was sponsored by the STO to ensure California had the necessary state legislative authority to make use of this new financing tool for accelerating high priority transportation projects. SB 928 became effective January 1, 2000, and was further amended by AB 438 (Chapter 113, Statutes of 2001), AB 3026 (Chapter 438, Statutes of 2002), SB 1098 (Chapter 212, Statutes of 2004), and SB 1507 (Chapter 793, Statutes of 2004). This bonding capacity analysis is the sixth prepared since 2000.

Attachment

**Analyses of
GARVEE
Bonding Capacity
2005**

Analyses for the
California Transportation Commission
April 2005

State Treasurer Philip Angelides



Table of Contents

Executive Summary	ii
I. Purpose of Analyses	1
II. The 2004 GARVEE Financing	2
III. Need for Sensitivity Analyses	3
IV. Information Sources	3
V. Summary of Alternative Assumptions	5
VI. Summary of Results	6
VII. California Transportation Commission Policy	8
VIII. Recent Events	8
IX. Conclusion	9
<i>Attachment A:</i> Federal Deposits Into The State Highway Account	
<i>Attachment B:</i> Detailed Assumptions For Sensitivity Analyses	
<i>Attachment C:</i> Detailed Worksheet For Sensitivity Analyses	
<i>Attachment D:</i> Detailed Summary Tables For Sensitivity Analyses	

Executive Summary

These analyses are provided to the California Transportation Commission (Commission) to assist in its compliance with the provisions of SB 928 (Burton) (Chapter 862, Statutes of 1999) requiring the Commission to prepare, in conjunction with the State Treasurer's Office (STO), an annual analysis of California's bonding capacity for issuing Grant Anticipation Revenue Vehicles, or GARVEE bonds and notes, which are capital market borrowings repaid by federal transportation funds deposited in the State Highway Account.

The State's authority for issuance of GARVEE obligations derives both from federal legislation and from the passage of SB 928 in 1999, which established Government Code Sections 14550 through 14555.9. The bill was sponsored by the STO to ensure California had the necessary state legislative authority to make use of this new financing tool for accelerating high priority transportation projects. SB 928 became effective January 1, 2000, and was further amended by AB 438 (Chapter 113, Statutes of 2001), AB 3026 (Chapter 438, Statutes of 2002), SB 1098 (Chapter 212, Statutes of 2004), and SB 1507 (Chapter 793, Statutes of 2004). This bonding capacity analysis is the sixth prepared since 2000.

The issuance of additional GARVEE bonds is subject to one important statutory condition: pursuant to Government Code Section 14553.4, which was amended by SB 1507 in September 2004, the Treasurer may not authorize the issuance of the bonds if the annual debt service on all outstanding GARVEE obligations would exceed 15 percent of the total amount of federal transportation funds deposited in the State Highway Account in the State Transportation Fund for any consecutive 12-month period within the preceding 24 months. Thus, the current and any future bonding capacity analyses must take place in the context of this "cap."

There are other factors, which also affect bonding capacity, such as: maturity structures, interest rates, and policy decisions. As a result, these analyses continue the practice of prior analyses by providing "sensitivity analyses" under different scenarios, with varying assumptions for maturity dates and interest rates. This approach should continue to assist the Commission in examining and responding to future applications in the context of alternative scenarios.

On March 10, 2004, the State issued \$614,850,000 State of California (California Department of Transportation) Federal Highway Grant Anticipation Bonds Series 2004A, the first issuance of GARVEE obligations. The Series 2004A Bonds are structured with a level debt solution with serial maturities from 2005 through 2015. The maximum annual debt service of the Series 2004A Bonds is \$72,901,444 in Fiscal Year (FY) 2013. The issue received underlying ratings of Aa3, AA-, and AA- from Moody's, Standard & Poor's and Fitch Ratings, respectively. With the exception of the serial maturity 2005, the Series 2004A Bonds were insured and therefore rated in the AAA category.

The Commission approved a Master Trust Indenture for all GARVEE senior lien obligations that requires the annual debt service on all outstanding GARVEE obligations not to exceed 25 percent of the total amount of federal transportation funds deposited in the State Highway Account in the State Transportation Fund for any consecutive 12-month period within the preceding 24 months. The Commission also adopted policy guidelines that stipulate the intent not to issue additional GARVEE obligations where the annual debt service on all outstanding obligations would exceed 15 percent of the total amount of federal transportation funds deposited in the State Highway Account in the State Transportation Fund for any consecutive 12-month period within the preceding 24 months. SB 1507 amended the statutory cap to align it with the Commission's 15 percent cap.

The analyses in this report are based on the 15 percent cap set forth in both the policy guidelines and statutory requirements.

The analyses of 2005 show that the bonding capacity is significantly reduced when compared with the analyses of 2004. The analyses show a resulting bonding capacity ranging from a low of \$1.4 billion to a high of \$2.58 billion. The primary factors that contributed to the significant decrease in the bonding capacity are a more stringent revenue test and higher market interest rates.

These analyses demonstrate that a wide range of circumstances, including policy and market factors, can affect the existing capacity for future State GARVEE financings. Therefore, the analyses should be used as a tool for understanding the implications of alternative project applications and the related potential GARVEE bond structures that the Commission may be asked to consider over the coming year.

I. Purpose of Analyses

The following analyses are provided to assist the Commission in meeting the requirements of SB 928 (Burton) (Chapter 862), sponsored by the STO to ensure California had the necessary state legislative authority to make use of this financing tool for accelerating high priority transportation projects. The analyses relate specifically to those requirements found in Section 14553(b) of the Government Code, which states:

“Notwithstanding Section 7550.5 of the Government Code, on or before April 1 of each year, the commission, in conjunction with the Treasurer’s office, shall prepare an annual analysis of the bonding capacity of federal transportation funds deposited in the State Highway Account in the State Transportation Fund.”

The analyses have been performed consistent with the GARVEE bonds bonding capacity guidelines provided in Government Code Section 14553.4 (as amended by SB 1507), which states:

“The Treasurer may not authorize the issuance of notes if the annual repayment obligations of all outstanding notes in any fiscal year would exceed 15 percent of the total amount of federal transportation funds deposited in the State Highway Account in the State Transportation Fund for any consecutive 12-month period within the preceding 24 months.”

The following analyses are intended to measure the capacity of the State Highway Account to support future issuance of GARVEE bonds, given:

1. the historical record of federal deposits to the State Highway Account (we examine deposits of pledged funds only);
2. requirements preceding any issuance of additional bonds under the Master Trust Indenture; and
3. the “statutory cap” on total outstanding GARVEE bonds.

II. The 2004 GARVEE Financing

The Series 2004A Bonds are secured by a Master Trust Indenture dated February 1, 2004 as amended and supplemented by a First Supplemental Indenture dated February 1, 2004, by and among the Treasurer, the Commission and the California Department of Transportation (Department). The Series 2004A Bonds and all future bonds and obligations issued under the Master Trust Indenture are secured solely by the Trust Estate that consists solely of federal transportation funds. The primary source of federal transportation funds is amounts appropriated to the State by the federal government pursuant to Federal Aid Authorization, pursuant to Title 23 U.S. Code authorizing federal funding of state transportation projects.

The Department entered into a Memorandum of Agreement with the Federal Highway Administration (FHWA) in anticipation of reimbursement by FHWA for debt service and other bond related costs associated with the federal-aid projects approved by the FHWA.

The Master Trust Indenture provides for the issuance of additional bonds on parity with the Series 2004A Bonds. The additional bonds may be issued only after a Department Representative certifies that the total amount of federal transportation funds deposited into the State Highway Account in the State Transportation Fund for any 12-month consecutive period within the preceding 24 months was not less than four times the amount of annual debt service with respect to all outstanding obligations in any fiscal year.

No provision of the Master Trust Indenture prevents the Treasurer from issuing bonds or other obligations on a basis subordinate to the Series 2004A Bonds. Any subordinate bonds, however, would have to meet the “statutory cap” for additional bonds.

The \$657,713,000 proceeds of the Series 2004A Bonds are being used to pay a portion of the costs of acquisition of right-of-way and/or construction costs for eight federal-aid projects approved by the Commission for funding from the Series 2004A Bonds. The eight projects are:

- San Diego I-15 Managed Lanes
- Riverside SR-60/SR-91/I-215
- Santa Clara I-880/Coleman Avenue
- Santa Clara SR-87 (North)
- Santa Clara SR-87 (South)
- Los Angeles I-5 HOV Lanes
- Los Angeles I-405 Auxiliary Lanes
- Los Angeles I-405/Highway 101 Gap Closure

Start-up of some of the projects has been delayed. The Commission and the Department continue to monitor each project’s progress to ensure the expedient use of bond proceeds.

III. Need for Sensitivity Analyses

There are many factors that will influence the State’s future capacity to issue GARVEE bonds. These factors include the final maturity, interest rates and the available revenues for the additional bonds test. As a result, no single bonding capacity analysis is sufficient for purposes of guiding the Commission’s evaluation of the potential for future use of GARVEE bonds to finance transportation projects. Therefore, to facilitate an informed consideration of future applications with structures and terms not yet known to the Commission, we have performed a series of “sensitivity analyses” under alternative scenarios. The factors that have been varied in these different analyses are identified in the following table.

Primary Factors Affecting Bonding Capacity Sensitivity Analyses
Final Maturity
Assumed Interest Rates

IV. Information Sources

Pledged Revenues:

In performing these bonding capacity analyses, the STO is using data obtained from the Department regarding deposits into the State Highway Account in the State Transportation Fund from federal transportation funds. The amounts provided by the Department represent federal funds that can be legally pledged under the Master Trust Indenture for payment of the Bonds. The federal transportation funds legally available for payment of debt service include those derived from federal aid authorization under Title 23, including apportioned funds (i.e., National Highway System, Interstate Maintenance, Highway Bridge Rehabilitation and Replacement, Surface Transportation Programs, Congestion Mitigation and Air Quality and amounts available under minimum guarantees) with corresponding Obligation Authority (OA). Excluded from these total funds and OA legally available for payment of debt service are those categories of funds related to specific congressional action (i.e., High Priority Projects – better known as “Earmarks”) and other specified programmatic “set-asides” as determined in law by formula (i.e., State Planning and Research, Metropolitan Planning, Revenue Aligned Budget Authority, Discretionary, and Section 163).

This information was provided on a monthly basis for the period of January 2003 through December 2004. See **Attachment A** for the complete listing of these monthly deposits and related calculations.

The additional bonds test is based on the highest consecutive 12-month of pledged revenue deposits in the prior 24-month period. These historic annual deposits are a known quantity at any given point in time, but clearly are subject to change over time, and must be re-examined at the time of each potential GARVEE bond issuance.

Final Maturities:

The analyses in the report assume additional GARVEE bonds issued in 2005 with final maturities in 2011 and 2017.

Interest Rate Assumptions:

Estimates of potential interest costs under various scenarios were developed by the STO based on the AA index published by Municipal Market Data (MMD), a widely used industry benchmark. The interest rate assumptions used for the analyses are based on the weighted average coupon, using a level debt solution for each final maturity (or amortization period).

V. Summary of Alternative Assumptions

For the 2005 bonding capacity analyses, we chose to use the MMD “AA” interest rate scale, which corresponds with the actual underlying ratings received for the first issue of GARVEE bonds. The two alternative scenarios for market conditions used in these analyses are as follows:

- 1. Base Case:** Based on the March 1, 2005 MMD AA interest rate scale.
- 2. Market Sensitivity Case:** Base Case plus 100 basis points.

Many observers believe long-term interest rates will increase from the current levels. For this reason, and based on the expected short-term maturity structure of the State’s current and future GARVEE obligations, a 100 basis point increase in interest rates is used for the market sensitivity analyses.

Two alternatives for the final maturity of the bonds were analyzed for each case. The table below summarizes the range of assumptions for the sensitivity analyses. The different scenarios for each factor combine for a total of four different analyses.

Factors	Range of Assumptions
Final Maturity	Two scenarios: varying at 6 and 12 years from date of issuance
Assumed Interest Rates	Two scenarios: one at AA MMD market rates on March 1, 2005 and one at 100 basis points above the March 1, 2005 AA MMD market rates

See **Attachment B** for the detailed assumptions used in each sensitivity analysis.

It also should be noted that the current analyses, by necessity, require significant simplification as compared to the myriad of structuring nuances that would be involved in actual bond sales. As a result, certain ambiguities or alternative interpretations could lead to somewhat differing results in practice. One example of a simplification,

common to all scenarios, is the assumption that all GARVEE bonds within the capacity of a given scenario would be issued in a single, initial year and not staggered over multiple years, as typically would be expected in a bonding program of significant magnitude.

If, instead, such bonds were staggered and this financing structure was assumed to have a fixed “end date” represented by the assumed final maturity used in each scenario, each resulting measure of maximum bonding capacity would have to be adjusted downward. This would be necessary because the GARVEE bonds issued in subsequent years would have a shorter period during which to amortize principal before the fixed end date. This would increase the annual debt service necessary for a given par amount of bonds, causing a reduction in total bonding capacity, assuming a fixed amount of annual revenues for each scenario.

Alternatively, this simplification would not have this constraint on capacity if future financings were assumed to be structured on a “rolling maturity” basis, that is, with each GARVEE bond issued in subsequent years within each scenario having exactly the same underlying terms, such as total years to maturity and interest rate, regardless of the timing of any future bond issuance. This latter simplification would also assume a fixed amount of annual revenues for each scenario.

This discussion is offered as an example, which is by no means exhaustive, of the implications of the necessary simplifications involved in any analysis of bonding capacity given current uncertainty about the “real life” conditions that will exist at the time of any future issuance of GARVEE bonds or obligations. Therefore, care should be exercised in using these analyses to avoid erroneous interpretations or conclusions.

VI. Summary of Results

The 2004 report was based on the 25 percent additional bonds test set forth in the Master Trust Indenture for Series 2004A bonds. This report is based on the 15 percent cap set forth in both the Commission policy and the statutory requirement as amended by SB 1507.

The analyses in this report are based on a more stringent statutory cap with some sensitivity analyses of alternative maturities and higher interest rates. Therefore, the current analyses resulted in a much lower bonding capacity than last year’s analyses. For example, a 6-year maturity bond issuance corresponds to a bonding capacity ranging from \$1.40 billion (market sensitivity case) to \$1.45 billion (base case). These levels represent a decrease of \$1.40 billion and \$1.45 billion, respectively, over those in 2004, or a decrease of 50 percent over last year.

The Commission policy established 12 years as the maximum maturity for GARVEE bonds. If all future bond issues are structured with a 12-year amortization period consistent with the current Commission policy and at current interest rate levels, the remaining capacity for issuance of GARVEE bonds under the 15 percent cap revenue test would be from \$2.43 billion (market sensitivity case) to \$2.58 billion (base case). These levels represent a decrease of \$2.45 billion and \$2.59 billion, respectively, over those in 2004, or a decrease of almost 50 percent over last year.

A longer amortization period would increase the additional bonding capacity. If the Commission policy changes to allow a longer maximum maturity, the bonding capacity would increase accordingly.

The average monthly deposits into the State Highway Account, from 2002 on, is based on all federal transportation funds that are deposited into the State Highway Account and are legally available to be pledged in the Master Trust Indenture to pay the GARVEE bonds, as discussed previously under “Pledged Revenues” in Section IV of this report.

The interest rates used for the 2005 analyses assume a AA rating on the GARVEE bonds. As of March 1, 2005, the average interest rate for AA rated bonds with a 6-year final maturity is 3.07 percent and with a 12-year final maturity is 3.61 percent.

The following table summarizes key results of our analyses. Detailed worksheets supporting the results can be found in **Attachments C and D** for ease of reference.

Summary of Results for GARVEE Bonding Capacity Sensitivity Analyses		
Final Maturity Amortization Period	Base Case March 1, 2005 AA MMD Scale	Market Sensitivity Case Base Case plus 100 Basis Points
6 years	\$1.45 billion	\$1.40 billion
12 years	\$ 2.58 billion	\$2.43 billion

VII. California Transportation Commission Policy

The Commission adopted a GARVEE policy in December 2003. This policy extends through the next federal transportation reauthorization act, which is expected to continue through the 2008-09 federal fiscal year.

The policy, contained in Commission Resolution No. G-03-21, is as follows:

- **Debt Limit.** The Commission will limit annual GARVEE debt service to 15 percent of qualifying federal revenues. This limit will be calculated on the basis described in Section 14553.4 of the Government Code (i.e., 15 percent of the total amount of federal transportation funds deposited in the State Highway Account for any consecutive 12-month period within the preceding 24 months).
- **Term.** Each bond will be structured for debt service payments over a term of no more than 12 years.
- **Project Selection.** The Commission will select projects for accelerated construction through the use of GARVEE bonding. The selection will be made through the programming process for the State Transportation Improvement Program (STIP) and the State Highway Operation and Protection Program (SHOPP). The Commission will select projects that are major improvements to corridors and gateways for interregional travel and goods movement. Major improvements

include projects that increase capacity, reduce travel times, or provide long-life rehabilitation of key bridges or roadways.

VIII. Recent Events

State transportation funding has been impaired over the last three fiscal years due to general fund loans, transfers, and other funding impacts. Because of the lack of transportation funds, any future GARVEE financing has been suspended until federally required state matching funds can be identified. It is anticipated that the earliest GARVEE issuance would be during Fiscal Year 2005-2006, although it is possible that issuance could be delayed even further.

The Transportation Equity Act for the 21st Century (TEA-21), which authorizes the use of federal transportation funds, expired on September 30, 2003. The latest short-term extension of TEA-21 by the federal government expires after May 31, 2005. If the reauthorization act is not passed by Congress and signed by the President before May 31, 2005, another short-term extension of the TEA-21 is expected. The Administration introduced their proposed funding level for the reauthorization act for 2004 through 2009 as a part of the President's 2006 Budget proposal.

Although an interruption in the flow of GARVEE funding may be unlikely, there is concern toward the continuing reauthorization delay. Continuing gridlock on enacting a multi-year authorization and reliance on short-term extensions would erode the predictable federal transportation funding.

IX. Conclusion

As the above analyses show, the ultimate capacity existing for the State's future GARVEE financings will depend on a wide range of circumstances over time, including market conditions, maturity structures, and other factors that may be considered by the Commission in the future.

We hope these analyses will prove useful in light of some of the structuring options available for GARVEE financing, in addition to meeting the immediate goal of assisting the Commission in preparing its annual report.

ATTACHMENT A-1

**FEDERAL DEPOSITS INTO THE
STATE HIGHWAY ACCOUNT**

**Cumulative 12-Month
Federal Deposits into the State Highway Account
Over 24-Month period, ending December 31, 2004**

Period Covered		12-Mo. Total Revenues Deposited	
Jan-03	Dec-03	\$2,249,510,487.55	
Feb-03	Jan-04	\$2,275,991,122.37	Highest 12-mo. Total
Mar-03	Feb-04	\$2,207,406,157.68	
Apr-03	Mar-04	\$2,239,740,281.57	
May-03	Apr-04	\$2,068,961,841.88	
Jun-03	May-04	\$2,001,009,353.00	
Jul-03	Jun-04	\$1,862,173,581.14	
Aug-03	Jul-04	\$1,857,282,573.77	Lowest 12-mo. Total
Sep-03	Aug-04	\$1,947,635,795.28	
Oct-03	Sep-04	\$2,030,747,633.90	
Nov-03	Oct-04	\$2,017,039,030.20	
Dec-03	Nov-04	\$1,971,432,844.21	
Jan-04	Dec-04	\$1,953,499,715.83	
		\$2,052,494,647.57	Average 12-mo. Total

Source: California Department of Transportation

ATTACHMENT A - 2

FEDERAL DEPOSITS INTO THE STATE HIGHWAY ACCOUNT

	Monthly Deposits of all Federal Funds into State Highway Account			Monthly Deposits of Legally Pledged Federal Transportation Fund		
	2000	2001	2002	Revised 2002	2003	2004
Month	Deposit Amount	Deposit Amount	Deposit Amount	Deposit Amount	Deposit Amount	Deposit Amount
January	\$214,693,101.00	\$292,768,595.59	\$374,758,124.97	\$282,681,171.87	\$129,633,322.45	\$156,113,957.27
February	\$94,948,610.41	\$101,908,226.48	\$209,544,305.44	\$158,059,894.83	\$176,469,364.31	\$107,884,399.62
March	\$205,220,057.43	\$116,551,593.66	\$260,419,048.96	\$196,434,865.67	\$176,660,031.09	\$208,994,154.98
April	\$147,504,794.21	\$119,796,825.42	\$196,474,114.54	\$148,201,010.84	\$420,948,316.42	\$250,169,876.73
May	\$108,381,081.51	\$156,000,075.99	\$115,355,567.53	\$87,013,048.79	\$159,159,415.85	\$91,206,926.97
June	\$167,864,562.76	\$253,660,527.36	\$102,356,476.33	\$77,207,795.51	\$273,461,672.27	\$134,625,900.41
July	\$150,382,435.48	\$147,895,873.85	\$214,132,144.40	\$161,520,515.45	\$165,281,995.19	\$160,390,987.82
August	\$117,373,486.00	\$204,700,825.57	\$216,364,894.49	\$163,204,685.51	\$209,994,087.21	\$300,347,308.72
September	\$122,198,875.54	\$174,876,482.17	\$215,774,125.14	\$162,759,066.42	\$133,524,108.16	\$216,635,946.78
October	\$150,734,015.97	\$182,116,657.75	\$226,730,163.97	\$171,023,239.20	\$89,565,350.88	\$75,856,747.18
November	\$104,873,241.58	\$234,233,366.71	\$182,207,900.39	\$137,439,962.94	\$121,999,022.22	\$76,392,836.23
December	\$41,768,650.18	\$263,201,366.08	\$231,122,159.12	\$174,336,134.25	\$192,813,801.50	\$174,880,673.12
TOTAL	\$1,625,942,912.07	\$2,247,710,416.63	\$2,545,239,025.28	\$1,919,881,391.28	\$2,249,510,487.55	\$1,953,499,715.83
Monthly average	\$135,495,242.67	\$187,309,201.39	\$212,103,252.11	\$159,990,115.94	\$187,459,207.30	\$162,791,642.99

Source: California Department of Transportation. The Revised 2002 Deposit Amount column reflects deposits into the State Highway Account of Federal Transportation Funds that could be legally pledged under the Master Trust Indenture, which is less than all Federal Funds deposited in the State Highway Account in 2002.

ATTACHMENT B

**DETAILED ASSUMPTIONS
FOR SENSITIVITY ANALYSES**

Summary of Assumptions for GARVEE Bonding Capacity Sensitivity Analyses			
Base Case – Current Market Conditions			
	Factors	Assumptions	Comments
	Final Maturity	6 and 12 years	Analyses run at each final maturity listed at left.
	Interest Rates	3.07% and 3.61%	Rates indicated relate to each respective final maturity above; listed rates represent the weighted average coupon for a bond issue sizing with level annual debt service.
	Annual Revenues	\$2,275,991,122	The Treasurer may not authorize the issuance of the bonds if the annual debt service on all outstanding GARVEE obligations would exceed 15 percent of the State’s historical annual deposits in the State Highway Account from federal funding.

Market Sensitivity Case – Alternative Market Conditions			
	Factors	Assumptions	Comments
	Final Maturity	6 and 12 years	Analyses run at each final maturity listed at left.
	Interest Rates	4.07% and 4.61%	Rates indicated relate to each respective final maturity above; listed rates represent the weighted average coupon for a bond issue sizing with level annual debt service.
	Annual Revenues	\$2,275,991,122	The Treasurer may not authorize the issuance of the bonds if the annual debt service on all outstanding GARVEE obligations would exceed 15 percent of the State’s historical annual deposits in the State Highway Account from federal funding.

ATTACHMENT C

DETAILED WORKSHEET FOR SENSITIVITY ANALYSES

OVERVIEW OF GARVEE BONDING CAPACITY ANALYSES	
<p>The bond test requires that the annual payment obligations of all outstanding notes in any fiscal year not to exceed 15 percent of the the Federal Transportation Funds deposited in the State Highway Account for the highest 12 consecutive months in the last 24 months. The Series 2004A Bonds maximum Annual Debt Service has been subtracted from the last 12 highest consecutive months in order to calculate the remaining Additional Debt Capacity.</p>	
<p style="text-align: center;">Base Case</p> <p>Maximum Par Amount of Bonding Capacity</p> <p>Interest rate</p> <p>Maximum Assumed Annual Debt Service *</p> <p>Term of Bond Issue</p>	<p>\$1,451,134.64</p> <p>3.07%</p> <p>(268,497.65)</p> <p>6</p>
<p style="text-align: center;">Market Sensitivity</p> <p>Maximum Par Amount of Bonding Capacity</p> <p>Interest rate</p> <p>Maximum Assumed Annual Debt Service *</p> <p>Term of Bond Issue</p>	<p>\$1,404,299.60</p> <p>4.07%</p> <p>(268,497.65)</p> <p>6</p>
<p style="text-align: center;">Base Case</p> <p>Maximum Par Amount of Bonding Capacity</p> <p>Interest rate</p> <p>Maximum Assumed Annual Debt Service *</p> <p>Term of Bond Issue</p>	<p>\$2,577,866.16</p> <p>3.61%</p> <p>(268,497.65)</p> <p>12</p>
<p style="text-align: center;">Market Sensitivity</p> <p>Maximum Par Amount of Bonding Capacity</p> <p>Interest rate</p> <p>Maximum Assumed Annual Debt Service *</p> <p>Term of Bond Issue</p>	<p>\$2,432,983.64</p> <p>4.61%</p> <p>(268,497.65)</p> <p>12</p>
<p><small>*15% of legally pledged Federal Transportation Funds deposited in the State Highway Account less maximum annual debt service for the Series 2004A Bonds.</small></p>	
<small>(white / non-shaded)</small>	<small>= Base Case Scenarios based on March 01, 2005 AA MMD Scale</small>
<small>(yellow / shaded)</small>	<small>= Market Sensitivity Case Scenarios based on March 01, 2005 AA MMD Scale Plus 100 Basis Points</small>

ATTACHMENT D-1

**DETAILED SUMMARY TABLES
FOR SENSITIVITY ANALYSES**

GARVEE BONDING CAPACITY

Base Case

Highest 12-month Revenue (\$ in 000's)	\$2,275,991
Indenture Debt Service Test (15% of Revenue)	\$341,399
Less: Existing Maximum Annual Series 2004A Debt Service	-\$72,901
Remaining Maximum Annual Debt Service Capacity	\$268,498

(Dollars in Thousands)

	6 Years	12 Years
Assumed Date of Issuance	2004	2004
Assumed Final Maturity	2010	2016
Assumed Interest Rate ⁽¹⁾	3.07%	3.61%
Par Capacity	\$1,451,135	\$2,577,866
Annual Debt Service Required	\$268,498	\$268,498

(1) The assumed interest rates are based on the March 01, 2005 AA MMD bond scale. The rates used are the weighted average coupon for a level debt service bond sizing based upon the final maturity in each scenario.

ATTACHMENT D-2

**DETAILED SUMMARY TABLES
FOR SENSITIVITY ANALYSES**

GARVEE BONDING CAPACITY

Market Sensitivity Case

Highest 12-month Revenue (\$ in 000's)	\$2,275,991
Debt Service Test (15% of Revenue)	\$341,399
Less: Existing Maximum Annual Series 2004A Debt Service	-\$72,901
Remaining Maximum Annual Debt Service Capacity	\$268,498

(Dollars in Thousands)

	6 Years	12 Years
Assumed Year of Issuance	2005	2005
Assumed Final Maturity	2011	2017
Assumed Interest Rate⁽¹⁾	4.07%	4.61%
Par Amount	\$1,404,300	\$2,432,984
Annual Debt Service Required	\$268,498	\$268,498

(1) The assumed interest rates are based on the March 01, 2005 AA MMD bond scale (increased by 100 basis points (1%) for market fluctuations). The rates used are the weighted average coupon for a level debt service bond sizing based upon the final maturity in each scenario.