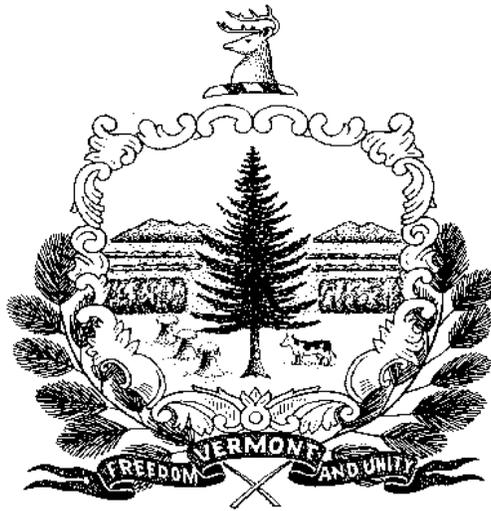


**CAPITAL DEBT AFFORDABILITY  
ADVISORY COMMITTEE**

**State of**



**Vermont**

**RECOMMENDED ANNUAL NET TAX-SUPPORTED  
DEBT AUTHORIZATION**

**September 2011**

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## 1. OVERVIEW

### **Purpose**

In accordance with 32 V.S.A., Chapter 13, Subchapter 8, and Section 32 of Act 50 of 2009, as amended, creating the Capital Debt Affordability Advisory Committee of the State of Vermont (the “Committee” or “CDAAC”), the Committee is required to present to the Governor and the General Assembly each year, no later than September 30, a recommendation as to the maximum amount of net tax-supported debt that the State may prudently issue for the ensuing fiscal year. The recommendation is presented in accordance with certain debt affordability guidelines and other matters that may be relevant to the proposed debt to be authorized.

### **Recommendation**

Consistent with the two-year authorization adopted by the General Assembly during its 2011 session, the Committee recommends that the State of Vermont maintain its current authorization of long-term net tax-supported debt for fiscal years 2012 and 2013 in an amount not to exceed \$153,160,000. Among the reasons that CDAAC is proposing this debt authorization for fiscal year 2013 are the following:

1. Authorization of this level of debt complies with the State’s triple-A debt guidelines.
2. It produces a meaningful increase in the amount of capital funding for State purposes, based on the level of past debt authorizations.
3. Economic conditions, including reduced employment, reduced equity markets performance, and State revenue constraints, are putting budgetary pressures on the State’s expenditures, limiting the growth that fixed costs, including debt service payments, should absorb of State resources.
4. Authorization of this level of debt in fiscal year 2013 is consistent with the current expectations of the rating agencies; we believe the message will be received that the State continues to manage its debt issuance program in a prudent and restrained manner.

In the 2011 Capital Bill (Act 40), the General Assembly authorized the State Treasurer to sell \$153,160,000 of bonds for the purpose of funding appropriations for both fiscal years 2012 and 2013. This was consistent with the alternative 2-year recommendation in the 2010 CDAAC Report.

### **2012-2013 Two-Year Authorization**

Last year CDAAC submitted an alternate two-year debt authorization (\$153,160,000) for fiscal years 2012 and 2013. This two-year authorization was developed to more closely align with the current biennial legislative session, and was driven by both near-term and long-term considerations.

#### *Near-Term:*

- (i) Historically low interest rates;
- (ii) Need to get certain large-scale capital projects (i.e., State Hospital) underway;

## State of Vermont Capital Debt Affordability Advisory Committee

- (iii) Current lower cost of construction in the State;
- (iv) Use of capital program to inject funding into the State economy.

### *Long-Term:*

- (i) Increased coordination between construction and debt authorization process;
- (ii) Ability to pursue large-scale projects on a multi-year debt authorization basis.

The alternative \$153,160,000 two-year authorization was structured as the sum of the recommended one-year authorization for fiscal year 2012 of \$76,580,000 and the assumed equal authorization of \$76,580,000 for fiscal year 2013. CDAAC emphasized that any additional authorization above this amount during the fiscal 2012-2013 period would violate the intent of the two year alternative recommendation and that it is of critical importance that the State not authorize bonds in excess of the two year authorization amount in the second year.

During the summer of 2011, the CDAAC received preliminary feedback on the 2-year authorization from the Chairs of the House Committee on Corrections and Institutions and the Senate Committee on Institutions, and from the Commissioner of the Department of Buildings and General Services. The Chairs and Commissioner indicated that while the 2-year authorization required substantially more deliberation and effort than a single-year authorization, it achieved the goal of accelerating certain large projects. Given the initial reported success of the 2-year authorization process, the CDAAC will plan to provide an alternative 2-year recommendation in its 2012 Report, which would correspond to fiscal years 2014 and 2015. Depending upon the continued success of this approach, the State may choose to utilize this biennium authorization feature in the future.

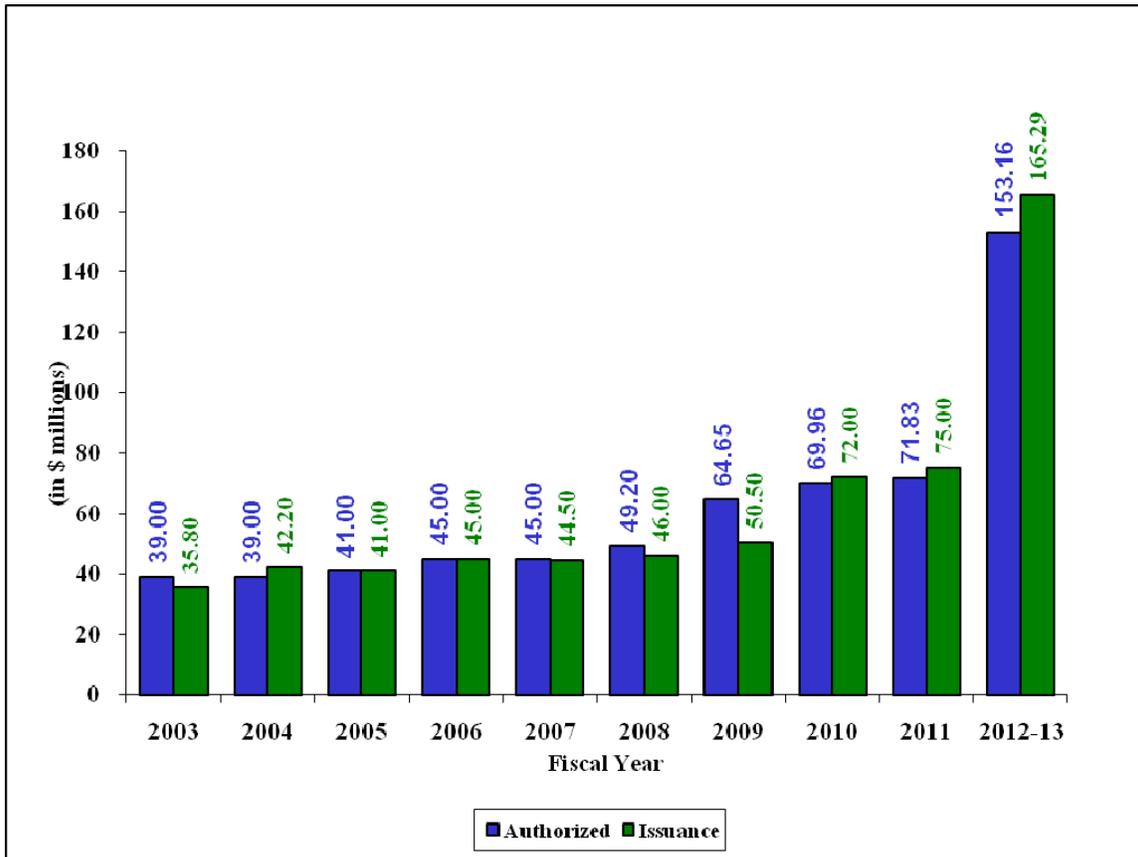
### **Nature of Vermont “Net Tax-Supported Debt”**

As a matter of practice, while the CDAAC legislation, as amended, refers to an authorization of “net tax-supported debt,” the amount of net tax-supported debt for the State means only general obligation debt, and this report assumes only general obligation debt for authorization purposes and in calculating its projected debt ratios. As indicated in Section 5 of this report, the rating agencies will most likely include the State’s special obligation transportation infrastructure bonds (TIBs), issued by Vermont in July 2010, as part of net tax-supported debt. While the CDAAC report includes “dashboard” debt metrics calculated both with and without TIBs, it does not assume that such indebtedness is part of net tax-supported debt. CDAAC believes that the TIBs, as explicitly represented to bondholders, are not general obligations of the State and are not supported by the full faith and credit of the State, but rather are payable only by funds pledged to repayment of bonds by a trust agreement, held in trust for the benefit of the bondholders. Further, unlike general obligation bonds, TIBs are subject to, and capacity-constrained by, both a debt service coverage ratio and an additional bonds test.

**Debt Authorizations**

In fiscal year 2011, \$75,000,000 of new money debt was issued, representing all of the \$71,830,000 authorized for that year plus \$3,170,000 of authorized but unissued debt remaining from prior years. During fiscal year 2012, \$88,710,000 of debt is assumed to be sold, one-half of the 2012-2013 recommended authorization (\$76,580,000) plus \$12,130,000 of authorized, but unissued debt remaining from prior year’s authorizations. Finally, \$76,580,000 is assumed to be sold in FY 2013 (representing the balance of the 2012-2013 recommended authorization. We believe the State’s historical practice to annually extinguish all or a large portion of the authorized amount of debt to avoid a rising residual amount of authorized but unissued debt has enhanced the State’s credit position as it is viewed favorably by the rating agencies. The following chart presents the amounts of general obligation debt that have been authorized and issued by the State since fiscal year 2003.

**STATE OF VERMONT  
HISTORICAL AND TWO YEAR PROJECTED GENERAL OBLIGATION BONDS  
AUTHORIZATION AND ISSUANCE BY FISCAL YEAR**



Notes:

Annual issuances do not include refunding bonds. Authorized but unissued debt has been carried forward and employed in subsequent years’ bond issuances.

For 2012 -2013 “Authorized” amount is the assumed two year authorized amount of the General Assembly in the 2011 Capital Bill (Act 40). The 2012-2013 “Issuance” amount is the 2012-2013 authorization plus \$12,130,000 of authorized, but unissued debt remaining from prior year’s authorizations.

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As shown above, the State has experienced a significant increase in debt authorizations over the last ten years. For the period, 2003-2008, the average annual debt authorization amounted to \$43.0 million and for the period 2009-2013 (assuming the State adopts the recommended authorization) the average annual debt authorization is \$70.6 million, which represents an increase of approximately 65% over the 2003-2008 period.

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## 2. DEBT GUIDELINES

The State of Vermont currently enjoys triple-A ratings from both Fitch Ratings and Moody's Investors Service. Fitch Ratings raised the State's rating in conjunction with a recalibration (generally meaning increased ratings), conducted by the rating agency in 2010. Moody's raised the State's rating to triple-A in February, 2007. In addition, Standard & Poor's Corporation rates Vermont's general obligation bonds "AA+."

For a number of years, Vermont has pursued a strategy to achieve a triple-A rating from all three nationally recognized credit rating agencies. In order to facilitate the achievement of this goal, CDAAC and the State have employed conservative debt load guidelines, as follows:

### **Debt Per Capita**

The Committee has adopted a guideline for the State to equal or perform better than the 5-year mean and median of triple-A rated states on the basis of debt per capita. At present, the targets are \$940 for the mean and \$898 for the median. Based on data from Moody's Investors Service, Vermont's 5-year mean and median debt per capita figures are lower than the 5-year mean and median for triple-A rated states. Using the 5-year Moody's median for triple-A rated states and increasing it by 3.76% annually (60% of annual increase for peer group), combined with the assumption that the State will issue \$88,710,000 during fiscal year 2012 and \$76,580,000 in fiscal years 2013-2022, Vermont will continue to be below the Moody's 5-year mean and 5-year median for triple-A rated states during fiscal years 2012-2022, inclusive (see "Historical and Projected Debt Ratios"). It should be emphasized that the debt numbers for Vermont have generally been stabilizing while those of the other triple-A rated states, on a composite basis, have been rising. According to Moody's Investors Service's most recent information, the State's relative position, among states, improved during the period 2003 through 2011 with respect to net tax-supported debt per capita, improving from 16<sup>th</sup> position in 2003 to 37<sup>th</sup> position in 2011 (rankings are in numerically descending order, with the state having the highest debt per capita ranked 1<sup>st</sup> and the state having the lowest debt per capita ranked 50<sup>th</sup>).

### **Debt As A Percent of Personal Income**

The Committee also adopted a guideline for the State to equal or perform better than the 5-year mean and 5-year median of triple-A rated states on the basis of debt as a percent of personal income. At present, the targets are 2.6% for both the mean and the median. Based on data from Moody's Investors Service, Vermont's debt as a percent of personal income figure is better than the 5-year mean and 5-year median for triple-A rated states. Moreover, considering the 2011 figures alone, Vermont's relative comparison improves, with a widening gap between Vermont's figure and those of the triple-A rated states. Assuming that the State will issue \$88,710,000 in fiscal year 2012 and \$76,580,000 in fiscal years 2013-2022, Vermont should be able to comply with the 5-year mean and 5-year median for triple-A rated states (see "Historical and Projected Debt Ratios"). According to Moody's Investors Service's most recent information, the State's relative position, among states, improved during the period 2003 through 2011 with respect to net

tax-supported debt as a percent of personal income, improving from 17<sup>th</sup> position in 2003 to 36<sup>th</sup> position in 2010 and 2011.

### **Debt Service As A Percentage of Revenues**

This guideline does not create a compliance requirement for triple-A rated states. Rather, it is an absolute guideline, not a comparative one. CDAAC's adopted standard is a ratio of no greater than 6% for annual general obligation debt service as a percent of the annual aggregate of General and Transportation Funds. At present, this ratio equals approximately 5.1%, down from last year's ratio of 5.7%. With the projected issuance of general obligation debt at \$76,580,000 annually, this ratio is estimated to vary from 4.7% to 5.3% over the next ten years. Therefore, at present and for the foreseeable future, it is anticipated that the State will satisfy this standard. For the State of Vermont, operating revenues for the rating agencies' purposes have consisted of the combined General and Transportation Funds based upon past discussions with the rating agencies and the historic general flexibility in their uses of these funds for meeting financial operations of the State.

### **Adjustment To Debt Per Capita Inflator; Effect On Recommendations**

As indicated above, the debt per capita statistics, among the various debt guidelines, is used to establish the annual limitations on the amount of general obligation debt that the State should authorize annually. In order to achieve a realistic perspective on the future direction of the 5-year debt per capita median for triple-A rated states, it was necessary to inflate this guideline from year to year. As recently as 2008, CDAAC used an inflator of 2.7% or 90% of an assumed 3% inflation rate. As part of the development of the 2009 report, CDAAC has determined that it would be most appropriate to adopt an inflator, based upon a percentage of the averaging of the annual increases in the median debt per capita of the triple-A States for the last five years. For the current year, the average growth factor of the peer group was 6.27%. However, because Vermont's triple-A ratings have historically been maintained as a result of prudent debt and financial management as opposed to strong economic factors, an inflator of less than 100% of Vermont's triple-A peers was deemed appropriate. A number representing only 60% of the growth factor, or 3.76%, was calculated and used in order to be consistent with the expectations of the rating agencies and financial community and consistent with the State's debt management practices and the prior year's report.

It should be emphasized that the 60% inflation factor is not to be considered fixed. As described elsewhere in this report, there are too many matters in play at present that could conceivably alter this number. First, should the agencies continue to increase the number of triple-A rated states, the composition of our peer group will be altered. Second, the amount of relative bond issuance by other triple-A states could affect the per capita median for the State's peer group which could alter per group growth rate. Third, Moody's has stated on several occasions in its credit reports that if the rating agency were to see a deterioration in the State's relative rankings with respect to debt per capita and debt as a percent of personal income, Vermont's triple-A rating could fall. Therefore, it is imperative for CDAAC to monitor the State's performance in these comparisons annually to determine if the inflation factor should be adjusted from time to time. In fact, CDAAC looked at the possible effect on the inflator based on the expected drop

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nationally in total calendar year 2011 municipal bond issuance, which is reported to be 40 to 50% less than 2010 bond issuance. The analysis indicated that this drop of issuance would likely reduce the average annual increases in the median debt per capita of the triple-A States for the last five years next year which may otherwise tighten the State's future debt per capita, debt capacity guideline.

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**STATE OF VERMONT  
2011 TRIPLE-A RATED STATES  
(as of June 30, 2011)**

2011 Triple-A Rated States	Fitch	Moody's	S&P
Alaska	No	Yes	No
Delaware	Yes	Yes	Yes
Florida	Yes	No	Yes
Georgia	Yes	Yes	Yes
Indiana	N/R	Yes	Yes
Iowa	Yes	Yes	Yes
Maryland	Yes	Yes	Yes
Minnesota <sup>1</sup>	Yes	No	Yes
Missouri	Yes	Yes	Yes
Nebraska	N/R	N/R	Yes
New Mexico	N/R	Yes	No
North Carolina	Yes	Yes	Yes
South Carolina	Yes	Yes	No
Tennessee	Yes	Yes	No
Texas	Yes	Yes	No
Utah	Yes	Yes	Yes
Virginia	Yes	Yes	Yes
Wyoming	N/R	N/R	Yes
<b>VERMONT</b>	Yes	Yes	No

<sup>1</sup>Minnesota was downgraded by Fitch to AA+ from AAA on July 7, 2011 and was downgraded by Standard and Poor's to AA+ from AAA on September 23, 2011.

**STATE OF VERMONT  
MEAN DEBT RATIOS**

Per Capita	2007	2008	2009	2010	2011
All States	\$1,101	\$1,158	\$1,195	\$1,297	\$1,408
Triple-A <sup>1</sup>	922	951	899	966	964
<b>VERMONT</b>	<b>706</b>	<b>707</b>	<b>692</b>	<b>709</b>	<b>747</b>

% of Personal Income.	2007	2008	2009	2010	2011
All States	3.2%	3.2%	3.1%	3.2%	3.2%
Triple-A <sup>1</sup>	2.7	2.8	2.4	2.6	2.6
<b>VERMONT</b>	<b>2.1</b>	<b>2.0</b>	<b>1.8</b>	<b>1.8</b>	<b>1.9</b>

<sup>1</sup>These calculations exclude all Vermont numbers and include only states rated triple-A by any one of the three rating agencies during the year shown. See chart on "Debt Per Capita" for complete listing of triple-A states and respective ratings and triple-A time periods.

State of Vermont Capital Debt Affordability Advisory Committee

STATE OF VERMONT  
DEBT PER CAPITA COMPARISON

Triple-A Rated States (All states with at least one triple-A rating)

5-Year Average Mean and 5-Year Median Excluding Vermont:

MEAN: \$940 Vermont: \$712

MEDIAN: \$898 Vermont: \$707

Triple-A Rated States <sup>1</sup>	Moody's Ratings <sup>2</sup>	S&P Ratings <sup>2</sup>	Fitch Ratings <sup>2</sup>	Moody's Debt Per Capita				
				2007	2008	2009	2010	2011
Alaska	Aaa/Stable	AA+/Stable	AA+/Stable	\$939*	\$924*	\$861*	\$1,345*	\$1,257
Delaware	Aaa/Stable	AAA/Stable	AAA/Stable	1,998	2,002	2,128	2,489	2,676
Florida	Aa1/Stable	AAA/Stable	AAA/Negative	1,020	1,005	1,115	1,123	1,150
Georgia	Aaa/Stable	AAA/Stable	AAA/Stable	916	954	984	1,120	1,103
Indiana	Aaa/Stable	AAA/Stable	AA+/Stable	657*	478	482	492	471
Iowa	Aaa/Stable	AAA/Stable	AAA/Stable	104*	98*	79	73	270
Maryland	Aaa/Negative	AAA/Stable	AAA/Stable	1,171	1,297	1,507	1,608	1,681
Minnesota <sup>3</sup>	Aa1/Stable	AAA/Stable	AAA/Stable	827	879	866	1,037	1,159
Missouri	Aaa/Stable	AAA/Stable	AAA/Stable	613	675	670	780	775
Nebraska	Not Rated	AAA/Stable	Not Rated	24*	22*	17*	15*	13
New Mexico	Aaa/Negative	AA+/Stable	Not Rated	1,435*	1,429*	1,394*	1,398	1,827
No. Carolina	Aaa/Stable	AAA/Stable	AAA/Stable	728	898	832	765	782
So. Carolina	Aaa/Stable	AA+/Stable	AAA/Stable	630	966	899	917	887
Tennessee	Aaa/Negative	AA+/Positive	AAA/Stable	213*	221*	233*	318	345
Texas	Aaa/Stable	AA+/Stable	AAA/Stable	415*	481*	520*	520	612
Utah	Aaa/Stable	AAA/Stable	AAA/Stable	621	542	447	957	1,222
Virginia	Aaa/Negative	AAA/Stable	AAA/Stable	692	764	782	895	1,058
Wyoming	Not Rated	AAA/Stable	Not Rated	97*	91*	84*	77*	71
<b>MEAN<sup>4</sup></b>				<b>922</b>	<b>951</b>	<b>899</b>	<b>966</b>	<b>964</b>
<b>MEDIAN<sup>5</sup></b>				<b>778</b>	<b>898</b>	<b>849</b>	<b>917</b>	<b>973</b>
VERMONT	Aaa/Stable	AA+/Stable	AAA/Stable	706	707	692	709	747

<sup>1</sup>Indiana carries a Municipal Issuer Rating from S&P, assigned in 2008 and it is first reflected in 2008 numbers – this is a GO bond equivalent rating. Moody's rated Indiana triple-A in 2010 as part of their Ratings Recalibration effort. The Fitch rating for Indiana (AA+) is for lease revenue bonds. Iowa carries a Municipal Issuer Rating of triple-A from Fitch – an implied G.O. rating. S&P assigned its respective rating on Iowa in 2009 and it is first reflected in 2009 numbers. Fitch raised Florida, Iowa, Vermont, Tennessee and Texas all to triple-A in 2010 as part of their Ratings Recalibration effort. Moody's raised Indiana, Iowa, New Mexico, Tennessee and Texas to triple-A in 2010 as part of their Ratings Recalibration effort. S&P raised no state ratings in 2010. Nineteen states are currently rated triple-A by one or more of the nationally recognized rating agencies: Triple-A ratings assigned as follows: Delaware and Florida (2005), Georgia, Maryland, Minnesota, Missouri, North Carolina, South Carolina, Utah, Virginia and Vermont (2007), Indiana (2008), Iowa (2009), New Mexico, Tennessee and Texas (2010), Alaska, Nebraska and Wyoming (2011).

<sup>2</sup>Ratings as of June 30, 2011.

<sup>3</sup>Minnesota was downgraded by Fitch to AA+ from AAA on July 7, 2011, its Outlook was changed to Negative by Moody's on August 1, 2011 and it was downgraded by Standard and Poor's to AA+ from AAA on September 23, 2011. Minnesota is included in calculating the means or medians for each of the years from 2007 to 2011.

<sup>4</sup>These calculations exclude all Vermont numbers.

<sup>5</sup>These calculations exclude all Vermont numbers.

\*Indicates that the state was not rated triple-A by any of the three rating agencies during the year shown. Amount not used in calculating the mean or median for the year.

**State of Vermont Capital Debt Affordability Advisory Committee**

In addition to comparing the State’s debt per capita ratios to all states with at least one triple-A rating, the following chart indicates the State also compares favorably with all the states that have triple-A ratings from all three national rating agencies (Triple Triple-A States).

**STATE OF VERMONT  
DEBT PER CAPITA COMPARISON**

**Triple Triple-A Rated States (All states with three triple-A ratings)**

**5-Year Average Mean and 5-Year Median Excluding Vermont:**

**MEAN: \$1,038      Vermont: \$712**

**MEDIAN: \$898      Vermont: \$707**

Triple Triple-A Rated States	Moody's Debt Per Capita							
	Moody's <sup>1</sup>	S&P <sup>1</sup>	Fitch <sup>1</sup>	2007	2008	2009	2010	2011
Delaware	Aaa/Stable	AAA/Stable	AAA/Stable	1,998	2,002	2,128	2,489	2,676
Georgia	Aaa/Stable	AAA/Stable	AAA/Stable	916	954	984	1,120	1,103
Iowa	Aaa/Stable	AAA/Stable	AAA/Stable	104*	98*	79	73	270
Maryland	Aaa/Negative	AAA/Stable	AAA/Stable	1,171	1,297	1,507	1,608	1,681
Missouri	Aaa/Stable	AAA/Stable	AAA/Stable	613	675	670	780	775
No. Carolina	Aaa/Stable	AAA/Stable	AAA/Stable	728	898	832	765	782
Utah	Aaa/Stable	AAA/Stable	AAA/Stable	621	542	447	957	1,222
Virginia	Aaa/Negative	AAA/Stable	AAA/Stable	692	764	782	895	1,058
<b>MEAN<sup>2</sup></b>				<b>963</b>	<b>1,019</b>	<b>929</b>	<b>1,086</b>	<b>1,196</b>
<b>MEDIAN<sup>2</sup></b>				<b>728</b>	<b>898</b>	<b>807</b>	<b>926</b>	<b>1,081</b>
VERMONT	Aaa/Stable	AA+/Stable	AAA/Stable	706	707	692	709	747

<sup>1</sup>Ratings as of June 30, 2011.

<sup>2</sup>These calculations exclude all Vermont numbers.

\*Indicates that the state was not rated triple-A by any of the three rating agencies during the year shown. Amount not used in calculating the mean or median for the year.

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**STATE OF VERMONT  
DEBT AS % OF PERSONAL INCOME COMPARISONS**

**Triple-A Rated States (All states with at least one triple-A rating)**

**5-Year Average Mean and 5-Year Median Excluding Vermont:**

**MEAN: 2.6% Vermont: 1.9%**

**MEDIAN: 2.6% Vermont: 1.9%**

Triple-A Rated States	Moody's Investors Service				
	2007	2008	2009	2010	2011
Alaska	2.7%	2.4%	2.2%	3.2%	3.0%
Delaware	5.5	5.2	5.4	6.2	6.8
Florida	3.1	2.8	2.9	2.9	3.0
Georgia	3.0	3.0	3.0	3.3	3.3
Indiana	2.1	1.5	1.5	1.5	1.4
Iowa	0.3	0.3	0.2	0.2	0.7
Maryland	2.8	3.0	3.3	3.4	3.5
Minnesota	2.2	2.3	2.1	2.4	2.8
Missouri	1.9	2.1	2.0	2.2	2.2
Nebraska	0.1	0.1	0.0	0.0	0.0
New Mexico	5.3	4.8	4.6	4.4	5.6
North Carolina	2.4	2.8	2.5	2.3	2.3
South Carolina	2.3	3.3	2.9	2.9	2.7
Tennessee	0.7	0.7	0.7	0.9	1.0
Texas	1.3	1.4	1.4	1.4	1.6
Utah	2.3	1.9	1.5	3.2	3.9
Virginia	1.8	1.9	1.9	2.1	2.4
Wyoming	0.3	0.2	0.2	0.2	0.1
<b>MEAN<sup>1</sup></b>	<b>2.7</b>	<b>2.8</b>	<b>2.4</b>	<b>2.6</b>	<b>2.6</b>
<b>MEDIAN<sup>1</sup></b>	<b>2.3</b>	<b>2.8</b>	<b>2.3</b>	<b>2.6</b>	<b>2.6</b>
VERMONT	2.1	2.0	1.8	1.8	1.9

<sup>1</sup>These calculations exclude all Vermont numbers and include only states rated triple-A by any one of the three rating agencies during the periods shown, year ended June 30<sup>th</sup>.

In addition to comparing the state's debt as a percentage of personal income ratios to all states with at least one triple-A rating, the following chart indicates the state also compares favorably with all the states that have triple-A ratings from all three national rating agencies (Triple Triple-A States).

**STATE OF VERMONT  
DEBT AS % OF PERSONAL INCOME COMPARISONS**

**Triple Triple-A Rated States (All states with three triple-A ratings)**

**5-Year Average Mean and 5-Year Median Excluding Vermont:**

**MEAN: 2.8% Vermont: 1.9%**

**MEDIAN: 2.8% Vermont: 1.9%**

<b>Triple-A Rated States</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>
Delaware	5.5	5.2	5.4	6.2	6.8
Georgia	3.0	3.0	3.0	3.3	3.3
Iowa	0.3	0.3	0.2	0.2	0.7
Maryland	2.8	3.0	3.3	3.4	3.5
Missouri	1.9	2.1	2.0	2.2	2.2
North Carolina	2.4	2.8	2.5	2.3	2.3
Utah	2.3	1.9	1.5	3.2	3.9
Virginia	1.8	1.9	1.9	2.1	2.4
<b>MEAN<sup>1</sup></b>	<b>2.8</b>	<b>2.8</b>	<b>2.5</b>	<b>2.9</b>	<b>3.1</b>
<b>MEDIAN<sup>1</sup></b>	<b>2.4</b>	<b>2.8</b>	<b>2.3</b>	<b>2.8</b>	<b>2.9</b>
<b>VERMONT</b>	2.1	2.0	1.8	1.8	1.9

<sup>1</sup>These calculations exclude all Vermont numbers and include only states triple-A by all three rating agencies during the periods shown, year ended June 30<sup>th</sup>.

**State of Vermont Capital Debt Affordability Advisory Committee**

**STATE OF VERMONT  
HISTORIC AND PROJECTED DEBT RATIOS**

Fiscal Year (ending 6/30)	Net Tax-Supported Debt Per Capita (in \$)			Net Tax-Supported Debt as Percent of Personal Income			Net Tax-Supported Debt Service as Percent of Revenues <sup>(5)</sup>		
	State of Vermont	Moody's Median	State's Rank <sup>(4)</sup>	State of Vermont	Moody's Median	State's Rank <sup>(4)</sup>	State of Vermont <sup>(2)</sup>	Moody's Median	State's Rank <sup>(4)</sup>
Actual <sup>(1)</sup>									
2000	925	540	9	3.8	2.2	10	7.0	n.a.	n.a.
2001	828	541	15	3.3	2.1	14	6.8	n.a.	n.a.
2002	813	573	18	3.0	2.3	14	6.5	n.a.	n.a.
2003	861	606	16	3.0	2.2	17	6.7	n.a.	n.a.
2004	724	701	24	2.5	2.4	25	6.0	n.a.	n.a.
2005	716	703	25	2.3	2.4	27	5.4	n.a.	n.a.
2006	707	754	29	2.2	2.5	28	5.1	n.a.	n.a.
2007	706	787	28	2.1	2.4	30	5.1	n.a.	n.a.
2008	707	889	32	2.0	2.6	33	5.0	n.a.	n.a.
2009	692	865	34	1.8	2.5	35	5.5	n.a.	n.a.
2010	709	936	36	1.8	2.5	36	5.7	n.a.	n.a.
2011	747	1066	37	1.9	2.8	36	5.1	n.a.	n.a.
Current <sup>(2)</sup>	783	n.a.	n.a.	1.9	n.a.	n.a.	5.1	n.a.	n.a.
Projected (FYE 6/30) <sup>(3)</sup>		State Guideline <sup>(6)</sup>			State Guideline <sup>(7)</sup>			State Guideline	
2012	843	932		1.9	2.6		4.9	6.0	
2013	883	967		1.9	2.6		4.8	6.0	
2014	918	1,003		1.9	2.6		5.0	6.0	
2015	958	1,041		1.9	2.6		4.7	6.0	
2016	996	1,080		1.9	2.6		4.8	6.0	
2017	1,033	1,121		1.9	2.6		4.8	6.0	
2018	1,068	1,163		1.9	2.6		4.9	6.0	
2019	1,098	1,206		1.9	2.6		5.0	6.0	
2020	1,124	1,252		1.9	2.6		5.1	6.0	
2021	1,144	1,299		1.9	2.6		5.3	6.0	
2022	1,162	1,348		1.8	2.6		5.3	6.0	
5-Year Moody's Mean for Triple-A States		940			2.6			n.a.	
5-Year Moody's Median for Triple-A States		898			2.6			n.a.	

<sup>(1)</sup>Actual data compiled by Moody's Investors Service, reflective of all 50 states.

<sup>(2)</sup>Calculated by Public Resources Advisory Group.

<sup>(3)</sup>Projections assume the issuance of \$88,710,000 of G.O. debt during fiscal year 2012 and \$76,580,000 of G.O. debt annually thereafter through 2022.

<sup>(4)</sup>Rankings are in numerically descending order (i.e., from high to low debt).

<sup>(5)</sup>Revenues are adjusted beginning in fiscal year 1998 reflecting "current law" revenue forecasts based on a consensus between the State's administration and legislature. Debt service includes interest subsidy on all Build America Bonds.

<sup>(6)</sup>State Guideline equals the 2011 5-year Moody's median for triple-A states of \$898 increasing annually at 3.76%.

<sup>(7)</sup>The 5-year Moody's median for triple-A States (2.6%) has not been increased for the period 2012-2022 since the annual number is quite volatile, ranging from 2.4% to 2.8% over the last five years.

**3. DEBT STATISTICS**

**“Dash Board” Indicators**

	<u>Vermont<sup>(a)</sup></u>	<u>Median Triple-A States</u>
Net Tax-Supported Debt:	\$491,748,000	\$4,308,159,000 <sup>(c)</sup>
Debt As A Percent Of Gross State Product:	2.13%	2.17% <sup>(c)</sup>
Debt Per Capita:	\$785	\$1,066 <sup>(c)</sup>
Debt As A Percent Of Personal Income:	1.95%	2.8% <sup>(c)</sup>
Debt Service As A Percent Of Operating Revenue <sup>(b)</sup> :	5.19%	N/A
Rapidity Of Debt Retirement:	42.70% (In 5 years)	N/A
	70.45% (In 10 Years)	N/A
	90.33% (In 15 Years)	N/A
	100.00% (In 20 Years)	N/A
Proposed FY 2013 Debt Authorization:	\$76,580,000 <sup>(d)</sup>	N/A
Initial Year Limitation:	None <sup>(d)</sup>	N/A

<sup>(a)</sup>Debt statistics for Vermont are as of June 30, 2011.

<sup>(b)</sup>Aggregate of State’s General Fund and Transportation Fund.

<sup>(c)</sup>Moody’s: 2011 State Debt Medians Report.

<sup>(d)</sup>Authorization amount equal to one-half of two year recommended authorization (\$153,160,000). See Section 1. “OVERVIEW, Recommendation”, above.

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**Net Tax-Supported Debt Outstanding**

The State's aggregate net tax-supported principal amount of debt increased from \$464.3 million as of June 30, 2010 to \$491.7 million as of June 30, 2011, an increase of 5.9%. The table below sets forth the sources of the change in net tax-supported debt outstanding from fiscal year 2010 to fiscal year 2011 (in thousands):

Net Tax-Supported Debt as of 6/30/10 .....	\$464,341
G.O. New Money Bonds Issued .....	75,000
G.O. Refunding Bonds Issued .....	0
Less: Retired G.O. Bonds.....	(47,593)
Less: Refunded G.O. Bonds.....	<u>0</u>
Net Tax-Supported Debt as of 6/30/11 .....	<u>\$491,748</u>

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State of Vermont Capital Debt Affordability Advisory Committee

STATE OF VERMONT

Debt Statement

As of June 30, 2011 (\$ Thousands)

**General Obligation Bonds\*<sup>(1)</sup>:**

General Fund	\$471,388
Transportation Fund	17,375
Special Fund	2,985

**Contingent Liabilities:**

VEDA Mortgage Insurance Program	\$9,000
VEDA Financial Access Program	1,000
VEDA Tech/Small Business Loan Program	1,000

**Reserve Fund Commitments:**

Vermont Municipal Bond Bank	\$527,335
Vermont Housing Finance Agency	155,000
VEDA Indebtedness	100,000
Vermont Student Assistance Corporation	50,000
Vermont Telecommunications Authority	40,000
Univ. of Vermont/State Colleges	100,000

**Gross Direct and Contingent Debt** \$1,475,083

Less:

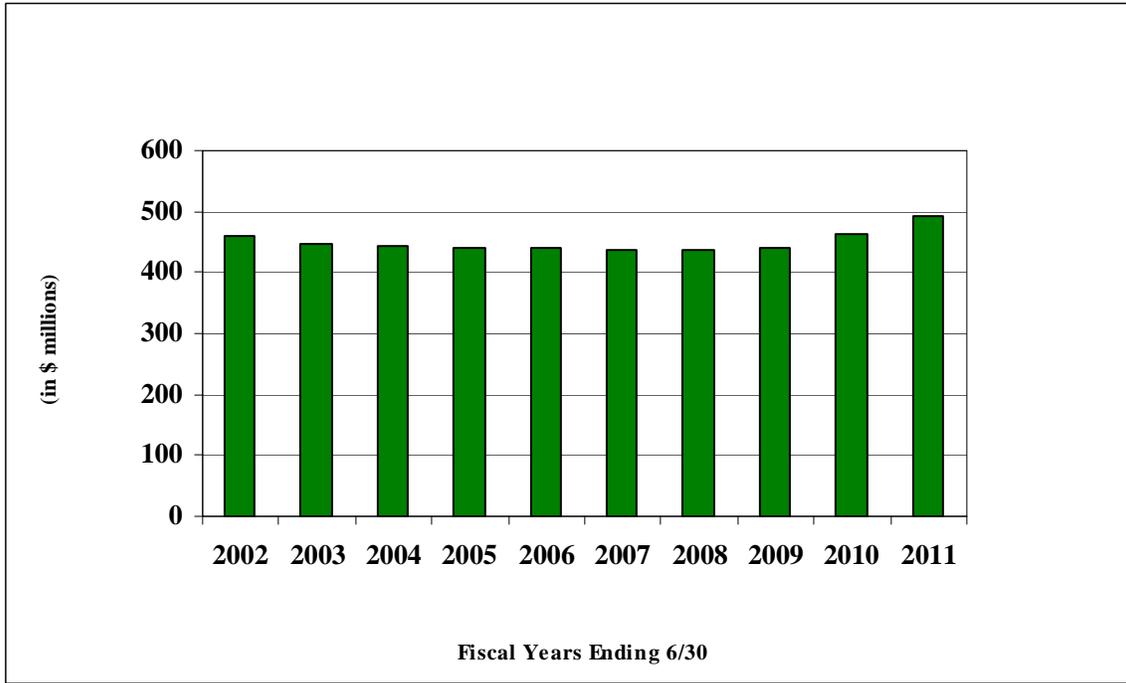
Contingent Liabilities	(11,000)
Reserve Fund Commitments	(972,335)

**Net Tax-Supported Debt** \$491,748

\* Includes original principal amounts of Capital Appreciation Bonds.

<sup>1</sup> Does not include (i) general obligation bonds that have been refunded, (ii) \$4,127,512.58, which is the accreted value of the capital appreciation bonds, less the original principal amount of such bonds, and (iii) the present value of outstanding capitalized leases in the amount of \$108,802. In addition, the State entered into an approximately \$4.7 million capitalized lease to fund an energy services contract in fiscal year 2009. Payments due under this lease are budgeted to be funded from energy savings realized under the related contract, which savings are guaranteed by the contractor.

**STATE OF VERMONT  
GENERAL OBLIGATION BONDS OUTSTANDING FY 2002-2011  
(in millions of dollars)**



**STATE OF VERMONT  
GENERAL OBLIGATION BONDS OUTSTANDING FY 2002-2011  
(in millions of dollars)**

<b>FY:</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>
<b>TOTAL</b>	460.5	448.2	444.7	440.3	440.0	438.4	438.6	440.7	464.3	491.7

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**General Obligation and General Fund Supported Bond Debt Service Projections**

The State’s projected annual general obligation (G.O.) debt service and debt outstanding are presented on the following pages and summarized below. The projected debt service (at 6% interest rate) assumes the issuance of \$88,710,000 in G.O. debt during fiscal year 2012, and \$76,580,000 annually for fiscal years 2013-2022.

**TOTAL PROJECTED GENERAL OBLIGATION DEBT SERVICE AND DEBT  
OUTSTANDING  
(in thousands of dollars)**

<b>Fiscal Year Ending</b>	<b>G.O. Debt Service</b>	<b>G.O. Bonds Outstanding</b>
6/30/2011	71,424	491,748
6/30/2012	69,962	530,935
6/30/2013	71,839	558,245
6/30/2014	78,358	581,890
6/30/2015	75,727	609,260
6/30/2016	78,812	636,060
6/30/2017	81,839	662,205
6/30/2018	85,237	687,145
6/30/2019	90,247	709,230
6/30/2020	94,251	729,280
6/30/2021	99,846	745,425
6/30/2022	102,551	760,445

Note: This table sets forth the projected general obligation debt with the issuance of projected new debt during fiscal years 2012 through 2022, consistent with the assumptions presented on the table above “STATE OF VERMONT HISTORIC AND PROJECTED DEBT RATIOS”

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**State of Vermont Capital Debt Affordability Advisory Committee**

The table below sets forth the State’s existing principal amounts outstanding and annual debt service requirements, as of June 30, 2011, without the issuance of any additional general obligation debt. Please refer to the table on the previous page for the State’s projected principal amounts outstanding and annual debt service requirements assuming the issuance of G.O. debt.

**OUTSTANDING GENERAL OBLIGATION NET TAX-SUPPORTED DEBT  
As of June 30, 2011  
(in thousands of dollars)**

<b>GENERAL OBLIGATION BONDS (STATE DIRECT DEBT)</b>								
Fiscal Year	General Fund		Transportation Fund		Special Fund		Total	
	Beginning		Beginning		Beginning		Beginning	
	Principal Outstanding	Debt Service*	Principal Outstanding	Debt Service	Principal Outstanding	Debt Service	Principal Outstanding	Debt Service*
2012	471,388	65,964	17,375	3,372	2,985	626	491,748	69,962
2013	425,041	58,965	14,679	2,482	2,505	628	442,225	62,076
2014	382,630	57,393	12,765	2,415	2,000	629	397,395	60,437
2015	340,407	47,155	10,853	2,095	1,470	633	352,730	49,882
2016	305,502	42,686	9,203	1,947	910	636	315,615	45,268
2017	273,788	38,606	7,652	1,884	320	336	281,760	40,826
2018	244,979	35,275	6,101	1,709	-	-	251,080	36,985
2019	218,376	33,355	4,649	1,630	-	-	223,025	34,985
2020	192,714	31,649	3,231	560	-	-	195,945	32,209
2021	167,847	30,713	2,813	541	-	-	170,660	31,254
2022	142,904	27,117	2,396	522	-	-	145,300	27,639

\* Debt service has been calculated using the net coupon rates on all Build America Bonds, taking into account the 35% interest subsidy from the federal government. The entire amount of the Build America Bonds is allocated to the General Fund. Totals may not agree due to rounding.

On the following page is a table showing the projected G.O. debt service, G.O. bond principal payments, and G.O. bonds outstanding during each of the fiscal years, 2012 through 2022, inclusive. This table shows the projected issuance of \$88,710,000 in fiscal year 2012 and \$76,580,000 during fiscal years 2013-2022, inclusive.

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**State of Vermont Capital Debt Affordability Advisory Committee**

EXISTING AND PROJECTED NET TAX-SUPPORTED G.O. DEBT SERVICE (\$000)													
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total	
Current	Issue	Issue	Issue	Issue	Issue	Issue	Issue	Issue	Issue	Issue	Issue	Est.	
FY	D/S	88.710M	76.5800M	76,580M	D/S*								
2012	69,962	0	0	0	0	0	0	0	0	0	0	69,962	
2013	62,076	9,763	0	0	0	0	0	0	0	0	0	71,839	
2014	60,437	9,496	8,425	0	0	0	0	0	0	0	0	78,358	
2015	49,882	9,225	8,195	8,425	0	0	0	0	0	0	0	75,727	
2016	45,268	8,959	7,965	8,195	8,425	0	0	0	0	0	0	78,812	
2017	40,826	8,693	7,735	7,965	8,195	8,425	0	0	0	0	0	81,839	
2018	36,985	8,427	7,506	7,735	7,965	8,195	8,425	0	0	0	0	85,237	
2019	34,985	8,160	7,276	7,506	7,735	7,965	8,195	8,425	0	0	0	90,247	
2020	32,209	7,894	7,046	7,276	7,506	7,735	7,965	8,195	8,425	0	0	94,251	
2021	31,254	7,628	6,816	7,046	7,276	7,506	7,735	7,965	8,195	8,425	0	99,846	
2022	27,639	7,362	6,586	6,816	7,046	7,276	7,506	7,735	7,965	8,195	8,425	102,551	

EXISTING AND PROJECTED NET TAX-SUPPORTED G.O. BOND PRINCIPAL PAYMENTS (\$000)													
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total	
Current	Issue	Issue	Issue	Issue	Issue	Issue	Issue	Issue	Issue	Issue	Issue	Est.	
FY	Principal	88.710M	76.5800M	76,580M	Principal*								
2012	49,523	0	0	0	0	0	0	0	0	0	0	49,523	
2013	44,830	4,440	0	0	0	0	0	0	0	0	0	49,270	
2014	44,665	4,440	3,830	0	0	0	0	0	0	0	0	52,935	
2015	37,115	4,435	3,830	3,830	0	0	0	0	0	0	0	49,210	
2016	33,855	4,435	3,830	3,830	3,830	0	0	0	0	0	0	49,780	
2017	30,680	4,435	3,830	3,830	3,830	3,830	0	0	0	0	0	50,435	
2018	28,055	4,435	3,830	3,830	3,830	3,830	3,830	0	0	0	0	51,640	
2019	27,080	4,435	3,830	3,830	3,830	3,830	3,830	3,830	0	0	0	54,495	
2020	25,285	4,435	3,830	3,830	3,830	3,830	3,830	3,830	3,830	0	0	56,530	
2021	25,360	4,435	3,830	3,830	3,830	3,830	3,830	3,830	3,830	3,830	0	60,435	
2022	22,655	4,435	3,830	3,830	3,830	3,830	3,830	3,830	3,830	3,830	3,830	61,560	

EXISTING AND PROJECTED NET TAX-SUPPORTED G.O. BONDS OUTSTANDING (\$000)													
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total	
Current	Issue	Issue	Issue	Issue	Issue	Issue	Issue	Issue	Issue	Issue	Issue	Est.	
FY	Debt	88.710M	76.5800M	76,580M	Debt*								
2011	491,748	0	0	0	0	0	0	0	0	0	0	491,748	
2012	442,225	88,710	0	0	0	0	0	0	0	0	0	530,935	
2013	397,395	84,270	76,580	0	0	0	0	0	0	0	0	558,245	
2014	352,730	79,830	72,750	76,580	0	0	0	0	0	0	0	581,890	
2015	315,615	75,395	68,920	72,750	76,580	0	0	0	0	0	0	609,260	
2016	281,760	70,960	65,090	68,920	72,750	76,580	0	0	0	0	0	636,060	
2017	251,080	66,525	61,260	65,090	68,920	72,750	76,580	0	0	0	0	662,205	
2018	223,025	62,090	57,430	61,260	65,090	68,920	72,750	76,580	0	0	0	687,145	
2019	195,945	57,655	53,600	57,430	61,260	65,090	68,920	72,750	76,580	0	0	709,230	
2020	170,660	53,220	49,770	53,600	57,430	61,260	65,090	68,920	72,750	76,580	0	729,280	
2021	145,300	48,785	45,940	49,770	53,600	57,430	61,260	65,090	68,920	72,750	76,580	745,425	
2022	122,645	44,350	42,110	45,940	49,770	53,600	57,430	61,260	65,090	68,920	72,750	76,580	760,445

\*Totals may not agree due to rounding.

**Net Tax-Supported Debt Service by Fiscal Year**

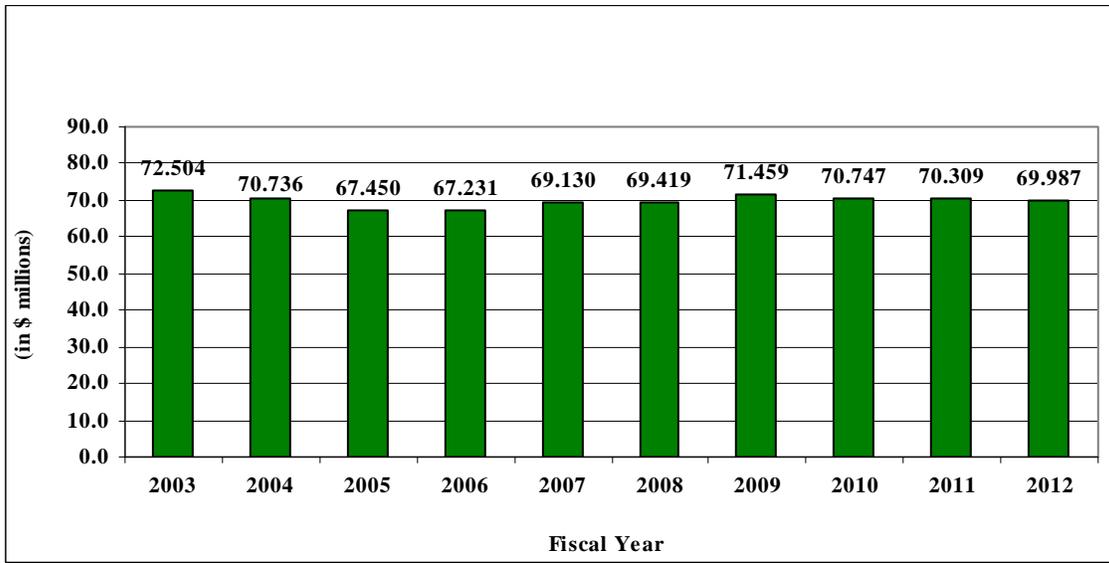
The State’s scheduled general obligation debt service requirement (“D/S”) for fiscal year 2012 is \$69.987 million, 0.46% less than the \$70.309 million paid in fiscal year 2011. This decrease comes after annual decreases ranging from 0.3% to 7.6% over the period from FY 2000 to FY 2007 and FY 2010 – FY 2011.

(in \$ thousands)

Net Tax-Supported D/S Paid in FY 2011.....	\$70,309
Decrease in D/S Requirement FY 2011-2012 <sup>(1)</sup> .....	(6,496)
D/S Increase Due to G.O. Debt Issued in FY 2011 <sup>(1)</sup> .....	6,174
Net Tax-Supported D/S Due in FY 2012.....	<u>\$69,987</u>

<sup>(1)</sup>The debt service amount shown takes into account the 35% interest subsidy from the federal government (calculated to be \$1,437,142 during FY 2012), payable on the \$87,050,000 Build America Bonds as part of the 2010 Series A and D bond issues.

**STATE OF VERMONT  
HISTORICAL NET TAX-SUPPORTED DEBT SERVICE\***  
((\$'s in millions)



*\*Consists of General Obligation Bonds.*

#### 4. ECONOMIC AND FINANCIAL FORECASTS

This section of the report is based on the economic analysis provided by the New England Economic Partnership (“NEEP”) for the State of Vermont and certain projections provided by Economic and Policy Resources, Inc. (“EPR”). NEEP’s report, “Vermont Economic Outlook,” dated May 19, 2011 (a copy of which is included in the appendices), states that “Because the U.S. economy is the most significant driving force for the state economy, the Vermont NEEP forecast update generally tracks the directional trend and roughly the pace of the U.S. economic forecast.”

“Like the rest of New England and following the same general path as the U.S. economy, [this forecast] finds the Vermont economy making measurable improvement towards restoring the economic ground the state lost during the ‘Great Recession.’ The labor market data indicate that Vermont has recovered nearly one-third (30.9%) or 4,000 of the nearly 13,000 payroll jobs lost during the Great Recession. However, recovery progress is expected to remain at a historically slow pace, with Vermont not transitioning to an actual labor market expansion until the 2<sup>nd</sup> quarter of calendar year 2013 – a total of 15 quarters or nearly 4 full years after the State’s labor market hit bottom during the third quarter of calendar 2009.”

“Although the calendar year 2011 performance of most macro variables is expected to be positive, increases in payroll jobs and output are expected to be only about 2/3 of their historical averages. [The] forecast for Vermont indicates that payroll job additions will remain at subpar levels until as late as mid-calendar year 2013 [and] expects a similar profiled but somewhat muted recover/expansion path for real output (as measured by Gross State Product or GSP) and real or inflation adjusted Personal Income. Among the State’s 11 major [industry classification] sectors, a total of 10 are expected to see positive job changes over the forecast time horizon with the only exception being the Construction sector.”

“[The forecast] calls for Vermont to experience significantly less severe housing price declines relative to the other five New England states and relative to many other parts of the nation. However, any improvement in sales and construction activity in the Vermont housing market is forecast to be very gradual, with a bottoming no later than the second half of calendar year 2011. At that point, the housing price decline in Vermont will likely have ended, and prices will then start to show more consistent, positive changes and sales activity will increase.”

“Overall, the Vermont economic upturn is expected to continue. Sometime in mid-calendar year 2013, the Vermont up-cycle is expected to move past recovery and into a full-fledged economic expansion. However, there are still a number of risks that present formidable obstacles for the national upturn and therefore the Vermont economy. These include: (1) the upward trend in commodity prices and energy prices in particular, (2) uncertainty about the still unfolding financial crisis in the Eurozone [and] lingering uncertainties regarding the European debt situation, (3) the uncertainties regarding the bottoming process in U.S. housing markets and commercial construction, and (4) the still poor fiscal condition of the state and local governments.”

**State of Vermont Capital Debt Affordability Advisory Committee**

As shown in the table below, EPR’s population estimate for 2011 in Vermont is about 0.26% greater than its forecast for 2010, and its estimates of future population growth average about 0.37% annually from 2012 through 2022. Personal income in Vermont increased 4.87% from 2010 to 2011 and is projected to achieve an average annual growth rate of 4.20% from 2012 through 2022. Estimated full valuation increased 2.72% from 2010 to 2011 and is projected to achieve an average annual growth rate of 2.47% from 2012 through 2022, inclusive. EPR’s current and projected General Fund and Transportation Fund revenues are shown in the table on the following page.

**Prior Year, Current and Projected Economic Data<sup>(1)</sup>**

<b>Year</b>	<b>Population (in thousands)</b>	<b>Personal Income (in \$ billions)</b>	<b>Effective Full Valuation (in \$ millions)</b>
2010	626.5	25.207	56,124
2011	628.2	26.434	57,648
2012	630.1	27.621	59,767
2013	632.0	29.480	62,346
2014	634.1	31.282	64,594
2015	636.2	32.700	65,969
2016	638.5	33.910	67,276
2017	640.9	35.086	68,525
2018	643.5	36.284	69,819
2019	646.2	37.498	71,135
2020	649.0	38.770	72,502
2021	651.7	40.119	73,915
2022	654.4	41.554	75,334

<sup>(1)</sup>These figures were prepared by EPR, except Effective Full Valuation. Projected Effective Full Valuation was based on Real Vermont Gross State Product annual growth rates provided by EPR.

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**State of Vermont Capital Debt Affordability Advisory Committee**

As shown in the table below, total revenue for fiscal year 2011 is \$123.3 million more than in fiscal year 2010, an increase of 9.8%. Fiscal year 2012 total revenue is forecast to increase by \$41.7 million, or 3.03%; the average annual revenue growth rate during the fiscal year period, 2012 through 2022, inclusive, is projected to be approximately 3.16%.

**Prior Year, Current and Projected Revenue<sup>(1)</sup>  
(in millions of dollars)**

<b>Fiscal Year</b>	<b>General Fund</b>	<b>Transportation Fund</b>	<b>Total Revenue<sup>(2)</sup></b>
2010	1,038.4	213.3	1,251.7
2011	1,157.4	217.6	1,375.0
2012	1,191.2	225.5	1,416.7
2013	1,267.2	231.9	1,499.1
2014	1,327.3	238.4	1,565.6
2015	1,373.5	243.2	1,616.8
2016	1,408.5	249.2	1,657.7
2017	1,445.7	255.2	1,700.9
2018	1,483.9	261.1	1,744.9
2019	1,523.1	267.1	1,790.1
2020	1,563.4	273.2	1,836.6
2021	1,605.6	279.2	1,884.8
2022	1,649.0	285.3	1,934.3

<sup>(1)</sup>Amounts shown are “current law” revenue forecasts, based on a consensus between the State’s administration and legislature. The official forecast is shown as of May 19, 2011.

<sup>(2)</sup>Totals may not agree due to rounding.

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## 5. OTHER DEBT FACTORS

### Moral Obligation Indebtedness

As the State's rating has improved, the value of its moral obligation has also grown. It is therefore apparent that there has been greater pressure on the State to raise the size of its existing moral obligation commitments and/or to assign the moral obligation pledges to State borrowers. However, without some form of containment, it is possible that an ever-increasing moral obligation debt load could, over time, erode the State's credit position.

In accordance with the appropriate provisions from the enabling statute that created CDAAC, the Committee has already been authorized to consider "any other long-term debt of instrumentalities of the state not secured by the full faith and credit of the state, or for which the state legislature is permitted to replenish reserve funds." Therefore, it is not inconsistent for CDAAC to develop guidelines for Vermont regarding the size and use of the State's moral obligation debt.

In recent years, CDAAC has adjusted its debt load guidelines to take into account the comparative debt load statistics for triple-A rated states throughout the country. Unfortunately, none of the rating agencies prepare comparative data on the respective triple-A rated states on moral obligation or contingent debt. Moreover, there is little consistency among the triple-A rated states regarding the size, nature and role of such debt. The types of contingent debt are quite varied among the states, including state guarantees of local school debt, back-up support for revenue obligations, etc. Because of the mixture of contingent debt applied by triple-A states, it would not be possible to employ guidelines that are similar to the general obligation guidelines that have been utilized by CDAAC in connection with its annual recommendation of long-term general obligation debt to be authorized by the State legislature.

Over the last four years, a number of actions have been taken by the State legislature that increased the State's moral obligation exposure, consisting of the following:

- \$55,000,000 increase for Vermont Housing Finance Agency
- \$50,000,000 program for Vermont Student Assistance Corporation
- \$40,000,000 program for Vermont Telecommunications Authority
- \$65,000,000 program for University of Vermont
- \$35,000,000 program for Vermont State Colleges
- \$30,000,000 increase for Vermont Economic Development Authority

A new form of moral obligation support was created in 2009 for both VHFA and VSAC. Normally, the State's moral obligation support attaches to a debt service reserve fund that must be filled up by the State if the agency draws down on the fund. However, for both VSAC and VHFA, the State is committed to increase certain reserves if individual trusts do not provide requisite parity levels. This provision for a pledged equity moral obligation for VHFA was constrained within VHFA's overall (\$155 million) moral obligation authority. The pledged equity program for the two agencies was adopted to allow each agency to more effectively deal with the market problems that surfaced in 2008.

There had been, for several years, discussions within CDAAC regarding the establishment of guidelines for limiting the amount of moral obligation debt that the State

should authorize. In an accompanying chart, the State's net tax-supported debt statement, consisting entirely of the State's GO outstanding indebtedness, is presented, as of June 30, 2011, at \$491,748,000. Using 225% of GO debt for establishing a limit of moral obligation debt, the State would have had \$134,098,000 in additional moral obligation capacity. Using 200% of GO debt for establishing a limit of moral obligation debt, the State would have had \$11,161,000 in additional capacity, and using 195% the State would have had (\$13,426,400) in negative capacity; in other words, at 195%, the State could not comply with the administrative guideline.

At this point, CDAAC believes that a range of 200-225% is appropriate in determining the amount of moral obligation commitments that should be outstanding in comparison to the State's general obligation debt. Since CDAAC has not recommended legislative action to codify any statutory limits on the incurrence of moral obligation debt, CDAAC will continuously monitor the developing size of moral obligation commitments and report the results.

With the exception of VEDA, which has specific plans for utilizing its enhanced moral obligation commitment, the new authorizations shown above have not been part of financing strategies for the particular agencies. At some point, should a major infrastructure requirement or other critical financing need arise that would be appropriately funded through a financing agency, the State may, as appropriate, consider rescinding the existing, but unused moral obligation authority and have it transferred – taking into account the limited availability for the State to provide additional moral obligation capability as a result of the 200-225% administrative limits.

Ultimately, the effect of contingent liabilities and reserve fund commitments on the State's debt affordability is a function of the level of dependency for the repayment of this particular debt on the State's general operating revenues. With respect to this matter, the principle that the rating agencies follow give us relevant guidance: Until such time that the State's guarantee or contingent obligation becomes actual (through a payment or a replenishment obligation being made), then such debt or guarantee is not included in the State's net tax-supported indebtedness. To the extent that the State has not been called upon to pay for the debt components, as envisioned in Subparagraph (5) of the CDAAC legislation, then those items should not become quantifiable factors included in the affordability analysis.

***Contingent or Limited Liability Obligations (all figures as of June 30, 2011):***

1. VEDA Mortgage Insurance Program: The State had a contingent liability of \$9.0 million with respect to this Program.
2. VEDA Financial Access Program: The State had a contingent liability of \$1.0 million with respect to this Program.
3. VEDA Tech/Small Business Loan Program: The State had a contingent liability of \$1.0 million with respect to this Program.

*Reserve Fund Commitments (all figures as of June 30, 2011):*

1. Vermont Municipal Bond Bank: The Bank had \$527.34 million of debt outstanding secured by reserve fund commitments from the State. At present, there is no limit on the amount of reserve fund (“moral obligation”) debt that the Bank may issue and have outstanding. The General Assembly is legally authorized, but not legally obligated, to appropriate money to maintain the reserve funds at their required levels. Since participating borrowers have always met their obligations on bonds of the Bank, the State has not been required to appropriate money to the reserve fund for this program. Based on the long history of the bond bank program, the rating agencies credit assessment of the underlying loans of the portfolio, the general obligation pledge of the underlying borrowers for a high percentage of the loan amounts and the State intercept provision for the payment debt, it is not anticipated that it will be necessary for the State to appropriate money for the reserve fund
2. Vermont Housing Finance Agency (“VHFA”): The VHFA had previously received a legislative commitment of \$155 million of moral obligation debt secured by reserve fund fill-up mechanism from the State. It has not been necessary, over the years, for the State to appropriate money to fill up the debt service reserve fund. In 2009, the State authorized increased flexibility for VHFA’s use of the moral obligation commitment specifically allowing for “pledged equity” contributions from the State’s operating funds and increased flexibility in the use of the traditional debt service reserve structure.
3. It should also be noted that the State has authorized the VEDA to incur indebtedness in an amount of \$100 million secured by the State’s reserve fund commitment. Based upon VEDA’s historical performance and the quality of the loans it has provided and expects to provide, it is not anticipated that it will be necessary for the State to appropriate money for the reserve fund.
4. Legislation was passed in 2007 to create the Vermont Telecom Authority to facilitate broadband and related access to an increased number of Vermonters. In this connection, the State has authorized \$40 million of debt that has a moral obligation pledge from the State. The legislation requires that projects must be self-supporting in order to utilize the moral obligation support. Considering the fact that no debt has yet been issued by the Authority, the report has not included any portion of such debt in the State's net tax-supported debt computations.
5. Legislation was passed in 2008 to provide a moral obligation pledge from the State to the University of Vermont in the amount of \$66 million and to the State Colleges in the amount of \$34 million. It is not expected that the State will need to appropriate money to the respective reserve funds for these purposes.
6. As described in “Moral Obligation Indebtedness,” the State has provided \$50 million of moral obligation commitment by the State to VSAC. In 2011, VSAC issued \$15 million of moral obligation supported bonds.

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Finally, it should be noted that the actual amount of moral obligation debt outstanding is somewhat less than the amount authorized, as shown in the table below:

<b>State of Vermont</b>				
<b>Moral Obligation Commitments and Debt Outstanding</b>				
<b>As of June 30, 2011</b>				
<u>Issuer Name</u>	<u>Amount Provided In Statute</u>	<u>Actual Par Amount Outstanding</u>	<u>Credit Ratings with Moral Obligation (Moody's/S&amp;P/Fitch)</u>	<u>Assumed Underlying Credit Ratings (Moody's/S&amp;P/Fitch)</u>
Vermont Municipal Bond Bank*	\$527,335,000	\$527,335,000	Aa2/AA/--	n/a
Vermont Economic Development Authority	100,000,000	104,000,000	n/a	n/a
Vermont Housing Finance Agency	155,000,000	75,565,000	Aa3/A+/-	--/BBB+/-
Vermont Student Assistance Authority	50,000,000	15,000,000	Aa2/--/AA	--/--/A+
University of Vermont	66,000,000	0	n/a	n/a
Vermont State Colleges	34,000,000	0	n/a	n/a
Vermont Telecommunications Authority	40,000,000	0	n/a	n/a
	<u>\$972,335,000</u>	<u>\$721,900,000</u>		

\* The Vermont Municipal Bond Bank's debt obligations are secured first by the general obligation pledge of the participating municipalities, and second by a State intercept of payments to municipalities, before the moral obligation is utilized.

**Comparative Debt Load Standing Among States**

The Committee follows a series of debt guidelines, reflecting the State's comparative current and prospective performance in terms of debt load measures (i.e., debt per capita and debt as a percent of personal income) against triple-A rated states. A more detailed discussion of these guidelines and the State's compliance with them is presented herein. According to Moody's Investors Service's most recent information, the State's relative position, among states, improved during the past year with respect to both net tax-supported debt as a percent of personal income (improving from 35<sup>th</sup> in 2009 to 36<sup>th</sup> in 2010 to 37 in 2011) and net tax-supported debt per capita (improving from 34<sup>th</sup> in 2009 to 36<sup>th</sup> in 2010 and 2011).

**Authorized, But Unissued Debt**

In fiscal year 2009, Vermont sold only \$50.5 million of its authorized \$64.65 million; in fiscal year 2008, Vermont issued \$46 million of an authorized amount of \$49.2 million. This trend diverges from past practice whereby the State annually extinguished all or nearly all of the authorized amount of debt. This previous practice enhanced the State's credit position with favorable responses from the rating agencies. In fiscal 2010, the State sold \$2,045,000 in an amount greater than the \$69,955,000 of debt authorization for the year, and in fiscal 2011 the State sold \$3,175,000 more than the \$71,825,000 of debt authorization for that year leaving an authorized, but unissued figure of \$12,130,000. If

the remaining authorized, but unissued amount of \$12,130,000 was divided into 2012 and 2013, it would not materially alter the recommended level, since the annual assumed amounts extend through 2022, pursuant to the legislation.

For this year's report, an assumption has been made that the authorized, but unissued amount is combined with one-half of the 2012-2013 authorization (\$76,580,000) for a combined issuance this fiscal year of \$88,710,000 (see "Debt Guidelines").

It may be advantageous for the State's future debt management operations to reconsider, and perhaps cancel, slowly developing or marginal capital projects and for steps to be taken to adhere to Vermont's previous practice of matching annual debt authorizations with realistic annual debt issuances.

### **Information and Technology Indebtedness**

In December of 2010, the Commissioner of the Department of Information and Innovation, the Commissioner of Finance and Management, and the State Treasurer delivered a report to the Legislature entitled "Information Technology Infrastructure Needs – A Study of Financing Options," that enumerated several strategies for financing capital costs of information technology improvements. Information systems and technology innovation can lead to improved productivity and operating efficiencies. Toward this end, it is expected that the State will increase the amount of indebtedness that it will issue in the future for these important purposes. At present, it is not possible to provide a precise estimate of future authorizations that will be dedicated to information systems and technology innovation, but based on preliminary projections it could constitute a significant portion of total debt authorizations. CDAAC does not have concerns about debt financing for such purposes in general, but emphasizes that the following consideration must be carefully monitored. Over the years, the State has sold 20-year debt, generally with level principal amounts, for capital projects that have had useful economic lives significantly exceeding the period of the related debt repayment. Since the useful lives of information systems and technology innovation may be somewhat shorter than those of traditional capital projects for which Vermont has issued long-term debt in the past, it will be crucial for the State to continue to relate its debt repayment structure to the overall useful life profile for the underlying capital projects that are being financed, including any potentially shorter useful lives from the funding of information systems and technology innovation. The State has benefited from the existing repayment debt structure, as viewed by the rating agencies, since the useful lives of the capital projects have extended beyond the period of debt repayment; in a related manner, Vermont has also recaptured its debt capacity rapidly as a result of its amortization schedules - another factor that has been positively noted by the rating agencies. While the State makes adjustments to the projects for which it incurs long-term indebtedness, it will continue to be important for Vermont to adhere to those practices that have resulted in favorable rating agency responses.

### **Special Obligation Transportation Infrastructure Bonds (TIBs)**

The State has historically sold only general obligation bonds for its capital infrastructure purposes. On occasion, it has issued certificates of participation, backed ultimately by the State's general credit pledge, but it hasn't been an issuer of revenue bonds, supported

## State of Vermont Capital Debt Affordability Advisory Committee

by specific fees and charges. Of course, as characterized elsewhere in this report, several agencies in Vermont, such as VHFA, VSAC, and VEDA, do, in effect, sell bonds supported by specific fees and charges. Recently, however, the State did issue securities that clearly can be described as revenue bonds through the sale of Transportation Infrastructure Bonds (“TIBs”). The bonds are payable from new assessments on motor vehicle gasoline and motor vehicle diesel fuel, and the State is not obligated to use any other funds to cover debt service on TIBs.

The rating agencies have effectively indicated that they will place the TIB debt on the State’s net tax-supported debt statement. The agencies state that the taxes to be used for the payment of TIB debt service consist of a type of tax that resembles taxes already collected by Vermont for general operating purposes. As such, the debt supported by the assessments, although new, should be considered as part of the State’s general indebtedness. CDAAC does not agree with the approach of the rating agencies. Virtually, without exception, CDAAC has reached agreement with the rating agencies on presentation matters, but, in this case, CDAAC will respectfully not include TIBs in its “net tax-supported indebtedness” computations. The CDAAC believes that the TIBs are self-supporting revenue bonds, and are explicitly not general obligations of the State and are not supported by the State’s full faith and credit. Rather, TIB revenues are pledged under a trust agreement and held by a trustee for the benefit of TIB bondholders. Further, unlike net tax-supported debt, the TIBs’ debt service coverage ratios and additional bonds test serve as an explicit and easily-measured constraint on the issuance of new TIBs.

For purposes of illustration, however, it is relevant to quantify the impact of TIBs inclusion in the more critical debt ratios, as shown below:

### STATE OF VERMONT DEBT RATIOS WITH AND WITHOUT CONSIDERING TIBS\*

	<u>With TIBs</u>	<u>Without TIBs</u>
Net Tax-Supported Debt:	505,582,792	\$491,747,792
Debt As A Percent of Gross State Product:	2.18%	2.13%
Debt Per Capita:	\$807	\$785
Debt As A Percent of Personal Income:	2.01%	1.95%

\* As of June 30, 2011 the outstanding principal amount of the State’s Special Obligation Transportation Infrastructure Bonds, 2010 Series A was \$13,835,000

## 6. RECENT EVENTS

The last five years, since the summer 2007 beginnings of the global financial crisis, have been memorable for the state and local credit markets. At one point in late 2008, the tax-exempt bond market actually closed down in most respects, a phenomenon that had not been experienced in modern times. Moreover, major new, taxable financing options became available for state and local borrowers in 2009 and 2010, and the rating agencies made substantial changes in their systems and methodologies in 2010 and 2011. Finally, 2011 saw the unprecedented downgrade of the United States' long term debt rating, as well as one of the worst natural disasters in Vermont's history. CDAAC does not believe that adjustments in the credit markets or other recent events should alter its methodology or process; however, the Committee realizes that it and the State will need to keep the changing debt finance environment and other current circumstances in mind as the State develops its capital funding and debt management program.

### **Tropical Storm Irene**

On August 28 and 29, 2011 Tropical Storm Irene caused the worst flood-related damage in the State of Vermont since the historic flooding of 1927. As of the date of this Report, the gross cost to the State and its communities is not yet known, but by some estimates could exceed \$1 billion. The State and local communities expect significant reimbursement from Federal Emergency Management Agency (FEMA) and Federal highway funds, insurance policies and insurance pools from both the Vermont League of Cities and Towns and the Vermont School Boards' Insurance Trust programs. The total amount of reimbursement, however, and thus the net cost to the State, is also not known. While the CDAAC committee recognizes the enormous pressures on these budgets, we believe it is prudent not to recommend a dollar amount or sources of revenue (general taxing authority, revenues such as motor fuel assessments, etc.) until such time as the net cost is known.

The state has also recently established a private not for profit corporation to assist in meeting the unmet needs of Vermonters after all other sources of relief have been exhausted. Contributions to this organization and similar related organizations in the state are expected to raise many millions of additional dollars to provide relief to families and individuals impacted by this and future disasters.

Accordingly, the recommendation in this Report should be viewed as a pre-Irene baseline or a recommendation to balance our "normal" capital needs with capacity and the criteria set forth in statute and policies adopted by CDAAC to maintain prudent long-term capital financing consistent with the State's superior credit rating.

During this interim period the Treasurer's Office, in cooperation with CDAAC, bond professionals, and state, local, private and non-profit partners are exploring the mechanics of contingency plans for long-term financing of the residual costs, net of reimbursement, including an assessment of potential financing volume and offering timing. For instance, the Treasurer's Office is in the process of updating its models and sizing the current Transportation Infrastructure Bond (TIB) program to determine what future bond capacity exists at the current assessment levels, and how much capacity

could be generated with increases in the assessments. It is, however, premature to set a dollar level.

The State has several financial challenges ahead that relate around the concepts of financing and funding. Financing involves the use of strategies, including bonding, to leverage for immediate use the value of a stream of revenue, paying it back over time. This includes general obligation debt, revenue bonds, GARVEES, and other instruments. Ultimately, new revenue sources, or increases to existing sources, or in the alternative, diversion of existing funding from other uses, are needed to fund any such financing. Any significant bonding will require an examination of the revenue sources currently used to pay for capital, maintenance and repair and a frank discussion of the potential sources of funds. Neither the Treasurer nor CDAAC is recommending a dollar amount for such general obligation, revenue or recovery bonds at this time but are setting the stage to have the framework available when the time for permanent financing comes. We will be ready with alternatives for consideration by the Administration and the Legislature and we expect to be your partners in addressing the long-term capital financing strategy.

### **Substantial Reduction in 2011 Municipal Bond Volume**

Through the first half of calendar year 2011, U.S. municipal bond issuance volume is almost 40% to 50% lower than the volume from 2010 according to the Securities Industry Financial Markets Association (SIFMA). This is the most dramatic year-over-year reduction in bond issuance since 1986. The primary reasons for the drop include issuers avoiding incurring more debt in the face of economic weakness and uncertainty, and also that 2010 was a record issuance year as issuers accelerated bond sales ahead of the expiration of American Recovery and Reinvestment Act (ARRA) bond programs on December 31, 2010.

Because the State's Debt Per Capita metric and projected ratios depend upon a year-over-year inflation factor, the Committee is concerned that such a large single-year drop will have an outsized impact on its proposed fiscal year 2014 debt authorization. Clearly, such a large outlier is somewhat dependent upon extreme policy-driven changes, and the Committee may need to consider adjustments to the Debt Per Capita metric that are more reflective of overall long-term issuance trends.

### **Downgrade of United States Credit Rating**

On August 5, 2011, Standard & Poor's downgraded the long-term debt rating of the United States from AAA to AA+, and assigned a negative outlook to the rating, citing lack of credible progress by the Administration and Congress in reducing the Country's long-term deficit outlook. This was the first time the U.S. was rated less than triple-A since Moody's first assigned the rating to the Country in 1917. Moody's placed the U.S. on review for possible downgrade, and also placed five triple-A rated states – Maryland, New Mexico, South Carolina, Tennessee and the Commonwealth of Virginia – on review for possible downgrade if the U.S. were downgraded from Aaa to Aa1 or lower. Fitch Ratings did not report an imminent threat of downgrade either for the U.S. or the states from ongoing Federal debt negotiations.

While none of the three ratings agencies reported an immediate threat to Vermont’s credit ratings, if the U.S. were to be further downgraded, then Vermont’s rating likely would be impacted eventually. The rating agencies generally have reported that it would be unlikely for Vermont or other states to maintain ratings more than one “notch” above the United States’ rating.

### **Standard & Poor’s Methodology For U.S. State Ratings**

On January 3, 2011, Standard & Poor’s released the final version of its “U.S. State Ratings Methodology.” A copy of the methodology is included in the Appendices to this report. This methodology provides, for the first time, a comprehensive presentation that sets forth in a systematic way a quantification approach to rating states. By assigning numerical values to its various rating criteria, the agency has moved closer to the establishment of state ratings through a quantification approach. CDAAC has reviewed those provisions and found the methodology informative and helpful. The State has been aware, for many years, of the important categories of review, referred to as “factors,” by Standard & Poor’s: Government Framework, Financial Management, Economy, Budgetary Performance and Flexibility, and Debt And Liability Profile. However, the State had not previously seen the manner in which the sub-categories, or “metrics” within each factor was weighed. Specifically, S&P assigns a score of 1 (strongest) to 4 (weakest) for twenty-eight metrics, grouped into the five factors listed above. Each of the metrics is given equal weight within the category, and then each factor is given equal weight in an overall 1 through 4 score. The overall scores correspond to the following indicative credit levels for the highest three ratings categories:

<u>Score</u>	<u>Indicative Credit Level</u>
1.0-1.5	AAA
1.6-1.8	AA+
1.9-2.0	AA

S&P reported that Vermont’s score was approximately 1.7, corresponding to the State’s AA+ rating from S&P. Metrics where Vermont could improve, that to varying degrees are within the State’s control, are (1) providing a statutory requirement for a balanced budget when introduced and adopted, which is required to stay in balance during the year; (2) increasing formal budget-based reserves to 8%; (3) increasing pension funded ratios to above 90%, and (4) planning for and accumulating assets to address other post-employment benefits. Other factors weighing against Vermont, that are more structural in nature, include lower-than-average population growth trends and higher-than-average age dependency ratio as calculated by the U.S. Census Bureau.

In future CDAAC reports, certain new pieces of information from the Standard & Poor’s methodology will be presented, such as debt as a percent of state domestic product and relative rapidity of debt retirement, in summary fashion, and the Committee may consider expanding its reporting on S&P’s methodology in future reports.

## Combining Pension Liabilities with Debt Obligations

Fitch, Moody's, and S&P include pension liabilities in their assessment of the overall financial health of states. On March 11, 2001, Moody's published a special comment entitled "Combining Debt and Pension Liabilities of U.S. States Enhances Comparability," and ranked the fifty states according to four metrics, combining pension and long-term debt liabilities, as follows:

1. As a percent of personal income
2. As a percent of gross domestic (state) product
3. Dollars per capita
4. As a percent of (general fund) revenues

A copy of the special comment is included in the Appendices to this report. This study takes a significant step in identifying pension liabilities as a serious consideration in reviewing and assessing the long-term liabilities of a state or local jurisdiction. While CDAAC takes the position that the pension obligation is a "soft" liability, more likely to fluctuate over time as compared to a hard debt number, Moody's correctly reports that demographic factors including increasing numbers of retirees and increasing life expectancy of retirees have placed additional stresses on funding. Many systems have also experienced significant increases in their unfunded liabilities due to the investment losses of the "Great Recession," although returns over the past two years have had a positive impact.

This information, while illustrative, is not included in the development of debt indicators since the CDAAC uses a five year moving average and historical data is not available for the peer triple-A states. The CDAAC also notes that there is considerable variation in the actuarial methods and assumptions used to generate the unfunded liabilities and that this makes comparisons difficult. Current accepted accounting standards by the Government Accounting Standards Board (GASB) recognize six accepted actuarial methods. These can produce different results, spreading the total cost in the actuarially required contribution (ARC) differently between normal cost and the amortization of the unfunded liability. Simply stated, varying methods yield different results. While somewhere between 60% and 70% of states use the "entry age normal" method (the method which GASB will require in the future if current standards in the GASB exposure draft are adopted), there are variances in the underlying assumptions that also result in varied results. As noted in the Moody's report, "states use actuarial projections, which incorporate assumptions about employee retirement ages, longevity, investment performance, and other factors." This limits the comparability of data. Rate of return for investments is an important consideration. While studies completed by some rating agencies to recalculate liabilities on the basis of a "standardized investment rate", have provided a useful look through the numbers, the rate of inflation may still vary resulting in differing net "effective rates". In addition the impact demographic factors and assumed labor negotiated steps and raises also impact the result. States have varying methods of amortizing the unfunded liability that impact funding. For instance, the Vermont systems

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use a closed amortization period with a set year (2038) to fully fund the liability. Other systems may amortize over a shorter period (20 years for instance) but reset each year (open system), which is a less conservative funding policy.

The Moody's special comment and other reports recognize the importance of funding the ARC as an indicator of fiscal discipline to resolve long-term pension funding issues. As Moody's and other rating agencies further define their criteria and GASB's efforts to standardize actuarial methods and practices for pension liabilities takes further form, use of unfunded liabilities and progress in funding the ARC may, in combination with key debt indicators, take on an increasing role in defining the long-term obligation of states.

The Treasurer's Office discussed the analysis with the special comment's authors, and concurred with them that although pension obligations have the same legal and statutory priority as net tax supported-debt, pension liabilities and debt substantially differ in how they are calculated. Traditional fixed rate debt obligations are simply the sum of regularly-scheduled principal and interest payments, and the liability is fixed and can be calculated to the penny.

Because pension liabilities pose myriad challenges from an analytical standpoint, the Committee has decided not to combine pension liabilities with debt at this time for the purpose of the annual recommendation and computing projected debt ratios. However, the Committee will track the means and medians of Moody's four metrics against Vermont's triple-A rated peer group going forward.

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**STATE OF VERMONT  
STATES' COMBINED PENSION AND LONG-TERM DEBT LIABILITIES COMPARED  
TO VARIOUS METRICS**

Triple-A Rated States	Moody's Investors Service			
	Personal Income	GDP	Per Capita	As % of Revenues
Alaska	15.1%	9.3%	6,407	64.1%
Delaware	7.4	4.3	2,974	70.7
Florida	5.4	5.2	2,073	123.4
Georgia	6.2	5.1	2,067	111.4
Indiana	7.0	6.0	2,383	123.4
Iowa	4.8	3.9	1,764	60.0
Maryland	9.8	9.8	4,677	172.7
Minnesota	8.7	7.4	3,688	127.9
Missouri	3.2	2.8	1,099	69.8
Nebraska	0.1	0.1	43	2.3
New Mexico	15.3	12.2	4,842	162.6
North Carolina	2.4	1.9	818	42.0
South Carolina	11.4	10.4	3,560	264.0
Tennessee	2.2	1.9	750	37.2
Texas	4.0	3.1	1,517	86.8
Utah	7.4	5.6	2,207	118.3
Virginia	5.3	4.5	2,257	114.6
Wyoming	5.6	4.2	2,731	67.9
<b>MEAN<sup>1</sup></b>	<b>6.7</b>	<b>5.4</b>	<b>2,548</b>	<b>101.1</b>
<b>MEDIAN<sup>1</sup></b>	<b>5.9</b>	<b>4.8</b>	<b>2,232</b>	<b>99.1</b>
VERMONT	6.3	6.0	2,462	66.1

Source: "Combining Debt and Pension Liabilities of the U.S. States Enhances Comparability," Moody's Investors Service.

<sup>1</sup>Calculated by Public Resources Advisory Group. These calculations exclude all Vermont numbers and include only states rated triple-A by any one of the three rating agencies, year ended June 30<sup>th</sup>.

**Proposal for the Formation of a "Capital Projects Planning Advisory Committee"**

For several years, the Committee has discussed at length, as part of its statutory mandate to analyze "any projections of capital needs authorized or prepared by the agency of transportation, the joint fiscal office, or other agencies or departments," the need for a multi-year capital planning process to identify and prioritize Vermont's capital needs. Indeed, the 2-year debt authorization arose in part from the need to advance large capital projects that were unlikely to be funded in a single-year authorization. As a result of its discussions, the Committee believes that a Capital Projects Planning Advisory Committee, organized in similar fashion to CDAAC, charged with creating a five-year capital plan and reporting annually to the Administration and General Assembly, would be very helpful in setting long-term capital planning priorities for the State.

## 7. ACKNOWLEDGEMENTS

We would like to express our gratitude to the State Treasurer's Office, the Department of Finance and Management, EPR, NEEP, and various officers and staff members of the State, whose assistance has been invaluable in completing this report. Certain computations and projections were made based on population, personal income, and revenue projections provided by EPR. The numbers presented herein have not been audited and are, therefore, subject to change, possibly in a substantial manner.

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## 8. PROVISIONS OF ENABLING LEGISLATION AND METHODOLOGY

The Committee is responsible for the submission of a recommendation to the Governor and the General Assembly of the maximum amount of new long-term, net tax-supported indebtedness (at this point, general obligation debt) that the State may prudently issue for the ensuing fiscal year. Such recommendation includes guidelines and other matters that may be relevant to the proposed debt to be authorized. The deadline for the Committee's annual recommendation is September 30<sup>th</sup>.

In 2008, the legislature, among other changes, replaced in the enabling legislation, "general obligation," with "net tax-supported indebtedness." At this point, all of the State's net tax-supported indebtedness actually consists of only general obligation debt. However, in practical terms, the State's debt load, as computed by the nationally recognized rating agencies, in determining the overall State debt, as reflected in the comparative debt statistics, is based, not just on a state's general obligation debt, but on its net tax-supported indebtedness. Now that the State has transportation infrastructure bonds ("TIBs") outstanding, the use of "net tax-supported indebtedness," instead of "general obligation," becomes more relevant; indeed, it is likely that the rating agencies will, in fact, start to include TIBs in the State's debt statement, although the State will likely decide, over time, not to include such indebtedness.

In making its recommendation, CDAAC has the responsibility to consider the following provisions of the enabling legislation:

*SUBPARAGRAPH (1):*

*The amount of state net state tax-supported indebtedness that, during the next fiscal year, and annually for the following nine fiscal years:*

*(A) will be outstanding; and*

*(B) have been authorized but not yet issued.*

*SUBPARAGRAPH (2):*

*A projected schedule of affordable state net state tax-supported bond authorizations for the next fiscal year and annually for the following nine fiscal years. The assessment of the affordability of the projected authorizations shall be based on all of the remaining considerations specified in this section.*

*SUBPARAGRAPH (3)*

*Projected debt service requirements during the next fiscal year, and annually for the following nine fiscal years, based upon:*

*(A) existing outstanding debt;*

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*(B) previously authorized but unissued debt; and*

*(C) projected bond authorizations.*

**SUBPARAGRAPH (4)**

*The criteria that recognized bond rating agencies use to judge the quality of issues of state bonds, including but not limited to:*

*(A) existing and projected total debt service on net tax-supported debt as a percentage of combined general and transportation fund revenues, excluding surpluses in these revenues which may occur in an individual fiscal year; and*

*(B) existing and projected total net tax-supported debt outstanding as a percentage of total state personal income.*

**SUBPARAGRAPH (5)**

*The principal amounts currently outstanding, and balances for the next fiscal year, and annually for the following nine fiscal years, of existing:*

*(A) obligations of instrumentalities of the state for which the state has a contingent or limited liability;*

*(B) any other long-term debt of instrumentalities of the state not secured by the full faith and credit of the state, or for which the state legislature is permitted to replenish reserve funds; and*

*(C) to the maximum extent obtainable, all long-term debt of municipal governments in Vermont which is secured by general tax or user fee revenues.*

In regards to (A) and (B) above, see section 5. OTHER DEBT FACTORS, Moral Obligation Bonds.

**Municipal Debt:**

In conformance with the standards followed by the rating agencies, this evaluation does not set forth or incorporate any debt obligations of Vermont municipalities. Should any such obligations be required to be payable by the State (e.g., through assumption or support of local debt as part of a financial emergency), a corresponding and appropriate amount related to the State's contribution would then be required to be included in the analysis. At present, no such liability has occurred, and, therefore, none has been included in this review.

**SUBPARAGRAPH (6):**

## State of Vermont Capital Debt Affordability Advisory Committee

*The impact of capital spending upon the economic conditions and outlook for the state.*

In 2008, new language, “impact of capital spending upon the,” was added to this subparagraph. It should be noted that CDAAC routinely considers this factor in the context of its deliberations. Indeed, in the early 1990s, CDAAC recommended significantly higher debt authorization during an economic downturn. There is always a concern at the rating agencies when a state meaningfully enlarges its debt program to ameliorate periodic economic downturns. The rating agencies will often advise that long-term annual costs, in the form of higher debt service and frequently higher administrative and operating expenses, can accompany such an increased debt program.

*SUBPARAGRAPH (7):*

*The cost-benefit of various levels of debt financing, types of debt, and maturity schedules.*

This subparagraph was added to the enabling legislation in 2008.

CDAAC annually goes through an extensive analysis to determine the “cost-benefit of various levels of debt financing.” The cost-benefit is demonstrated by CDAAC’s determination of the amount of debt that the State should annually authorize and still achieve compliance with CDAAC’s articulated affordability guidelines. This evaluation is fundamental to CDAAC’s responsibility in recommending annually the amount of net tax-supported indebtedness (i.e., general obligation, at present) that should be authorized by the State.

Second, with respect to the “types of debt,” Vermont and its financing agencies have utilized a great variety of debt types. At present, revenue bonds are sold by the State (see “Transportation Infrastructure Bonds (TIBs)” elsewhere in this document), VSAC, VHFA, VEDA, among others. The State Treasurer’s office has looked at a series of options for possible revenue bond issuance, but, because of Vermont’s special circumstances, revenue bonds have generally not appeared to be a comprehensive answer to the State’s direct infrastructure needs. Notwithstanding the fact that there have been no new revenue bond uses recently for funding Vermont infrastructure requirements, with the exception of TIBs, the State will continue to explore possible opportunities in this respect that would not cause debt load or debt management difficulties for Vermont.

Further, quasi-revenue bonds, such as moral obligation or reserve fund commitments, have also been employed by VMBB, VEDA, and VHFA, and such debt is now authorized for issuance by VTA, VSAC, UVM and State Colleges. There is a more extensive discussion of the State’s moral obligation commitments elsewhere in this report. In addition, the State, in the past, has directly employed capital lease debt, largely in the form of certificates of participation; however, this type of debt was proven to be expensive and created an undue complexity for the State’s net tax-supported debt statement, and the State decided in the late 1990s to refund the certificate of participation indebtedness with general obligation debt – with the rating agencies indicating at the time and subsequently their pleasure with the State’s actions. At present, as indicated in a footnote to the State’s debt statement, Vermont does have a \$4.7 million capitalized

## State of Vermont Capital Debt Affordability Advisory Committee

lease, but the debt service payments on this lease are funded from energy savings, which are guaranteed by the contractor; as a result, this debt is not added to the State's net tax-supported indebtedness. The State will continue to review the extent to which efficient employment of lease financings can be achieved in Vermont's debt program without adversely affecting the State's debt management operations or credit position.

CDAAC and the State Treasurer's Office are constantly reviewing prospects for funding of required infrastructure through approaches that will not add to the State's net tax-supported indebtedness.

The maturity schedules employed for State indebtedness are directly tied to State statute. Moreover, as indicated elsewhere herein, Vermont's current debt repayment for its general obligation bonds allows the State to recapture debt capacity at an attractive pace. By shortening the debt service payments, it would have the effect of placing more fixed costs in the State's annual operating budget, leaving less funds available for discretionary spending. By lengthening debt payments, that would increase the aggregate amount of the State's outstanding indebtedness, which would cause Vermont's debt per capita and debt as a percentage of personal income to rise, reducing the State's ability to comply with its affordability guidelines. Notwithstanding these limitations, there may be opportunities for the State in the future to adjust the maturity of its indebtedness to achieve various debt management goals over time.

### *SUBPARAGRAPH (8):*

*Any projections of capital needs authorized or prepared by the agency of transportation, the joint fiscal office, or other agencies or departments.*

This subparagraph was added to the enabling legislation in 2008.

CDAAC is proceeding in its compliance with this provision. Material on various infrastructure capital requirements will be considered as this information is provided to CDAAC over time.

*Any other factor that is relevant to:*

*(A) the ability of the state to meet its projected debt service requirements for the next five fiscal years; or*

*(B) the interest rate to be borne by, the credit rating on, or other factors affecting the marketability of state bonds.*

There are numerous factors that can affect the State's affordability to incur future indebtedness, including the prospective State economy and the availability of adequate financial resources. Of course, it should be recognized that even though the debt load indices employed in this report are generally also used by the rating agencies for determining the amount of net tax-supported indebtedness that the State can effectively support, these indices do not take into consideration the possibility for deterioration in

**State of Vermont Capital Debt Affordability Advisory Committee**

the State's financial results. For example, if the State were to confront a significantly increased or new financial liability that was not contemplated in the context of this analysis, the appropriateness of this debt load would become less certain. Similarly, if the State were to incur serious deficits or face a dangerously eroding economy, the ability of the State to incur debt in the future could be affected. These managerial and unpredictable aspects of debt affordability have not been considered in this analysis. It will be important for State officials to monitor Vermont's annual financial condition and results, together with the State's economic trends, in order to evaluate the State's credit position to determine whether annual issuance of debt should be adjusted to reflect a changing financial outlook and credit condition for the State under altered circumstances.

With respect to the interest rate and credit ratings assumed in the evaluation, the report has made conservative assumptions. For anticipated debt issuances, the interest rate on future State G.O. indebtedness is assumed at 6.00%, which is well above the interest rate at which the State could currently sell long-term general obligation bonds.

At the same time, we have assumed that the State will maintain its current ratings: "Aaa" from Moody's, "AA+" from S&P, and "AAA" from Fitch. Of course, a negative change in the State's ratings in the future could adversely affect the comparative interest rates that Vermont pays on its bond issues, thereby increasing the amount of the State's annual fixed costs for debt service. This effect could reduce the amount of long-term, net tax-supported indebtedness that the State can annually afford to issue.

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## 9. APPENDICES

- A. 2011 State Debt Medians (Moody's Investors Service)
- B. Fitch Ratings Credit Report
- C. Moody's Investors Service Credit Report
- D. Standard & Poor's Credit Report
- E. Vermont Economic Outlook (New England Economic Partnership)
- F. "US State Rating Methodology" (Standard and Poor's)
- G. "Combining Debt and Pension Liabilities of the U.S. States Enhances Comparability" (Moody's Investors Service)
- H. Full Text of 32 V.S.A. §1001, Capital Debt Affordability Advisory Committee

## **APPENDIX A**

**SPECIAL COMMENT**

# 2011 State Debt Medians Report

2010 Data Shows State Debt Continued Substantial Growth

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*This report corrects our May 25<sup>th</sup> report adjusting GDP to latest numbers and revising debt numbers for Iowa and New Mexico*

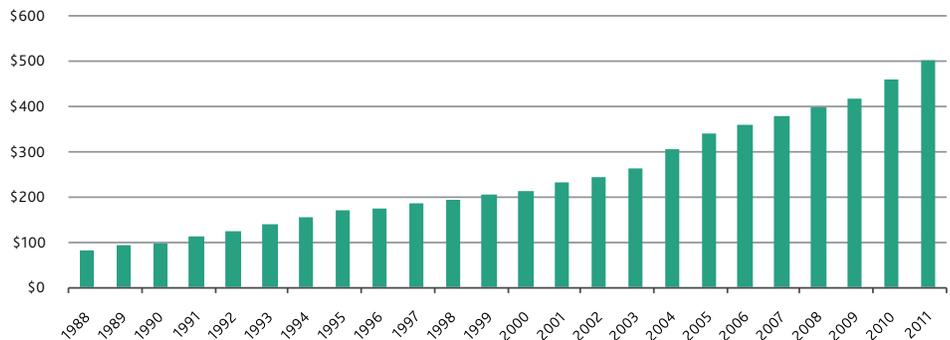
## Summary Opinion

Calendar year 2010 was a strong year for debt issuance thanks in part to federal programs that expired at the end of the year, offering the likelihood of significantly lower issuance in 2011. State net tax-supported debt increased by 8.7% in 2010 to \$500 billion from \$460 billion in 2009 (see Figure 1), compared to 10.3% growth in the prior year. The growth in net tax-supported debt resulted from a number of factors, including but not limited to:

- » The Build America Bond (BAB) and Qualified School Construction Bond (QSCBs) programs and a push to capitalize on the BAB program before it expired on December 31, 2010;
- » The continued need by some states for budget relief as a result of the national recession; and
- » A low interest rate environment.

Median net tax-supported debt per capita increased by 14% to \$1,066 from \$936, while net tax-supported debt as a percentage of personal income increased to 2.8% from 2.5%.

FIGURE 1  
**Total Net Tax-Supported Debt of the 50 States (\$B)**



2010 was a notable year in debt issuance due to the acceleration of debt issuance in advance of the termination of the BAB subsidy program on December 31st. The BAB program ran for two years as part of the American Recovery and Reinvestment Act (ARRA) and provided a 35% interest payment subsidy on bonds for state and local governments. In an effort to capitalize on this program, many issuers moved bond sales originally planned for 2011 into 2010 to take advantage of investor demand and lower costs of issuance.

Most municipal bonds are exempt from federal income taxes and certain state and local income taxes, making them attractive in high tax rate environments. The expected termination of the Bush tax cuts at the end of 2010 created additional investor appetite for municipal debt, further supporting debt issuance toward the end of the year.

The 2010 increase in state debt also reflects the continuation of a low interest rate environment as well as the recession's continued effects on state finances. As is typical when interest rates are low, state governments refunded existing debt to achieve interest rate savings. As we observed in 2009, a significant portion of the savings achieved in 2010 debt refundings were used to plug budget gaps. As states struggled to balance rising expenditure pressures with depressed revenues, debt restructuring, in the form of issuing bonds to defer debt service, became a more common solution to address budgetary gaps. In addition to restructuring debt, some states simply issued long-term debt to fund operations. Notably, the State of Illinois issued deficit bonds to relieve budget pressures, using the proceeds of approximately \$3.5 billion of general obligation bonds to help fund the annual pension contribution.

State debt issuance in 2011 (which will be the basis of our 2012 debt medians analysis) will likely decrease compared to 2010 figures as states will no longer be able to issue BABs and will likely face a rising interest rate environment. States will continue to look to long-term financing to alleviate budget pressure, though the higher cost of issuance will decrease issuer appetite for this solution.

Every year, Moody's prepares a special comment that presents an analysis of state debt medians. The 2011 Debt Medians report examines the condition of net state tax-supported debt as of calendar year-end 2010. As in prior years, the data presented (Figures 1, 2, 3 and Table 6) reflect the historical trend up to the immediately preceding year's state debt issuance while the data point label corresponds to the year in which the report is produced (i.e. the data labeled 2011 reflect debt as of calendar year-end 2010). Two measures of state debt burden – debt per capita and debt as a percentage of personal income – are commonly used by analysts to compare the debt burden of one state to another. Debt burden is one of many factors that Moody's uses to determine state credit quality. In considering debt burden, the focus is largely on net tax-supported debt, which Moody's characterizes as debt secured by state resources. Moody's also examines gross debt, which includes contingent debt liabilities that may not have direct tax support but represent commitments to make debt service payments under certain conditions (e.g. state guarantees and bonds backed by state moral obligation pledges).

*Net Tax-Supported Debt is defined as debt secured by state operating resources which could otherwise be used for state operations. Any debt to which state resources are pledged for repayment is considered to be net tax-supported debt.*

Last year, Moody's added a third metric: net tax-supported debt as a percent of gross domestic product. This ratio is useful when comparing U.S. state credits to sovereign and non-U.S. subsovereign credits as debt-to-GDP is an important input into the ratings assigned to these sectors. This ratio is usually higher for governments outside of the U.S. because their debt issuance is more centralized.

Even so, comparison of this metric is an important part of our continued benchmarking against other sectors now that U.S. state credits are rated on the same scale as sovereign and subsovereign credits.

### Growth of Net Tax-Supported Debt Slightly Lower Than the Prior Year

State total net tax-supported debt increased by 8.7% in 2010 to \$500 billion, a slightly lower rate than the increase of 10.3% recorded in 2009. The rate of growth is reflective of a stable market combined with a low interest rate environment. In 2009, bond markets had just begun to stabilize and bonds that were not issued as originally planned in 2008 were brought to market, creating strong growth of net tax-supported debt in that year that was unlikely to continue at that pace. Many other factors responsible for higher debt issuances in 2009 continued to be important drivers of debt issuance in 2010. The historically low interest rate environment encouraged states to borrow for economic stimulus. States continued to issue large amounts of fixed rate bonds to retire variable rate debt as obtaining third-party liquidity became more difficult and the expense of available liquidity outweighed the benefit of short term interest rates. During 2010, states continued to benefit from a lower cost of issuance due to the debt structures introduced by ARRA which expanded the investor base of municipal issues from the traditional holders of tax-exempt bonds to purchasers of taxable bonds. Debt issuance remained strong up through the end of the year as issuers pushed to capitalize on the ARRA program before its conclusion in December of 2010.

Utah, which experienced high debt growth in 2009, continued the trend in 2010 with 30% growth in net tax-supported debt as a result of more than \$1 billion of new debt issuance. Utah capitalized on the low interest rate environment and the ARRA bond subsidy programs to continue to finance its ongoing highway construction program as well as building programs at higher education institutions. Utah's overall net tax-supported debt is still low relative to other states, ranking 30th out of 50 in total net tax-supported debt and we note that the state amortizes its debt rapidly.

One of the largest bond issues in 2010 was the State of California's \$5.9 billion of Various Purpose General Obligation bonds issued in two series in March 2010. In total, California increased its net tax-supported debt by 8.5% in 2010 over the prior year. The State of Arizona experienced a large 25% increase in debt due to the issuance of certificates of participation to close its budget gap. The state sold \$1 billion in certificates of participation, in part to fund a sale-leaseback agreement in which government buildings were sold for an upfront payment and then leased back to the state. Even with the sharp increase, Arizona climbed just two positions, from 23<sup>rd</sup> to 21<sup>st</sup>, in outstanding net tax supported debt since 2010.

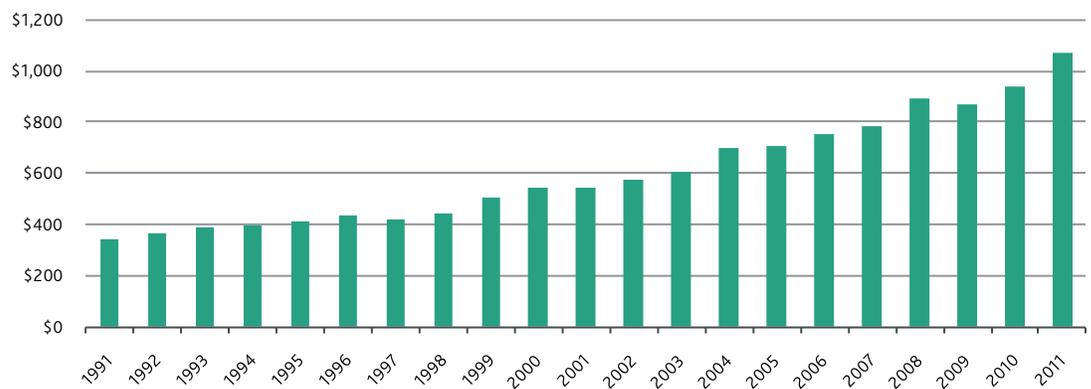
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### Median Net Tax-Supported Debt Per Capita Increases by 14%

Median net tax-supported debt per capita at calendar year-end 2010 increased by 14% to \$1,066 (see Figure 2), compared to 8.1% in 2009. This is the third largest percentage growth we have seen since tracking this variable beginning in 1995. Illinois, the fifth most populous state, had a large increase with 28.4% growth. Many other states driving this increase have comparatively lower populations, such as Kentucky, New Hampshire, and Utah. Some states that have historically limited debt issuance embarked on substantial capital programs in 2010 which have driven debt growth. New Mexico had a 31% increase in its net tax-supported debt per capita, issuing highway revenue bonds to fund transportation projects and severance bonds to fund general capital improvements.

Some states reduced their outstanding debt in 2010. The State of Alaska reduced its net tax-supported debt per capita by 6.5%, in sharp contrast to a 48% increase in 2009. The state retired more debt than it issued due to recovering revenues tied to rising oil prices and the ample funds raised in the previous year. The State of Nebraska, which historically has had one of the lowest debt burdens of all states due to a constitutional limitation on issuance of general obligation debt, experienced a 13% decline of net tax-supported debt per capita as maturing debt outpaced the issuance of \$8.3 million of certificates of participation.

FIGURE 2  
Median Net Tax-Supported Debt Per Capita for 50 States



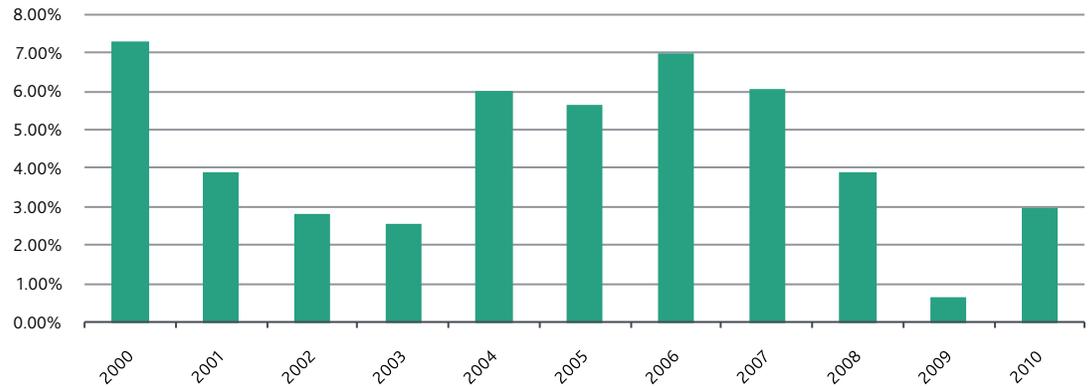
### Median Net Tax-Supported Debt as a Percent of Personal Income Increases

Median net tax-supported debt, as a percent of personal income, increased to 2.8% in 2010, in line with the overall increase in net tax-supported debt (Figure 3). Prior to this year, median net tax-supported debt averaged 2.3%, never exhibiting growth or declines of more than two tenths of a percentage point year-over-year.

FIGURE 3  
Median Net Tax-Supported Debt as Percent of Personal Income for 50 States



FIGURE 4  
**Personal Income Year-Over-Year % Change**



### 2011 State Debt Outlook: Debt Issuance Expected to Reverse Growth Trend

State debt issuance in 2011 is expected to decrease to below the record levels of 2009 and 2010. While most states continue to experience budgetary strain, they appear to be avoiding deficit financings or bond issuances for debt restructuring to balance budgets. Most states will likely turn to revenue increases, through taxes and fees, and spending cuts to resolve their budget gaps. States will continue to use long-term debt to finance capital needs due to reduced options to cash fund projects amid weak revenue growth and continued budget reductions. However, we expect lower overall issuance for capital purposes in 2011 due to higher capital costs. The expiration of the BAB program will also have a negative impact on debt issuance for the 2011 calendar year, as states will no longer be able to capitalize on these popular structures to lower overall cost of issuance.

Some states have exhausted the debt issuing capacity permitted by their debt policies. The majority of states have a debt capacity tool in place to monitor leverage. These policies typically measure debt capacity in terms of debt service as a percent of general fund revenues. As state revenues have declined, debt capacity has also declined. Overall, few states have included robust capital improvement projects in their proposed fiscal 2012 budgets which would necessitate debt issuance at levels seen over the previous years.

TABLE 1

## Net Tax-Supported Debt

Per Capita			Rating
1	Connecticut	\$5,236	Aa2
2	Massachusetts	\$4,711	Aa1
3	Hawaii	\$4,236	Aa2
4	New Jersey	\$3,940	Aa3
5	New York	\$3,149	Aa2
6	Delaware	\$2,676	Aaa
7	Washington	\$2,626	Aa1
8	California	\$2,542	A1
9	Illinois	\$2,383	A1
10	Rhode Island	\$2,191	Aa2
11	Oregon	\$2,006	Aa1
12	Kentucky	\$1,961	Aa2*
13	New Mexico	\$1,827	Aaa
14	Wisconsin	\$1,795	Aa2
15	Maryland	\$1,681	Aaa
16	Mississippi	\$1,534	Aa2
17	Louisiana	\$1,308	Aa2
18	Alaska	\$1,257	Aaa
19	Kansas	\$1,239	Aa1*
20	Utah	\$1,222	Aaa
21	West Virginia	\$1,221	Aa1
22	Minnesota	\$1,159	Aa1
23	Florida	\$1,150	Aa1
24	Georgia	\$1,103	Aaa
25	Pennsylvania	\$1,075	Aa1
26	Virginia	\$1,058	Aaa
27	Ohio	\$1,007	Aa1
28	Arizona	\$910	Aa3*
29	South Carolina	\$887	Aaa
30	Nevada	\$878	Aa2
31	Maine	\$865	Aa2
32	Alabama	\$856	Aa1
33	New Hampshire	\$812	Aa1
34	North Carolina	\$782	Aaa
35	Missouri	\$775	Aaa
36	Michigan	\$762	Aa2
37	Vermont	\$747	Aaa
38	Oklahoma	\$634	Aa2
39	Texas	\$612	Aaa
40	Colorado	\$524	Aa1*
41	Idaho	\$519	Aa1*
42	Indiana	\$471	Aaa*
43	Montana	\$371	Aa1
44	Arkansas	\$361	Aa1
45	Tennessee	\$345	Aaa
46	South Dakota	\$328	NGO**
47	North Dakota	\$315	Aa1*
48	Iowa	\$270	Aaa*
49	Wyoming	\$71	NGO**
50	Nebraska	\$13	NGO**
	MEAN:	\$1,408	
	MEDIAN:	\$1,066	
	Puerto Rico	\$10,474	A3***

\* Issuer Rating (No G.O. Debt)

\*\* No General Obligation Debt

\*\*\* This figure is not included in any totals, means, or median calculations but is provided for comparison

TABLE 2

## Net Tax-Supported Debt

As a % of 2009 Personal Income		
1	Hawaii	10.1%
2	Massachusetts	9.5%
3	Connecticut	9.5%
4	New Jersey	7.9%
5	Delaware	6.8%
6	New York	6.8%
7	Washington	6.2%
8	Kentucky	6.1%
9	California	6.0%
10	Illinois	5.7%
11	Oregon	5.6%
12	New Mexico	5.6%
13	Rhode Island	5.3%
14	Mississippi	5.1%
15	Wisconsin	4.8%
16	Utah	3.9%
17	West Virginia	3.8%
18	Maryland	3.5%
19	Louisiana	3.5%
20	Georgia	3.3%
21	Kansas	3.2%
22	Florida	3.0%
23	Alaska	3.0%
24	Ohio	2.8%
25	Minnesota	2.8%
26	Arizona	2.8%
27	South Carolina	2.7%
28	Pennsylvania	2.7%
29	Alabama	2.6%
30	Virginia	2.4%
31	Maine	2.4%
32	Nevada	2.3%
33	North Carolina	2.3%
34	Michigan	2.2%
35	Missouri	2.2%
36	Vermont	1.9%
37	New Hampshire	1.9%
38	Oklahoma	1.8%
39	Idaho	1.6%
40	Texas	1.6%
41	Indiana	1.4%
42	Colorado	1.3%
43	Arkansas	1.1%
44	Montana	1.1%
45	Tennessee	1.0%
46	South Dakota	0.9%
47	North Dakota	0.8%
48	Iowa	0.7%
49	Wyoming	0.1%
50	Nebraska	0.0%
	MEAN:	3.5%
	MEDIAN:	2.8%
	Puerto Rico	71.0%**

\*\* This figure is based on 2009 Personal Income. It is not included in any totals, means, or median calculations but is provided for comparison purposes only.

TABLE 3

## Total Net Tax Supported Debt (\$000's)

			Rating
1	California	\$94,715,065	A1
2	New York	\$61,650,419	Aa2
3	New Jersey	\$34,407,665	Aa3
4	Massachusetts	\$31,243,217	Aa1
5	Illinois	\$30,847,532	A1
6	Florida	\$21,472,900	Aa1
7	Connecticut	\$18,467,835	Aa2
8	Washington	\$17,712,354	Aa1
9	Texas	\$15,432,590	Aaa
10	Pennsylvania	\$13,578,800	Aa1
11	Ohio	\$11,610,654	Aa1
12	Georgia	\$10,933,325	Aaa
13	Wisconsin	\$10,174,263	Aa2
14	Maryland	\$9,646,600	Aaa
15	Kentucky	\$8,510,617	Aa2*
16	Virginia	\$8,413,741	Aaa
17	Oregon	\$7,734,585	Aa1
18	Michigan	\$7,566,087	Aa2
19	North Carolina	\$7,398,875	Aaa
20	Minnesota	\$6,131,243	Aa1
21	Arizona	\$6,075,976	Aa3*
22	Louisiana	\$5,925,270	Aa2
23	Hawaii	\$5,506,809	Aa2
24	Missouri	\$4,661,028	Aaa
25	Mississippi	\$4,540,516	Aa2
26	South Carolina	\$4,075,801	Aaa
27	Alabama	\$4,046,793	Aa1
28	New Mexico	\$3,716,821	Aaa
29	Kansas	\$3,520,236	Aa1*
30	Utah	\$3,457,853	Aaa
31	Indiana	\$3,033,441	Aaa*
32	Colorado	\$2,667,556	Aa1*
33	Delaware	\$2,385,363	Aaa
34	Oklahoma	\$2,360,633	Aa2
35	Nevada	\$2,330,446	Aa2
36	Rhode Island	\$2,315,623	Aa2
37	West Virginia	\$2,229,760	Aa1
38	Tennessee	\$2,183,779	Aaa
39	Maine	\$1,135,921	Aa2
40	New Hampshire	\$1,075,019	Aa1
41	Arkansas	\$1,051,074	Aa1
42	Alaska	\$891,300	Aaa
43	Iowa	\$817,123	Aaa*
44	Idaho	\$808,919	Aa1*
45	Vermont	\$464,695	Aaa
46	Montana	\$363,378	Aa1
47	South Dakota	\$269,369	NGO**
48	North Dakota	\$205,701	Aa1*
49	Wyoming	\$38,982	NGO**
50	Nebraska	\$23,181	NGO**
	Totals	\$ 499,826,733	
	MEAN:	\$9,996,535	
	MEDIAN:	\$4,308,159	
	Puerto Rico	\$41,553,000	A3***

\* Issuer Rating (No G.O. Debt)

\*\* No General Obligation Debt

\*\*\* This figure is not included in any totals, means, or median calculations but is provided for comparison

TABLE 4

## Gross Tax Supported Debt (\$000's)

			Gross to Net Ratio
1	California	\$103,060,316	1.09
2	New York	\$61,778,000	1.00
3	New Jersey	\$40,102,665	1.17
4	Illinois	\$32,741,532	1.06
5	Florida	\$32,525,900	1.51
6	Massachusetts	\$32,435,132	1.04
7	Connecticut	\$26,291,590	1.42
8	Washington	\$26,192,279	1.48
9	Texas	\$24,059,432	1.56
10	Michigan	\$23,016,481	3.04
11	Minnesota	\$20,437,073	3.33
12	Pennsylvania	\$18,836,800	1.39
13	Ohio	\$17,012,638	1.47
14	Oregon	\$16,071,028	2.08
15	Virginia	\$12,433,425	1.48
16	Wisconsin	\$11,700,808	1.15
17	Colorado	\$11,494,032	4.31
18	Kentucky	\$11,456,037	1.35
19	Georgia	\$10,933,325	1.00
20	Maryland	\$9,646,600	1.00
21	Alabama	\$8,210,228	2.03
22	Utah	\$7,943,479	2.30
23	Hawaii	\$7,635,932	1.39
24	North Carolina	\$7,398,875	1.00
25	Louisiana	\$7,128,350	1.20
26	Arizona	\$6,230,381	1.03
27	Tennessee	\$5,701,194	2.61
28	Maine	\$5,229,856	4.60
29	New Mexico	\$5,006,821	1.35
30	Indiana	\$4,869,952	1.61
31	Missouri	\$4,729,643	1.01
32	Mississippi	\$4,540,516	1.00
33	South Carolina	\$4,522,512	1.11
34	Arkansas	\$4,494,472	4.28
35	West Virginia	\$4,183,453	1.88
36	Kansas	\$3,893,741	1.11
37	Delaware	\$3,803,855	1.59
38	Alaska	\$3,758,000	4.22
39	Rhode Island	\$3,512,381	1.52
40	Iowa	\$3,260,096	3.99
41	Nevada	\$2,942,261	1.26
42	New Hampshire	\$2,511,637	2.34
43	Oklahoma	\$2,384,611	1.01
44	Idaho	\$1,646,589	2.04
45	Vermont	\$1,452,165	3.12
46	North Dakota	\$1,386,026	6.74
47	Montana	\$569,146	1.57
48	South Dakota	\$478,852	1.78
49	Wyoming	\$38,982	1.00
50	Nebraska	\$37,586	1.62
	Totals	\$661,726,685	
	MEAN:	13,234,534	1.92
	MEDIAN:	6,679,366	1.48
	Puerto Rico	\$44,688,990**	1.12

\*\* This figure is not included in any totals, means, or median calculations but is provided for comparison purposes only.

TABLE 5

## Net Tax-Supported Debt as % of Gross State Domestic Product\*

2010		NTSD to State GDP Ratio	2011		NTSD to State GDP Ratio
1	Massachusetts	8.32%	1	Massachusetts	8.62%
2	Hawaii	8.11%	2	Hawaii	8.38%
3	Connecticut	7.91%	3	Connecticut	8.38%
4	New Jersey	6.73%	4	New Jersey	7.19%
5	New York	5.35%	5	New York	5.68%
6	Mississippi	4.75%	6	Kentucky	5.51%
7	Rhode Island	4.73%	7	Washington	5.27%
8	California	4.73%	8	California	5.03%
9	Kentucky	4.65%	9	New Mexico	5.00%
10	Washington	4.60%	10	Illinois	4.97%
11	Oregon	4.40%	11	Rhode Island	4.86%
12	Wisconsin	4.05%	12	Mississippi	4.78%
13	Illinois	3.78%	13	Oregon	4.68%
14	Delaware	3.56%	14	Wisconsin	4.26%
15	New Mexico	3.52%	15	Delaware	4.02%
16	Maryland	3.35%	16	West Virginia	3.58%
17	West Virginia	3.18%	17	Maryland	3.40%
18	Florida	2.80%	18	Utah	3.07%
19	Georgia	2.77%	19	Florida	2.94%
20	South Carolina	2.68%	20	Kansas	2.85%
21	Kansas	2.62%	21	Louisiana	2.84%
22	Louisiana	2.57%	22	Georgia	2.78%
23	Utah	2.43%	23	South Carolina	2.58%
24	Ohio	2.28%	24	Ohio	2.49%
25	Alabama	2.20%	25	Pennsylvania	2.48%
26	Pennsylvania	2.14%	26	Alabama	2.40%
27	Minnesota	2.08%	27	Arizona	2.39%
28	Maine	2.02%	28	Minnesota	2.38%
29	Missouri	1.96%	29	Maine	2.24%
30	Alaska	1.96%	30	Michigan	2.10%
31	Arizona	1.95%	31	Virginia	2.07%
32	Michigan	1.95%	32	Missouri	1.97%
33	Nevada	1.86%	33	Alaska	1.91%
34	North Carolina	1.79%	34	Nevada	1.86%
35	Virginia	1.78%	35	North Carolina	1.85%
36	Vermont	1.73%	36	Vermont	1.85%
37	Idaho	1.58%	37	New Hampshire	1.82%
38	New Hampshire	1.47%	38	Oklahoma	1.53%
39	Oklahoma	1.43%	39	Idaho	1.51%
40	Indiana	1.24%	40	Texas	1.35%
41	Texas	1.05%	41	Indiana	1.18%
42	Montana	0.97%	42	Colorado	1.06%
43	Arkansas	0.92%	43	Arkansas	1.04%
44	Colorado	0.81%	44	Montana	1.02%
45	Tennessee	0.79%	45	Tennessee	0.90%
46	North Dakota	0.68%	46	South Dakota	0.69%
47	South Dakota	0.30%	47	North Dakota	0.65%
48	Iowa	0.16%	48	Iowa	0.60%
49	Wyoming	0.12%	49	Wyoming	0.10%
50	Nebraska	0.03%	50	Nebraska	0.03%
	MEAN:	2.78%		MEAN:	4.48%
	MEDIAN:	2.17%		MEDIAN:	3.94%

\* State GDP numbers have a 1-year lag

TABLE 6

## Net Tax-Supported Debt as a Percentage of Personal Income

	1991	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Alabama	2.7	1.7	1.5	2.3	2.2	2.2	2.2	2.0	2.0	2.2	2.0	2.8	2.6	2.4	2.6
Alaska	3.2	0.5	0.0	1.0	0.4	0.4	0.3	3.0	2.8	2.6	2.7	2.4	2.2	3.2	3.0
Arizona	1.4	1.9	1.9	1.6	1.6	1.9	2.1	2.3	2.6	2.2	2.0	2.0	2.5	2.3	2.8
Arkansas	0.3	0.8	0.6	0.9	1.2	1.2	1.4	1.8	1.6	1.6	1.4	1.7	1.3	1.0	1.1
California	1.5	2.6	2.6	2.4	2.5	2.5	2.5	3.2	4.7	4.6	4.4	4.3	4.4	5.6	6.0
Colorado	0.4	0.1	0.0	0.03	0.4	0.7	0.9	0.9	1.0	0.9	0.9	0.8	0.8	1.0	1.3
Connecticut	6.5	8.7	8.7	8.1	8.0	8.0	8.2	8.4	8.5	8.0	7.8	7.3	8.2	8.7	9.5
Delaware	7.0	5.9	5.7	5.2	5.5	5.3	5.0	5.6	5.5	5.3	5.5	5.2	5.4	6.2	6.8
Florida	2.7	3.4	3.5	3.4	3.3	3.4	3.5	3.5	3.4	3.2	3.1	2.8	2.9	2.9	3.0
Georgia	2.0	2.9	2.9	2.8	2.6	2.9	2.9	2.9	2.8	2.7	3.0	3.0	3.0	3.3	3.3
Hawaii	10.4	10.7	11.2	11.6	11.0	10.4	10.9	10.4	11.1	12.1	10.6	9.9	9.4	9.9	10.1
Idaho	0.4	0.2	0.4	0.4	0.3	0.4	0.3	0.5	0.6	0.6	0.6	1.2	1.6	1.7	1.6
Illinois	2.7	2.7	2.6	2.6	2.7	2.8	3.2	5.8	6.2	5.9	5.5	5.2	4.6	4.4	5.7
Indiana	0.6	0.8	0.9	0.9	1.1	1.1	1.1	1.3	1.4	1.6	2.1	1.5	1.5	1.5	1.4
Iowa	0.3	0.5	0.5	0.4	0.4	0.6	0.6	0.5	0.5	0.4	0.3	0.3	0.2	0.2	0.7
Kansas	0.6	1.7	2.0	2.4	3.1	3.0	3.0	3.3	4.0	3.8	3.7	3.5	3.2	3.0	3.2
Kentucky	5.8	3.9	3.7	3.5	4.4	4.3	4.4	4.4	4.0	4.5	4.3	4.7	4.8	5.4	6.1
Louisiana	7.4	2.6	2.6	2.4	2.5	2.4	2.7	2.6	2.4	3.1	4.9	4.3	3.3	3.6	3.5
Maine	2.3	1.9	1.9	2.1	2.0	1.9	1.8	1.8	2.2	2.0	1.9	1.9	2.2	2.2	2.4
Maryland	3.4	3.1	3.3	3.0	2.6	2.6	2.8	3.0	2.9	3.0	2.8	3.0	3.3	3.4	3.5
Massachusetts	8.1	7.8	7.8	8.0	8.5	8.5	8.5	8.5	8.5	9.8	9.4	9.8	8.9	9.2	9.5
Michigan	1.1	1.6	1.7	1.5	1.6	1.5	1.8	2.2	2.2	2.1	2.2	2.2	2.2	2.1	2.2
Minnesota	2.3	1.9	2.0	1.9	1.8	1.8	1.9	2.0	2.0	2.1	2.2	2.3	2.1	2.4	2.8
Mississippi	2.0	3.5	4.4	4.7	4.6	4.7	5.6	5.2	4.8	4.8	4.9	4.8	5.2	5.0	5.1
Missouri	1.2	1.0	1.0	1.0	1.1	1.3	1.3	1.6	1.5	1.6	1.9	2.1	2.0	2.2	2.2
Montana	2.5	1.4	1.7	1.7	1.7	1.6	1.4	1.3	1.1	1.4	1.5	1.2	1.2	1.1	1.1
Nebraska	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0
Nevada	2.0	1.6	1.8	1.8	1.8	1.7	1.4	2.0	2.0	2.2	1.7	2.0	2.2	2.3	2.3
New Hampshire	2.2	2.4	2.3	2.0	1.5	1.5	1.4	1.5	1.3	1.4	1.3	1.3	1.3	1.6	1.9
New Jersey	2.3	5.1	5.2	5.3	5.5	5.6	5.5	5.9	7.4	7.9	7.6	7.5	7.3	7.2	7.9
New Mexico	2.1	1.9	2.6	3.1	4.0	4.0	3.7	4.1	5.3	4.7	5.3	4.8	4.6	4.4	5.6
New York	4.7	6.5	6.6	6.4	6.2	5.9	5.9	6.7	7.2	6.7	6.7	6.3	6.3	6.5	6.8
North Carolina	0.5	1.0	1.2	1.4	1.4	1.4	1.6	2.0	2.5	2.8	2.4	2.8	2.5	2.3	2.3
North Dakota	1.3	0.8	0.6	0.7	0.9	0.9	0.9	0.9	0.6	1.2	1.0	1.1	1.0	0.8	0.8
Ohio	2.5	2.5	2.7	2.7	2.6	2.6	2.6	2.7	2.9	2.9	3.0	2.9	2.8	2.6	2.8
Oklahoma	0.6	0.8	1.2	1.3	1.4	1.3	1.2	1.2	1.2	1.4	1.5	1.5	1.5	1.6	1.8
Oregon	1.7	1.2	1.2	1.3	1.6	1.5	1.6	4.5	4.7	4.5	4.6	5.0	4.6	5.2	5.6
Pennsylvania	2.4	2.0	2.3	2.2	2.2	2.3	2.3	2.2	2.3	2.3	2.4	2.4	2.5	2.4	2.7
Rhode Island	4.0	6.6	6.5	6.2	5.3	5.2	5.0	4.4	4.3	4.1	4.6	4.7	4.5	5.2	5.3
South Carolina	1.9	1.6	1.6	1.6	1.8	2.5	2.4	2.4	2.2	2.5	2.3	3.3	2.9	2.9	2.7
South Dakota	2.4	1.5	1.5	1.5	1.2	0.9	0.7	0.9	0.9	0.7	0.8	0.9	0.8	0.4	0.9
Tennessee	0.7	0.9	1.0	1.0	1.2	0.9	0.8	0.8	0.7	0.8	0.7	0.7	0.7	0.9	1.0
Texas	1.2	1.4	1.3	1.2	1.0	0.9	0.9	0.8	1.0	1.0	1.3	1.4	1.4	1.4	1.6
Utah	1.5	3.1	3.6	3.3	2.8	3.0	2.9	3.5	3.2	2.7	2.3	1.9	1.5	3.2	3.9
Vermont	3.9	4.2	4.2	3.8	3.3	3.0	3.0	2.5	2.3	2.2	2.1	2.0	1.8	1.8	1.9
Virginia	1.2	2.1	2.0	2.1	1.9	1.8	1.7	1.7	1.8	1.7	1.8	1.9	1.9	2.1	2.4
Washington	4.4	4.8	4.6	4.6	4.4	4.4	4.8	4.9	4.9	4.9	5.1	5.1	5.1	5.3	6.2
West Virginia	5.2	2.8	3.4	3.3	4.2	4.0	4.1	3.6	4.6	4.4	3.9	3.9	3.6	3.5	3.8
Wisconsin	2.5	2.8	2.8	2.7	3.2	3.0	3.3	4.5	4.7	4.3	4.2	4.1	4.0	4.6	4.8
Wyoming	0.0	0.7	1.0	1.0	1.0	1.4	0.9	0.8	0.7	0.3	0.3	0.2	0.2	0.2	0.1
Median	2.2	1.9	2.0	2.2	2.1	2.3	2.2	2.5	2.5	2.5	2.4	2.6	2.5	2.5	2.8

## Moody's Related Research

### Special Comments:

- » [Combining Debt and Pension Liabilities of U.S. States Enhances Comparability, March 2011 \(131552\)](#)
- » [Annual U.S. State Outlook: 2011, March 2011 \(131366\)](#)
- » [2010 State Debt Medians Report, May 2010 \(125068\)](#)

### Rating Methodology:

- » [Moody's State Rating Methodology, November 2004 \(89335\)](#)

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## **APPENDIX B**



## **Fitch Rates Vermont's \$25MM GOs 'AAA'; Outlook Stable** Ratings

12 Nov 2010 4:36 PM (EST)

Fitch Ratings-New York-12 November 2010: Fitch Ratings assigns an 'AAA' rating to the following State of Vermont general obligation (GO) bonds:

--\$25 million 2010 series E (Vermont Citizen Bonds).

The bonds are expected to sell via negotiation on Nov. 16, 2010.

In addition, Fitch affirms the 'AAA' rating on the state's outstanding GO bonds.

The Rating Outlook is Stable.

### RATING RATIONALE:

--Vermont's debt profile reflects nearly exclusive use of GO debt and amortizes rapidly. Debt ratios have declined in recent years and are now low; affordability planning is employed.

--The state's revenue stream is diverse, and reserve funds remain funded at statutory maximum levels.

--Vermont's economy has diversified but remains narrow and somewhat vulnerable to the cyclical manufacturing sector.

### KEY RATING DRIVERS:

--Maintenance of fiscal balance and conservative management practices.

--Maintenance of a low to moderate debt burden.

### SECURITY:

The bonds are general obligations of the State of Vermont and secured by the full faith and credit of the state pledged.

### CREDIT SUMMARY:

Vermont's 'AAA' rating reflects its low debt burden which is maintained through adherence to debt affordability guidelines, conservative financial management, and sound reserves. Outstanding debt, which is nearly entirely GO and matures rapidly, has declined from previously moderate levels. The state budgets conservatively, and its diverse revenue stream includes a state property tax for education. Reserves in each major operating fund as of the close of fiscal 2010 were fully funded at 5% of prior-year appropriations. The state's enacted budget for fiscal 2011 contemplates maintaining the reserves at their maximum statutory levels; the education fund reserve will be funded slightly below the 5% level but still within the maximum statutory range of 3.5% to 5%. The relatively narrow state economy is supported by larger than average manufacturing (albeit less so than in the past), tourism, and health and educational services sector employment. Vermont has a relatively small income base with an older and well-educated population.

Vermont lost less than 1% of its jobs during the recession earlier this decade; by 2004 it had exceeded its pre-recession annual employment peak, in sharp contrast to the steep and protracted recession of the early 1990s. Employment growth since 2005 has lagged the nation, and declines registered in 2008 and 2009 were less severe than those experienced nationally. September 2010 data indicate state employment continues to contract as national employment has returned to slight growth. Manufacturing sector employment, led by an IBM facility near Burlington, still exceeds the national level on a percentage basis, though both employment and personal income reliance on this sector have dropped in recent years. State unemployment has historically been below the national level and Vermont's September 2010 unemployment rate of 5.8% is well below the national rate of 9.6% for the same month. Vermont has been challenged by the aging of its population; the median age of 41.5 years is well above the national 36.9 years and is exceeded only by Maine. Per capita personal income in 2009 totaled \$39,021, ranking Vermont 22nd among the states at 98.5% of the national level.

Conservative practices and well-stocked reserves sustained healthy finances during the recession earlier this decade, with

the state using some reserves and reducing appropriations in fiscals 2002 and 2003 when revenues softened. Operations were subsequently favorable, and reserves were restored to their maximum level by the end of fiscal 2004. Surpluses in fiscals 2004 through 2008 were largely used for reserves, additional pension contributions, property tax relief, and carryovers into ensuing fiscal years. Fiscal 2009 general fund revenue expectations were reduced several times and ultimately declined 8% from fiscal 2008 figures. Personal income tax receipts were down by a significant 14.8% while corporate income taxes and sales and use tax receipts were down by 11.3% and 5.1%, respectively. Measures to maintain balance during fiscal 2009 were promptly implemented and Vermont ended with an operating surplus of approximately \$15 million.

Fiscal 2010 revenue expectations were revised downward early in the fiscal year, and \$28 million in spending cuts, balance transfers and application of a portion of the prior year's surplus were employed to maintain balance. Subsequent revisions resulted in slight increases to revenue expectations, and preliminary results indicate fiscal 2010 closed with a slight operating surplus. Actual general fund revenues were slightly ahead of January 2010 forecast levels, falling 5.8% from fiscal 2009. Personal income tax receipts were 6.1% below fiscal 2009 levels, while corporate income taxes and sales and use tax receipts were down by 5.1% and 3.1%, respectively. The enacted general fund executive budget for fiscal 2011 addressed a \$154 million budget gap, primarily through human service agency cuts, \$38 million in cuts across other agencies, \$15 million in savings generated through a series of pension reforms, and through an increase in the hospital provider tax. The budget maintains the state's three reserve funds within their respective maximum statutory levels. Through October 2010, fiscal 2011 revenue performance is running ahead of budgeted expectations.

Vermont's tax-supported debt is nearly exclusively GO, and it amortizes rapidly. The state's debt burden is low. As of June 30, 2010, net tax-supported debt totaled \$464 million, equaling \$747 per capita and 1.9% of 2009 personal income. Debt has declined since the 1990s as a result of debt affordability recommendations, and while annual issuance levels are expected to grow, debt ratios are expected to remain low to moderate. Vermont continues to appropriate required contributions to its pension systems although funded ratios have recently declined in part due to asset valuation declines.

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Additional information is available at '[www.fitchratings.com](http://www.fitchratings.com)'.

In addition to the sources of information identified in the Tax-Supported Rating Criteria, this action was additionally informed by information from the Financial Advisor and IHS Global Insight.

Applicable Criteria and Related Research:

--'Tax-Supported Rating Criteria', Aug. 16, 2010.  
--'U.S. State Government Tax-Supported Rating Criteria', Oct. 8, 2010.

For information on Build America Bonds, visit [www.fitchratings.com/BABs](http://www.fitchratings.com/BABs).

**Applicable Criteria and Related Research:**

Tax-Supported Rating Criteria  
U.S. State Government Tax-Supported Rating Criteria

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## **APPENDIX C**

**New Issue: MOODY'S ASSIGNS Aaa RATING TO THE STATE OF VERMONT'S \$25 MILLION  
GENERAL OBLIGATION BONDS 2010 SERIES E**

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Global Credit Research - 16 Nov 2010

**OUTLOOK IS STABLE**

State  
VT

**Moody's Rating**

<b>ISSUE</b>	<b>RATING</b>
General Obligation Bonds 2010 Series E (Vermont Citizens Bonds)	Aaa
<b>Sale Amount</b>	\$25,000,000
<b>Expected Sale Date</b>	11/16/10
<b>Rating Description</b>	General Obligation

**Opinion**

NEW YORK, Nov 16, 2010 -- Moody's Investors Service has assigned a Aaa rating and stable outlook to the State of Vermont's \$25 million General Obligation Bonds 2010 Series E. Proceeds of the sale will be used to fund various capital projects around the state. The outlook is stable.

**RATINGS RATIONALE**

Moody's highest rating level reflects Vermont's strong history of financial management, which includes conservative fiscal policies and the maintenance of healthy reserve balances that continue to provide a cushion against further revenue declines; and manageable debt profile that reflects the state's focused efforts to reduce its debt ratios and maintain well-funded pension systems. The state's credit outlook is stable.

Credit strengths are:

- \*History of strong financial management and fiscal policies indicated by conservative budgeting practices.
- \*History of prompt action to reduce spending following revenue weakening.
- \*Maintenance of budget reserve levels at statutory limit.
- \*Steady progress in reducing previously high debt ratios and maintaining an affordable debt profile.

Credit challenges are:

- \*Continuing budget pressure in the next fiscal year as a result of the expiration of ARRA funding
- \*Decline in job growth.
- \*Potential service pressures due to a population that is aging at a relatively rapid pace.
- \*Below average per capita income levels.

**FY 2010 RESULTS IN MODEST BUDGET SURPLUS**

Like most other states, Vermont continued to experience revenue underperformance during fiscal 2010, resulting in a 5.9% year-over-year decline in general fund. However the state did realize a modest operating surplus of \$2.5 million (less than 1% of full year revenues) at the end of fiscal 2010, the result of better than expected collections in corporate income tax receipts, sales and use tax receipts, and meals and rooms tax receipts. Personal income tax receipts lagged in growth, coming in \$6 million below the budgeted target. During the course of fiscal 2010 the state faced a sizeable cumulative budget gap of \$343 million (31% of general fund revenues). In order to solve the budget shortfalls the state used a mix of budget cuts (\$77 million), revenue enhancements (\$26.2 million), and federal fiscal stimulus funds (\$192.2 million). The state also tapped \$16 million in caseload reserve funds and rescinded \$28 million from agencies.

**ENACTED FY 2011 BUDGET CLOSED SHORTFALL OF \$267 MILLION**

The January 2010 economic and revenue forecast showed the state facing a budget gap in fiscal 2011 of \$267 million. The state took action to close \$154 million of the gap primarily with recurring expenditure cuts and savings reached through a modification of the teachers retirement system and cost effective labor contracts. The remaining gap was closed by use of ARRA funding. As in other states, Vermont has greatly benefited from the federal fiscal stimulus package, which helped the state mitigate budget shortfalls during fiscal 2009, fiscal 2010 and the current fiscal 2011. Vermont has approximately \$113 million of federal funds built into the fiscal 2011 budget (11% of fiscal 2011 sources). The federal funds were used primarily to backfill cuts in health and human services. The state's out-year projections show continued structural imbalance as a result of increased spending pressures and the elimination of the federal stimulus dollars. Vermont is currently projecting a structural budget gap of between \$110-\$120 million for fiscal 2012, which at the higher end could equal 10% of operating revenues projected to be available for fiscal 2012.

## FISCAL UNCERTAINTY BALANCED BY STATE'S TREND OF PROACTIVE FINANCIAL MANAGEMENT

While Vermont has taken swift actions to address budget deficits, it still faces substantial challenges in its out-year budgets. As in many states, persistent economic weakness will continue to present financial threats for the state. The Governor took steps early on to reduce out-year gaps such as negotiating labor contracts for the next two years which will reduce wages by 3%. The state has also increased the frequency of its revenue forecasting, which traditionally was performed on a semi-annual basis. From January 2008 to January 2010 the state published quarterly economic and revenue forecasting which has enabled them to identify and provide solutions for any sudden revenue declines. Moody's expects that, like other Aaa-rated states, Vermont will continue its trend of conservative financial management and aggressive approach to dealing with budget shortfalls to manage its current fiscal challenges.

## BUDGET RESERVE LEVELS MAINTAINED AT STATUTORY FUNDING LEVELS OF 5%

Vermont has so far avoided using any of its fully funded budget stabilization reserve funds (BSR). At the end of fiscal 2010, Vermont's General Fund BSR was \$57.3 million which reflects the statutorily required funding level of 5% of prior year budgetary appropriations, a level that has been maintained since 2004. Vermont also maintains a fully funded Transportation Fund BSR, also at 5% of prior year appropriations, and in its Education Fund at the statutory required level of 3.5% to 5% of prior year expenditures, excluding General Fund transfers. Vermont expects to maintain its budget stabilization reserves at the statutory level through the end of fiscal 2011.

## UNEMPLOYMENT RATE HAS DECLINED

Continuous job growth in education and health services, Vermont's largest employment sector, has helped offset persistent weakness in other areas of the economy, primarily manufacturing and construction. Vermont never fully recovered manufacturing job losses from the prior economic recession in 2001-2002. For 2009, Vermont's average annual year-over-year job growth declined by 3.3%, lower than the national employment decline of 4.3%. 2010 employment growth is expected to decline by 0.4%. The state's unemployment level, which has historically been low, rose rapidly during 2009 but has stabilized at 5.8% (September 2010) versus 9.6% for the nation. The state's largest private employer IBM has begun hiring which is also positive for the state's economy.

## DEBT RATIOS CONTINUE TO DECLINE

Vermont's debt levels have declined considerably over the past decade and are now below average relative to Moody's 50-state median, on both a per capita and personal income basis. Debt per capita of \$709, compared to the state median of \$936, ranked Vermont 36th among the fifty states in Moody's 2010 state debt medians. Debt to total personal income of 1.8%, compared to the 2.5% state median also ranked Vermont 36th. Both ratios represent steady improvement in Vermont's debt profile, reflecting efforts by the state's Capital Debt Affordability Advisory Committee which oversees long-term capital planning for the state.

Vermont's overall pension funding levels have historically been strong relative to other states. Due to the broad based market losses experienced in 2008 the state's two pension systems have seen a decline in funding ratios particularly in 2009. As of June 30, 2010 the state employees' system had a 81.2% funding ratio, up from the 78.9% funded ratio reported June 30, 2009. The teachers' system has a funded ratio of 66.5% on June 30, 2010, up from 65.4% reported June 30, 2009. The state continues to be committed to the full annual funding requirements. Vermont's assessment of its other post employment benefit (OPEB) liability reflects \$962.6 million for state employees and \$703 million for teachers. The state has not decided on a funding mechanism for the OPEB liabilities, however they have set up an irrevocable trust fund to initially be funded with excess revenues from Medicaid part D reimbursements. As of June 30, 2009 this trust fund held \$5.7 million of assets.

## Outlook

Moody's Investors Service considers the quality of information available on the credit satisfactory for the purposes of assigning a credit rating. The outlook for Vermont's general obligation debt is stable. The state faces significant pressure to achieve structural budget balance in the coming fiscal years. Moody's expects that the state will continue its trend of proactive and conservative fiscal management in light of declining revenues and increasing expenditures. We believe that Vermont will continue to demonstrate the willingness and ability to respond with budget adjustments as needed to maintain budget balance.

What could make the rating go - DOWN

\*A break from the state's history of conservative fiscal management.

\*Emergence of ongoing structurally imbalanced budgets.

\*Depletion of budget reserves without swift replenishment.

\*Liquidity strain resulting in multiyear cash flow borrowing.

The principal methodology used in this rating was Moody's State Rating Methodology published in November 2004.

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Information sources used to prepare the credit rating are the following: parties involved in the ratings, parties not involved in the ratings, and public information.

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## **APPENDIX D**

## Vermont; General Obligation

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# Vermont; General Obligation

## Credit Profile

Vermont GO

*Long Term Rating*

AA+/Stable

Affirmed

## Rationale

Standard & Poor's Ratings Services affirmed its 'AA+' rating, and stable outlook, on Vermont's general obligation (GO) bonds outstanding.

The ratings reflect our opinion of the state's:

- Strong financial management that has helped it maintain a good financial position in an environment of declining revenue; and
- Rapid GO debt amortization.

The state's GO bonds are secured by the state's full faith and credit pledge.

Vermont, with a 2010 population estimate of 625,000, is in northern New England, bordered by Canada to the north, and the U.S. states of New York, Massachusetts, and New Hampshire to the west, south, and east.

The fiscal 2011 budget, as enacted, closed an estimated \$153 million budget gap (approximately 14% of revenues), and officials project the three stabilization reserves for the general fund, transportation fund, and education fund will end the year at fully funded 5% levels. In addition to the stabilization funds, officials project that the general fund will end the year with an additional \$27 million balance that will be carried over into fiscal 2012, and the education fund will carry over about \$4.5 million into fiscal 2012. The enacted 2011 budget closed the projected gap primarily through reductions in human service appropriations, reductions in pension appropriations due to changes made to the teachers' pension system, and a \$38 million expense reduction bill. The latest consensus revenue forecast was done in January 2011, which resulted in a 6.9% increase in the revenue projections for the general fund. The 2011 budget did not rely on a projected Federal Medical Assistance Percentage extension to fund recurring expenditures, and will use the approved funding for one-time uses.

The governor's proposed fiscal 2012 budget projects the closure of a \$176 million budget gap without the use of budget stabilization reserves or broad-based tax increases. The budget contains \$27 million of additional revenues from the most recent revenue forecast and \$83 million of general fund reductions. The reductions include a \$23 million decrease in the general fund transfer to the education fund and \$12 million of savings through changes to contracts, health insurance, and retirement benefits.

Officials project that the state's next debt issuance will be in fall 2011 of about \$90 million.

Based on the analytical factors we evaluate for states, on a scale of '1' (strongest) to '4' (weakest), we have assigned a composite score of '1.7'.

## Outlook

The stable outlook reflects Standard & Poor's expectation that Vermont's prudent financial and debt management practices will allow it to maintain what we view as a sound financial position. We will continue to monitor the state's ability to maintain its financial position in the current environment of potential revenue pressures.

## Government Framework

Vermont does not have a constitutional or statutory requirement to enact or maintain a balanced budget, but it has consistently maintained sound finances. In our view, the state has significant flexibility to increase the rate and base of its major tax revenues, which include income taxes, sales taxes, and a statewide property tax that funds the state's support of local education. We view the state's revenue sources as diverse. Voter initiatives cannot affect the state. Vermont maintains the ability to adjust disbursements in order to maintain sufficient liquidity. Debt service can be paid without a budget, but there is no other legal priority for debt.

### Revenue structure

Vermont's tax structure is broad, and its revenue sources are diverse across several operating funds. The general fund relies on unrestricted revenues from personal and corporate income, sales and use, and meal taxes. The personal income tax generated \$526.6 million in fiscal 2010, or 48% of total general fund revenues, which was a 5.1% decline from fiscal 2009; this tax also declined from 2008 to 2009. The next largest sources of general fund revenue in fiscal 2010 were:

- Sales and use (\$209.1 million or 20% of total general fund revenues), which declined 2% from 2009 and 5% from 2008 to 2009; and
- Meals and rooms (\$118.5 million or 11%), which increased slightly in both fiscals 2009 and 2010.

The education fund relies primarily on a statewide property tax (66% of 2010 education fund revenues plus transfer from the general fund), and an appropriation from the general fund (about 24%). The education fund budget stabilization fund was \$3.1 million at the end of fiscal 2010.

The transportation fund relies primarily on federal-match grant revenues, a motor vehicle license fee, and a motor fuel tax. The transportation budget stabilization fund ended fiscal 2010 with an \$11.3 million balance.

On a scale of '1' (strongest) to '4' (weakest), we have assigned a '1.6' to Vermont's government framework.

## Financial Management

### Financial Management Assessment: 'Strong'

Standard & Poor's considers Vermont's financial management practices "strong" under its FMA methodology, indicating financial practices are strong, well embedded, and likely sustainable.

Much of Vermont's debt and financial management practices are embedded in state statute. These, along with internally developed policies, guide the state's long-term budget and capital planning, debt management, and investing practices.

The state has a well-established consensus revenue estimating process. According to statute, the joint fiscal office

and administration provide their respective revenue estimates for the general, transportation, and federal funds for the current and next succeeding fiscal year to the Vermont Emergency Board.

Vermont law also requires a long-term capital plan. The governor submits a capital budget annually to the General Assembly based on debt management provisions outlined by the state's capital debt affordability advisory committee. The committee's estimate is nonbinding, but the state legislature has never authorized new long-term GO debt in excess of the committee's estimated amount. The state has formal debt management policies, including a statutory debt affordability analysis developed by the capital debt affordability advisory committee that the state integrates into the operating budget development process and updates at least annually. Vermont has not entered into any interest rate swaps and does not have an adopted swap management policy. Statutory restrictions and adopted administrative policies govern investment management, and the office of the state treasurer monitors compliance.

## Budget Management Framework

The state has multiple tools to assist financial management. Vermont monitors revenues and publishes results monthly; and the emergency board meets at least twice annually, in July and January, to evaluate the revenue forecast and make adjustments, if necessary. The state forecasts also include Medicaid revenues and spending. These consensus forecasting meetings can be convened more frequently, and have been held quarterly for about the past two years, due to the recession and the potential impact on revenues and expenditures. The emergency board includes the governor and the legislative chairs of the house and senate fiscal appropriations committees. The forecasting process includes traditional economic and revenue forecasting, which the state performs with the assistance of outside economists, for the current and next succeeding fiscal year, as well as a less detailed forecast for the next eight years. The state also forecasts Medicaid revenues and spending.

The governor has statutory authorization to adjust the budget within certain revenue and expenditure change limits when the Vermont Legislature is not in session. Vermont maintains stabilization reserve funds at statutory levels to reduce their effect on annual revenue variations. In 1993, the state created separate budget stabilization reserves within the general and transportation funds. The amount in each of these reserves is not to exceed 5% of previous-year appropriations. The state created an education fund budget stabilization reserve in fiscal 1999 with provisions for slightly lower reserves at 3.5%-5.0% of expenditures. Vermont statute requires annual funding of such reserves.

On a scale of '1' (strongest) to '4' (weakest), we have assigned a '1.0' to Vermont's financial management.

## Economy

The state's population has recently grown more slowly than the nation as a whole; for 2000-2009, its population grew by 2.1% compared with the nation's 9.1%. State per capita personal income in 2009 was slightly below the nation, at 98% of the national level. Throughout the current recession, Vermont's unemployment rates have been better than national levels; the state's peak rate was 7.3% in May 2009, and the February 2011 rate dropped to 5.6%. The state's age dependency ratio was lower than that of the U.S., indicating a ratio of fewer children and elderly to each working-age adult, which we consider a positive factor.

IHS Global Insight projects 0.5% annual labor force growth over next decade, 42nd in the U.S., and projects that

this will be an impediment to long-term economic growth. The firm also projects 1.3% per year employment growth for 2011-2016, lagging the 1.8% U.S. growth, and ranking 45th in the country. However, the firm also projects that strong health care demand will positively influence that sector of the economy, which provides relatively more jobs in Vermont than in the nation as a whole.

The major private employers in the state include Fletcher Allen Health Care, the operator of the largest hospital in the state (about 6,700 employees) and IBM (about 5,000). The IBM plant manufactures computer chips for consumer electronics. Other sectors with more than 1,000 employees include retail, retail banking, manufacturing, higher education, health care, and tourism. In addition, the University of Vermont system employs more than 3,000.

On a scale of '1' (strongest) to '4' (weakest), we have assigned a '1.9' to Vermont's economy.

## Budgetary Performance

The state maintains separate budget stabilization funds in its general, transportation, and education funds that are available to offset undesignated fund deficits. The statutory maximum for the three stabilization reserves is 5% of the prior year budgetary appropriations, and the education stabilization fund also has a statutory minimum of 3.5% of the prior year appropriation. The three stabilization funds have been at their statutory maximums since fiscal 2007. The state pools the cash reserves for these major funds, which results in sufficient liquidity for operations during the fiscal year. Officials indicated that the state has not externally borrowed for liquidity since 2004.

General fund revenues were \$1.04 billion in fiscal 2010, which was a \$66 million decline from the prior year. However, the year ended with the budget stabilization reserves for the general, transportation, and education funds fully funded at their statutory maximum levels of 5% of the prior year's appropriations. The fiscal 2010 general fund revenue projection decreased revenues in July 2009 but then increased the projections in the next two quarterly meetings. Vermont achieved budget savings in fiscal 2010 through a wage reduction in its latest collective bargaining contract with its largest union. The internal service fund has an accumulated unreserved fund deficit of \$28.3 million, which is due to claim liabilities from when the Medicaid fund was altered under a waiver from the federal government. State officials project that the state will receive federal assistance in eliminating this deficit.

On a scale of '1' (strongest) to '4' (weakest), we have assigned a '1.3' to Vermont's budgetary performance.

## Debt And Liability Profile

### Debt

As of June 30, 2010, Vermont's tax-supported debt was about \$770 per capita, 2.0% of personal income, and 1.9% of gross state product. The fiscal 2010 tax-supported debt service was about 2.9% of general governmental expenditures. Vermont's debt portfolio is conservative, in our view, consisting of only fixed-rate debt and without any exposure to interest rate swaps. We consider the debt amortization to be rapid, with officials retiring more than 70% of GO debt over the next 10 years. The state has a debt affordability committee that annually recommends a maximum amount of debt issuance for the next fiscal year, and while the committee's recommendations are not binding, the state has consistently adhered to them. Debt service can be paid without a budget, but there is no other priority for the payment of debt before other general state expenditures.

## Pensions

Vermont maintains three statutory pension plans: the state teachers' retirement system (VSTRS), with about 10,500 active members; the state employees' retirement system (VSRS), which includes general state employees and state police and has about 7,800 active members; and the municipal employees' retirement system, with about 6,600 active members. The state appropriates funding for the first two systems; the municipal system is supported entirely by municipal employers and employees. The pension systems' funding ratios improved somewhat as of June 30, 2010. As of that date, the funded ratio for the combined teachers and state employee pension systems was 72.7%, with a \$1.01 billion unfunded actuarial accrued liability. The actual pension contributions in fiscals 2009 and 2010 were 98% and 101%, respectively, of the actuarial required contributions (ARCs) for VSTRS, and 87% and 84%, respectively, of the ARCs for VSRS.

Subsequent to the issuance of the most recent actuarial report, the state implemented pension changes that officials project reduced the VSTRS pension ARC for fiscal 2011 and future years. The primary changes were a longer eligibility period to qualify for normal retirement and an increase in the retirement contribution made by all teachers. After these changes, officials project that the ARC for fiscal 2011 was reduced by \$15.3 million to \$48.2 million. The other postemployment benefits (OPEB) ARC was also projected to be reduced by these changes.

## Other postemployment benefit liabilities

Vermont offers postemployment medical insurance, dental insurance, and life insurance benefits to retirees of the single-employer VSRS and the multiemployer VSTRS. The unfunded OPEB liability for VSRS as of June 30, 2010, was \$917.3 million, and \$703.8 million for VSTRS. The actuarial annual OPEB cost in fiscal 2010 was \$58.9 million for VSRS, of which the state paid 38% under pay-as-you-go funding. The VSTRS also uses pay-as-you-go funding, but the state does not break out the actual fiscal 2010 employer contribution, instead including it through the pension fund without an explicit appropriation. The actuarial annual OPEB cost for VSTRS in fiscal 2010 was \$60.3 million. Officials also project that benefits changes negotiated with the teachers' union will reduce the VSTRS OPEB cost by about \$15 million for fiscal 2011. The state has established an OPEB trust fund for VSRS, but has only deposited \$8 million in it, for a 1% actuarial asset funded ratio. The separate multiemployer Vermont Municipal Employees Health Benefit Fund for local government is administered by the state, but has no liability to the state, and is not included in our OPEB calculations.

On a scale of '1' (strongest) to '4' (weakest), we have assigned a '2.4' to Vermont's debt and liability profile.

## Related Criteria And Research

USPF Criteria: State Ratings Methodology, Jan. 3, 2011

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## **APPENDIX E**

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## VERMONT ECONOMIC OUTLOOK May 19, 2011

### The Forecast in Brief

- Like the rest of New England and following the same general path as the U.S. economy, the May 2011 Vermont forecast update for NEEP<sup>1</sup> finds the Vermont economy making measurable improvement towards restoring the economic ground the state lost during the “Great Recession.”
  - So far through March of 2011, the labor market data indicate that Vermont has recovered nearly one-third (30.9%) or 4,000 of the nearly 13,000 payroll jobs lost during the Great Recession.”
  - However, recovery progress is expected to remain at a historically slow pace, with the Vermont not transitioning to an actual labor market expansion until the 2<sup>nd</sup> quarter of calendar year 2013—a total of 15 quarters or nearly 4 full years after the state’s labor market hit bottom during the third quarter of calendar year 2009.
- Following in the footsteps of most recent NEEP forecast updates, the revised May 2011 forecast calls for most key macro-variables to regain a more normal pace as the forecast unfolds.
  - Although the calendar year 2011 performance of most macro variables is expected to be positive, increases in payroll jobs and output are expected to be only about 2/3 of their respective historical averages
  - This is traceable to the recent run-up in commodity prices (particularly energy prices), which have pushed normal rates of increase in the state’s macro variables out into calendar year 2012.
  - For payroll jobs, the revised May NEEP forecast for Vermont indicates that payroll job additions will remain at subpar levels until as late as mid-calendar year 2013.
- Looking at other key macro indicators for Vermont, the forecast expects a similar profiled but somewhat muted recovery/expansion path for real output (as measured by Gross State Product or GSP) and real or inflation adjusted Personal Income.
  - On an annual basis, this May NEEP forecast update for Vermont expects a 2.5% increase in output in calendar 2011, followed by a more sturdy 3.9% increase for 2012.

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<sup>1</sup> NEEP means the “New England Economic Partnership”.

- For calendar year 2013 and beyond, the pace of GSP expansion slides a bit, tracking at 3.1% for 2013, 2.6% for 2014, and closing out with a 1.6% rate of growth for 2015.
- Real Personal Income is expected to post a similar performance, with a 3.8% increase in calendar year 2011, being followed by a 3.0%, 3.9%, 2.4% and 1.9% annual growth rate path for calendar years 2012 through 2015, respectively.
- For the state unemployment rate and the state FHFA Housing Price Index, Vermont is generally expected to post consistently better performances (as it has historically) over nearly all of the 2011 through 2015 forecast timeline.
  - The lone exceptions are the last two years of the forecast period for the FHFA index which are expected to increase at a rate somewhat below both the New England regional and U.S. averages..
- This somewhat muted performance in the out years of the forecast time period—principally calendar years 2012-15—is a reflection of the fact that the Vermont economy did not decline as much as her U.S. and New England regional economic counterparts—which therefore has led to more muted rates of recovery.
- On a sector by sector basis, all but one major NAICS<sup>2</sup> categories will be adding jobs consistently over the entire forecast period, with most of the job contributions coming from services job categories.
  - Among the state's 11 major NAICS sectors, a total of 10 are expected to see positive job changes over the forecast time horizon with the only exception being the Construction sector.
  - Leading the way are the Leisure and Hospitality sector (at 2.7% per year over the 2010-15 period), the Professional and Business Services sector (at 2.4% per year over the 2010-2015 period), the Education and Health Services Sector (at 2.3% per year over the 2010-15 period), the High Tech sector (at 2.3% per year over the 2010-15 period), and the Natural Resources and Mining sector (at 2.0% per year over the 2010-15 period)—all of which are expected to increase at a rate equal to or greater than 2.0% per annum.
  - The Manufacturing sector is again expected to show some positive forward momentum (at 1.2% per year over the 2010-15 period).
  - Even the Governmental sector—as it struggles with its own version of the deleveraging process—is forecasted to add jobs over the calendar year 2010-15 period, although it will have the weakest job increases by far at 0.2% per year over the calendar year 2010-15 time frame.
  - Like the Fall 2010 NEEP Outlook, the Construction remains as the lone job losing sector on average over the 2010-15 time period, declining at an average annual rate

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<sup>2</sup> NAICS means North American Industry Classification System.

of 0.2% per year over the 2010-15 period—largely due to losses through calendar year 2012.

- This May 2011 NEEP forecast update, as previous forecasts have done, calls for Vermont to experience significantly less severe housing price declines relative to the other five New England states and relative to many other parts of the nation.
  - However, any improvement in sales and construction activity in the Vermont housing market is forecasted to be very gradual, with a bottoming no later than the second half of calendar year 2011.
  - At that point, the housing price decline in Vermont will likely have ended, and prices will then start to show more consistent, positive changes and sales activity will increase.
  - Over the near-term, it is expected that additional foreclosures and a substantial inventory of unsold units will continue to put downward pressure on house prices through calendar year 2012—with a gradual turnaround taking hold in 2013 and beyond.
- Overall, the Vermont economic upturn is expected to continue. Sometime in mid-calendar year 2013, the Vermont up-cycle is expected to move past recovery and into a full-fledged economic expansion.
  - However, there still are a number of a number of risks that present formidable obstacles for the national upturn and therefore the Vermont economy.
  - These include:(1) the upward trend in commodity prices and energy prices in particular, (2) uncertainty about the still unfolding financial crisis in the Eurozone, lingering uncertainties regarding the European debt situation, and (3) the uncertainties regarding the bottoming process in U.S housing markets and commercial construction, and (4) the still poor fiscal condition of the state and local governments.
- Turning to the conference theme, Vermont and Canada have enjoyed a solid, mutually beneficial relationship for the greater part of three centuries.
  - From its significant trade relationship—where Canada is the Vermont’s most significant foreign market—to the broad interdependency between Vermont and Canada on matters such as tourism, health care, electrical energy, and many non-economic factors (e.g. culture, arts, etc.), Vermont and Canada have had a very close relationship that has spanned generations of Vermonters, Canadians, and their families.
  - These long standing ties run very wide and very deep in a number of ways, including (1) trade, (2) company ownership, (3) tourism (including real property ownership), and (4) close ties in electric power.
  - With the ever increasing interconnectedness of today’s world, it is hard to imagine that this longstanding, special and mutually beneficial relationship enjoyed by

residents, businesses, and governments on both sides of the border will do anything but get closer over the coming decades

#### The U.S. Economic Context—If It Isn't One Thing—It is Another...

The U.S. recovery, now approaching its second birthday,<sup>3</sup> remains the recipient of a multitude of deprecating adjectives and outright ingratitude. Analyst after analyst (including this one) has described the current economic upturn as under-performing, weak, fragile, and/or disappointing. These analysts have produced charts, graphs, and tables showing the lagging nature of the current upturn's performance relative to past economic up cycles. For a recovery that is nearly two years old, it seems that “if it isn't one thing, it is another” for this still struggling U.S. economic upturn.

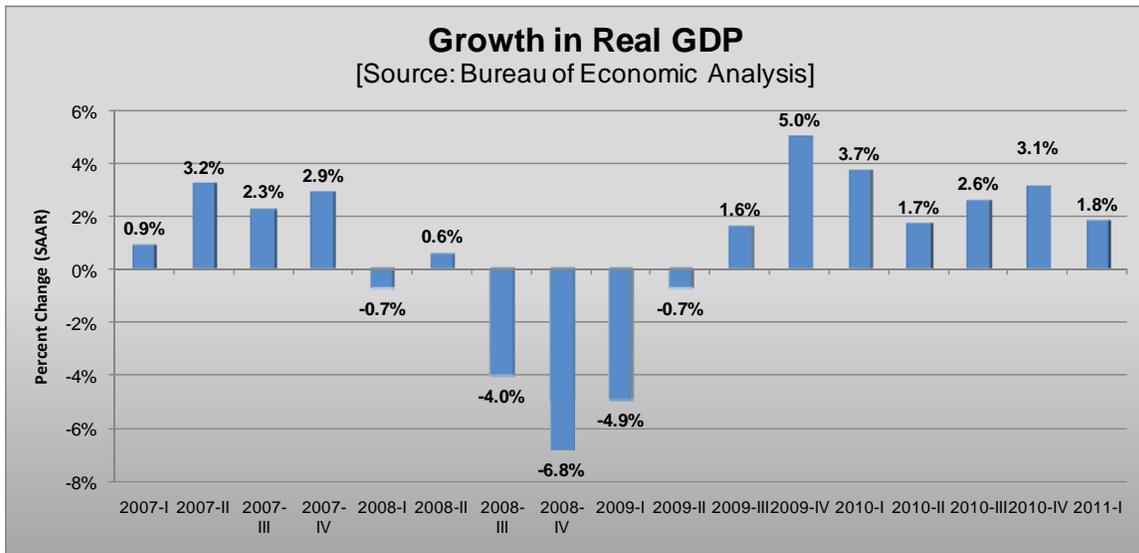
Over this period, we analysts often lose sight of the fact that we all have still been talking about a continuous economic upturn since the Summer of 2009, where the U.S economy has more or less continued to make forward recovery progress. In some cases, such as from the standpoint of the dollar value of the U.S. economy's output of good and services, the forward progress that the economy has been making can properly be termed “expansion.”

Over the past several weeks, all of these descriptions of “under-whelming” or “disappointing” forward progress in the U.S economy have once again begun to crop up as the economy has hit a rough patch during the first quarter of calendar year 2011. In late April, the Commerce Department reported in the Advance Estimate that U.S. inflation-adjusted Gross Domestic Product (GDP) grew at a disappointingly slow 1.8% pace during the first quarter of calendar year 2011. That performance represented a significant deceleration from the 3.1% rate of increase for GDP registered during the 4<sup>th</sup> quarter of calendar year 2010. Much of the first quarter slowdown was attributed to a slowdown in consumer spending (up 2.7% but down from the 4<sup>th</sup> quarter's roughly 4.0% growth rate), a wider trade gap (exports slowed while imports increased), a decline in residential construction activity (which fell by 0.1% during the first quarter), weaker business fixed investment (up 1.8% versus 7.7% during the 4<sup>th</sup> quarter), and a slowing in government spending (which fell by 5.2% during the first quarter mostly due to federal defense spending). While some of the factors restraining output growth during the first quarter of calendar year 2011 were considered transitory (e.g. bad Winter weather restrained at least some activity), the prospect for weaker government spending (due to budget cuts by state and local governments) and an increasing trade gap each will likely continue to be a drag on economic forward progress through the coming year. With state and local governments in a budget cutting mode and making serious moves to raise significant amounts of revenue, the governmental sector is not likely to add much to U.S. output growth until calendar year 2012.

Chart 1.

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<sup>3</sup> The recovery's second birthday will be “celebrated” in June 2011.



Even so, despite all of the hand-wringing about the stress and threats to the upturn, the economy’s fundamentals continue to improve. Leading the way is the still very strong financial position of the business sector and the improvements in the financial sector where many of the excesses and imbalances have been substantially worked through. Regarding the former, corporate profits continue to be strong and business balance sheets show a solid capability for the business sector to make new investments in facilities and manpower. Regarding the second, households have been reducing their debt loads and debt service requirements.<sup>4</sup> . The data indicates that delinquency rates have come down for mortgages, car loans, and credit cards. Lenders, in response have begun to loosen credit controls for certain kinds of debt. More liquidity in the financial system will clearly benefit future economic growth.

By far the biggest threat to the outlook arises from the upward trend in energy prices (and in many respects commodity prices in general) despite the early May nosedive, the still deteriorating sovereign debt situation in Europe, the still unfolding “bottoming” process in U.S. housing markets, and fiscal weakness on the state and local government level. As the month of April came to a close, it is noteworthy that the price of West Texas Intermediate Crude closed at nearly \$114 per barrel, still well below the record price of nearly \$150 per barrel established during the energy price run-up back in 2008, but the highest since September of 2008 after fossil fuel prices were declining. In addition, at the end of the month the cost of a gallon of regular gasoline closed in on the \$4.00 per gallon level, up more than a dollar per gallon over the past year and getting to a level where it will be noticed by consumers and tourists. Most analysts see the most recent spike easing back somewhat this Summer after the Memorial Day holiday weekend, based on underlying supply and demand data that argue for a somewhat lower gasoline price.

The situation in Europe, on the other hand, appears to have taken on a new and higher level of concern, with new apprehension about the financial condition of Spain—on top of the already large demands from Greece, Italy, and Portugal. Investor concern about this situation is threatening to drive up the cost of borrowing for a myriad of countries—and not just those in the afflicted European region—but others including some developing countries that are keys to the global economic outlook. A default by Greece or any other

<sup>4</sup> Although a significant portion this phenomenon seems tied to mortgage write-downs or foreclosures in contrast to actual debt pay downs

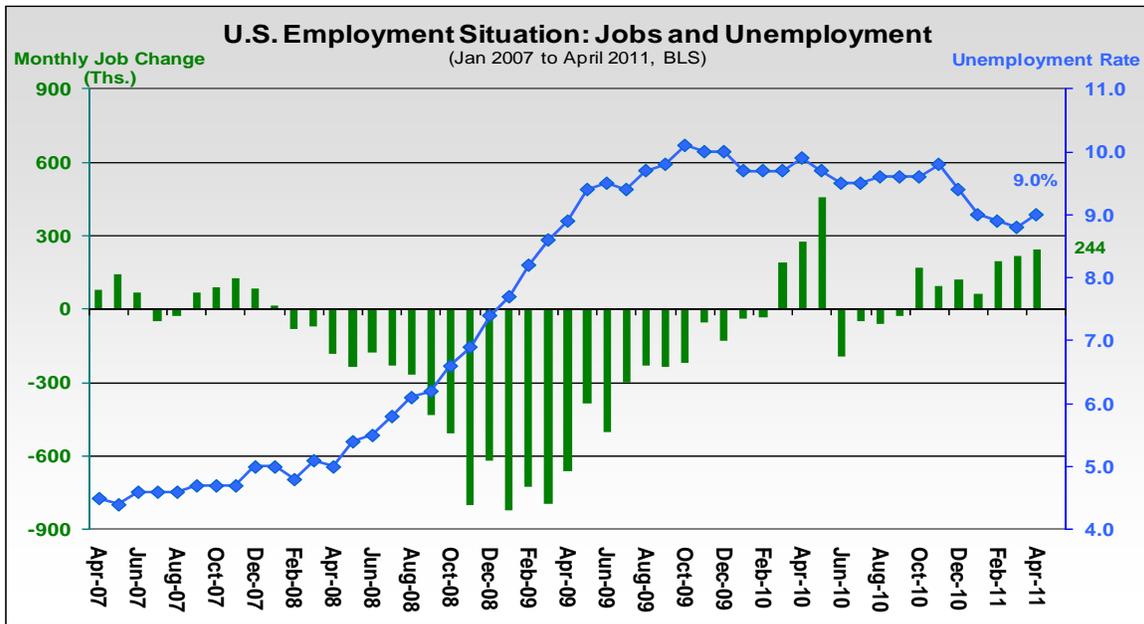
country in the 16-nation Eurozone would be potentially catastrophic to the region, leading to possible eviction from the monetary union and severely testing the soundness of Europe's political and economic integration. Most analysts believe the Eurozone's healthy economic powerhouses will ultimately come to the aid of Greece, currently the most troubled nation in the region. The parallel these analysts argue is the way Washington bailed out Mexico during the peso crisis during the 1990s. European officials have offered mixed signals about their willingness to come to Greece's and/or any of the other troubled countries' aid. But many believe the alternative--having a politically embarrassing bail-out by the International Monetary Fund for a Eurozone country—would be so deeply problematic for Europe's major powers that they would opt to instead aid Greece on their own.

Regarding the third, the risk of even steeper than the already significant price declines expected over the remainder of this calendar year before the housing market finally “bottoms” likewise hangs like a large dark cloud over the economy. An unsettling number of housing sales in recent months have been so-called distressed sales. Still “tight credit” market conditions and the negative equity positions of any existing homeowners is also limiting the trade-up market. With the overall economic fundamentals still fragile and many part of the economy under some stress, the possibility that another misstep in the economic up-cycle could snowball into another downdraft in the housing market to the detriment of housing prices and the economy's performance overall is too large to ignore

Regarding the fourth, the on-going fiscal debates that are still unfolding on federal, state, and municipal levels likewise threatens the on-going U.S. upturn. The federal uncertainties are just beginning to play out with the passage of the 2012 federal budget and the upcoming votes on the raising of the U.S. debt ceiling. On the state and local level, state and municipal governments have been struggling with expenditure cuts and revenue increases, neither of which—if they occur—will add significantly to U.S. economic activity.

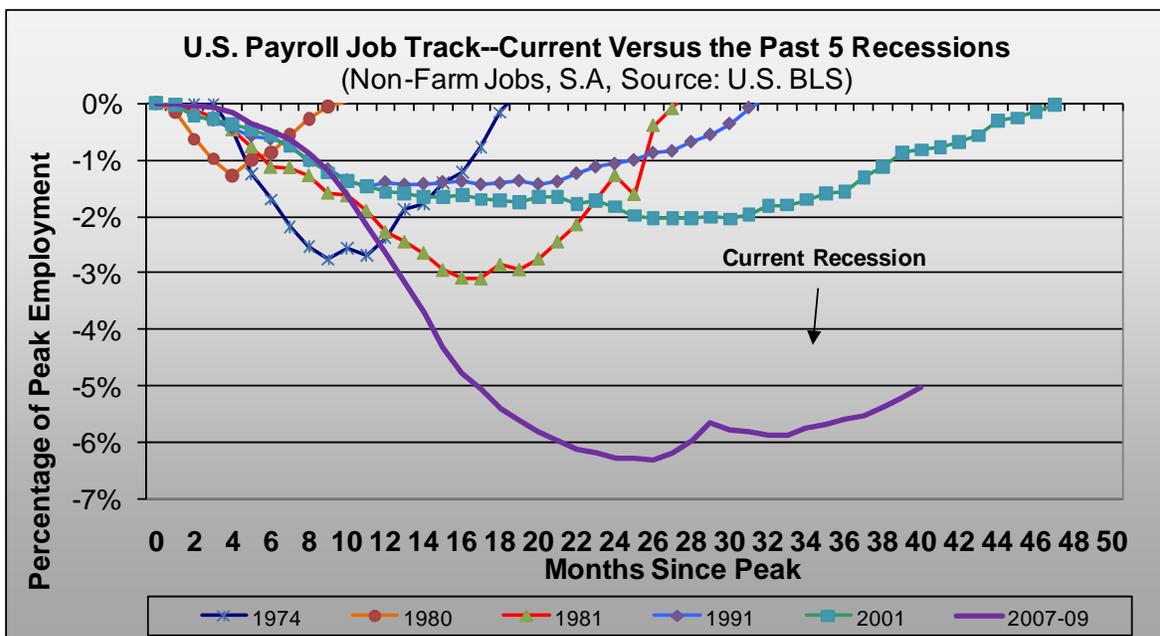
Still the May 2011 NEEP forecast revision for Vermont comes against an economic backdrop with that is improving. First, there have been respectable job gains over the past three months and the breadth of these job gains has widened—both geographically and sector-wise. In addition, the Federal Reserve's decision to end quantitative easing is at least a back-handed acknowledgement that economic conditions have improved markedly since last Winter, when it seemed that the economy was on the brink of falling into the second trough of what increasingly was beginning to look like a “double-dip recession.” All that angst has now passed, and although there continues to be concern about sustained high energy prices, a return to recession does not appear likely unless gasoline prices rise to and sustain a level near \$5.00 per gallon price level.

Chart 2.



Looking more closely at payroll jobs in a cyclical context, the chart below shows the payroll job track compared to the previous 5 past recessions. The bottom line represents the job loss and recovery path of the current cycle, which shows the much deeper job loss in comparison to previous downturns. From the chart, it is clear that the current labor market recovery will take years—not quarters—pushing the labor market recovery well past the “jobless recoveries” of 1991 and 2001. At last month’s job recovery rate of 244,000 jobs per month, it would take about 2½ years to return back to the peak employment level of December 2007.

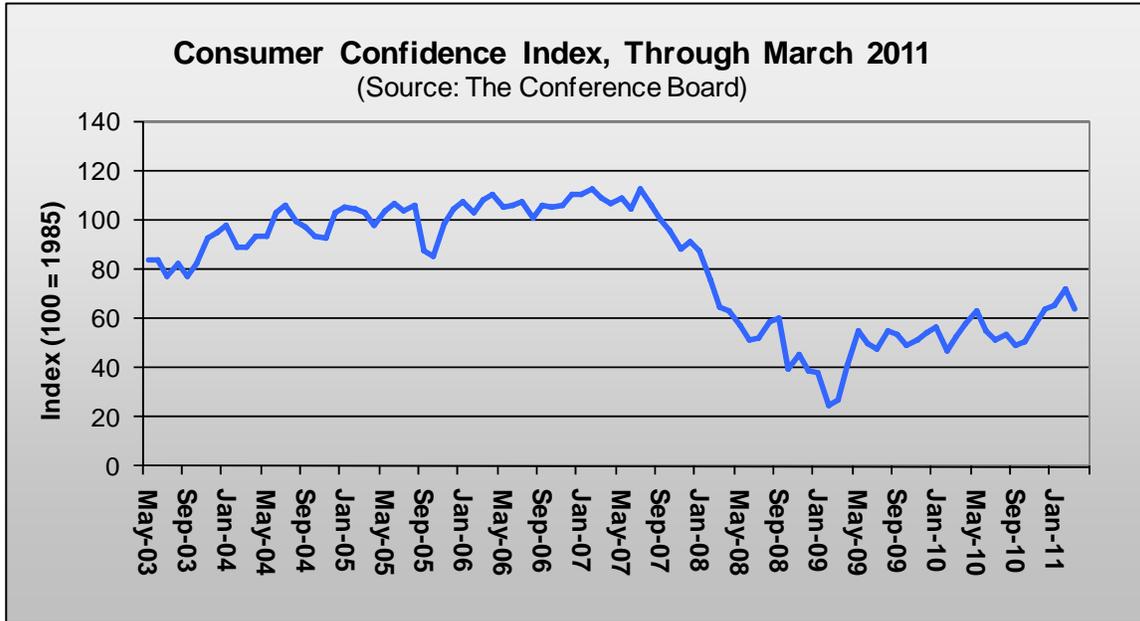
Chart 3.



Reflecting the still fragile and stressed state of the economy, the Consumer Confidence Index

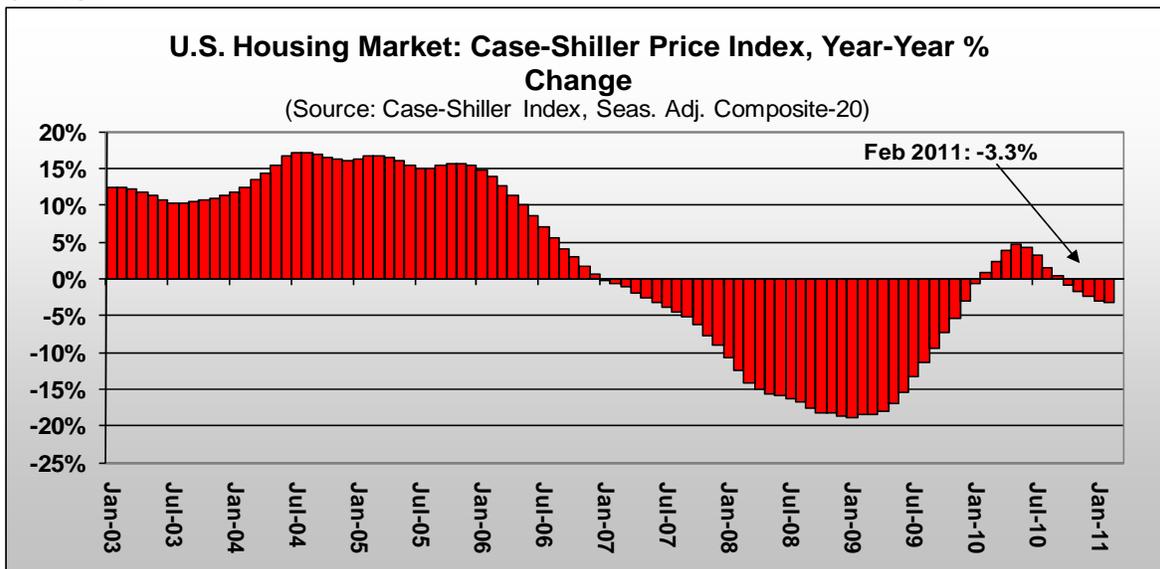
dipped to 63.4 in March from 72.0 in February—following five straight months of positive recovery progress. Political unrest in the Middle East has caused energy prices to increase, leading to more consumer pain at the gas pump, very likely a contributing factor to the decline in the Index.

Chart 4.



On the housing front, the Case-Shiller Housing Price Index was again negative in February 2011 year-over-year housing price index comparison—the fifth consecutive month of negative year-over-year price comparison. At this point, it is unclear just how far home prices will tick down to a true bottom, but analysts expect an additional 5-7% decline from current prices by the time housing prices reach a “bottom.” It is also likely that the national housing market will be more fractured, with various locales varying considerably based on individual local and regional market characteristics, including the level of shadow inventory and lingering unemployment.

Chart 5.



While the housing market may have recently been overtaken in the media by other factors or forces of downside risk (e.g. including the global impact of the earthquake and tsunami in Japan and the on-going nuclear crisis, political unrest in the Middle East, and concerns regarding debt in the Eurozone), the housing market remains fragile. At this time, it remains the single largest domestic threat to the continued expansion of the U.S. economy.

#### The Vermont Situation: Signs of a Strengthening Recovery?

With that U.S and global economic background, the most recent vitals on the health and performance of the Vermont economy show that the state is generally following the U.S. economy's lead. The Vermont economic recovery has solidified, and the pace of recovery does appear to be gaining some positive momentum. For example, looking at the payroll jobs data, payroll employment in Vermont continues to show marked improvement—especially following the re-benchmarking process this Spring for the payroll job count data. In year over year job rankings, Vermont now ranks near the top of the 50 states in year-over-year job change for a large number of job sectors. In non-seasonally adjusted year-over-year Total Nonfarm jobs category, Vermont for the month of March ranks 2<sup>nd</sup> among the 50 states and 1<sup>st</sup> among the six states in the New England region in terms of its year-over-year job change performance with a healthy 2.8% year-over-year job change. For the Total Private payroll jobs category, the state posted a +4.0% year-over-year job change growth, ranked second among the 50 states in the nation behind only the state of North Dakota again (see below).

Table 1: Year-Over-Year Job Change by State		
Total Payroll Jobs (Mar 2010-Mar 2011)		
Rank	State	
1	North Dakota	4.2%
<b>2</b>	<b>Vermont</b>	<b>2.8%</b>
3	Alaska	2.6%
4	Texas	2.3%
5	Kentucky	2.2%
8	Connecticut	1.7%
12	Pennsylvania	1.5%
13	California	1.4%
21	New Hampshire	1.2%
28	Massachusetts	1.0%
34	New York	0.7%
37	Florida	0.6%
43	Maine	0.4%
44	Rhode Island	0.4%
46	Maryland	0.3%
47	Arizona	0.2%
48	New Jersey	0.0%
49	New Mexico	0.0%
50	Kansas	-0.4%
Source: U.S. Department of Labor, BLS		

Table 2: Year-Over-Year Job Change by State		
Private Sector Payroll Jobs (Mar 2010-Mar 2011)		
Rank	State	% Change
1	North Dakota	5.2%
<b>2</b>	<b>Vermont</b>	<b>4.0%</b>
3	Alaska	3.9%
4	Michigan	3.0%
5	Texas	2.7%
10	California	2.3%
12	Connecticut	1.9%
15	Pennsylvania	1.9%
22	New Hampshire	1.7%
27	New York	1.4%
30	Maine	1.3%
34	Massachusetts	1.3%
44	New Jersey	0.7%
46	Rhode Island	0.7%
47	Arizona	0.5%
48	New Mexico	0.4%
49	Maryland	0.3%
50	Kansas	-0.6%
Source: U.S. Department of Labor, BLS		

However, while it is clear that labor markets in Vermont are improving, it is highly doubtful that the level of improvement has been as robust as the data are indicating. As has been noted in previous NEEP outlooks, the path to labor market improvement in Vermont has been very uneven, more analogous to a “saw-toothed” pattern than slow and steady improvement. While it has been typical for progress in past labor market recoveries in Vermont to be uneven, the pattern and scope of Vermont’s current labor market recovery looks to be especially volatile and exaggerated during this recovery. For example, readings on the improvement side of the recovery ledger seemed to have far exceeded that level of improvement that was actually occurring. Periods of deceleration or lost recovery momentum in the state’s labor market recovery path likewise have exceeded what has actually been occurring in the state’s labor markets as well. These assertions have been based on the relative lack of corroborating evidence for these cyclical exaggerations. When combined with the now well documented constraints on state departments of labor around the country to make state-specific adjustments to the payroll job series for perceived shortcomings in the survey data without explicit U.S. Department of Labor approval (which is rarely, if ever, given), states have seen the volatility in their month-to-month series substantially increase. This problem appears to be particularly difficult for states with a small sample size—such as the state of Vermont. Now, in order for analysts to use CES<sup>5</sup> survey properly, they now need to know both the data AND how the data may actually be wrong or misleading.

On a sector-by-sector basis for the private sector job categories, Vermont’s best performance over the last year came in the Leisure and Hospitality sector, where it posted an increase of 11.6% in jobs versus March 2010, ranking it first among the 50 states. The State also had a positive performance in the Professional and Business Services sector, where it posted an increase of 7.7% over the prior year, ranking 4<sup>th</sup> highest among the 50 states and 2<sup>nd</sup> in New England. The State’s weakest industry performance was in Information sector which experienced a 1.9% year-over-year decline, ranking Vermont 30<sup>h</sup> in the nation and 5<sup>th</sup> in New England.

Table 3: Comparative Payroll Job Performance by Sector (March 2010 v. March 2011)

Industry Supersector	% Change in VT	VT Rank in New England	VT Rank in U.S.	Highest Ranked New England State	# of States Reporting Job Losses
<b>Total Nonfarm</b>	<b>2.8%</b>	<b>1st</b>	<b>2</b>	<b>VT (2nd)</b>	<b>1</b>
<b>Total Private</b>	<b>4.0%</b>	<b>1st</b>	<b>2</b>	<b>VT (2nd)</b>	<b>1</b>
Construction	-1.8%	4th	26	CT (6th)	32
Manufacturing	3.3%	1st	8	VT (8th)	12
Information	-1.9%	5th	30	RI (3rd)	30
Financial Activities	3.3%	1st	2	VT (2nd)	28
Trade, Transportation, Utilities	2.2%	2nd	6	RI (3rd)	5
Leisure and Hospitality	11.6%	1st	1	VT (1st)	8
Education and Health Services	2.5%	2nd	19	CT (12th)	2
Professional and Business Services	7.7%	2nd	4	NH (3rd)	3
Government	-1.7%	5th	38	CT (10th)	39

**Notes:**

NAICS means North American Industry Classification System

Source: U.S. Bureau of Labor Statistics

Prepared by: Economic & Policy Resources, Inc.

Cyclically speaking, the Vermont economy as measured by its labor market vitals, bottomed out during the 3<sup>rd</sup> quarter of calendar year 2009, and has since added back roughly 4,000 payroll jobs or nearly one third (30.9%) or 4,000 of the nearly 13,000 payroll jobs the Vermont labor market lost during the “Great Recession.” If those data hold up under the final re-benchmark revisions next Spring, the “Great Recession” in Vermont would have last a total of 6 quarters (or a year and one-half), resulted in a total nonfarm payroll job loss of 3.7% (versus 5.5% during the early 1990s

<sup>5</sup> CES means Current Employment Survey.

recession in Vermont), eroded the inflation-adjusted income of Vermonters by 1.3% (versus 3.0% during the early 1990s recession in Vermont), and caused the state unemployment rate to increase by 3.9% to 7.3% at its peak (in comparison to a 4.0 percentage point increase to 6.6% during the early 1990s recession in Vermont). While that level of job decline presents an improvement versus expectations or initial measurements of total payroll job decline in previous NEEP forecast updates, the peak to bottom payroll job declines during the “Great Recession” were still the most severe since the harsh economic downturn in Vermont during the early 1990s (See Table 4). Overall, looking at 11 major macro indicators, the “Great Recession” in Vermont—was worse than the early 1990s downturn in only 4 indicators—including (1) the expected length of the state’s labor market recovery, (2) the change in single family housing permits, (3) the change in Manufacturing jobs, and (4) the expected change peak to bottom in the FHFA house price index.

**Table4: Cyclical Comparison: The “Great Recession” versus the Early 1990s Recession**

<b>Variable (Seasonally Adjusted/Quarter-to-Quarter Basis)</b>	<b>Early 1990s Recession</b>	<b>This Recession</b>	<b>Better/ Worse</b>
Length in Quarters--Peak-to-Trough Nonfarm Jobs	8	6	<b>Better</b>
Length in Quarters of Recovery--Nonfarm Jobs [Actual vs. Projected]	12	15	<b>Worse</b>
Change in Gross State Product (\$2005 Bil.)	-\$0.81	-\$0.39	<b>Better</b>
Percent Change	-5.3%	-1.7%	
Change in Payroll Jobs (Ths.)	-14.4	-13.0	<b>Better</b>
Percent Change	-5.5%	-3.7%	
Change in Real Personal Income (\$Bil.)	-\$499.0	-\$283.6	<b>Better</b>
Percent Change	-3.6%	-1.3%	
Change in Construction Jobs (Ths.)	-7.452	-4.433	<b>Better</b>
Percent Change	-40.2%	-25.4%	
Change in Single-Family Housing Permits	-2,710	-2,312	<b>Worse</b>
Percent Change	-65.5%	-78.8%	
Change in Retail Jobs (Ths.)	-2.766	-2.867	<b>Better</b>
Percent Change	-8.0%	-7.1%	
Change in Manufacturing Jobs (Ths.)	-5.588	-6.633	<b>Worse</b>
Percent Change	-12.4%	-17.9%	
Change in FHFA Index [1980=100] Index Points	-4.14	-43.79	<b>Worse</b>
Percent Change	-1.9%	-9.5%	
"Cyclical High" in Statewide Unemployment Rate	6.6%	7.3%	<b>Better</b>
Change in Percentage Points	4.0	3.9 <i>[Higher Rate]</i>	

**Source: May 2011 New England Economic Partnership Forecast for Vermont**

Looking at company news, again this Spring the news from key employers in the state is Dealer Dot Com, Inc. (“Dealer.com”) which followed through on its expansion project and added a total of 100 workers to its labor force in the greater Burlington area. Within the state’s manufacturing sector, Green Mountain Coffee Roasters announced plans to continue to expand its workforce, adding 50 new employees in the Burlington area while at the same time wrapping up a 75,000 square foot expansion of its facilities in the Waterbury area. The K-cup business for Green Mountain Coffee Roasters continues to grow through strategic acquisitions in addition to their announcement earlier this year of an agreement to manufacture Dunkin’ Donuts coffee in the

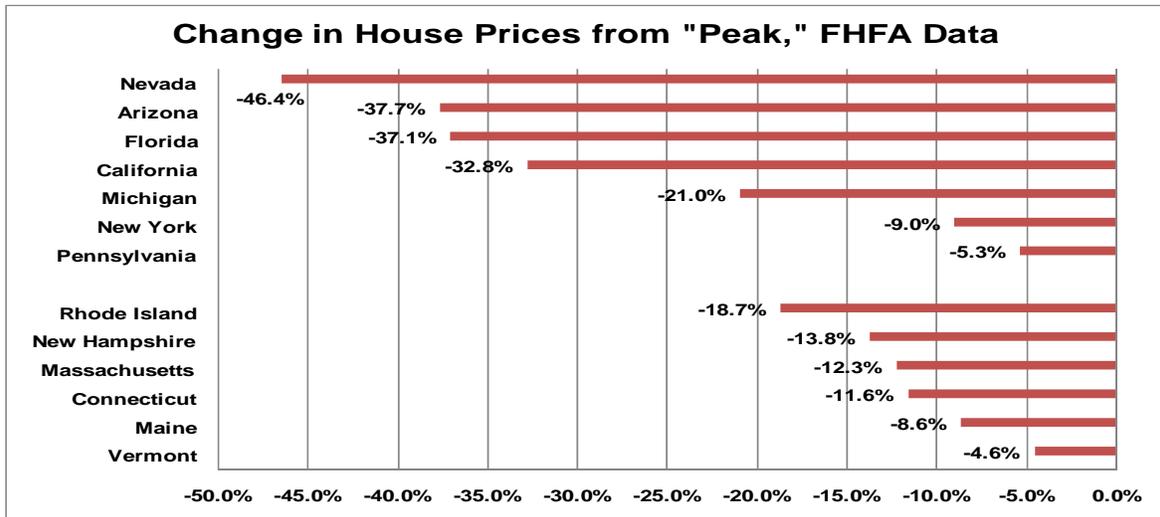
increasingly well-known and accepted K-cup format. Other notable announcements was move by Swan Valley Cheese of St Albans into the old VT Fastener building complex, the expansion of the specialty food manufacturer Bariatrix in the Town of Georgia, and the expansion of Vermont-based food manufacturer Vermont Smoke and Cure, which will shortly occupy part of the now closed Saputo Cheese manufacturing plant in Hinesburg.

On the IBM front, the company continues to add small numbers of workers as needed, following onto their strategy of expanding their fabrication operations through strategic business relationships and federal contracts. Earlier this year, IBM renamed its Essex Junction campus Champlain Valley Technology and Innovation Park, as secured the re-location of General Dynamics Technology Center from its Lake Street location in downtown Burlington. Together with ASK IntTag, a manufacturer of secure identification cards, the renamed campus now is home to 450 Vermont workers.

Outside of the manufacturing sector, the best news is found in the travel and tourism sector where early reports from the 2010-11 Winter ski season have been generally upbeat, with expectations this year for the number of skier visits to top the 4.1 million level recorded during the 2009-10 Winter ski season. In the hard hit Construction sector, early reports indicate that the 2011 season will be significantly better than the 2010 season. However, that metric represents a relatively low “bar” for comparison, given the fact that last year was a very poor season. Signs of improvement in the Construction sector are only scattered, with most of the significant activity happening near ski resorts such as Jay Peak. Elsewhere, the commercial real estate sector continues to struggle, and the residential side of the real estate market remains troubled, but there are some signs of improvement that have many in the industry optimistic for at least some improvement during calendar year 2011—even though competition is stiff and pricing power and margins remain very thin.

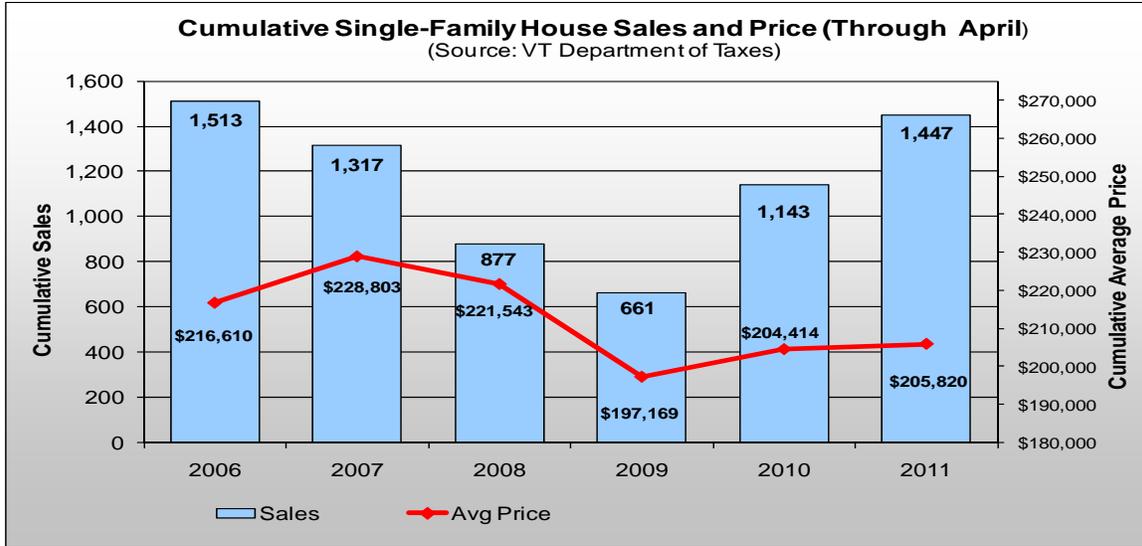
Looking more closely at housing prices, housing prices overall in Vermont have continued to hold up relatively well compared to many housing markets throughout the country. Using Federal Housing Finance Agency data for selected states in a peak to 2010 fourth quarter analysis, the data show that Nevada, Arizona, Florida and California have all experienced house price declines in excess of 30%, with Nevada having the largest decline at 46.4%. Vermont compares very favorably with a peak to 2010 fourth quarter price level decline of 4.6%, the lowest in New England, which itself has seen much lower housing price declines in contrast to the nation.

Chart 6:



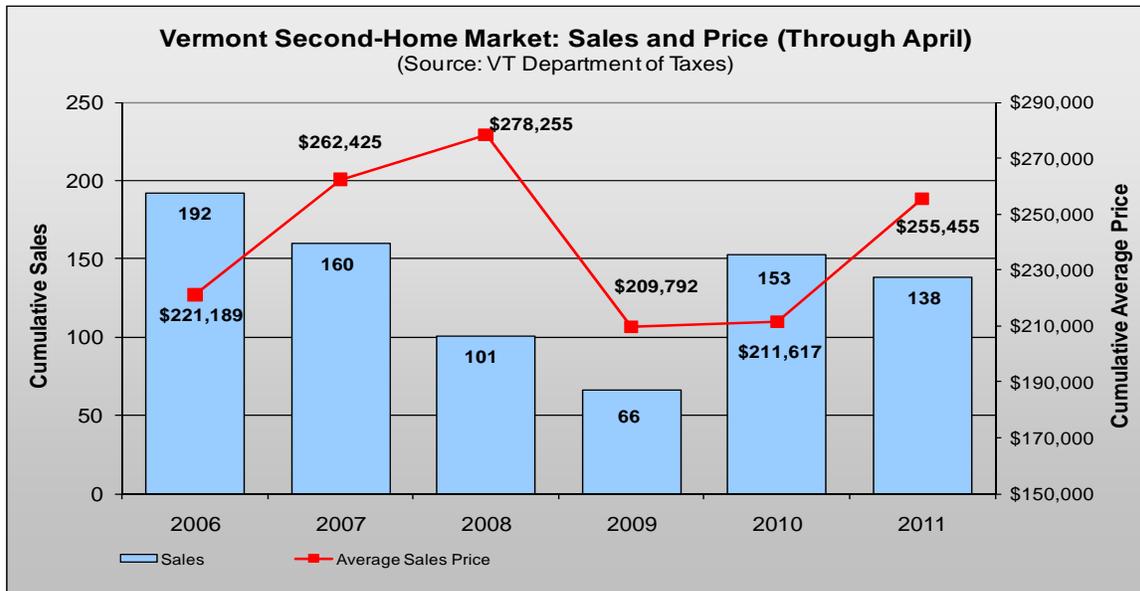
Looking more closely at housing price data from the Vermont Department of Taxes' Property Transfer Tax statistics, the year-to-date through March data show that cumulative average house prices have increased from 2009's bottom. Sales volume also has increased significantly, and is currently are at a level above 2008-2010. These appear to be signs that the housing market in Vermont has leveled out some and is at "near-normal," especially in comparison to the national housing situation.

Chart 7:



At the same time, with the solidification of the economic recovery, the second-home market in Vermont has responded in kind. The average sales price has increased significantly rocketed up from 2009's recent low of just under \$210,000 to a more respectable \$255,500. However, while the data do show a stabilization in sales and an increase in average prices, the depth of the market place appears to be shallow, where a relative few high-end second home sales may be disproportionately impacting the average sales price (which in this case is a "mean"). However, even excluding those sales, the second home market still does appear to be on an improving trend—although the fundamentals are somewhat less favorable than indicated by the averages. This market is driven by out-of-state buyers. From a Vermont perspective, high income households in metro areas like New York and Boston represent a key market for second homes in the state. These data offer some hope that the worst of the residential and second home housing price declines may soon be ending.

Chart 8:



Overview of the Moody's Economy.com National Economic Outlook: A Slight Upgrade...

The Spring 2011 Vermont NEEP forecast is based on a Moody's Analytics U.S. forecast alternative. Typically, the NEEP state forecast managers utilize the Moody's U.S. outlook baseline as the national context for the individual state forecasts. However, given the slowdown in the U.S. economy during the first quarter of calendar year 2011, the NEEP organization voted to use a Moody's forecast alternative for this NEEP forecast cycle. While this alternative U.S. forecast is very similar to the Moody's baseline forecast for the calendar year 2011 through calendar year 2015 period, the consensus was to utilize a somewhat weaker variant of the Moody's U.S. forecast baseline. As one NEEP evaluator termed it, we chose the Moody's baseline "absent steroids."

This Moody's Analytics U.S. forecast variant adopted by NEEP forecasters includes a somewhat weaker initial period for the forecast over the first half of calendar year 2011, with the U.S. economy picking up some more positive recovery/growth momentum steam the second half of calendar year 2011. For all of calendar year 2011, the baseline forecast alternative calls for a 2.9% rate of growth for U.S. GDP, roughly 0.5 percentage points slower than the Moody's baseline forecast. For calendar years 2012 and 2013 the NEEP-employed alternative forecast has inflation-adjusted GDP growth rates that are-expected to be 0.4 percentage points and 0.2 percentage points slower than the Moody Analytics' U.S. forecast baseline. For labor markets, job growth is expected to be somewhat lower under the NEEP-adopted forecast alternative, and the unemployment rate somewhat higher (9.2% in 2001 versus 9.1% under the baseline and 8.8% in 2012 under the alternative versus 8.5% under the baseline). Throughout the NEEP selected forecast alternative, the recovery-expansion path generally remains below the long-term growth trend of the U.S. economy.

The Vermont Forecast Detail: The "Long Hard, Slog to Recovery" Analogy Still Applies...

Because the U.S. economy is the most significant driving force for the state economy, the Vermont NEEP forecast update generally tracks the directional trend and roughly the pace of the U.S. economic forecast. As mentioned above, payroll jobs in Vermont hit bottomed in the Fall of calendar 2009, and since then have had a measurable, but uneven, improvement. Through the 1<sup>st</sup> quarter of calendar year 2011, the state has recaptured about half added back roughly 4,000 payroll jobs or nearly one third (30.9%) of the nearly 13,000 payroll jobs the Vermont labor market lost during the "Great Recession. With the payroll job "bottom" now clearly marked with the final re-

benchmarking of the 2009 payroll job data completed, we now know that the “Great Recession” turned out to be significantly less severe than first feared, with the 13,000 payroll jobs that were lost, nearly 5,000 jobs less than the 17,900 payroll jobs that was forecasted to be lost peak to trough as presented in the Fall 2009 NEEP forecast update. While that in any way does not diminish the personal and family tragedies associated with the loss of 3.7% of the Vermont economy’s total payroll job base, it does indicate that the “Great Recession” had the potential to be significantly worse than it actually turned out to be in Vermont. A good deal of that can be traced to a key group of federal policy-makers, including now Treasury Secretary and former New York Federal Reserve President Timothy Geithner, Fed Chair Ben Bernanke, and ex-Treasury Secretary Henry Paulson recognizing the threat of a potentially catastrophic economic and financial system meltdown, and taking decisive action when the U.S. and global economies needed it most to forestall an even more significant crisis.

Looking at other key macro indicators for Vermont, the state can expect a similar profiled but somewhat muted recovery/expansion path for real output (as measured by Gross State Product or GSP) and for inflation-adjusted or real personal income. The somewhat muted performance in the out years of the forecast time period—principally calendar years 2012-15—is a reflection of the fact that the Vermont economy did not decline as much as her U.S. and New England regional economic counterparts—which therefore led to more muted rates of recovery (See Table 5). On an annual basis, this May NEEP forecast update for Vermont expects a 2.5% increase in output in calendar 2011, followed by a more sturdy 3.9% increase for 2012. For calendar year 2013 and beyond, the pace of GSP expansion slides a bit, tracking at 3.1% for 2013, 2.6% for 2014, and closing out with a 1.6% rate of growth for 2015. Real or inflation-adjusted Personal Income is expected to post a similar performance, with a 3.8% increase in calendar year 2011, being followed by a 3.0%, 3.9%, 2.4% and 1.9% annual growth rate path for calendar years 2012 through 2015, respectively. For the state unemployment rate and the state FHFA Housing Price Index, Vermont is expected to post consistently better performances (as it has historically) over nearly all of the 2011 through 2015 forecast timeline (with the exception of the last two years of the forecast period for the FHFA index).

Table 5. Forecast Comparison: U.S., New England and Vermont (May 2010 NEEP Forecast Update)

	Actual					Forecast				
	2006	2007	2008	2009 [2]	2010 [2]	2011	2012	2013	2014	2015
<b>Real Output (\$2000-% Change)</b>										
U.S. Gross Domestic Product	2.7	1.9	0.0	-2.6	2.8	2.9	3.7	3.6	3.2	2.1
N.E. Gross Domestic Product	2.1	1.9	0.9	-2.0	3.5	2.7	3.3	3.2	2.7	1.8
Vermont Gross State Product	1.2	0.1	2.0	-0.7	4.5	2.5	3.9	3.1	2.6	1.6
<b>Non-Farm Payroll Jobs (% Change)</b>										
U.S.	1.8	1.1	-0.6	-4.4	-0.7	1.1	1.8	2.2	2.4	1.5
New England	1.0	0.9	0.0	-3.6	-0.3	0.9	1.1	1.5	1.8	1.1
Vermont	0.8	0.2	-0.4	-3.2	0.1	1.2	1.2	1.6	1.9	1.1
<b>Inflation-Adjusted Personal Income %Change (2000 Dollars)</b>										
U.S.	4.6	2.9	0.7	-1.9	1.3	4.2	4.2	4.5	2.7	2.4
New England	5.0	3.2	-0.5	-2.3	1.0	3.8	3.1	4.0	2.7	2.2
Vermont	5.1	2.8	0.0	-0.6	1.8	3.8	3.0	3.9	2.4	1.9
<b>Unemployment (Percent)</b>										
U.S.	4.6	4.6	5.8	9.3	9.6	9.2	8.8	7.8	6.6	6.4
New England	4.5	4.5	5.4	8.2	8.5	8.0	7.9	7.2	6.2	5.9
Vermont	3.7	3.9	4.5	6.9	6.2	5.8	5.5	4.8	3.9	3.8
<b>FHFA Housing Price Index [3]</b>										
U.S.	7.1	1.6	-3.4	-4.1	-3.3	-2.9	-1.7	0.0	4.6	4.7
New England	3.0	-1.3	-3.9	-4.3	-2.0	-0.3	0.5	2.9	4.1	3.9
Vermont	8.2	2.9	0.2	-1.5	-0.9	-0.1	0.0	1.4	2.3	2.9

Notes:

[1] U.S. data reflect the Moody's Analytics S5 Forecast Alternative for March 2011.

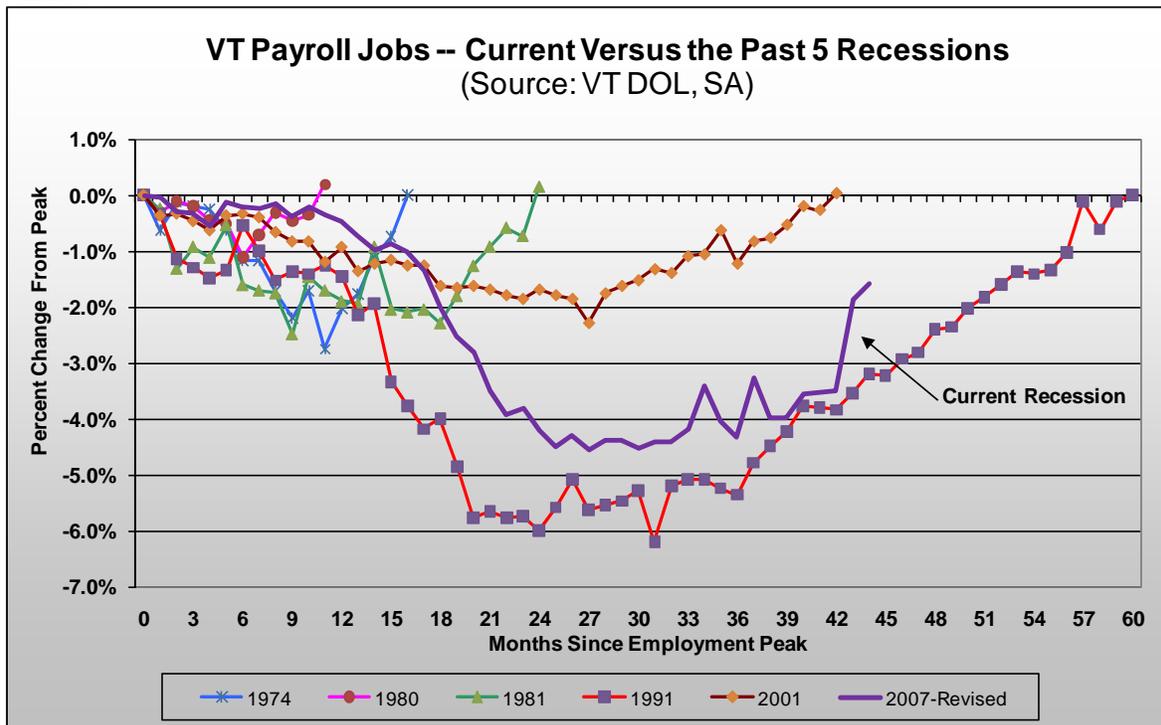
[2] 2010 variables are subject to further revision, and 2011 through 2015 values in this table reflect projected data as of May 2011.

[3] FHFA refers to the Federal Housing Finance Agency (formerly the Office of Federal Housing and Enterprise Oversight).

Sources: Moody's Analytics (U.S.), New England Economic Partnership May 2011 Forecast Update (New England, Vermont)

One characteristic of the current recovery is the increasing length of time needed for labor markets to complete their full recovery (e.g. replace the number of jobs lost during the economic downturn). The labor market recovery from the “Great Recession” is no exception to this trend. If this NEEP forecast holds true, Vermont labor markets will not numerically re-gain the nearly 13,000 payroll jobs lost during the last recession until the 2<sup>nd</sup> quarter of calendar year 2013—or two years from now. Such a performance would result in the state’s labor market recovery taking three quarters longer than the largely “job less” recovery that the Vermont economy endured during the punishing early 1990s downturn. The chart below tracks the decline from the peak in non-farm payroll jobs during the “Great Recession” versus the job loss/recovery record of the previous five recessions in percentage terms. Looking at the data, it took 60 months during the early 1990s recovery and 42 months in the early 2000s for the labor market recovery from the 1988-91 recession and the 2001 recession to fully recover. In contrast, there was much more “cyclical bounce” in labor market recoveries from recessions prior to the early 1990s. In this way, the May 2011 NEEP forecast update does not deviate from last Fall’s characterization that the state’s labor market remains on a “long hard slog to recovery.”

Chart 9.



On the sector-by-sector front, a total of 10 of 11 major job categories will be adding jobs over the 2010-15 period. Among the sectors contributing to Vermont’s economic and labor market turnaround include: the Leisure and Hospitality sector (at 2.7% per year over the 2010-15 period), the Professional and Business Services sector (at 2.4% per year over the 2010-2015 period) and the Education and Health Services Sector (at 2.3% per year over the 2010-15 period), the High Tech sector (at 2.3% per year over the 2010-15 period), and the Natural resources and Mining sector (at 2.0% per year over the 2010-15 period). Those four sectors are the categories that are expected to increase at a rate equal to or greater than 2.0% per annum. Other notable job increases over the calendar year 2010-15 time frame include Manufacturing (at 1.2% per year over the 2010-15 period). Like the Fall 2010 NEEP Outlook, the Construction remains as the lone job losing sector

on average over the 2010-15 time period, declining at an average annual rate of 0.2% per year over the 2010-15 period—largely due to losses through calendar year 2012. Even the Governmental sector—as it struggles with its own version of the de-leveraging process—is forecasted to add jobs over the calendar year 2010-15 period, although it will have the weakest job increases by far at 0.2% per year over the calendar year 2010-15 time frame.

Looking to Vermont’s version of a housing recovery, any improvement in sales and construction activity in the Vermont housing market is forecasted to be very gradual, with a bottoming no later than the second half of calendar year 2011. At that point, the housing price decline in Vermont will likely have ended, and house prices will have reached bottom. Prices will then start to show more consistent, positive changes and activity will increase. This forecast update, as previous forecasts have done, also calls for Vermont to experience significantly less severe housing price declines relative to the other five New England states and relative to many other parts of the nation. This is again primarily due to more prudent lending practices overall which have led to much lower foreclosure rates. This is key because foreclosures typically lead to forced liquidation sales—including their significant price discounts—which can snowball and lead to and/or reinforce house price declines that make it so difficult for housing markets to build the confidence among buyers and sellers needed for a genuine and lasting recovery.

**Conference Theme: Vermont and Canada—A Special and Very Deep Relationship**

For the greater part of three centuries, Canada and Vermont have enjoyed a mutually beneficial relationship. From its significant trade relationship—where Canada is the Vermont’s most significant foreign market—to the broad interdependency between Vermont and Canada on matters such as tourism, health care, electric energy, and many non-economic fronts (including arts, culture, entertainment, etc.), Vermont and Canada have had a very close relationship that has spanned generations of Vermonters, Canadians, and their families.

Table 6: Profile of Top Exports from Vermont to Canada

\$ Millions	
619	Electronic tubes & semi-conductors
38	Paper & paperboard
27	Crude wood materials
23	Plastics & chemical industry machinery
18	Valves
14	Lumber
12	Sugars
11	Stationery & office supplies
11	Motor vehicle parts, except engines
10	Medical, ophthalmic & orthopaedic supplies

Source: Canadian Embassy (2010)

These long standing ties run very wide and very deep in a number of ways. These include: (1) trade, (2) company ownership, (3) tourism, and (4) electric power. From the trade perspective, Canada is Vermont’s most significant foreign market for the 9<sup>th</sup> consecutive year in 2009—especially for semi-conductors<sup>6</sup>—with

Canada representing nearly half (roughly 46%) of Vermont’s total export goods according to a 2010 study by the Canadian Embassy. Exports between Vermont and Canada in calendar year 2009 totaled \$3.6 billion—including \$1.1 billion in exports from Vermont to Canada and \$2.5 billion in exports from Canada to Vermont. The \$3.6 billion in bi-lateral trade was an increase of 10% from the previous year. In addition, according to a study done by the World Institute for

<sup>6</sup> Tied to IBM.

Strategic Economic Research (WISER), the bilateral trade relationship was responsible for an estimated 19,300 Vermont payroll jobs in 2009. The Canadian market is larger than the export volume from Vermont to its next 11 foreign trading partners combined. From this perspective, it is indeed hard to overstate the significance of the Canadian market for Vermont exports.

In terms of company ownership, many Canadian companies are household names in Vermont. Canadian-owned Husky Injection Molding Systems which operates from a 700 acres manufacturing campus in Milton. The company is the world's largest brand name supplier of injection molding equipment and services to the plastics industry. Husky currently employs 395 Vermonters, and serves markets around the world in more than 100 countries from its Vermont - based state-of-the-art plastics injection molding facility. TD Bank, NA is also a major employer in the state's financial services sector, employing an estimated 300 Vermont workers, and bringing affordable world class financial services to businesses and households in the state. Other key employers include Velan Valve Corp in northwest Vermont (a specialty value—large—manufacturer with 190 employees in Williston), Saputo Cheese USA, with 95 employees in northwest Vermont, and Kaytec, Inc. (a plastic siding manufacturer located in Richford), which employees another 85 Vermont workers at its Vermont-based facility.

In addition, Canadian ownership of Vermont employers also stretches into the utilities sector. First, the Gaz Métro has for a number of years owned the only operating natural gas utility company in the state of Vermont—Vermont Gas Systems through its wholly-owned subsidiary, Northern New England Energy Corporation (NNEEC). Located in northwestern Vermont, Vermont Gas Systems, Inc. has imported and distributed clean-burning natural gas to residential, commercial, and industrial customers since 1966, and accounts for the bulk of the \$123 million in natural gas imports into Vermont in calendar year 2009. . In addition, in March of 2007, the Gaz Métro Limited Partnership acquired Green Mountain Power Corporation, the state's second-largest electricity distributor in Vermont through NNEEC. The NNEEC, also includes an ownership state in another local power company—Portland Natural Gas. Between Vermont Gas Systems and Portland Natural Gas, Gaz Métro's holdings serve over 162,000 customers (including 45,000 in Vermont) across northern New England. Green Mountain Power, with its headquarters located in Colchester, employs 192 Vermonters, making Gaz Métro an important supporter of over 300 employees in the state.

In the travel and tourism sector, cross-border travel is a key to both Vermonters and Canadian prosperity. According to Statistics Canada, Canadian visitors accounted for 740,600 visits to Vermont while Vermonters made 129,900 cross border visits to Canada. Canadian visitors spent an estimated \$141 million in Vermont while on their Vermont trips, while Vermonters spent an estimated \$40 million north of the border. However, travel means more than dollars to Vermonters and Canadians. Cross border travel links our communities, strengthens our families (e.g. many Canadians own property in Vermont and many Vermonters own property in Canada as well. Lastly, Mont Saint-Sauveur Inc., a consortium of ski resorts and mountains in Quebec, owns operates Jay Peak Resort (and has done so since 1978), one of the crown jewels of Vermont's skiing industry. Jay Peak, located in the northeastern part of the state, has become one of the premier destination resorts in the northeastern region of the U.S., if not the entire country.

Beyond Gaz Métro's ownership interest in Green Mountain Power, it is also noteworthy that Vermont and the province of Québec have had a long-standing, decades-long energy partnership dating back to the early 1980s. This relationship has included a major power purchase agreement with Vermont-Hydro-Québec contract for 310 megawatts that was signed back on Dec. 4, 1987—which runs through 2016—and accounts for the \$153 million in electricity Vermont imported in 2009. Following on in this tradition, Hydro- Québec, Green Mountain Power, Central Vermont

Public Service Corporation, and several other utility parties jointly announced in March of 2010 a new power purchase agreement totaling up to about 225 megawatts starting in November 2012 and ending in 2038. The agreement was subsequently approved by the Public Service Board last month, extending this long-standing relationship that has benefitted Hydro-Québec, Vermont utility companies, and the ratepayers of the state of Vermont for another 26 years.

In addition to these longstanding and very deep economic connections, the state and Canada have also have mutually benefitted from deep cultural, arts, family and other non-economic connections. It is therefore not surprising that the state's non-economic connections likewise run deep. To many Canadians, Vermont offers a unique refuge from the challenges of day-to-day life—a place to unwind and enjoy the recreational and other opportunities that the Green Mountain state offers. To many Vermonters, Canada—and particularly Montreal<sup>7</sup>—offers a wide variety of arts, entertainment and other amenity options that otherwise would not be available to a small state like Vermont. To many northwestern Vermont residents, the greater Burlington area is a suburb of Montreal. As a result, in this increasingly small world we live in, it is hard to imagine that this longstanding, special and mutually beneficial relationship enjoyed by residents, businesses, and governments on both sides of the border will do anything but get closer over the coming decades.

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<sup>7</sup> Many Vermonters in the northwest region of the state consider themselves to be living in a suburb of Montreal.

## **APPENDIX F**

### Criteria | Governments | U.S. Public Finance:

## U.S. State Ratings Methodology

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## Criteria | Governments | U.S. Public Finance:

# U.S. State Ratings Methodology

*(Editor's Note: This methodology replaces portions of U.S. Public Finance Criteria: GO Debt, published Oct. 12, 2006 and is related to Principles Of Corporate And Government Ratings, published June 26, 2007.)*

1. Standard & Poor's Ratings Services is updating its methodology for rating United States state governments. We are publishing this article to help market participants better understand our approach to assigning state ratings. "Rating" refers to the rating assigned to general obligation (GO) debt of U.S. states or the issuer credit rating if no GO debt is outstanding. This methodology replaces portions of "U.S. Public Finance Criteria: GO Debt," published Oct. 12, 2006, and relates to "Principles Of Corporate And Government Ratings," published June 26, 2007. (Listen to related podcast, "Standard & Poor's Updated Methodology For Rating U.S. States," dated Jan. 18, 2011, and the related CreditMatters TV segment, "Standard & Poor's Revised Rating Criteria For U.S. States," dated March 4, 2011.)

## SCOPE OF THE CRITERIA

2. These criteria apply to all U.S. state governments and U.S. Territories.

## SUMMARY OF CRITERIA UPDATE

3. Standard & Poor's publicly rates all 50 U.S. states based on an analysis of a range of financial, economic, managerial, and institutional factors. Given the specific delegation of powers to states under the U.S. Constitution, we view states as having sovereign powers that warrant recognition in our criteria, and therefore we are separating our criteria for our analysis of states from our broader general obligation criteria.
4. We are keeping the existing general analytic framework for U.S. states, which involves five main factors:
  - Government framework;
  - Financial management;
  - Economy;
  - Budgetary performance; and
  - Debt and liability profile.
5. We provide greater transparency on how the rating for each state is determined using the combination of the various rating factors. We assess these factors using various credit metrics as outlined in Chart 1. These criteria follow the publication of the "Request for Comment: Methodology For U.S. State Ratings," published on May 11, 2010.

## IMPACT ON OUTSTANDING RATINGS

6. We do not expect any significant rating changes as a result of these criteria.

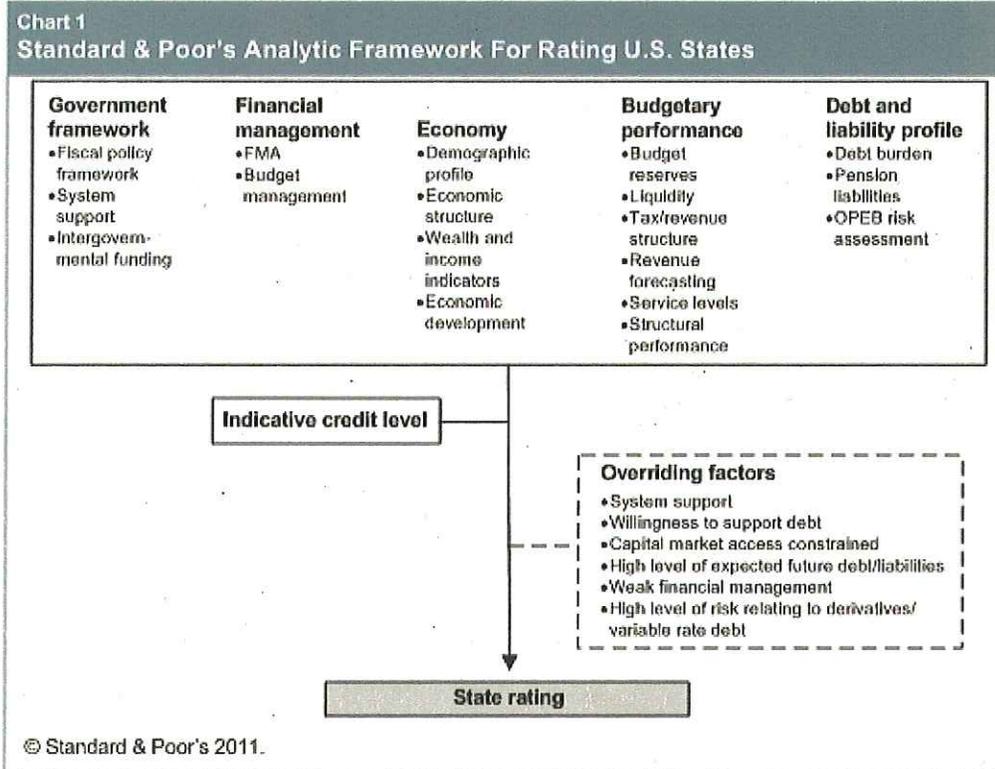
## EFFECTIVE DATE AND TRANSITION

7. These criteria are effective immediately.

## METHODOLOGY

### A. Overall Analytic Framework For U.S. States

8. Standard & Poor's assigns credit ratings to U.S. states and Territories based on our qualitative and quantitative analysis of a range of financial, economic, managerial, and institutional factors. Our overall analytic framework centers around the following factors:
  - Government framework;
  - Financial management;
  - Economy;
  - Budgetary performance; and
  - Debt and liability profile.
9. We assess each of these factors utilizing various metrics that we score on a scale from 1 (strongest) to 4 (weakest). For each metric there may be several indicators we evaluate to develop the metric score. We score each indicator individually on the same scale and average the indicators' scores to develop the overall score for the metric. We average the metrics for each factor to develop a composite score for each. The scores for the five factors are combined and averaged with equal weighting to arrive at an overall score which is then translated to an indicative credit level as illustrated in table 1. (A glossary of selected terms is provided at the end of this article.)



10. Table 1 below lists the indicative credit level that is associated with the overall score assigned. In most cases, we expect the final state rating to be within one notch of the indicative credit level, based on the state's position relative to all other states.

**Table 1**  
**Scores And Indicative Credit Level**

Score	Indicative Credit Level
1-1.5	AAA
1.6-1.8	AA+
1.9-2	AA
2.1-2.2	AA-
2.3-2.4	A+
2.5-2.6	A
2.7-3	A-
3.1-4	BBB category

Note: A rating below 'BBB' is possible based on various overriding factors as outlined in paragraphs 11-18.

**1. Overriding factors impacting state ratings**

11. In certain circumstances, the following overriding factors may result in a rating different from the indicative credit level as follows.

12. **System support score.** In the case of U.S. Territories and Commonwealths, where the policy and fiscal relationship with the federal government may result in a system support score that is different from the score assigned to all states, the rating may be multiple notches below the indicative credit level, as a result of the lower system score (see "Methodology for Rating International Local and Regional Governments," published Sept. 20, 2010).
13. **Willingness to support debt.** We view U.S. states as generally having a strong commitment to honor their legal obligation to pay debt even during difficult or stressful economic cycles. If we believe there is a change in a state's willingness to support its debt, we will assign a rating below what is indicated, possibly by several categories. For example, were a state to choose not to pay obligations we view as debt subject to annual appropriation, we would lower the state's GO rating or ICR, as detailed in our appropriation-backed obligations criteria ("Appropriation-Backed Obligations", published June 13, 2007). Were state officials who are charged with funding debt to suggest an unwillingness to fund debt in accordance with the priority payment status, we would likely assign the state a GO rating or issuer credit rating that is no higher than the 'BB' category. The rating would be no higher than the 'B' category and would likely be lower if we determined that this lack of willingness was likely to threaten a pending debt payment.
14. **Capital market access.** In addition, if we deem access to the capital markets or other sources of external liquidity as questionable and we view that access as necessary for the state to maintain regular operations, we will assign a rating no higher than the 'BBB' category. The rating may remain investment grade if we believe that internal liquidity, the priority claim enjoyed by bond holders, and the state's ability to manage disbursements provides good coverage of debt service. If we believe these internal factors provide questionable coverage of debt service and we perceive difficulties accessing the market for external liquidity to pay debt obligations, this would lead to a more rapid transition below the 'BB' category.
15. We also anticipate possible but limited circumstances where we will adjust a state's rating by one notch compared with the indicative credit level in table 1. These include:
16. **High level of expected future debt/liabilities.** In cases where we expect that a state's identified future debt obligations are likely to increase the majority of ratios used to measure the state's debt burden to levels that are higher than one-third above those indicated for a score of '4' (see paragraphs 62-69), we will assign a rating one notch below the indicative credit level in table 1. Instances where we anticipate future debt and liability metrics to be an overriding factor in the rating include (but are not limited to) when the state authorizes a large debt program that we expect to significantly alter its current debt position, or when a contingent liability (such as the debt of another government entity or an underlying level of government) becomes a direct funding responsibility of the state. Finally, if a state's pension funded ratio were to fall below 40%, the rating will be one notch below the indicative credit level in table 1. We believe that the inclusion of this overriding factor will allow for a forward-looking assessment of future debt and liabilities and its impact on the state's future operating budget performance.
17. **Weak financial management.** In cases where we score a state's overall financial management at '4' (see paragraphs 32-36) the rating will be one notch lower than the indicative credit level in table 1. In our opinion, weak financial management can result in rapid credit deterioration.
18. **High level of risk relating to derivatives/variable rate debt.** In cases where a state has a liquidity score of '4' (see paragraphs 46-51) and also has what we consider a high level of risk relating to derivatives/variable rate debt, the rating will be one notch lower than the indicative credit level in table 1. Specifically this includes the requirement to fund any accelerated payment provisions without having funds identified and available to make these payments.

## 2. Relationship to sovereign rating

19. Although many economic credit factors are similar and some expenditure responsibilities are linked, we do not directly link state ratings to the rating of the U.S. The rating on a state or local government can be higher than a

sovereign rating (see "Methodology: Rating A Regional Or Local Government Higher Than Its Sovereign," published Sept. 9, 2009) if, in our view, the individual credit characteristics remain stronger than those of the sovereign in a scenario of economic or political stress. Other factors that we will review include our view of the predictability of the institutional framework that limits the risk of negative sovereign intervention and the state's ability to mitigate negative intervention from the sovereign due to the state's high financial flexibility and limited dependence on the federal government.

### 3. Standard & Poor's use of stress scenarios and calibration of state criteria

20. To calibrate the criteria for state ratings, Standard & Poor's uses the stress scenarios associated with each rating category level, as presented in Appendix IV of "Understanding Standard & Poor's Rating Definitions," published June 3, 2009 (hereafter called the "stress scenario article"). We believe that most states should be able to attain at least a 'AA' rating level, because we expect they should be able to meet their debt obligations, even in a very severe stress scenario, as defined in the stress scenario article. Under the U.S. Constitution, state governments have broad powers to establish their own tax structures and expenditure responsibilities and therefore possess unique administrative and financial flexibility. They are not eligible to file for bankruptcy under the U.S. Bankruptcy Code. They may adjust revenues, alter disbursements, and access reserves or other forms of liquidity when they consider it necessary in order to restore budgetary balance.
21. State public finance systems are in our view mature and accounting standards are well-developed, contributing to a high level of transparency relative to regional governments in other countries. U.S. states typically have balanced-budget requirements and well-developed revenue and expenditure monitoring policies and procedures. Although there is some variation among states in terms of economic diversity and wealth, when evaluated on a global basis we find that state economies as a whole are generally diverse and income levels are above average. The security features and priority of payment for debt service are generally well-defined and capital market access is also generally well-established. We also believe U.S. states typically have a strong commitment to their legal obligation to pay debt despite difficult economic cycles as evidenced by only one observed default for the sector in more than one hundred years.
22. When defaults have occurred, reforms have generally followed. Although eight states (Arkansas, Illinois, Indiana, Louisiana, Maryland, Michigan, Mississippi, and Pennsylvania) plus the Territory of Florida defaulted following the panic of 1837, most debt issued for state and local purposes was issued at the state level, where large amounts of debt had been issued for economic development and public improvements. Following this episode, states' borrowing abilities were curtailed, and debt issuance for economic development purposes shifted primarily to local governments. Only one state (Arkansas) defaulted on debt during the Great Depression, and following this period governments further diversified their revenue streams by increasing their reliance on personal income taxes and implementing sales taxes—largely the structure we see today. Additional improvements to states' financial controls, reporting, and disclosure followed in the postwar period.

## B. Government Framework

23. Government framework is the first factor we assess to arrive at the indicative rating level. A state's government structure and political environment can affect its powers as defined by federal and state law and influence its fiscal position. Fiscal policy framework, system support, and intergovernmental funding are the metrics we use to assess government framework. Each is scored individually, and we then average the scores to determine the overall

government framework score.

**1. Fiscal policy framework**

- 24. The framework within which a state taxes, spends, and issues debt influences its ability to manage through various economic stress scenarios in our opinion. When evaluating the fiscal policy framework of a state we analyze five metrics that are averaged to determine the overall fiscal policy framework. These five metrics include: balanced budget requirement (table 2), revenue structure (table 3), disbursement autonomy (table 4), voter initiatives (table 5), and legal framework for debt (table 6).
- 25. *Balanced budget requirement (table 2)*. In contrast to the federal government and many local governments, most U.S. states are required by statute or their constitution to propose or adopt a balanced budget. Others are required to ensure balance during the fiscal year. In our opinion, these requirements tend to encourage budgetary discipline.

**Table 2 - As described in paragraph 25**

Balanced Budget Requirement	
Score	
1	Constitutional/statutory requirement for balanced budget when introduced and adopted. The budget is required to stay in balance during the year.
2	Budget must be balanced when introduced or when adopted but no legal requirement to maintain balance during the year.
3	There is no requirement to propose or adopt a balanced budget but in our view there is a track record of doing so.
4	No balanced budget requirements exist and, in our view, there is no track record of doing so.

- 26. *Revenue structure (table 3)*. Most states enjoy the flexibility to set and modify tax rates, deductions, exemptions, and collection dates. If, in our view, these can be achieved without major constitutional, legal, political, or administrative difficulty, these discretionary powers can quickly and favorably influence a state's fiscal condition.

**Table 3 - As described in paragraph 26**

Revenue Structure	
Score	
1	The state has autonomy to raise taxes and other revenues (rate and base); in addition, there is no constitutional constraint or extraordinary legislative threshold for approval (a simple majority requirement for approval of new taxes, for example) and state policymakers have, in our view, a proven track record of implementing tax increases as one of the alternatives to address budget imbalances.
2	The state has autonomy to raise most but not all taxes and revenues. In addition, in our view, the track record of implementing tax increases as a policy alternative to address budget imbalances is uneven, thus effectively reducing the state's revenue flexibility.
3	There are in our view significant constraints to adjusting taxes or revenues. These constraints can include constitutional prohibitions on tax increases, an above majority legislative threshold for approval, or the need to have voter approval for tax and revenue increases.
4	The state is both legally and, in our view, politically constrained in its ability to increase all key revenue sources. We view revenue flexibility as practically limited to the potential growth of the existing revenue base.

- 27. *Disbursement autonomy (table 4)*. While state governments generally have broad service responsibilities, most enjoy what we view as considerable discretion in establishing funding levels for state assistance, shifting responsibilities to local government and establishing or changing disbursement dates for various programs. Absent constitutional or other legal mandates, this affords control over budgets and cash flow which, in our view, can positively affect fiscal standing. When assessing flexibility, we look at fixed costs relative to the total budget. Fixed costs include debt and contractual obligations. We also review the legal framework governing various program areas and how that affects the ability to reduce or eliminate spending and programs.

**Table 4 - As described in paragraph 27**

Disbursement Autonomy	
Score	
1	High degree of flexibility in adjusting disbursements; extends to nearly all program areas, including the ones with the highest impact on the budget.
2	Flexibility to adjust disbursements exists but adjustments may not be legally allowed for all program areas, including one or more of the state's largest expenditure programs such as education and health care.
3	Flexibility to adjust disbursements is constrained, and does not include the legal ability to adjust disbursements for large expenditure programs such as education and health care.
4	Flexibility to adjust disbursements is practically non-existent.

28. *Voter initiatives (table 5).* A state government's autonomy can be limited and this can affect relative credit standing in our view. Where decisions about specific tax or revenue levels, spending allocations, and debt issuance require approval from the electorate, states have reduced flexibility to respond to changing economic or financial situations, in our opinion.

**Table 5 - As described in paragraph 28**

Voter Initiatives	
Score	
1	Not a voter initiative state
2	State has some voter initiative activity but it has not historically negatively affected operations or limited flexibility.
3	State has an active initiative process which has affected state revenues and/or expenditures and flexibility has been diminished.
4	Initiative process is highly active and has substantially impaired operations of government in our view.

29. *Legal framework for debt (table 6).* We analyze both statutory and constitutional debt provisions.. This review includes consideration of the nature of the repayment pledge, the priority of payment for debt service, amortization features that are imbedded in constitution or statute, and legal restrictions related to debt issuance.

**Table 6 - As described in paragraph 29**

Legal Framework for Debt	
Score	
1	High degree of legal flexibility to issue debt for a range of purposes. There is a strong legal priority for payment of debt.
2	Some legal limitation on debt issuance which has not in our view inhibited planned issuance. There is a legal priority for payment of debt service but it is not a first claim on revenues.
3	Very limited legal right to issue debt; lack of voter support or limited access to alternative debt structures. There is no established legal priority for debt.
4	Cannot issue debt; there is a lack of voter support. There is no priority of payment for debt service.

## 2. System support

30. System support refers to our assessment of the predictability of the public finance system in a federal context. It is the same for all states and incorporates the predictability, transparency and accountability, and system support aspects of the institutional framework score as detailed in our criteria for rating international local and regional governments (see "Methodology For Rating International Local And Regional Governments," published Sept. 20, 2010). We assess the final element of the international public finance institutional framework, revenue and expenditure balance by the other metrics in the government framework analysis of the U.S. state criteria to capture the state constitutional and statutory differences that affect this area.

## 3. Intergovernmental funding

31. Table 7 details our assessment of a state's local government funding framework. How services and programs are provided across state and local governments and what the funding relationship has been over time are in our view

important considerations because they influence revenues, spending and overall budget flexibility. We review the legal requirements and historical patterns of state assistance and revenue sharing arrangements. If a state has broad discretion in adjusting spending flows to local governments or the amount of these flows are limited, we view the state as having a high level of control over budgeting and cashflow. Conversely, if a state has limited legal capacity to adjust programs and spending levels or limited political willingness to do so, we view the state as having less autonomy, especially when this funding represents a significant state budget element.

**Table 7 - As described in paragraph 31**

Local Government Funding Framework	
Score	
1	Level of assistance to local governments is limited or highly flexible from a legal standpoint or by historic patterns; strong ability to downstream reductions or change revenue allocations.
2	Level of assistance to local governments is high; flexibility (either legal or practical) may be limited at times.
3	Level of assistance is high and is not flexible from a legal or practical standpoint; ability to reduce local government funding is restrained.
4	Very limited flexibility exists.

## C. Financial Management

32. Financial management is the second of the five major factors shown in chart 1 contributing to our assessment of the indicative credit level. Our view of the rigor of a government's financial management practices is an important factor in Standard & Poor's analysis of creditworthiness. We believe managerial decisions, policies, and practices have a direct effect on a government's financial position and operations, debt burden, and other key credit factors. A government's ability to implement timely and sound financial and operational decisions in response to economic and fiscal demands is in our view a key factor in assessing credit quality. The financial policies (Financial Management Assessment) and the budget management framework are the key metrics we use to assess financial management that are scored individually and averaged to develop an overall score for financial management.

### 1. Financial Management Assessment

33. Standard & Poor's analyzes the impact of financial management polices and practices through the use of the Financial Management Assessment (FMA). We believe the FMA provides a transparent assessment of a government's financial practices and highlights aspects of management that are common to most governments in a consistent manner (see "USPF Criteria: Financial Management Assessment," published June 27, 2006). Based on the current framework, a state is assigned a 'strong,' which equates to a score of 1, 'good' (score of 2), 'standard' (score of 3), or 'vulnerable' (score of 4) assessment.

### 2. Budget management framework

34. While the FMA outlines policies in a range of areas including budget amendments, our view of the framework for managing the budget (including legal framework as well as the policies in practice) is a factor in the high credit profile of U.S. states and we believe it is important in differentiating state credit ratings above or below the 'AA' rating level. Table 8 details our scoring methodology for this area.

**Table 8 - Assessment of the framework is further detailed in paragraphs 34 and 35.**

Budget Management Framework	
1	Framework is formalized, strong, and proactive; adjustments are timely, with emphasis on structural balance.

**Table 8 - Assessment of the framework is further detailed in paragraphs 34 and 35.**

Budget Management Framework (cont.)	
2	Framework is good but process may be less defined and adjustments may be less timely
3	Framework is adequate; budget monitoring is established but adjustments are not timely and response is uneven.
4	Framework is weak, which effectively prohibits timely adjustment; deficits carry forward into the next fiscal year.

35. To score the budget management framework, we review whether:
- There is a formal schedule for providing revenue and spending forecast updates throughout the year;
  - There are frequent (two or more times) updates during the fiscal year, especially during weak economic periods;
  - Budget adjustments are implemented in a timely manner to restore balance, generally within 30-60 days of budget gap being identified;
  - The executive branch/budget office has what we consider to be broad powers to adjust appropriations;
  - Legislative approval is required to restore balance and if the response is timely (adjustments begin within about 30 days of the gap being identified);
  - There is in our view a well-established track record of making difficult and politically unpopular revenue and spending decisions in order to restore balance during the fiscal year;
  - Gap-closing solutions are in our view generally focused on structural budget balance rather than relying on non-recurring revenue or spending actions; and
  - Deficits are not carried forward.
36. A state that meets all but one or two of the above budget management items will likely receive the highest score for its budget management framework while a state that exhibits only one or two of these characteristics will likely result in the lowest score.

## D. Economy

37. Economy is the third of the five major factors shown in chart 1 contributing to our assessment of the indicative credit level. Our economic review focuses on four metrics: demographic profile, economic structure including employment composition and performance, wealth and income indicators, and economic development. Each of these metrics is scored (1-4) and averaged to assess the overall economic fundamentals of a state. Where there are multiple indicators for each metric, they are also scored (1 to 4) and averaged to develop the metric score.

### 1. Demographic profile

38. We believe that the structure and growth characteristics of a state's population base provide critical information about revenue-generating capability as well as the costs of providing services and infrastructure. It is also a factor in revenue distribution at the federal level. We analyze historic population trends for each state relative to national trends. We also examine U.S. Census and other third party projections for future growth or decline. The age profile of the population base and changes in it over time are also considerations due to the high proportion of state spending tied to education and social service programs. To assess this we review the age dependency ratio calculated by the U.S. Census Bureau. As detailed in table 9, the key indicators of our demographic profile score are our view of:
- Population growth trends; and

- Age distribution of population.

Table 9 - As described in paragraph 38

Demographic Profile		
Indicators (scored separately then averaged)		
Score	Population growth trends	Age dependency ratio*
1	Strong population growth relative to U.S.	Relatively low dependent population (more than 5% below U.S. levels).
2	Stable population trends; steady growth over time in line with U.S.	Dependent population ratio in line with U.S. levels.
3	Demographic trends are weaker than the U.S.	Dependent population is well above U.S. (0- +5%).
4	Growth has declined for more than a decade.	Dependent population has significant variance (more than 5%-10% from U.S.).

\* From the U.S. Census.

## 2. Economic structure

39. The composition, output, and diversity of the employment base plays a role in the link between a state's economy and its ability to generate revenues. A state's economic structure can also influence the level of services it provides and can contribute to spending growth pressures. A review of the economic structure, growth trends, and how various indicators perform during economic cycles allows us to assess the relative stability or cyclicity of a state's economy. We also review changes in the structure of the economy over time to assess diversification trends and how this may affect future economic performance. As detailed in table 10, the key indicators summarize our view of:

- Employment, labor force, and unemployment trends;
- Employment composition by sector and how it compares to the national distribution; and
- Gross state product growth trends and gross state product per capita.

Table 10 - As described in paragraph 39

Economic Structure				
Indicators (scored separately then averaged)				
Score	Unemployment	Employment composition/ diversity of base	GSP* per capita	GSP growth
1	Rate 2%+ below U.S.	Employment mix in line with U.S.; limited concentration; performance tends to be less cyclical than U.S.	>100% of U.S. Gross Domestic Product (GDP)	Growth consistently above U.S.
2	Rate within 2% +/- of U.S.	Employment base exhibits some concentration that contributes to more cyclical performance than the U.S. economy as a whole.	>85% of U.S. (GDP)	Growth in line with U.S.
3	Rate 2%+ above U.S.	Employment base is concentrated; performance has been cyclical and weak relative to the U.S. over the past decade	>75% of U.S. (GDP)	Growth below the U.S. periodically.
4	Rate 5% or more above U.S.	Employment base has high level of concentration relative to U.S. distribution which has contributed to cyclical performance and weak trends over decades.	<75% of U.S. (GDP)	Growth has consistently been below U.S. levels.

\* GSP—Gross state product.

40. As part of our review of the employment composition and diversity of the employment base as outlined in table 10, we analyze the largest employers in the state relative to current economic conditions to assess the potential for cyclicity and how those firms might affect future growth and development. We include regional patterns of employment in the review if an individual state benefits from proximity to other labor markets.

### 3. Wealth and income indicators

41. We consider wealth levels of a state as part of the economic review. We believe that how income compares to national levels and how growth rates have trended over time can provide useful information about the ability to generate additional revenues. The key indicator is to us is per capita personal income, as detailed in table 11.

Table 11 - As described in paragraph 41

Income And Wealth	
Score	Per capita personal income rank
1	>100% of U.S.
2	>85% of U.S.
3	75%-85% of U.S.
4	<75% of U.S.

### 4. Economic development

42. In addition to historic economic trends, we consider each state's economic development initiatives and future growth prospects as they are likely to affect future revenue generating capacity. We have identified areas that we believe drive future development. A state that we believe displays a preponderance of attributes in a given section below will be assigned that score. We express our assessment of economic development prospects as detailed in table 12:

Table 12 - As described in paragraph 42

Economic Development	
Score	
1	The state's resources, employment opportunities, cost of living, cost of doing business, and tax structure result in an economic environment that supports entrepreneurship, as well as significant levels of private sector investment. The majority of urban centers in the state are economically vibrant and continue to attract in-migration and investment. In addition, the state is home to the headquarters of employers with global operations, as well as prominent higher education anchors which serve as catalysts to continuous investment over time. A majority of the state's current employment is in economic sectors that are expected to perform at an above-average pace during periods of economic growth. Infrastructure is in place to support further growth and development.
2	The state's resources, employment opportunities, cost of living, cost of doing business, and tax structure result in overall growth in population and employment over time, but economic growth across the state is uneven, with only a few urban centers performing better than average, and the majority of urban centers exhibiting lackluster economic performance. Some, but not all, of the major urban centers are attracting private investment and are major centers of job creation. Higher education anchors exist, but are not situated near major urban centers or major employment centers, which could limit their effectiveness in attracting investment. Concentration of private investment and employment in economic sectors that have below-average growth prospects may limit overall economic growth.
3	We expect the state to experience limited employment and private investment growth or possibly decline for a range of reasons including one or both of the following: reliance on sectors that are experiencing structural decline in both output and employment; and a tax structure that may represent a competitive disadvantage (measured by historic levels of private investment, high cost of doing business, population flows, and recent loss of key employers).
4	Growth prospects are not evident and there is little focus by the state on economic development initiatives.

## E. Budgetary Performance

43. Budgetary performance is the fourth of the five major factors shown in chart 1 contributing to our assessment of the indicative credit level. While states prepare financial statements each year using generally accepted accounting principles (GAAP), which includes accruals, the budget development, appropriations, budget monitoring, and

reserves, are expressed on a budgetary basis, which is more closely aligned with a cash basis presentation. Budget-based financial information is a primary focus of our financial review because it shows how state finances are managed day-to-day. However, we also analyze the GAAP audited financial statements and variations between GAAP and budget-based financial disclosure to gain a more complete understanding of a state's financial condition. We assess six key metrics in order to evaluate budgetary performance: budget reserves, liquidity, tax/revenue structure, revenue forecasting, service levels, and structural budget performance. These metrics are scored individually and averaged to develop an overall assessment of budgetary performance. Where there are multiple indicators for each metric, they are also scored (1 to 4) and averaged to develop the metric score.

### 1. Budget reserves

44. State revenues tend to be cyclical and in our view generally are sensitive to changing economic conditions. Looking at the history of revenue shortfalls for states, we believe that no budget reserve fund could be sized to completely address the potential for volatility in a severe recession or revenue downturn. However, all other factors being equal, we believe states with well-funded reserves have greater flexibility to address shortfalls should and when they occur.
45. Over the past two decades states have generally exhibited greater formalization of budget reserve policies. We believe that a clearly articulated policy and steady funding of reserves is important to allow states to manage through challenging economic cycles. In addition to the level of funding, our review (detailed in table 13) includes an analysis of how the size of the reserve compares to historic revenue and spending patterns and gaps and of the track record of funding the reserve, including any replenishment mechanisms. If there is a stated policy but there is no track record of funding the reserve in positive economic periods, we will assess the reserve at the average level it is actually funded at historically. In addition to formal budget reserves, we review financial reserves and balances identified in funds outside of the state's main operating fund or general fund that may be available for budget purposes. If there are other available reserves identified by the state in addition to the formal budgetary reserve, we will consider these as part of the overall reserve capacity of the state if they are available for state operating purposes.

**Table 13 - As described in paragraph 45**

Budget-Based Reserves Relative To Revenue And Spending	
Score	
1	There is a formal budget-based reserve relative to revenue or spending that is above 8%. In addition, there is a formal process or a demonstrated track record of restoring the reserve following depletion.
2	There is a formal budget-based reserve relative to revenue or spending that is between 4% and 8%. In addition, there is a formal process or a demonstrated track record of restoring the reserve following depletion.
3	There is a formal budget-based reserve relative to revenue or spending that is between 1% and 4%. In addition, there is a formal process or a demonstrated track record of restoring the reserve following depletion.
4	There is no formal budget reserve fund, or reserves are funded at less than 1% over time, or there is no process for accumulating reserves. No additional reserve funds are identified or available.

Note: Refers to reserve policy levels and not actual funding level as we observe that reserves are often depleted through economic cycles.

### 2. Liquidity

46. Standard & Poor's believes that a state's liquidity position is an important component of its overall credit profile. We generally regard available cash as the strongest form of liquidity, but many states rely on external borrowing and disbursement adjustments in order to fund priority payments including debt service. While the ability to adjust disbursements provides short term flexibility, it could result in additional cost pressure or fiscal strain later in the fiscal year if disbursement delays are frequent and represent a significant portion of the total budget. When assessing liquidity for a state, we focus on the resources it is legally allowed to access to fund cash flow requirements. In

analyzing liquidity, we consider four areas: a) cash monitoring capabilities, b) cash flow predictability, c) internal cash flow generation capacity, and d) external cash flow borrowing. We combine our view of these four areas to arrive at our liquidity score. Below is a description of each of these areas and how they are combined into the overall score.

47. (a) *Cash monitoring capabilities.* We analyze states' cash monitoring capabilities to determine whether they include daily monitoring of balances and well-developed forecasting tools that enable swift reaction to imbalances. We also consider the ability to adjust disbursements and collections.
48. (b) *Cash flow predictability.* We evaluate the fluctuation in receipts and disbursements during the year and determine mismatches and how these change from year to year.
49. (c) *Internal cash flow generation capacity.* States often have what we view as broad discretion to access liquidity from other than general funds. We examine whether all funds are immediately available--which provides a high degree of flexibility--or whether legislative or executive authority is required to shift resources from other funds to cover key operating fund requirements. We also factor into our review of liquidity the level of reserves available for cash flow purposes across state government.
50. (d) *External cash flow borrowing.* We review borrowing for operations and how that has fluctuated over time.
51. Table 14 details the characteristics that we would generally expect to see at different levels for our liquidity score resulting from the combination of the above factors. We expect that a single state would exhibit most but not all of the characteristics listed.

**Table 14 - As described in paragraphs 46-50**

Liquidity	
Score	
1	Strong cash monitoring capabilities including regular cash flow forecasting; broad authority to access liquidity from pooled funds which allows for highly predictable cash management; receipts and disbursements are aligned; broad authority to adjust disbursements; little or no reliance on external borrowing and if necessary is conducted with ease.
2	Well-established cash monitoring capabilities and periodic cash flow forecasting. Access to pooled cash is available but may be limited to certain funds; receipts and disbursements may not be totally aligned during the fiscal year; well-defined contingencies are in place to augment internal resources; external borrowing is conducted with ease and stable over time relative to the size of the budget; ability to manage disbursements may be limited in some areas.
3	Cash monitoring is generally comprehensive but cash forecasting may be less established; access to internal liquidity is not sufficient to address timing or is restricted; recurring receipts and cash disbursements are not aligned and there may be variability that leads to external borrowing requiring regular adjustments through the course of the budget year, internal estimation of cash flow needs difficult to predict.
4	Cash monitoring is weak and cash forecasting is not done on a regular basis. Liquidity is weak and needs are volatile at times; state is meeting certain obligations only by deeply delaying payment on other obligations; ability to access pooled cash is limited; external borrowing is common and not predictable in terms of size and frequency; borrowing for cash flow is expanding relative to the size of the budget and may cross fiscal years.

### 3. Tax/revenue structure

52. Levying and collecting taxes has been a key tool for states in managing through a range of economic cycles. We believe that a state's tax structure, including the range of taxes, the ability and willingness to adjust them, and how they align with economic activity within its borders is an important credit factor. Our analysis of revenue structure considers the diversity of revenue sources (table 15) and the revenue adjustment history (table 16). In making these assessments we focus our analysis on the principal operating funds of the state.
53. *Diversity of revenue sources.* We evaluate the range of taxes levied and other revenues generated by each state and what the relative contributions are from each source. This includes a review of both the tax base and the rates to understand how they align with a state's economy and ultimately how they affect the volatility and predictability of

revenues.

**Table 15 - As described in paragraph 53**

Revenue Diversity Score	
Score	
1	State has contributions from at least two major sources that generally contribute more than 15%-30% each.
2	State relies on one key revenue source, generally providing more than 65% to fund operations but revenue aligns with key economic strengths of the state.
3	State relies on one key revenue source for more than 65% of revenues; key revenue source does not align closely to economic fundamentals.
4	State relies on one revenue source to fund more than 90% of operations.

54. **Revenue adjustment history.** While we measure the legal framework for levying taxes and adjusting the tax rate and base as part of the government framework, we assess a state's practical ability and willingness to use these powers if needed as part of our assessment of the state's financial flexibility and performance.

**Table 16 - As described in paragraph 54**

Revenue Adjustment History	
Score	
1	Strong track record of revenue adjustments in our view; adjustments are timely.
2	There is demonstrated track record of revenue adjustments in our view; response is generally less timely and may lag by a fiscal year.
3	Revenue adjustments are made periodically but they are not timely and may lag structural imbalance by more than a year.
4	Revenue adjustments are not implemented.

#### 4. Revenue forecasting

55. State revenues tend to be volatile during economic downturns because they rely on personal income tax, sales tax, corporate income tax, and other economically sensitive sources. We have observed that these sources tend to react more swiftly to changing economic conditions. As a result, the revenue forecasting process is part of our review for each state. Specifically, we review what economic sources and assumptions provide the foundation for the forecast and how the economic assumptions and forecast compare to those of other states. We also evaluate the process in place to establish the forecast to determine if it is an independent process or a forecast negotiated by the executive and legislative branches. We analyze forecasts to determine whether they align with the current economic environment and historic performance.

**Table 17 - As described in paragraph 55**

Revenue Forecasting	
Score	
1	There is a formal independent revenue forecast that guides budget development and the forecast is reviewed several times during fiscal year.
2	There is a formal and detailed revenue forecast; may be done by executive and legislative branch separately with an attempt to align the forecast in advance of budget approval based on economic considerations.
3	The revenue forecast is detailed and comprehensive but the final outcome may be "negotiated" and there is some level of political influence over outcome.
4	There is no formal revenue forecasting process.

#### 5. Service levels

56. The range and level of services provided by each state varies significantly. We believe that assessing expenditure composition and how this has changed over time is useful in assessing service levels and flexibility. Our analysis

focuses on the legal requirements to provide services, the discretion available in providing services, and the predictability of the services provided, as detailed in table 18.

57. **Legal requirements to provide services.** We believe that the legal framework for funding various service responsibilities is important to the extent that it creates or constrains budget flexibility. Spending for Medicaid is an example of a federally mandated program that is costly and usually difficult to adjust. Certain states provide a high level of services under the program, while others provide less. These differences will affect overall budget flexibility. Other services may have a constitutional or statutory basis of funding. Funding for K-12 education is a constitutional obligation for nearly all states. A state defending a legal challenge to its funding system could face additional spending requirements, which could diminish flexibility.
58. **Discretionary vs. non-discretionary expenditures.** When evaluating the range of services provided we analyze which are non-discretionary (mandates, statutory, constitutionally required, or contractual) and difficult to reduce versus those that are discretionary.
59. **Predictability.** When evaluating state spending, we review how predictable the expenses are: do they fluctuate with the economic environment (social service programs are an example), are they regularly tied to other statutory actions (stringent prison sentencing laws translating to higher prison costs), or influenced by other policies or factors specific to a state (debt vs. pay-as-you-go policies or collective bargaining agreements).

**Table 18 - As described in paragraphs 56-59**

Service Levels	
Score	
1	Expenditures are predictable as measured by variance from budget expectations; high degree of flexibility to reduce services/expenditures in most program areas. This flexibility is measured in terms of the legal ability and our view of the political willingness to make adjustments.
2	Expenditures are generally predictable as measured by variance from budget expectations, but may experience cyclical trends; ability to cut services and expenditures is good in our view, but may not extend to all program areas from a practical or legal standpoint.
3	Expenditures tend to be cyclical and less predictable with variances relative to budget common in certain program areas; ability to cut services/ expenditures is adequate in our view but many program areas are excluded from a practical or legal standpoint.
4	Expenditures are very cyclical and unpredictable and variances relative to the budget are common for many program areas; the state has exhibited a persistent reluctance or inability in our view to reduce expenditures and service levels.

## 6. Structural budget performance

60. Table 19 details our assessment of structural budget performance. We consider a state's budget to be structurally balanced if recurring revenues equal or exceed recurring operating expenditures. We recognize that structural balance is difficult to maintain during economic downturns when revenue performance is weak and support expenses may increase, but we believe it is also difficult during periods of strong economic growth when excess revenue can lead to expansion of programs and services. Most state governments that do multi-year financial planning will almost always show out-year gaps regardless of the economic climate as scarce resources are balanced against virtually unlimited spending needs. Periods of imbalance are common for states but we believe that a track record of aligning recurring revenues and expenditures over time is an important element of fiscal performance.

**Table 19 - As described in paragraph 60**

Structural Budget Performance	
Score	
1	Surpluses are regularly recorded in periods of positive economic growth; surpluses are used to fund reserves and other non recurring items. In periods of economic decline, focus on addressing budget imbalance includes structural solutions (generally more than 50% of the gap) rather than all one time measures.

Table 19 - As described in paragraph 60

Structural Budget Performance (cont.)	
2	Balanced operating results are typically achieved during periods of positive economic growth; commitment to reserves and non-recurring program areas is not formalized and may not be consistent; in periods of decline, focus on budget balance may be more reliant on non-recurring measures (more than 50% of the gap) to restore balance.
3	Balanced operating results may be achieved in positive economic periods but there is limited commitment to reserves and non-recurring program areas (surpluses largely fund higher recurring spending). In periods of economic and revenue decline, focus on budget balance may be more reliant on non-recurring measures (more than 75% of the gap) to restore balance.
4	There is limited focus on structural budget balance; deficits are regularly carried forward into future fiscal years and reserves are not funded in periods of positive economic growth.

## F. Debt And Liability Profile

61. The debt and liability profile is the fifth of the five major factors in our assessment of the indicative credit level. In particular, we review debt service expenditures and how they are prioritized versus funding of other long-term liabilities and operating costs for future tax streams and other revenue sources. We evaluate three key metrics which we score individually and weight equally: debt burden, pension liabilities, and other post employment benefits. For each metric there may be multiple indicators that we score separately and then average to develop the overall score for the metric.

### 1. Debt burden

62. Standard & Poor's debt ratio calculations for states aggregate all tax-supported debt, including GO bonds, appropriation obligations, and special-tax bonds such as sales, personal income, and gas tax bonds. In general, our tax-supported debt calculation do not include debt that is issued for true enterprises or is self-supported, such as toll revenue bonds if revenues are sufficient to cover debt service costs. (see "USPF Criteria: Debt Statement Analysis," published Aug. 22, 2006). Once we have determined a net direct tax supported debt figure, we calculate various ratios, as indicated in tables 20, 21, 22, 23, and 24.
63. We do not include grant anticipation revenue (GARVEE) bonds in state debt calculations if they are payable solely from dedicated federal revenues. We will also exclude bonds secured by tobacco settlement revenues from state debt calculations if they conform to our stress scenarios for rating such debt and are payable exclusively from settlement revenues. We exclude contingent obligations or moral obligation debt from the tax-supported debt calculation if there has been no state support required and we expect no need for support in the future see ("Moral Obligation Bonds," published June 27, 2006). There have not been a wide range of securitizations of assets or future revenues, but we will evaluate other structures to determine if they should be included as tax supported debt or a contingent liability. Similarly, as the use of public-private partnerships expands, we will evaluate the nature of a state's obligation under various long-term agreements to determine whether the obligation is considered part of a state's tax-supported debt burden or a contingent liability.
64. We examine a variety of ratios to measure debt burden. We score these individually and then average them to develop a score for debt burden. The indicators that we score include:
65. *Debt per capita (table 20)*. Table 20 shows the scoring ranges for tax-supported debt per capita, based on the population that is served and pays for the debt.

Table 20 - As described in paragraph 65

Tax-Supported Debt Per Capita	
1	Below \$500 (Low)

Table 20 - As described in paragraph 65

Tax-Supported Debt Per Capita (cont.)	
2	\$500-\$2,000 (Moderate)
3	\$2,000-\$3,500 (Moderately high)
4	Above \$3,500 (High)

66. *Debt as a percentage of personal income (table 21).* We consider the ratio of debt to personal income to be relevant because we believe the capacity to pay is a critical factor in debt analysis.

Table 21 - As described in paragraph 66

Tax-Supported Debt/Personal Income	
1	Below 2% (Low)
2	2%-4% (Moderate)
3	4%-7% (Moderately high)
4	Above 7% (High)

67. *Debt service as a percentage of expenditures (table 22).* We believe the ratio of debt service to expenditures is an important indicator, as it indicates the level of inflexibility that debt places on the budget. The ratio of debt service to operating revenue and debt service to operating expenditures usually track closely, although distortions in the first ratio can occur if nonrecurring revenues are factored into state revenue bases.

Table 22 - As described in paragraph 67

Tax-Supported Debt Service As A % of General Government Spending	
1	Below 2% (Low)
2	2%-6% (Moderate)
3	6%-10% (Moderately high)
4	Above 10% (High)

68. *Debt to gross state product (table 23).* We use the ratio of debt to gross state product widely for sovereign and non-U.S. public finance and we believe it should allow enhanced comparability for government ratings.

Table 23 - As described in paragraph 68

Tax-Supported Debt As A % Of Gross State Product	
1	Below 2% (Low)
2	2%-4% (Moderate)
3	4%-7% (Moderately high)
4	Above 7% (High)

69. *Debt amortization (table 24).* Serial amortization is a common feature for government debt issuance in the U.S. We believe that debt service relative to the size of the budget is an important affordability measure but needs to be evaluated in the context of the overall debt amortization schedule. A low debt service carrying charge ratio could simply be a function of a very slow 30-year amortization, which we view differently from a 15-year schedule. We consider the benchmark of 50% of principal repaid in 10 years to be average. This indicator assumes serial debt amortization where rapid amortization can allow new debt to be issued without affecting debt burden measures.

Table 24 - As described in paragraph 69

Debt Amortization (10 year)	
1	80%-100% (Very Rapid)
2	60%-80% (Rapid)

**Table 24 - As described in paragraph 69**

Debt Amortization (10 year) (cont.)	
3	40%-60% (Average)
4	Less than 40% (Slow)

## 2. Pension liabilities

70. We review state pension liabilities and trends related to funding progress. This analysis focuses on the principal state pension plans and includes changes in assets and liabilities, funded ratios, and unfunded actuarial accrued liabilities. Pension asset valuations can change, as can the actuarial liabilities. A state's commitment to funding the annual required contribution and how substantive and volatile these contributions are relative to the total budget are key credit considerations. We have historically not included pension liabilities in our calculation of tax supported debt ratios due to variation in how the liabilities are calculated. Specifically, under current accounting standards, there are a broad range of actuarial methods and assumptions allowed by the Governmental Accounting Standards Board (GASB) for governments in the U.S. and interest earnings assumptions differ by state. However, we have consistently analyzed and reported pension liabilities for states relative to population and personal income to allow a comparative framework for evaluating these liabilities relative to state tax supported debt. Our assessment of pension liabilities includes the following four indicators which are averaged to develop an overall score:

- Pension funded ratio (table 25),
- Pension funding levels (table 26),
- Unfunded pension liabilities per capita (table 27), and
- Unfunded pension liabilities relative to personal income (table 28).

We typically derive this information from audit reports as well as actuarial reports.

**Table 25 - As described in paragraph 70**

Pension Funded Ratio	
Strong (1)	90% or above
Above average (2)	80%-90%
Below average (3)	60%-80%
Weak (4)	60% or below

**Table 26 - As described in paragraph 70**

Pension Funding Levels	
Strong (1)	Consistently funds annual required contributions (ARC).
Above average (2)	Funds ARC in most years but occasionally contributes less.
Below average (3)	Has not funded ARC for 3 years.
Weak (4)	Has not funded ARC for more than 3 years.

**Table 27 - As described in paragraph 70**

Unfunded State Pension Liabilities Per Capita	
Strong (1)	Below \$500
Above average (2)	\$501-\$2,000
Below average (3)	\$2,001-\$3,500
Weak (4)	Above \$3,500

**Table 28 - As described in paragraph 70**

Ratio Of State Pension Liabilities To Personal Income	
Strong (1)	Below 2%
Above average (2)	2.1%-4%
Below average (3)	4.1%-7%
Weak (4)	Above 7%

### 3. Other post employment benefits (OPEB) risk assessment

71. Our analysis of OPEB liabilities is similar to that of pensions, although our overall assessment is a combined one as detailed in table 29. The legal and practical flexibility that a state has to adjust these liabilities and the overall strategy to manage the cost of these benefits will affect future contribution rates and budgetary requirements. All states are now reporting OPEB liabilities pursuant to GASB Statement 45. Currently, OPEB expenditures are funded generally on a pay-as-you-go basis. Under GASB Statement 45, liabilities attributable to OPEB and the annual required contribution for employers are actuarially determined and reported.

**Table 29 - As described in paragraph 71**

OPEB Risk Assessment	
Low (1)	Limited benefits provided or benefit consists of allowing some participation in the health plan (cost paid entirely by the retiree, implicit subsidy recorded), high level of discretion to change benefits, pay-go costs are not significantly different from the actuarial required contribution.
Moderate (2)	Moderate/average liability relative to other states, proactive management of the liability in our view, some flexibility to adjust benefit levels, contributions in excess of the annual pay-go amount have been made in order to accumulate assets to address the liability.
Elevated (3)	Above-average liability relative to other states, options to address the liability are being considered but plans are not well-developed in our view, there may be some flexibility to adjust benefits but changes have been limited.
High (4)	High liability relative to other states, high level of benefits that are viewed as inflexible based on statute/constitution/contract terms, a lack of management action to address the liability in our view which will lead to accelerating pay-go contributions.

## APPENDIX

On May 11, 2010, Standard & Poor's published "Request for Comment: Methodology For U.S. State Ratings". We received several responses from market participants addressed to the criteria comments mailbox. The comments addressed a wide range of issues that extended beyond the questions asked in the RFC but in general there was a positive response to the enhanced transparency and greater clarity of the proposed criteria.

- On the first question regarding separating the GO criteria for U.S. states from the broader GO criteria, nearly all market participants agreed with this.
- On the second question, regarding whether the proposed rating factors and individual metrics focus on the key factors affecting state government, most market participants agreed that the information was useful in evaluating state creditworthiness. There was a range of opinions on the equal weighting of factors. There was also feedback that the security features of state debt and default history of the sector should be highlighted more significantly.
- On the third question regarding scoring each individual metric in order to establish an overall score for each factor and translating that score to an indicative credit level, there was some feedback that the scoring would allow for greater transparency. Other market participants expressed reservations about how the scores would be utilized.

There were other comments and observations on specific aspects of the methodology. We have analyzed each

comment and have made some adjustments to the methodology. The main changes between the criteria presented in the Request For Comment and the final criteria as described in this article are the following:

- We have expanded the discussion of institutional framework (see "Standard & Poor's use of stress scenarios and calibration of state criteria") to highlight that the priority of payment, security features and the state sector's strong commitment to their legal obligation to pay debt are fundamental to our analysis of the state sector and contribute to its high credit profile:
- We have added additional clarity to the section "Overriding factors impacting state ratings."
- We have streamlined the metrics in the economic section and explained our approach to analyzing economic indicators for US states in a global context.
- We have adjusted the "reserve" section to better capture funding patterns as well as policy.
- We have changed the "future debt" metric as part of the Debt and Liability Profile score. We believe that forward looking measures are important to credit analysis and we will instead include this in the section "Overriding factors impacting state ratings" (see paragraph 16).
- In the area of pension liabilities, we added two additional measures, state pension liabilities per capita and state pension liabilities relative to personal income, to our assessment of this factor. We eliminated the three year average when assessing the funded ratio since nearly all state pension plans are subject to smoothing currently which phases in gains and losses over a multi year period.

## GLOSSARY

**Accelerated payment provisions.** This term refers to an investor's ability to require early repayment of principal that is not scheduled based on certain events, with repayment required on a compressed timeframe, generally less than 180 days.

**Bank bond exposure.** Refers to bonds purchased by a bank following a failed remarketing (outlined under the terms of a letter of credit reimbursement agreement or a standby bond purchase agreement). The bonds typically have a significantly higher interest rate and a significantly shorter maturity schedule than the original bond.

**Balanced budget.** Many states have balanced budget requirements that require them to pass a budget that provides sufficient revenues to fund all expenditures at the time of passage.

**Budget reserves.** Excess financial resources accumulated either formally or informally to address budget balance or other requirements of a government.

**Independent revenue estimating process.** A forecast developed by a group of subject matter experts which can include economists, business leaders and practitioners based on knowledge of current economic conditions and the existing tax structure.

**Contingent obligations.** Includes explicit or implicit obligations that a state may incur under certain circumstances and that could affect its financial position if the state absorbs these obligations and is fully responsible for them. Contingent obligations are generally not recorded in the state's balance sheet and often are not disclosed as off-balance sheet liabilities.

**Debt service.** Principal and interest payable during the fiscal year.

**Deficit.** The result achieved when operating revenues and recurring transfers in are less than operating expenditures and recurring transfers out.

**GAAP.** Generally accepted accounting principles are the common set of accounting principles, standards, and procedures that most governments utilize. For local and state governments, GAAP is determined by the Governmental Accounting Standards Board (GASB).

**Gross state product (GSP).** A measurement of the economic output of a state. It is the value added in production by the labor and property located in a state. GSP for a state is the sum of the gross product originating in all industries in a state. GSP is considered the state counterpart of the nation's gross domestic product (GDP), the U.S. Bureau of Economic Analysis' featured measure of U.S. output.

**Moral obligation debt.** Moral obligation debt represents a commitment by a state to seek future appropriations for payment of debt service or replenishment of a debt service reserve fund should it fall below its required level.

**Other post employment benefits (OPEB).** Includes retiree health care, along with dental, vision, disability, long-term care, and life insurance benefits.

**Revenue forecast.** The forecast developed by a state that underlies its budget. This would be the expected revenue based on assumptions reflecting the conditions a state expects to exist and adjustments (authorized/proposed) to the rates/fees or the base they are levied on.

**Self-supported.** Debt is considered self-supported if it is funded by an enterprise operation without any subsidy or support from the state government.

**Structural budget balance.** Results from matching recurring operating revenues to recurring expenditures. In measuring structural budget balance we do not include nonrecurring intergovernmental transfers, proceeds from the sale of assets, and non-recurring capital expenditures.

**Tax-supported debt.** When calculating tax-supported obligations, we include GO bonds, appropriation obligations, and special-tax bonds such as sales, personal income, and gas tax bonds. We typically include debt secured by revenues or assessments and charges levied state wide. In general, our tax-supported debt calculation will not include debt that is issued for true enterprise or self-sustaining purposes, such as toll revenue bonds if revenues are sufficient to cover debt service costs (see "USPF Criteria: Debt Statement Analysis," Aug. 22, 2006). We do not include grant anticipation revenue (GARVEE) bonds in state debt calculations if they are payable solely from dedicated federal revenues. We will also exclude bonds secured by tobacco settlement revenues from state debt calculations if they conform to our stress scenarios for rating such debt and are payable exclusively from settlement revenues.

## Related Criteria And Research

- Principles Of Corporate And Government Ratings, June 26, 2007
- USPF Criteria: GO Debt, Oct. 12, 2006
- USPF Criteria: Appropriation-Backed Obligations, June 13, 2007
- USPF Criteria: Financial Management Assessment, June 27, 2006
- USPF Criteria: Debt Statement Analysis, Aug. 22, 2006
- Pension Funding And Policy Challenges Loom For U.S. States, July 8, 2010
- USPF Report Card: 2009 State Debt Review: Significant Challenges Lie Ahead, Dec. 16, 2009
- U.S. States' OPEB Liabilities And Funding Strategies Vary Widely , June 3, 2009

- Methodology For Rating International Local And Regional Governments, Sept. 20, 2010

These criteria represent the specific application of fundamental principles that define credit risk and ratings opinions. Their use is determined by issuer- or issue-specific attributes as well as Standard & Poor's Ratings Services' assessment of the credit and, if applicable, structural risks for a given issuer or issue rating. Methodology and assumptions may change from time to time as a result of market and economic conditions, issuer- or issue-specific factors, or new empirical evidence that would affect our credit judgment.

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## **APPENDIX G**

## SPECIAL COMMENT

*This is another in an ongoing series on pension obligations. Previous reports (listed on page 12) covered potential pension accounting changes, fiscal pressure on governments, and the stock market's impact on pension funding. The impact of pension obligations on U.S. state and local credit ratings will be the subject of further reports in the coming months.*

*This report corrects our January 27 report, adjusting liabilities previously reported for nine states, as specified in the footnotes on pages eight and nine. It also revises state-by-state personal income data included in the original report.*

## Combining Debt and Pension Liabilities of U.S. States Enhances Comparability

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### Summary

Our credit analysis has long focused on states' net tax-supported debt, while also looking separately at pension funded ratios<sup>1</sup> to assess the relative risk implied in states' long-term liabilities. As part of our ongoing efforts to provide increased transparency, and in view of prospects for sluggish economic growth and slow revenue recovery among U.S. states, this report provides figures that combine unfunded pension liabilities with outstanding bonds when evaluating the leverage position of state governments.

Large and growing debt and pension burdens have been, and will continue to be, contributing factors in rating changes. However, unfunded pension liabilities have grown more rapidly in recent years because of weaker-than-expected investment results, previous benefit enhancements and, in some states, failure to pay the full annual required contribution (ARC).<sup>2</sup> Moreover, pension liabilities may be understated because of current governmental accounting standards.

Demographic factors (including the retirement of Baby Boom generation employees and increasing life expectancy of beneficiaries) are also adding to liabilities. States are beginning to respond to this growing challenge by increasing contribution requirements, raising minimum retirement ages, and undertaking other reforms. Several states have both high debt and pension liabilities, and these states, predictably, rank highest using these new measures. States' liability rankings versus revenue or economic measures tend to be indicative of the nature of risks these states carry in funding their obligations over the long term. Combining debt and pension metrics will improve transparency for investors by:

- » Supplementing traditional credit analysis measures and improving comparative credit assessment of states
- » Better aligning state credit analysis with corporate and other market sectors
- » Improving comparability between and among U.S. states and corporate issuers.

<sup>1</sup> The funded ratio of a pension is defined as the actuarially determined value of its assets divided by its actuarial, accrued liability for benefits.

<sup>2</sup> The ARC is defined as the amount needed to provide for future pension benefits earned in the current year as well as the share needed to amortize a portion of any unfunded liability from prior years.

## Rationale for Combining Pension Liabilities with Debt

We have historically assessed the credit risk of states' long-term obligations by comparing the amount of outstanding bonds to the size and growth of state tax bases and economies. We have ranked states in our annual debt medians reports based on the par value of outstanding bonds (net tax-supported debt<sup>3</sup>), as a percentage of income, on a per-capita basis and, more recently, as a share of states' gross domestic product. The funded ratios of pension plans have also been regularly factored into our analysis of state credit. In Moody's U.S. States Scorecard, first published in 2006, states have been ranked based on scores in 15 variables, including aggregate pension funded ratio.<sup>4</sup>

The pension funded ratio alone does not provide a full context for measuring the burden of long-term funding needs. For example, a relatively low funded ratio can reflect liabilities that are small in relation to available resources. A funded ratio that appears to be healthier when compared with those of other states still can be associated with onerous funding needs, given states' differing capacities to generate tax revenues, cut operating costs, and reform pension plans. Treating pension liabilities as a form of debt, and combining the unfunded amount with outstanding indebtedness, improves transparency by providing a more complete comparison of states based on their total long-term obligations as a portion of available revenue and taxing capacity.

The total pension and debt burden highlights different credit characteristics when compared to economic or revenue measures. Pension and debt liabilities compared to operating fund revenues indicate the relative degree of affordability based on current revenue sources. A comparison of the combined liabilities to GDP, population, and personal income indicates the economic and demographic base states may draw on to meet their obligations over time. For states such as Connecticut, Illinois and New Jersey, which have engaged in both underfunding and pension bond issuance, combined debt and pension metrics facilitate more comprehensive comparisons. This approach also provides a basis for comparisons with other sectors, such as hospitals and corporations.

## Accounting Rules Allow Significant Flexibility in Determining Liabilities

Public pension obligations represent deferred compensation owed to government employees. To derive the value of their obligations, states use actuarial projections, which incorporate assumptions about employee retirement ages, longevity, investment performance, and other factors. The unfunded actuarial accrued liabilities (UAALs) are highly sensitive to changes in the underlying assumptions. States use different combinations of assumptions and actuarial cost methods, making comparisons among states imperfect. Nonetheless, Moody's relies on the issuer's reported pension funded ratio and ARC as rough estimates of the magnitude of pension liabilities.

Notably, the Governmental Accounting Standards Board's rules applicable to pension reporting (GASBS 25 and 27) allow states significant flexibility not permitted under the Financial Accounting Standards Board's rules for corporate financial reporting (FAS 87). GASB indicates that the discount rate used to derive plan liabilities' present value should be consistent with expected long-term asset returns. FASB, meanwhile, dictates that the discount rate be consistent with guaranteed investment contracts or other instruments that could be used to settle a plan's liabilities. This difference stems from the fact that governments exist in perpetuity, while corporations can cease to exist. States and

<sup>3</sup> Net tax-supported debt excludes bonds that are not supported by state revenues and moral obligations or other guarantees that are not expected to be paid from state revenues.

<sup>4</sup> The U.S. States Scorecard includes an aggregate funded ratio for each state as one of four metrics in the debt category.

other public-sector plan sponsors typically discount their liabilities using the approximately 8% return anticipated on stocks and other assets, which substantially reduces the liabilities' reported size. For a state with a pension funded ratio of 70%, lowering the discount rate to 7% from 8% would lower the funded ratio to approximately 63%.

## Pension Benefits Are Protected, Long-Term Obligations

States typically provide pension benefits through retirement plans managed by systems that are not directly managed by the state government, but that are bound by statutory provisions. Once accrued, public pension benefits are protected, contractual obligations, sometimes shielded by specific pension provisions in state constitutions. In this respect, pension benefits differ from other post-employment benefits (or OPEB, primarily health insurance), which are typically easier for states to alter.<sup>5</sup> Pension liabilities therefore have an irrevocable, long-term nature that resembles bonded debt. States, however, retain the ability to alter many factors that go into valuing pension liabilities. In addition, states' requirements to contribute to pension plans in any specific year are subject to statutory change. States have also passed laws granting relief from contribution requirements in times of fiscal stress. Bonds, by contrast, carry specific dates on which interest and principal must be paid, and these dates are not subject to change by the legislature.

## Connecticut, Illinois and Hawaii Debt and Pension Liabilities Rank Among Highest

The combined net tax-supported debt and pension liability figures in this report have been measured compared with state personal income, GDP, population and operating fund revenue. The states with the largest combined pension and debt burdens include Connecticut, Hawaii, Illinois, Kentucky, Massachusetts, Mississippi, New Jersey and Rhode Island, as well as the Commonwealth of Puerto Rico. Figures 1 and 2 display the 10 states with the largest long-term liabilities as a percentage of revenues and as a percentage of GDP, respectively. A total of 12 states appear in these charts.

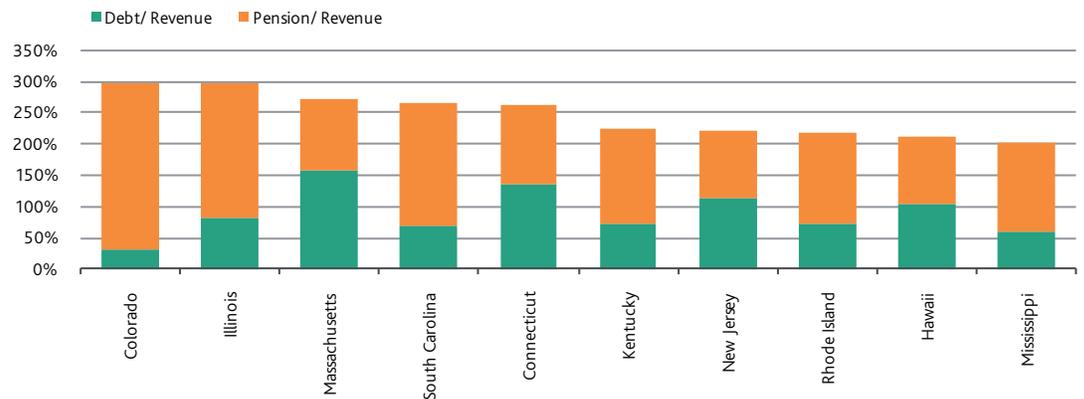
In general, states' rankings for debt and pension combined parallel their rankings for debt alone. Nebraska and South Dakota have conservative approaches to borrowing in the bond market and also benefit from comparatively low pension funding needs and therefore rank among the lowest in the combined measures. Hawaii, Massachusetts and Connecticut – the three states with the largest ratios of bonded debt to personal income – are also among states with the largest combined debt and pension obligations relative to their economies and revenues. Connecticut (Aa2, stable) has a combination of very high debt and pension obligations, even in view of its wealth. Looking at all four measures of pension and debt burden, Connecticut has the highest funding needs, followed by Hawaii (Aa1, negative), Massachusetts (Aa1, stable), and Illinois (A1, negative). Hawaii has a combination of very high debt (given that it issues debt for local capital projects), and it has struggled to make pension ARCs in recent years. Most of these states, however, have offsetting credit strengths that account for their high ratings, underscoring that these liabilities are only one of many factors that contribute to state credit ratings. In the case of Illinois, this high burden in combination with other fiscal weaknesses makes Illinois the lowest-rated state.

Not all states with large debt burdens also suffer from weak pension funding, however. New York (Aa2, stable), Delaware (Aaa, stable) and California (A1, stable) – states with comparatively large debt burdens – are not among the states with the highest combined long-term liabilities. New York which

<sup>5</sup> While we do include OPEB liabilities in our analysis of states, we have not included them in the current report because they are less binding under state law.

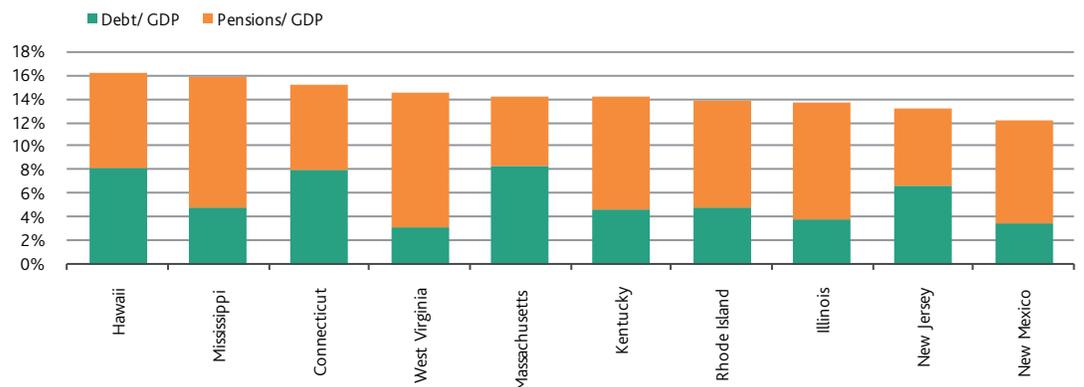
ranked fifth for debt to personal income in Moody's 2010 state debt medians report, ranks 34th based on its combined debt and pension obligations relative to personal income. Colorado and Illinois have two of the largest combined debt and pension obligations versus revenues, for different reasons. In the case of Colorado (Aa1, stable issuer rating), the ranking reflects weak pension funding and a revenue system that has been ratcheted lower by the state's constitutional constraints on taxes. Illinois' ranking is the product of chronic pension under-funding, a high debt burden, and use of numerous special revenue funds that reduce revenues of the state's general operating funds.

FIGURE 1  
Combined Liabilities as Share of Operating Revenue - Top 10 States



Illinois has also faced dwindling tax revenues in the recent recession while its pension contribution requirements have increased. Illinois law provides for annual contributions that are less than the actuarially determined amount needed to amortize pension liabilities over 30 years. The relative burden of Illinois' combined long-term debt and pension obligations may be understated compared with other states due to the adoption of a five-year smoothing policy for asset valuation.

FIGURE 2  
Combined Liabilities as Share of State GDP - Top 10 States



Mississippi is a comparatively high-debt state, because of debt issued for economic development. The state in recent years has experienced faster growth in pension liabilities than in assets. As a consequence, Mississippi last year raised the required employee contribution rate to 9% of gross salary

from 7.25%. Kentucky (Aa1 issuer rating, negative) also has comparatively high net tax-supported debt. The state in 2008 enacted legislation aimed at moving to full ARC payments, although not until 2025. Rhode Island (Aa2, stable) has unfunded pension liabilities that reflect a history of generous retirement incentives, as well as weak investment returns in recent years. The state is paying its annual required contribution and has enacted a series of pension reforms, which indicate the burden will be manageable over time.

New Jersey (Aa2, negative) faces pension funding requirements that, like Illinois,' are straining the state's budget. The state has committed, under a package of pension reforms, to fund one seventh of its ARC in fiscal 2012. In fiscal 2010, New Jersey failed to make any contribution, and it did not budget a contribution for the current year. In addition, the state faces retiree health benefit liabilities that are even more onerous than its pension burden. The governor has proposed additional reforms, including reversal of a 9% benefit increase granted in 2001, elimination of automatic cost-of-living adjustments, and increases in both the minimum retirement age and required employee contributions.

The State of Alaska (Aaa, stable) has a low liability-to-revenue ranking but, interestingly, relatively high liability rankings based on income and population (10th and sixth, respectively). These divergent rankings are explained by the state's petroleum-tax-based revenue system, which is not directly connected to population or personal income.

Not included in the preceding charts is the Commonwealth of Puerto Rico, for which the outlook was revised to negative in August in large part because of a very low pension funded ratio. Puerto Rico, rated A3, has three pension funds, which have a combined funded ratio of 14.5%. The combined debt and pension measure shows that Puerto Rico's debt and pension burden is dramatically higher than the 50 states as a share of economic output, at 94% of GDP compared with Hawaii's 16%. Puerto Rico's long-term liabilities are 437% of revenues, compared with just under 300% for Colorado and Illinois.

### Combining Long-Term Liabilities Is a Step Towards Enhanced Analysis of States' Relative Pension Funding

The combination of pension and debt measures represents a tool to help investors understand the relative magnitudes of these long-term liabilities. Pension funding pressures will continue to have a negative impact on state credit quality and state ratings. Combining debt and pension liabilities will allow enhanced comparisons not only among states but also with corporate entities.

We acknowledge, nevertheless, that these measures have certain limitations. Despite existing provisions under generally accepted accounting principles to standardize pension disclosure, states are able to make different assumptions about interest rates and other key variables, and they are able to use different actuarial cost methods. We have not adjusted for these differences. In addition, many states participate in cost-sharing, multi-employer plans, for which the reported liabilities include substantial amounts attributable to local governments. In some cases,<sup>6</sup> we have already adjusted the liabilities to reflect the approximate amounts attributable to the state rather than to local entities, but we expect to revise the data further over time to more accurately reflect states' portions of cost-sharing plans. This approach improves our ability to assess and compare states' long-term liabilities at a time when pension funding pressures are increasing.

<sup>6</sup> We have adjusted the pension liability amounts attributable to Ohio and Nevada, in response to the states' estimates of their shares of liabilities in cost-sharing plans.

FIGURE 3

**States' Combined Pension and Long-Term Debt Liabilities Compared to Various Metrics**

Ranked From Highest to Lowest

Personal Income <sup>7</sup>		GDP		Per Capita		As a % of Revenue					
1	Hawaii	19.8%	1	Hawaii	16.2%	1	Connecticut	9,366	1	Colorado	298.5%
2	Mississippi	16.8%	2	Mississippi	15.9%	2	Hawaii	7,987	2	Illinois	296.8%
3	Connecticut	16.7%	3	Connecticut	15.2%	3	Massachusetts	7,872	3	Massachusetts	271.9%
4	Kentucky	16.3%	4	West Virginia	14.5%	4	New Jersey	7,198	4	South Carolina	264.0%
5	West Virginia	16.0%	5	Massachusetts	14.2%	5	Illinois	6,692	5	Connecticut	262.7%
6	Illinois	15.8%	6	Kentucky	14.2%	6	Alaska	6,407	6	Kentucky	223.0%
7	Massachusetts	15.7%	7	Rhode Island	13.9%	7	Rhode Island	6,261	7	New Jersey	222.6%
8	Rhode Island	15.3%	8	Illinois	13.6%	8	Kentucky	5,143	8	Rhode Island	217.3%
9	New Mexico	15.3%	9	New Jersey	13.2%	9	Mississippi	4,955	9	Hawaii	210.3%
10	Alaska	15.1%	10	New Mexico	12.2%	10	West Virginia	4,910	10	Mississippi	202.0%
11	New Jersey	14.2%	11	Oklahoma	10.4%	11	New Mexico	4,842	11	Alabama	195.0%
12	Louisiana	13.5%	12	South Carolina	10.4%	12	Louisiana	4,799	12	California	186.7%
13	South Carolina	11.4%	13	Maine	10.1%	13	Maryland	4,677	13	Kansas	184.3%
14	Oklahoma	11.4%	14	Maryland	9.8%	14	California	4,254	14	Montana	173.3%
15	Kansas	10.8%	15	Louisiana	9.7%	15	Oklahoma	4,142	15	Maryland	172.7%
16	Maine	10.7%	16	Kansas	9.4%	16	Kansas	4,077	16	Louisiana	167.0%
17	California	10.0%	17	Alaska	9.3%	17	Colorado	3,968	17	Maine	167.0%
18	Maryland	9.8%	18	California	8.5%	18	Maine	3,790	18	New Hampshire	164.5%
19	Colorado	9.5%	19	Montana	8.3%	19	Minnesota	3,688	19	Arizona	164.2%
20	Montana	9.0%	20	Colorado	8.0%	20	South Carolina	3,560	20	New Mexico	162.6%
21	Minnesota	8.7%	21	Idaho	7.7%	21	New Hampshire	3,336	21	Oklahoma	160.8%
22	Alabama	8.3%	22	Alabama	7.6%	22	Montana	3,071	22	Oregon	157.4%
23	Idaho	8.3%	23	Minnesota	7.4%	23	Delaware	2,974	23	West Virginia	149.3%
24	New Hampshire	7.8%	24	New Hampshire	7.4%	24	Washington	2,948	24	Idaho	146.0%
25	Utah	7.4%	25	Washington	6.1%	25	Alabama	2,756	25	Washington	138.3%
26	Delaware	7.4%	26	Vermont	6.0%	26	Wyoming	2,731	26	Minnesota	127.9%
27	Washington	7.1%	27	Indiana	6.0%	27	Idaho	2,616	27	Indiana	123.4%
28	Indiana	7.0%	28	Arizona	5.9%	28	New York	2,601	28	Florida	123.4%
29	Arizona	6.9%	29	Utah	5.6%	29	Vermont	2,462	29	Nevada	119.2%
30	Oregon	6.5%	30	Oregon	5.5%	30	Indiana	2,383	30	Utah	118.3%
31	Vermont	6.3%	31	Florida	5.2%	31	Oregon	2,318	31	Virginia	114.6%
32	Georgia	6.2%	32	Georgia	5.1%	32	Virginia	2,257	32	Georgia	111.4%
33	Wyoming	5.6%	33	Michigan	5.0%	33	Arizona	2,233	33	New York	101.6%
34	New York	5.4%	34	Virginia	4.5%	34	Utah	2,207	34	Pennsylvania	88.5%
35	Michigan	5.4%	35	New York	4.4%	35	Florida	2,073	35	Texas	86.8%

<sup>7</sup> Personal income figures have been revised from the prior report. The data used are 2008 Bureau of Economic Analysis figures.

FIGURE 3

**States' Combined Pension and Long-Term Debt Liabilities Compared to Various Metrics**

Ranked From Highest to Lowest

Personal Income <sup>7</sup>			GDP			Per Capita		As a % of Revenue			
36	Florida	5.4%	36	Delaware	4.3%	36	Georgia	2,067	36	Michigan	78.1%
37	Virginia	5.3%	37	Wyoming	4.2%	37	Michigan	1,903	37	North Dakota	73.1%
38	Iowa	4.8%	38	Wisconsin	4.2%	38	Pennsylvania	1,807	38	Ohio	71.7%
39	Wisconsin	4.8%	39	Pennsylvania	4.1%	39	Wisconsin	1,765	39	Delaware	70.7%
40	Pennsylvania	4.5%	40	Iowa	3.9%	40	Iowa	1,764	40	Missouri	69.8%
41	Texas	4.0%	41	Nevada	3.1%	41	Nevada	1,547	41	Wyoming	67.9%
42	Nevada	3.9%	42	Texas	3.1%	42	Texas	1,517	42	Vermont	66.1%
43	North Dakota	3.8%	43	North Dakota	3.1%	43	North Dakota	1,477	43	Wisconsin	65.3%
44	Ohio	3.4%	44	Ohio	2.9%	44	Ohio	1,184	44	Alaska	64.1%
45	Missouri	3.2%	45	Missouri	2.8%	45	Missouri	1,099	45	South Dakota	60.9%
46	Arkansas	2.9%	46	Arkansas	2.6%	46	Arkansas	890	46	Iowa	60.0%
47	North Carolina	2.4%	47	South Dakota	1.9%	47	South Dakota	884	47	North Carolina	42.0%
48	South Dakota	2.4%	48	North Carolina	1.9%	48	North Carolina	818	48	Tennessee	37.2%
49	Tennessee	2.2%	49	Tennessee	1.9%	49	Tennessee	750	49	Arkansas	33.4%
50	Nebraska	0.1%	50	Nebraska	0.1%	50	Nebraska	43	50	Nebraska	2.3%
	Puerto Rico	115.4%			94.4%			16,157			437.0

Sources: State and retirement plan audited financial reports, Moody's State Debt Medians, Bureau of Economic Analysis and U.S. Census Bureau information

FIGURE 4

**States' Debt and Pension Liabilities**

State	Net Tax-Supported Debt (000s)	Unfunded Pension Liability (000s)	Combined Debt and Pension (000s)
Alabama <sup>1</sup>	\$3,748,559	\$9,228,918	\$12,977,477
Alaska <sup>1</sup>	\$939,600	\$3,535,519	\$4,475,119
Arizona <sup>1</sup>	\$4,856,686	\$9,868,823	\$14,725,509
Arkansas <sup>1†</sup>	\$900,483	\$1,671,420	\$2,571,903
California <sup>1*</sup>	\$87,320,000	\$69,927,752	\$157,247,752
Colorado <sup>1</sup>	\$2,011,683	\$17,925,705	\$19,937,388
Connecticut <sup>2</sup>	\$17,093,853	\$15,858,500	\$32,952,353
Delaware <sup>1</sup>	\$2,202,968	\$429,399	\$2,632,367
Florida <sup>1</sup>	\$20,819,974	\$17,610,905	\$38,430,879
Georgia <sup>1</sup>	\$11,011,066	\$9,303,207	\$20,314,273
Hawaii <sup>1</sup>	\$5,176,063	\$5,168,108	\$10,344,171
Idaho <sup>1</sup>	\$831,110	\$3,213,106	\$4,044,216
Illinois <sup>2</sup>	\$23,957,015	\$62,439,093	\$86,396,108
Indiana <sup>1‡</sup>	\$3,156,986	\$12,146,729	\$15,303,715
Iowa <sup>1*</sup>	\$219,279	\$5,085,230	\$5,304,509
Kansas <sup>1*</sup>	\$3,213,826	\$8,279,168	\$11,492,994
Kentucky <sup>1</sup>	\$7,269,586	\$14,918,955	\$22,188,541
Louisiana <sup>1</sup>	\$5,708,165	\$15,851,276	\$21,559,441
Maine <sup>2</sup>	\$1,002,485	\$3,994,115	\$4,996,600
Maryland <sup>1</sup>	\$9,166,095	\$17,488,177	\$26,654,272
Massachusetts <sup>1</sup>	\$30,371,476	\$21,533,599	\$51,905,075
Michigan <sup>1</sup>	\$7,461,594	\$11,515,100	\$18,976,694
Minnesota <sup>1</sup>	\$5,463,418	\$13,955,784	\$19,419,202
Mississippi <sup>1</sup>	\$4,364,174	\$10,262,074	\$14,626,248
Missouri	\$4,672,127	\$1,906,496	\$6,578,623
Montana <sup>1</sup>	\$349,260	\$2,645,369	\$2,994,629
Nebraska	\$27,032	\$49,446	\$76,478
Nevada <sup>3</sup>	\$2,446,111	\$1,643,838	\$4,089,949
New Hampshire <sup>1</sup>	\$880,871	\$3,537,732	\$4,418,603
New Jersey <sup>2</sup>	\$31,951,013	\$30,726,692	\$62,677,705
New Mexico <sup>1</sup>	\$2,809,156	\$6,922,147	\$9,731,303
New York <sup>1</sup>	\$61,259,793	-\$10,428,000	\$50,831,793
North Carolina <sup>1</sup>	\$7,174,650	\$503,580	\$7,678,230
North Dakota <sup>1</sup>	\$211,822	\$743,800	\$955,622
Ohio <sup>3</sup>	\$10,766,277	\$2,904,560	\$13,670,837
Oklahoma <sup>2</sup>	\$2,100,583	\$13,172,000	\$15,272,583
Oregon†	\$7,110,604	\$1,757,000	\$8,867,604
Pennsylvania <sup>3 **</sup>	\$11,827,000	\$10,951,067	\$22,778,067

FIGURE 4

**States' Debt and Pension Liabilities**

State	Net Tax-Supported Debt (000s)	Unfunded Pension Liability (000s)	Combined Debt and Pension (000s)
Rhode Island <sup>1</sup>	\$2,240,527	\$4,353,892	\$6,594,419
South Carolina <sup>1</sup>	\$4,184,210	\$12,052,684	\$16,236,894
South Dakota <sup>1</sup>	\$109,528	\$608,886	\$718,414
Tennessee <sup>1</sup>	\$2,003,673	\$2,719,767	\$4,723,440
Texas <sup>1</sup> *	\$12,892,508	\$24,692,702	\$37,585,210
Utah <sup>1</sup>	\$2,665,545	\$3,480,753	\$6,146,298
Vermont <sup>1</sup>	\$441,017	\$1,089,831	\$1,530,848
Virginia <sup>1</sup>	\$7,056,177	\$10,733,000	\$17,789,177
Washington <sup>1</sup> *	\$14,832,717	\$4,811,400	\$19,644,117
West Virginia <sup>1</sup>	\$1,962,926	\$6,971,820	\$8,934,746
Wisconsin <sup>1</sup>	\$9,726,313	\$252,600	\$9,978,913
Wyoming <sup>1</sup>	\$42,066	\$1,444,353	\$1,486,419
Puerto Rico <sup>1</sup>	\$40,201,000	\$23,929,725	\$64,130,725

<sup>1</sup> Partly reflects local governments, through cost-sharing multi-employer plans.

<sup>2</sup> Teacher retirement liability included in total because of state obligation to make payment.

<sup>3</sup> Liability reflects state estimate of its portion of cost-sharing plan.

\* Adjusted to reflect more current liability figures.

‡ Corrects database error.

† Liability figure has been adjusted since prior report to remove non-state obligations.

\*\* Liability figure has been adjusted since prior report to remove non-state obligations and capture previously omitted state obligations.

FIGURE 5

**States Ranked by Debt and Pension Liability as Share of GDP**

State	NTSD/ GDP	State	Unfunded Pension Liability/ GDP	State	Adjusted Debt/ GDP
Massachusetts	8.32%	West Virginia	11.31%	Hawaii	16.20%
Hawaii	8.11%	Mississippi	11.18%	Mississippi	15.94%
Connecticut	7.91%	Illinois	9.85%	Connecticut	15.24%
New Jersey	6.73%	Kentucky	9.54%	West Virginia	14.49%
New York	5.35%	Rhode Island	9.19%	Massachusetts	14.22%
Mississippi	4.75%	Oklahoma	8.99%	Kentucky	14.18%
Rhode Island	4.73%	New Mexico	8.66%	Rhode Island	13.92%
California	4.73%	Hawaii	8.09%	Illinois	13.63%
Kentucky	4.65%	Maine	8.03%	New Jersey	13.20%
Washington	4.60%	South Carolina	7.71%	New Mexico	12.18%
Oregon	4.40%	Alaska	7.38%	Oklahoma	10.43%
Wisconsin	4.05%	Montana	7.37%	South Carolina	10.38%
Illinois	3.78%	Connecticut	7.34%	Maine	10.05%
Delaware	3.56%	Colorado	7.21%	Maryland	9.75%
New Mexico	3.52%	Louisiana	7.13%	Louisiana	9.70%
Maryland	3.35%	Kansas	6.75%	Kansas	9.36%
West Virginia	3.18%	New Jersey	6.47%	Alaska	9.34%
Florida	2.80%	Maryland	6.40%	California	8.51%
Georgia	2.77%	Idaho	6.09%	Montana	8.34%
South Carolina	2.68%	Massachusetts	5.90%	Colorado	8.02%
Kansas	2.62%	New Hampshire	5.90%	Idaho	7.67%
Louisiana	2.57%	Alabama	5.43%	Alabama	7.63%
Utah	2.43%	Minnesota	5.31%	Minnesota	7.39%
Ohio	2.28%	Indiana	4.77%	New Hampshire	7.36%
Alabama	2.20%	Vermont	4.28%	Washington	6.09%
Pennsylvania	2.14%	Wyoming	4.09%	Vermont	6.02%
Minnesota	2.08%	Arizona	3.97%	Indiana	6.00%
Maine	2.02%	California	3.79%	Arizona	5.92%
Missouri	1.96%	Iowa	3.75%	Utah	5.60%
Alaska	1.96%	Utah	3.17%	Oregon	5.49%
Arizona	1.95%	Michigan	3.01%	Florida	5.16%
Michigan	1.95%	Virginia	2.70%	Georgia	5.11%
Nevada	1.86%	North Dakota	2.38%	Michigan	4.96%
North Carolina	1.79%	Florida	2.37%	Virginia	4.48%
Virginia	1.78%	Georgia	2.34%	New York	4.44%
Vermont	1.73%	Texas	2.02%	Delaware	4.26%
Idaho	1.58%	Pennsylvania	1.98%	Wyoming	4.21%
New Hampshire	1.47%	Arkansas	1.70%	Wisconsin	4.15%

FIGURE 5

**States Ranked by Debt and Pension Liability as Share of GDP**

State	NTSD/ GDP	State	Unfunded Pension Liability/ GDP	State	Adjusted Debt/ GDP
Oklahoma	1.43%	South Dakota	1.65%	Pennsylvania	4.12%
Indiana	1.24%	Washington	1.49%	Iowa	3.91%
Texas	1.05%	Nevada	1.25%	Nevada	3.12%
Montana	0.97%	Oregon	1.09%	Texas	3.07%
Arkansas	0.92%	Tennessee	1.08%	North Dakota	3.06%
Colorado	0.81%	Missouri	0.80%	Ohio	2.90%
Tennessee	0.79%	Delaware	0.69%	Missouri	2.77%
North Dakota	0.68%	Ohio	0.62%	Arkansas	2.62%
South Dakota	0.30%	North Carolina	0.13%	South Dakota	1.94%
Iowa	0.16%	Wisconsin	0.11%	North Carolina	1.92%
Wyoming	0.12%	Nebraska	0.06%	Tennessee	1.87%
Nebraska	0.03%	New York	-0.91%	Nebraska	0.09%

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## **APPENDIX H**

# **Title 32: Taxation and Finance**

## ***Chapter 13: DEBTS AND CLAIMS***

### **32 V.S.A. § 1001. Capital debt affordability advisory committee**

#### **§ 1001. Capital debt affordability advisory committee**

(a) Committee established. A capital debt affordability advisory committee is hereby created with the duties and composition provided by this section.

(b) (1) Committee duties. The committee shall review annually the size and affordability of the net state tax-supported indebtedness and submit to the governor and to the general assembly an estimate of the maximum amount of new long-term net state tax-supported debt that prudently may be authorized for the next fiscal year. The estimate of the committee shall be advisory and in no way bind the governor or the general assembly.

(2) The committee shall conduct ongoing reviews of the amount and condition of bonds, notes, and other obligations of instrumentalities of the state for which the state has a contingent or limited liability or for which the state legislature is permitted to replenish reserve funds, and, when deemed appropriate, recommend limits on the occurrence of such additional obligations to the governor and to the general assembly.

(3) The committee shall conduct ongoing reviews of the amount and condition of the transportation infrastructure bond fund established in 19 V.S.A. § 11f and of bonds and notes issued against the fund for which the state has a contingent or limited liability.

(c) Committee estimate of a prudent amount of net state tax-supported debt; affordability considerations. On or before September 30 of each year, the committee shall submit to the governor and the general assembly the committee's estimate of net state tax-supported debt which prudently may be authorized for the next fiscal year, together with a report explaining the basis for the estimate. In developing its annual estimate, and in preparing its annual report, the committee shall consider:

(1) The amount of net state tax-supported indebtedness that, during the next fiscal year, and annually for the following nine fiscal years:

(A) will be outstanding; and

(B) have been authorized but not yet issued.

(2) A projected schedule of affordable state net state tax-supported bond authorizations, for the next fiscal year and annually for the following nine fiscal years. The assessment of the

affordability of the projected authorizations shall be based on all of the remaining considerations specified in this section.

(3) Projected debt service requirements during the next fiscal year, and annually for the following nine fiscal years, based upon:

- (A) existing outstanding debt;
- (B) previously authorized but unissued debt; and
- (C) projected bond authorizations.

(4) The criteria that recognized bond rating agencies use to judge the quality of issues of state bonds, including but not limited to:

(A) existing and projected total debt service on net tax-supported debt as a percentage of combined general and transportation fund revenues, excluding surpluses in these revenues which may occur in an individual fiscal year; and

(B) existing and projected total net tax-supported debt outstanding as a percentage of total state personal income.

(5) The principal amounts currently outstanding, and balances for the next fiscal year, and annually for the following nine fiscal years, of existing:

(A) obligations of instrumentalities of the state for which the state has a contingent or limited liability;

(B) any other long-term debt of instrumentalities of the state not secured by the full faith and credit of the state, or for which the state legislature is permitted to replenish reserve funds; and

(C) to the maximum extent obtainable, all long-term debt of municipal governments in Vermont which is secured by general tax or user fee revenues.

(6) The impact of capital spending upon the economic conditions and outlook for the state.

(7) The cost-benefit of various levels of debt financing, types of debt, and maturity schedules.

(8) Any projections of capital needs authorized or prepared by the agency of transportation, the joint fiscal office, or other agencies or departments.

(9) Any other factor that is relevant to:

(A) the ability of the state to meet its projected debt service requirements for the next five fiscal years; or

(B) the interest rate to be borne by, the credit rating on, or other factors affecting the marketability of state bonds.

(10) The effect of authorizations of new state debt on each of the considerations of this section.

(d) Committee composition.

(1) Membership. Committee membership shall consist of:

(A) As ex officio members:

(i) the state treasurer;

(ii) the secretary of administration; and

(iii) a representative of the Vermont municipal bond bank chosen by the directors of the bank.

(B) Two individuals with experience in accounting or finance, who are not officials or employees of state government appointed by the governor for six-year terms.

(C) The auditor of accounts who shall be a nonvoting ex officio member.

(D) One person who is not an official or employee of state government with experience in accounting or finance appointed by the state treasurer for a six-year term.

(2) The state treasurer shall be the chairperson of the committee.

(e) Other attendants of committee meetings. Staff of the legislative council and the joint fiscal committee shall be invited to attend committee meetings for the purpose of fostering a mutual understanding between the executive and legislative branches on the appropriate statistics to be used in committee reviews, debt affordability considerations, and recommendations.

(f) Information. All public entities whose liabilities are to be considered by the committee, shall annually provide the state treasurer with the information the committee deems necessary for it to carry out the requirements of this subchapter. (Added 1989, No. 258 (Adj. Sess.), § 1; amended 2007, No. 121 (Adj. Sess.), § 28; No. 200 (Adj. Sess.), § 25, eff. June 9, 2008; 2009, No. 50, § 31.)