

NEW YORK STATE SENATE



FINANCIAL INFORMATION REVIEW

November 2011

SENATOR DEAN G. SKELOS President Pro Tempore,

MAJORITY LEADER

SENATOR JOHN A. DEFRANCISCO

CHAIRMAN, FINANCE COMMITTEE

ROBERT F. MUJICA

CHIEF OF STAFF AND SECRETARY TO THE SENATE FINANCE COMMITTEE



Financial Information Review

Robert F. Mujica CHIEF OF STAFF AND SECRETARY TO THE SENATE FINANCE COMMITTEE

Contributors:

Michael Paoli, Deputy Secretary Thomas P. Havel, Assistant Director Shawn M. MacKinnon, Assistant Director Mary C. Arzoumanian Peter C. Drao Megan Baldwin Nicole Fosco Charles Vaas Allison Bradley

Jason P. Clark, Publication Editor



SFC Senate Finance Committee **Financial Information Revision** November 2011

I. National & State **The National Economy**

Economy

Although the Great Recession ended in 2009, the economic recovery is slow. The Federal government has employed both monetary and fiscal stimulus packages but job creation has remained stagnant and the consumer outlook has been grim. In addition, various shocks to the economy, such as the sovereign debt crisis in Europe and issues relating to the Federal debt ceiling, have had negatively affected the recovery.

The national economy exhibited very slow growth in the first quarter of 2011. Real GDP in the first quarter increased by 0.4 percent. The economy strengthened in the second quarter, growing at an annualized rate of 1.3 percent. In the third quarter, the economy weathered the turmoil caused by the extension of the Federal debt ceiling with real GDP growth of 2.4 percent. However, the debt crisis in the Eurozone will have a negative impact on the national economy in the fourth quarter; especially its impact on the stock market and US exports. Economic growth is expected to continue in the fourth quarter. However, real GDP growth will slow to 1.0 percent. Overall, the estimate for the national economy in 2011 is growth in real GDP of 1.7 percent.

For 2012, the national economy is projected to continue to show modest growth throughout the year. Real GDP in the first quarter is projected to grow by 1.1 percent, accelerating to 1.8 percent by the fourth quarter. Overall, real GDP growth is projected at 1.4 percent for all of 2012.

The largest contributor to economic growth, the consumer, was the savior to the economy in the previous recovery. However, with anemic job growth and decreased household wealth, the consumer limited his spending and consumer confidence waned. For 2011. consumption is estimated to grow by 2.1 percent. Most of this growth occurred in the first quarter of the year, buoyed by double digit growth in the consumption of durables. As the year continued, consumption slowed, growing by 0.7 percent and 1.3 percent in the second and third quarters, respectively. In the fourth quarter, consumption growth is expected to continue, growing at 1.8 percent.

Consumption growth is a result of an estimated increase in personal income of 5.1 percent, which was enhanced by the reduction in the payroll tax enacted at the federal level. This personal income growth is offset by slow employment growth, especially in the second half of the year. While employment increased by over 1.3 percent in the first half of the year, employment growth is expected to slow to 0.2 percent in the second half. As a result of this slow employment growth, the unemployment rate for 2011 is estimated to be 9.1 percent.

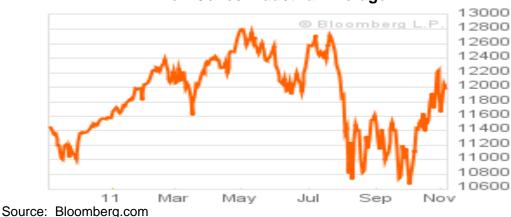
As the economic recovery continues to crawl into 2012, employment growth is projected to remain slow, increasing by 0.6 percent. As a result of the slowdown in employment growth, the unemployment rate is projected to increase to 9.3 percent. In turn, growth in personal income is projected to slow to 3.3 percent. Lower projected personal income growth and higher projected unemployment continues to dampen consumption. In 2012, growth in consumption is projected to slow to 1.9 percent, down from 2.1 percent in 2011.

The stagnant housing market continued to be a drag on the economy in 2011. Housing starts nationally are estimated to only grow by 0.3 percent. Concurrently, existing home sales are estimated to continue to decline by approximately 0.5 percent. The housing market is projected to show growth in 2012. Housing starts and existing home sales in 2012 are projected to increase by 13.3 percent and 4.0 percent, respectively.

In 2011, the business sector was the driver of economic growth. Although businesses were hesitant to hire new workers, they were making capital investments. Business spending on facilities increased by over 20 percent in the second and third quarters of the year while spending on machinery and equipment increased by approximately 10 percent in the same time period. In turn, corporate profits for the second and third quarters also exhibited double digit growth. For all of 2011, business spending and corporate profits are estimated to increase by 8.7 percent and 9.3 percent respectively.

With sluggish consumer demand in 2012, this strong growth in spending and corporate profits is projected to slow. Business spending on machinery and equipment is projected to increase by 6.6 percent but, this growth will be offset by a decline in spending on facilities by 1.8 percent. Corporate profits are projected to slow with a projected increase of 0.5 percent in 2012.

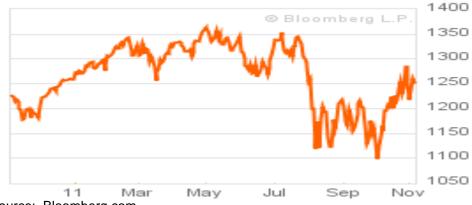
With the erratic economic news as well as the shocks to the economy from the Eurozone debt crisis and federal debt ceiling crisis, the stock market has shown extreme volatility. Through the month of April, the Dow Jones Industrial Average (DJIA) increased by almost 10 percent. However, by the end of September, the DJIA declined by over 16 percent.



Dow Jones Industrial Average

The S&P 500 exhibited similar fluctuations over this time period as well. The S&P 500 realized over 16.0 percent growth in the first half of 2011. However, this growth slowed to 12.0 percent in the third quarter. With the spread of the sovereign debt crisis to Italy and the slow reaction of the European Central Banks to the crisis, the stock market is projected to decline in the fourth quarter; decreasing by 8.6 percent. With the decline in the fourth quarter offsetting the growth realized in the first three quarters of the year, the stock market for all of 2011 is estimated to increase by 8.3 percent.

As the uncertainty in the Eurozone continues and as growth in corporate profits slows, the stock market is projected to decline over the first three quarters of 2012, with growth returning in the fourth quarter. As a result, the S&P 500 is projected to decline by 3.8 percent for calendar year 2012.





The New York State Economy

While the national economy is estimated to grow by 1.4 percent in 2011, the New York economy, as measured by real Gross State Product (GSP), is estimated to realize strong growth, increasing by 3.9 percent. Similarly, as growth is projected to slow at the national level in 2012, growth in the New York economy is projected to also slow, at a slower rate of 1.0 percent.

The housing market in New York has fared better than the national housing market over the course of the recession and its recovery. Housing starts are estimated to grow by 13.8 percent in 2011. This growth is mainly attributable to significant growth in multi-family housing starts, an increase of 76.0 percent, offset by a decline in single family housing starts of approximately 26.5 percent. Similar to the decline in single family housing starts, existing home sales are estimated to decline by approximately 7.2 percent in 2011. Similar to the projections for housing starts and home sales at the national level in 2012, housing starts are projected to continue to increase in New York by 9.5 percent, reflecting both an increase in single family and multi-family housing starts. In addition, home sales are projected to increase by 4.0 percent.

Over the course of the recession, the fallout from the collapse of the financial markets negatively impacted employment in the financial activities sector in New York. From 2007 through 2010, employment in the finance and insurance sector declined by over 10 percent. Employment growth returned to this sector in 2011, an estimated increase of 1.3 percent. Along with this growth, total employment in New York is estimated to grow by 0.8 percent in 2011. Although employment growth in 2012 is projected to slow nationally, employment in New York is projected to increase by 1.0 percent in 2012. Similarly, the unemployment rate is projected to decrease to 8.0 percent and 7.8 percent in 2011 and 2012, respectively.

Because of New York City's position as the financial capital of the world, the bonuses paid to Wall Street and other financial sector employees have a significant impact on the state

Source: Bloomberg.com

economy, as well as revenues. As a result of the subprime mortgage crisis, negative public opinion on the compensation structure of financial sector employees and the resulting government regulations changed the method by which bonuses were paid. As a result, more "bonuses" are being paid in the form of increased wage compensation or are paid in stock options tied to company performance in the long term. The employment of these new compensation packages coupled with the volatility in the financial markets will result in an estimated 20 percent decline in the amount of bonuses paid to Wall Street employees. However, due to the timing of the payment of these bonuses, which are primarily paid within the first quarter of the succeeding year, the estimated decline in bonuses are not reflected in wages or personal income for 2011. As a result, wages are estimated to increase by 4.1 percent. This wage growth, as well as the increased employment, results in personal income growth of 4.7 percent in 2011. In 2012, wages are projected to continue to grow, albeit at a slower rate than 2011; growing by 3.5 percent. With this increased wage growth as well as the projected increase in employment, personal income is projected to grow by 3.6 percent.

Consumption in New York, as measured by retail sales, is estimated to grow by 6.0 percent in 2011. This growth is a reflection of the increased personal income growth as well as the estimated increase in holiday sales. In 2012, retail sales growth is projected to slow, increasing by 3.8 percent as growth in personal income slows.

Risks to the Forecast

As with any forecast, there are unforeseen risks associated with forecasting the economy. Any "shock" to the various sectors of the economy, whether positive or negative, can have significant effects on whether the economy has a stronger recovery or falls into another recession. In addition to the unforeseen economic shocks, the forecast is at risk from the lack of accurate data due to the timing of the forecast. Current data for the growth in GDP for the third quarter is subject to revision. Variances in the data, whether positive or negative, can greatly affect the outcome of the forecast.

The major risk to the current forecast is the Eurozone debt crisis. How the individual countries as well as the European central banks deal with the debt crisis will have an economic impact here in the United States. The crisis has impacted financial markets but, it will also have an impact on the country's exports as well.

If the crisis in the Eurozone deepens, incomes for consumers in the Eurozone will decline. As a result, demand for goods, especially exports from the United States, will decline, impacting domestic economic growth.

In addition, the crisis in the Eurozone would devalue the euro against the dollar. This sudden appreciation in the value of the dollar would, in turn, increase the price of U.S. goods sold overseas. As the price of these goods increases, the demand for U.S. goods would decrease.

The construct of New York's fiscal year also affects the forecast, primarily in the forecast of tax collections. Although calendar year 2011 is more than three quarters complete, the fiscal year is only half complete. The final quarter of the calendar year as well as the first two months of the subsequent year play a major role in New York's tax collections. These collections, besides the forecast of the national and state economies, affect the forecast going forward. Most notable is the payment of Wall Street bonuses that occur between December and March. In addition to the bonus payments, the final quarter of the calendar

(Percent Cha	nge)	Economic Outlook (Percent Change)					
,	2011	2012	2013				
National Economy							
GDP	3.9%	2.8%	3.6%				
Real GDP	1.7%	1.4%	3.4%				
Consumption Expenditures	2.1%	1.9%	1.8%				
Government Expenditures	(2.2%)	(2.7%)	(2.0%				
Exports	6.7%	3.4%	7.5%				
Imports	4.6%	2.4%	3.8%				
CPI - All Urban, Percent Change	3.0%	1.3%	1.9%				
Pretax Corporate Profits	9.3%	0.5%	3.5%				
Personal Income	5.1%	3.3%	3.4%				
Wages and Salaries	3.9%	3.0%	4.0%				
Nonagricultural Employment	0.9%	0.6%	1.3%				
Unemployment Rate	9.1%	9.3%	9.1%				
T-Note Rate, 10-Year	.06%	.06%	.09%				
Standard and Poor's 500 Stock Index	8.6%	(3.8%)	6.5%				
New York Economy							
Personal Income	4.7%	3.6%	4.0%				
Wages and Salaries	4.1%	3.5%	4.5%				
Nonagricultural Employment	0.8%	1.0%	1.5%				
Unemployment Rate	8.0%	7.8%	7.5%				

year, especially December, is when sales tax collections from holiday sales are realized and when businesses must make their final estimated tax payments for the year.

Tax Collections

For SFY 2011-12, All Funds tax collections are estimated to increase by 6.4 percent from SFY 2010-11 collections. This growth primarily reflects strong estimated payments under the personal income tax as well as the estimated wage and personal income growth. This growth is augmented by the continued impact of revenue from tax increases enacted in SFY 2009-10 and SFY 2010-11.

Tax collections for SFY 2012-13 are projected to continue to grow but, only at a rate of 0.75 percent. This anemic revenue growth is a result of the slowdown in growth in the economy, especially in corporate profits. The growth in revenues is also offset by reduced collections due to the expiration of the temporary surcharge under the personal income tax and the increase in the sales tax exemption on clothing from \$55 per article to \$110 per article of clothing.

All Funds Tax Collections

(millions of dollars)

	SFY 2010-11	SFY 2011-12		SFY 2	012-13
			Difference		Difference
			From		From
	Actual	SFC	Executive	SFC	Executive
Withholding	31,240	31,409	207	32,036	235
Estimated Payments	9,735	11,883	(92)	11,497	19
Final Returns	1,964	2,113	3	2,212	13
Other Payments	1,063	1,017	(72)	1,036	(98)
Gross Collections	44,002	46,422	46	46,782	170
Refunds	(7,793)	(7,407)	85	(7,695)	328
Net Collections	36,209	39,015	131	39,087	498
Sales and Use	11,538	11,957	80	12,227	55
Auto Rental	95	108	4	106	(3)
Cigarette/Tobacco	1,616	1,650	(16)	1,716	(36)
Motor Fuel	517	501	(3)	503	(12)
Alc Bev Tax	230	231	(2)	236	(2)
Highway Use	129	132	(2)	136	(11)
Taxicab Surcharge	81	86	1	89	4
Total	14,206	14,665	62	15,013	(5)
Corporate Franchise	2,846	3,290	(8)	3,307	(167)
Corporate Utilities	813	820	(22)	861	(44)
Insurance	1,351	1,493	56	1,506	17
Bank	1,179	1,234	5	1,274	(99)
Petroleum Business	1,090	1,102	13	1,083	(68)
Total	7,279	7,939	44	8,031	(361)
Estate and Gift	1,219	1,113	38	1,008	(62)
Real Estate Transfer	580	640	20	672	(18)
Pari-Mutuel	17	16	-	14	(2)
Other	1	1	-	1	-
Total	1,817	1,770	58	1,695	(82)
Payroll Tax	1,359	1,400	(9)	1,449	(33)
Total Taxes	60,870	64,789	286	65,275	17

Personal Income Tax

The personal income tax is paid in a variety of ways: the withholding of wages and other income payments, the payment of estimated taxes, the payment of unpaid taxes through final returns, and the payment of overdue taxes through assessments. Any overpayment of the personal income tax is refunded to the taxpayer. The manner of payment determines the income year to which the tax applies. For example, withholding is paid when the income is earned. Therefore, 2011 wages would be reflected in 2011 withholding. However, personal income tax payments made with final returns are associated with the preceding year's income. As a result, final return payments made in 2011 are a reflection of income earned in 2010. The same pattern holds true for refunds.

Withholding collections for SFY 2011-12 are estimated to increase over SFY 2010-11 collections by 0.5 percent. Withholding collections for the current fiscal year are lower than the estimated increase in wages due to the fact that SFY 2010-11 collections included higher bonus payments than those estimated for the current fiscal year as well as the expiration of the temporary surcharge on high income taxpayers beginning on January 1, 2012. For SFY 2012-13, withholding is projected to grow, increasing by approximately 2.0 percent. This growth reflects continued wage and employment growth offset by the full year impact of the expiration of the temporary surcharge.

Estimated payments are made quarterly throughout the year, mainly by the state's taxpayers whose income is not earned through the payment of wages Estimated payments are also made with requests for the extension of filing one's annual return. As a result, these payments reflect both the current year's income as well as the previous year's income. Estimated payments are projected to increase by 22.1 percent in the current fiscal year, reflecting growth in extension payments as a result of personal income growth in 2010 and growth in proprietor's income.

Although both personal income and proprietor's income is projected to increase in 2012, payments made through estimated payments are projected to decline by 3.2 percent in SFY 2012-13. This decline represents the slower growth in personal income in 2012 accompanied by the expiration of the temporary surcharge as mentioned above.

Collections of the personal income tax remitted with a taxpayer's annual return are a function of personal income of the prior year. Due to strong personal income growth in 2010, collections from final returns in SFY 2011-12 are estimated to increase by 7.6 percent. For SFY 2012-13, collections from final returns are projected to increase by 4.7 percent, reflecting the growth in personal income in 2011.

Other personal income tax collections are primarily comprised of the assessments made on taxpayers for additional tax due as a result of audits. This category also includes filing fees paid by LLC's and partnerships. The amount of collections in this category is primarily a function of the number of audits and the income of the year being audited. The Department of Taxation and Finance is allowed a three year "window" to conduct audits. The amount is also a function of the number of LLC's and partnerships filing taxes under the personal income tax instead of under the corporate income tax. Other collections are estimated to decline by 4.3 percent in the current fiscal year and are projected to increase by 1.9 percent in SFY 2012-13.

Finally, if a taxpayer overpays his personal income tax, either through over-withholding or remitting excess estimated payments, he is allowed a refund of such overpayment when he files his annual return. With the proliferation of e-filing tax returns, the number of returns requesting refunds within the final quarter of the fiscal year has greatly increased. However, in order to manage the State's cash flow, the amount of tax refunds that are paid in the final quarter is administratively determined by the Division of Budget. In SFY 2009-10, the amount of refunds paid in the final quarter was \$1.25 billion. This amount was increased to \$1.75 billion in SFY 2010-11. For both SFY 2011-12 and SFY 2012-13, the amount of refunds to be paid in the final quarter will remain at \$1.75 billion.

In SFY 2011-12, the total amount of refunds paid is estimated to decrease by 5.0 percent. This decrease is a result of income growth in 2010. This decline in refunds paid is also due to the change in the amount of refunds paid in the final quarter of SFY 2010-11, as mentioned above. For SFY 2012-13, the amount of refunds is projected to increase by 3.9 percent.

User Taxes and Fees

Collections from user taxes and fees are comprised of: sales and use taxes, auto rental taxes, cigarette and tobacco taxes, motor fuel taxes, alcoholic beverage taxes, highway use taxes, and the taxicab surcharge imposed within the Metropolitan Transportation Commuter District. Sales and use taxes are the main contributor to tax collections in this category.

Sales and use taxes for the current fiscal year are estimated to increase by 3.6 percent. This increase is a result of an estimated increase in retail sales, as well as the increase in personal income.

Holiday sales as well as post-holiday sales as a result of the proliferation of gift cards have a large impact on sales tax collections during the final half of the fiscal year. Depending upon consumer sentiment in relation to the direction of the economy and the extent of job layoffs, the amount spent on holiday gifts will be adjusted downward or upward.

Sales and use tax collections for 2012-13 are projected to increase by 2.3 percent. This growth is mainly a reflection of a projected inflation growth of 1.3 percent as well as economic growth. A portion of the growth is offset by the reduced collections resulting from increasing the price threshold for the sales tax exemption on clothing from \$55 to \$110.

Collections from the other taxes in this category do not normally fluctuate greatly from year to year. For SFY 2011-12, collections from these other taxes are estimated to increase by 1.5 percent. Collections in SFY 2012-13 are projected to increase by 2.9 percent, mainly as a result of a projected increase in cigarette tax collections.

Business Taxes

The type of business operating in New York determines the method by which the business pays its taxes. Corporations and banks pay taxes based primarily on their net income. Utilities pay their corporate taxes based on their gross receipts. Most insurance companies pay their corporate taxes based on the amount of their premiums. Life insurance companies are the exception; their taxes are based on their net income. The petroleum business tax is based on volume and the tax rate varies with the price of petroleum.

Business tax revenues are estimated to increase by 9.1 percent in SFY 2011-12. This increase is a result of an estimated increase in corporate profits as well as the impact of the deferral of certain tax credits enacted in SFY 2010-11.

For SFY 2012-13, business tax collections are projected to grow, albeit at a slower rate of 1.2 percent. This growth reflects the projected slow growth in corporate profits augmented by the continued impact of the tax credit deferral.

Other Taxes

Other taxes are primarily comprised of the estate and gift taxes, real estate transfer taxes, pari-mutuel taxes and the MTA payroll tax. New York's estate taxes do not have to be remitted until nine months following a person's death. As a result, the amount of estate taxes paid in any particular month is not a reflection of the current economy but, the value of the estate at the time of death. These collections are also a function of the size of the estates on which the taxes are paid. Estate tax collections for SFY 2011-12 are estimated to decrease by 8.7 percent from SFY 2010-11 primarily as a result of the absence of an extremely large estate tax collection that occurred in SFY 2010-11.

All other tax collections for SFY 2011-12 are estimated to increase by 5.1 percent. This growth reflects an increase in the MTA payroll tax collections as a result of wage growth as well as growth in real estate transfer taxes as the housing market improves. In SFY 2012-13, estate taxes are projected to continue to decline by 9.4 percent as a result of the analytic decline in the state based of the interaction based on the based of the state base

of the projected decline in the stock market which impacts household wealth. However, all other collections are projected to grow by 3.8 percent; primarily the result of wage growth driving higher MTA payroll tax collections.

Miscellaneous Receipts

General Fund miscellaneous receipts are estimated to total \$3.22 billion in SFY 2011-12, a 2.1 percent increase from 2010-11. This increase is mainly due to increased collections from investment income as well as the use of one-time revenues such as the \$150 million transfer from the State's public authorities and the use of special revenue fund balances.

Collections in SFY 2012-13 are projected to decrease by 4.4 percent to \$3.08 billion as a result of the loss of one time revenues mentioned above.

Overall Disbursements and Receipts II. Overall **Disbursements &** The Executive's Mid-Year Financial Plan Update for State Fiscal Year (SFY) 2011-12 Receipts estimates a \$350 million current services deficit for the current state fiscal year. SFY 2011-12 All Funds spending (including Federal Aid) is projected to be \$131.408 billion. The Division of Budget (DOB) estimates a current services budget gap of \$3.25 billion for SFY 2012-13 an increase of approximately \$871 million or approximately 37 percent from the Division's previous estimate \$2.38 billion in the Enacted Budget Report, which was unchanged in the First Quarter Financial Plan Update. The bond ratings for New York State remain unchanged from 2010. Spending on Education (K-12/Higher Education/STAR) accounts for approximately \$40 billion and spending on Health/Mental Hygiene is estimated at \$52 billion on an All Funds basis, combined they represent approximately 70 percent of the total \$131.408 billion budget for SFY 2011-12. On an All Funds basis, overall spending in SFY 2011-12 was reduced by approximately \$3.4 billion or 2.5 percent. Of this amount approximately \$3.3 billion came from Education and Health/Mental Hygiene. Decreases in these areas account for approximately 98 percent of the net budget reduction in SFY 2011-12. Moreover, reductions in school aid amount to approximately \$3.1 billion or 92 percent of the total reduction. The "structural gap" refers to the degree that current services spending is estimated to differ from revenues in years following the current budget year. DOB estimates that the General Fund Financial Plan is carrying a \$350 million deficit. DOB projects a budget gap of approximately \$3.25 billion for SFY 2012-13, \$3.27 billion for SFY 2013-14 and \$4.80 billion for SFY 2014-15. This equates to a structural deficit of \$11.32 billion, a reduction of \$29.9 billion or 72.5 percent from the SFY 2010-11

mid-year structural deficit of \$41.2 billion.

The Adopted Budget includes total General Fund reserves of \$1.7 billion, equal to 3.34 percent of General Fund spending (1.83 percent of State Funds spending). The Tax Stabilization Reserve Fund has a balance of just over \$1 billion (out of a total of \$1.7 billion in reserves for SFY 2011-12).

DOB estimates the State will end SFY 2011-12 with a General Fund balance of \$1.7 billion. This assumes closing the \$350 million current services deficit without use of reserves and reflects a planned deposit of \$100 million to the Rainy Day Reserve in SFY 2011-12.

For SFY 2011-12, the Senate Finance Financial Review projects \$191 million in additional General Fund revenues and \$49.9 million in additional spending above the Executive projections. For SFY 2012-13, the Senate projects \$38 million in additional General Fund revenues above the Executive and \$332 million less in spending.

III. Medicaid <u>Methodology</u>

The Senate Finance Staff Medicaid forecast model uses projections of price and the number of service units to forecast Medicaid expenditures, based on Management Account Reporting Subsystem (MARS) data, specifically, report numbers 39, 51, 72 and 73. Projections for the current and following year are based on an analysis of actual data and service category trends.

The forecast is based on quarterly data, which tend to be more reliable than monthly data. In addition, while the forecast is based on a year to year comparison, trends for each category of service are examined for multiple prior years in order to analyze historical trends.

The Senate model is composed of seven components: **institutional** (hospital inpatient and nursing homes); **non-institutional** (hospital outpatient and freestanding clinics); **managed care** (HMO services); **non-institutional long term care** (assisted living, home care and long term managed care); **Family Health Plus; Pharmacy;** and **other services** (including rehabilitative services, physicians, hospice, practitioners, dental, transportation, vision, durable medical equipment, lab and other health care support services).

Both models forecast General Fund disbursements for Medicaid and include adjustments to remove amounts financed through Health Care Reform Act (HCRA) revenue sources. The Finance Committee model can also be articulated with the high level categories of service used by the Division of the Budget (DOB) in the Financial Plan and periodic updates.

Overview

The 2011-12 Enacted Budget adopted statutory changes that fixed spending growth of Department of Health Medicaid State share spending at the ten year average change in the Medical Component of the Consumer Price Index. This rate is currently calculated at four percent. In addition, the Enacted Budget impacted Medicaid spending by making substantive changes to managed care, Family Health Plus, pharmacy and non-institutional long term care. State spending is also heavily impacted by the expiration of the enhanced Federal share component for Medicaid (Federal Matching Assistance Percentage – FMAP) that was enacted through the American Recovery and Revitalization Act of 2009 (ARRA). The enhanced Federal share expired at the end of the first quarter of State Fiscal Year (SFY) 2011-12. The number of Medicaid recipients in SFY 2011-12 is expected to be 4.8 million.

SENATE FINANCE MEDICAID FORECAST DOH STATE FUNDS

SFY 2011-12

Spending Category	DOB Recast	SFC Recast	Dollar Change	Percent Change
Hospital /Clinics	\$2,520,216,000	\$2,536,476,671	\$16,260,671	0.65%
Nursing Homes	\$2,973,966,000	\$2,925,674,149	(\$48,291,851)	-1.62%
Managed Care	\$3,231,190,000	\$3,250,803,812	\$19,613,812	0.61%
Home Care	\$2,367,606,000	\$2,325,520,024	(\$42,085,976)	-1.78%
Non-Institutional /				
Other	\$1,515,847,000	\$1,675,558,487	\$159,711,457	10.54%
Pharmacy	\$691,186,000	\$676,307,640	(\$14,878,360)	-2.15%
Family Health Plus	\$803,111,000	\$780,882,731	(\$22,228,269)	-2.77%
TOTAL BASE	\$14,103,122,000	\$14,171,223,514	(\$68,101,514)	0.48%
Adjustments	\$1,223,454,000	\$1,223,454,000	\$0	0%
TOTAL ADJUSTED				
BASE	\$15,326,576,000	\$15,394,677,514	\$68,101,514	0.44%

SFY 2012-13

Spending Category	DOB Recast	SFC Recast	Dollar Change	Percent Change
Hospital /Clinics	\$2,399,346,000	\$2,311,154,815	(\$88,191,185)	-3.68%
Nursing Homes	\$2,975,219,000	\$2,879,092,971	(\$96,126,029)	-3.23%
Managed Care	\$4,171,615,000	\$4,167,027,101	(\$4,587,899)	-0.11%
Home Care	\$2,436,266,000	\$2,334,732,573	(\$101,533,427)	-4.17%
Non-Institutional /				
Other	\$1,574,918,000	\$1,704,253,711	\$129,335,711	8.21%
Pharmacy	\$423,349,000	\$535,478,896	\$112,129,896	26.49%
Family Health Plus	\$1,029,478,000	\$1,052,053,678	\$22,575,678	2.19%
TOTAL BASE	\$15,010,191,000	\$14,983,793,744	(\$26,397,256)	-0.18%
Adjustments TOTAL ADJUSTED	\$929,472,000	\$929,472,000	\$0	0%
BASE	\$15,939,663,000	\$15,913,265,744	(\$26,397,256)	-0.17%

Senate compared to DOB SFY 2011-12 through 2012-13

State Fiscal Year	DOB	Senate	Dollar Change	Percent Change
2011-12	\$ 15,326,576,000	\$15,394,677,514	\$68,101,514	0.44%
2012-13	\$15,939,663,000	\$15,913,265,744	(\$26,397,256)	-0.17%
TWO YEAR MEDICAID	RE-ESTIMATE		\$41,704,258	

Mid-Year Projections

Over the 2011-12 and 2012-13 fiscal years the Senate projects Department of Health State Share Medicaid spending at approximately \$31.3 billion; \$41.7 million more than projected by the Executive. The Finance Committee Mid-Year Review projects Medicaid baseline expenditures for SFY 2011-12 at \$15.39 billion. The spending forecast for SFY 2012-13 is \$15.91 billion.

Over the period from SFY 2010-11 through SFY 2012-13 the Executive projects General Fund Medicaid spending to increase by an aggregate amount of \$3.34 billion. The Executive Mid-Year Financial Plan Update projects General Fund Medicaid disbursements of \$10.27 billion for SFY 2011-12, an increase of \$3.15 billion from the SFY 2010-11 Enacted Budget. On a State Funds basis, the Executive anticipates Medicaid spending for SFY 2011-12 to increase by \$3.65 billion from SFY 2010-11. This spending increase is the result of the expiration of increased amounts of Federal aid through the enhanced Federal Matching Assistance Percentage authorized by the American Recovery and Revitalization Act of 2009. The Executive projects Department of Health State Fund spending for SFY 2012-13 will be \$15.9 billion.

Without the enhanced FMAP, the Executive projects that real State spending would decrease \$537 million from SFY 2010-11 to SFY 2011-12. The lower SFY 2011-12 Medicaid spending contained is the Finance Committee mid-year forecast is attributed primarily to action taken in the Enacted Budget that lowered spending. This trend carries forward into SFY 2012-13 where the Senate forecast also predicts lower spending. Below is an analysis of how the Senate forecast differs from the Executive. The categories are presented in the same categorical format used by the Executive in the Mid-Year Financial Plan Update.

Hospitals and clinics. The Executive projects hospital and clinic spending at approximately \$2.5 billion for SFY 2011-12 and \$2.4 billion for SFY 2012-13. These amounts represent a decrease of \$230 million in SFY 2011-12 and \$120.9 million in SFY 2012-13. The Senate recast is approximately \$16 million over the Executive for SFY 2011-12 and approximately \$88.2 million under the Executive for SFY 2012-13.

For hospital inpatient service the overall number of service units is trending slightly down between SFY 2010-11 and SFY 2012-13 (from 6.3 million to 6.1 million or approximately three percent). At the same time, the cost per unit increased (from approximately \$921 to \$995). The average number of beneficiaries is projected to decrease (from approximately 990,000 to 800,000). The Executive defines an inpatient service unit as services provided to one beneficiary.

Outpatient service units are trending up from approximately 20 million to 50 million, an increase of nearly 150 percent. This is due to the implementation of a new reimbursement system (Ambulatory Patient Groups). At the same time cost per unit decreased dramatically, from \$78 to \$8. The average number of beneficiaries is also trending down.

For clinics, the number of service units is trending up while the cost per unit is decreasing and the average number of beneficiaries is rising. For both outpatient services and clinics the Executive defines a service unit as one visit.

Nursing homes. The Executive projects nursing home spending at approximately \$2.97 billion in SFY 2011-12 and \$2.98 billion in SFY 2012-13. These amounts represent

increases of \$20 million in SFY 2011-12 and \$1.3 million in SFY 2012-13. The Finance Committee estimate is approximately \$48 million lower than the Executive's for SFY 2011-12 and \$96 million lower for SFY 2012-13. For nursing homes, the Executive defines a service unit as one bed day.

Managed care. The Executive projects managed care spending at \$3.2 billion for SFY 2011-12 and \$4.2 billion for SFY 2012-13. These amounts represent increases of \$810 million and \$940 million respectively. The Finance Committee estimates managed care spending for SFY 2011-12 at approximately \$3.3 billion and \$4.2 billion for SFY 2012-13. These amounts are approximately \$20 million over the Executive for SFY 2011-12 and \$5 million under the Executive for 2012-13.

Home care. The Executive projects home care spending at approximately \$2.37 billion for SFY 2011-12 and \$2.44 billion for SFY 2012-13. These amounts represent a decrease of \$148 million and an increase of \$69 million respectively. The Finance Committee estimates home care spending for SFY 2011-12 and 2012-13 at approximately \$2.33 billion each year; approximately \$42 million less than the Executive in SFY 2011-12 and approximately \$102 million less than the Executive for SFY 2012-13. The category corresponding to home care in the Finance Committee model is non-institutional long term care which includes assisted living, home nursing, long term home health care waived services (LTHHC), long term managed care, home health aide and personal care services.

Non-institutional/other. The Executive projects non-institutional/other spending at approximately \$1.52 billion for SFY 2011-12 and \$1.57 billion for SFY 2012-13. These amounts represent a decrease of \$140 million in SFY 2011-12 and an increase of \$59 million in 2012-13. The Finance Committee estimates non-institutional spending at approximately \$1.68 billion for SFY 2011-12 and approximately \$1.7 billion for SFY 2012-13; approximately \$160 million more than the Executive for SFY 2011-12 and \$129 million more than the Executive for SFY 2011-12 and \$129 million are in the Senate model includes a wide array of items such as dentists, therapists, practitioners, physicians, lab, x-ray, durable medical equipment, transportation, eyeglasses, case management and other items.

Pharmacy. The Executive projects pharmacy spending at approximately \$691 million for SFY 2011-12 and \$423 million for SFY 2012-13. These amounts represent decreases of \$689 million and \$268 million respectively. The Senate recast estimates pharmacy spending at approximately \$14 million below the Executive in SFY 2011-12 and \$112 million above the Executive in 2012-13.

Family Health Plus. The Executive projects Family Health Plus spending of \$803 million for SFY 2011-12 and \$1.03 billion in SFY 2012-13. The Finance Committee forecast projects spending of approximately \$781 million for SFY 2011-12 and \$1.05 billion for SFY 2012-13. These amounts are approximately \$22 million under and \$23 million over the Executive's for SFY 2011-12 and SFY 2012-13 respectively. The Finance Committee projects the Family Health Plus caseload to increase slightly over the remainder of the current fiscal year.

IV. Public <u>Public Assistance</u>

Assistance

New York State's Public Assistance caseload consists of two categories of recipients: Family Assistance (FA) and Safety Net Assistance (SNA). FA provides cash assistance to needy families that include a child living with a parent or a caretaker relative whose income is not in excess of 200 percent of the federal poverty level. SNA provides cash assistance to individuals and childless couples whose income does not exceed 200 percent of the poverty level, or to those who have exhausted their five-year time limit for FA eligibility.

The SFY 2011-12 Enacted Budget changed the funding formulas for both programs so that the FA program is now financed only with federal Temporary Assistance for Needy Families (TANF) funds and the SNA program is financed by 29 percent State and 71 percent local funds. Historically, the FA program had a 50 percent federal, 25 percent State and 25 percent local share, and the SNA program was financed with approximately 49 percent State and 51 percent local funds.

While welfare caseload fluctuates and can be difficult to predict, there is a strong relationship between the number of public assistance recipients and economic factors. Accordingly, the Finance Committee created a model to estimate the average number of monthly recipients and expenditures for the remainder of the current fiscal year, and to forecast the same data for SFY 2012-13. The model considers unemployment, low work wage, entry level employment, and historical recession trends.

The final statutorily scheduled ten percent basic public assistance grant increase was delayed from July of 2011 to July of 2012 as part of the SFY 2011-12 Enacted Budget. The projections for SFY 2012-13 expenditures do not incorporate the impact of the final grant increase.

Family Assistance

New York City:

For SFY 2011-12, the updated Family Assistance caseload for New York City (NYC) is projected at 146,798, an increase of 6,097 or 4.3 percent from the SFY 2011-12 Enacted Budget. The model used to determine Family Assistance caseload for NYC is based on a multiyear trend in actual monthly caseload from January 2003 through July 2011, adjusted for economic factors. This trend analysis results in a projected caseload of 145,876 for SFY 2012-13. The Monthly Average Payment is projected at \$413.92.

Rest of State:

For SFY 2011-12, the updated Family Assistance caseload for the Rest of State (ROS) is projected at 114,048, an increase of 2,396 or 2.2 percent from the SFY 2011-12 Enacted Budget. The model used to determine Family Assistance caseload for the ROS is based on a multiyear trend analysis of actual monthly caseload from January 2003 through July 2011, adjusted for economic factors. The projected caseload for SFY 2012-13 is 112,589. The Monthly Average Payment is projected at \$287.96.

Safety Net Families

New York City:

For SFY 2011-12, the updated Safety Net Families caseload for NYC is projected at 86,834, an increase of 4,485 or 5.5 percent from the SFY 2011-12 Enacted Budget. The model used to determine Safety Net Families caseload for NYC is based on a multiyear trend in actual monthly caseload from January 2003 through July 2011, adjusted for economic factors. The projected caseload for SFY 2012-13 is 87,014. The Monthly

Average Payment is projected at \$282.67.

Rest of State:

For SFY 2011-12, the updated Safety Net Families caseload for the ROS is projected at 33,065, a decrease of 899 or 2.7 percent from the SFY 2011-12 Enacted Budget. The model used to determine Safety Net Families caseload for the ROS analyzed a multiyear trend in actual monthly caseload from January 2003 through July 2011, adjusted for economic indicators. The caseload for SFY 2012-13 is projected at 32,513. The Monthly Average Payment is projected at \$222.88.

Safety Net Singles

New York City:

For SFY 2011-12, the updated Safety Net Singles caseload for NYC is projected at 112,508, an increase of 9,130 or 8.8 percent from the SFY 2011-12 Enacted Budget. The model used to determine Safety Net Singles caseload for NYC includes a multiyear trend in actual monthly caseload from January 2003 through July 2011, adjusted for economic factors. The projected caseload is 111,892 for SFY 2012-13. The Monthly Average Payment (MAP) is projected at \$512.41.

Rest of State:

For SFY 2011-12, the updated Safety Net Singles caseload for the ROS is projected at 66,335, an increase of 6,656 or 11.2 percent from the SFY 2011-12 Enacted Budget. The model used to determine Safety Net Singles caseload for the ROS includes a multiyear trend in actual monthly caseload from January 2003 through July 2011, adjusted for economic factors. The projected caseload is 65,237 for SFY 2012-13. The Monthly Average Payment is projected at \$364.94.

Statewide Totals

The mid-year revision for SFY 2011-12 estimates a statewide caseload of 559,588, reflecting an increase of 27,865 or 5.2 percent from the SFY 2011-12 Enacted Budget. The total State share related to the caseload in the mid-year revision is projected at \$395.9 million for SFY 2011-12, an increase of \$24.9 million or 6.7 percent from the SFY 2011-12 Enacted Budget spending level.

For SFY 2012-13, the statewide total caseload is projected at 555,121, reflecting an anticipated decrease of 4,467 or 0.8 percent from the current year. The projected SFY 2012-13 State share spending level related to the caseload is \$393.2 million, a decrease of \$2.7 million or 0.7 percent from the estimated current year level spending.

Local Governments will experience the same percentage increase of expenditures as the State in the current fiscal year, however the financial impact of these projections to local social services districts is significantly greater due to the change in the financing structure of the FA and SNA programs in the SFY 2011-12 Enacted Budget. The Finance Committee is projecting the total local share related to the mid-year revision caseload to be \$969.3 million, an increase of \$60.9 million from the SFY 2011-12 Enacted Budget spending level.

All projections presume economic activity consistent with the economic forecast included within this report. Should the underlying economics vary in any measured amount, caseload numbers will change accordingly.

V. School Aid I. State Fiscal Year 2011-12 Enacted Spending

The Legislature and the Governor enacted a general support for public schools program totaling \$19.6 billion. This represented a \$701 million decrease from the 2010-11 school year. Even with this reduction school aid has increased by \$1.81 billion since the 2006-07 school year. This is a 10.2 percent increase since the 2006-07 school year.

II. Current Year Spending Projections

Over the course of the State Fiscal Year the State Education Department (SED) is required to update State aid claims for school districts. These aid claim updates occur statutorily in May, November and February on or before the 15th of each respective month. Typically the school aid figures in each year's enacted budget are based upon data submitted by school districts on February 15th. The most recent data we currently have is an unofficial update provided by SED in November. The school year 2011-12 spending projections for aid included in this report are based on the November data. The data submitted by school districts include changes for the 2010-11 school year in addition to changes for the 2011-12 school year affect the spending in the 2011-12 "tail" which is appropriated in SFY 2012-13. The 2011-12 "tail" adjustment shows a \$102.91 million decrease for SFY 2012-13. In addition, the November 15th database update shows a reduced State Fiscal Year 2012-13 need of \$190 million based on the projected overall General Support for Public Schools total. Overall the 2012-13 State Fiscal Year need is \$292.91 million less than what is currently in the financial plan.

The following table provides a projected change for SFY 2012-13, resulting from the November 15th database update:

Fiscal Year 2012-13				
State Aid Adjustments				
Item	Amount			
2010-11 and 2011-12 State Aid Claim Adjustments	(\$102.91) million			
2012-13 Fiscal Year Need	(\$190.00) million			

III. Projected 2012-13 Spending:

Beginning in SFY 2012 and each year thereafter general support for public schools is scheduled to grow statutorily by the personal income growth index. For the 2012-13 school year growth will be based on a five year average of the State's personal income growth index. The following table provides the projected index for 2012-13 and 2013-14 based on figures obtained at the time of the 2011-12 enacted budget:

Growth Factor	2012-13	2013-14
Personal Income Growth Index	4.1%	4.3%

Beginning in SFY 2013-14 and each year thereafter an annual index will be applied (not a five year average). The personal income growth index is based upon the total personal income of NYS as published by the United States Department of Commerce. The 2012-13 personal growth index is 4.1 percent. Pursuant to the Enacted 2011-12 budget, the Commissioner of Education shall determine an allowable statewide growth amount. The

Commissioner shall then determine any growth in expense based aids (Building Aid, Transportation, BOCES, Excess cost etc) and deduct that from the allowable growth amount. This will offset any increase in expense based aids and reduce the total amount of allowable growth available. The enacted 2011-12 budget agreement also will offset the \$50 million of competitive grants (Academic Achievement - Administrative Efficiency). The remainder, once expense base aids and the competitive grants are funded, is the allocable growth amount. The allocable growth amount is subject to a chapter of the laws of the state fiscal year in which the school year commences. In other words this remainder has yet to be allocated to any aid category. The allocable growth can be used for the following purposes, including but not limited to increases in competitive grant awards, foundation aid phase in increases or increases for gap elimination restoration. The November data indicates that GSPS is \$19.5 billion. That amount multiplied by the personal growth index of 4.1 percent would result in an \$805 million increase in school aid for the 2012-13 school year. The projected increase in expense based aids of \$255 million is based upon the actual SED November data. This increase offset within the \$805 million allowable growth amount along with the \$50 million competitive grant offset indicates that the allocable growth amount for the 2012-13 school year would be approximately \$491 million on a school year basis.

As indicated above, the allocable growth amount can be utilized to fund increases in foundation aid, gap elimination restoration or other school aid GSPS categories. Therefore, no projection is provided for these major categories in that the current law provides that any allocable growth amount shall be determined by a chapter of laws of the fiscal year within which the school year shall commence.

2012-13 School Year Aid Projections Expense Aids					
		(millions)			
Aid	Annual Average Growth	2011-12 Amount	2012-13 School Year Projected	2012-13 School Year Projected Increase	
Building Transportation BOCES Private and High Cost Excess Cost Aid Instructional Materials	4.1%	\$6,235.49	\$6,490.99	\$255.50	

The following chart provides the average annual increases in these aid categories and the projected increases for 2012-13:

2012-13 School Year Projections General Support for Public Schools					
		(billions)			
Aid Category	2011-12	2012-13	Change Amount	Change Percent	
Foundation Aid	\$14.894	\$14.894*	\$.00	0.0%	
Expense Aids	\$6.235	\$6.490	\$0.255	4.11%	
Universal Pre-K	\$.383	\$.383	\$.000	0.0%	
High Tax Aid	\$.205	\$.205	\$.000	0.0%	
All Other	\$.346	\$.354	\$.011	0.0%	
Comp. Grants	\$.00	\$.050*	\$.050	N/A	
GEA	(\$2.786)	(\$2.786)	\$.000	0.0%	
GEA Restoration	\$.229	\$.229*	\$.000	0.0%	
Allocable Growth	N/A	\$.491*	\$.491	N/A	
Total	\$19.51	\$20.31	\$.805	4.1%	

The projected increase includes the following components:

* Subject to negotiation

The 2012-13 State Fiscal Year (SFY) increase is projected to be \$279 million. This amount includes the \$292.91 million in savings generated by a reduction in claims from the 2010-11, 2011-12 and 2012-13 school years (Based on the November 15th database).

IV. Projected 2013-14 Spending:

It is expected that the same expense based aid categories will continue to increase in 2013-14. Current law provides for aid to grow by the personal income growth index. The current projected growth index for the 2013-14 school year is 4.3 percent. When multiplied by the GSPS amount of \$20.31 billion from the 2012-13 school year, growth in school aid is expected to increase by \$873 million in the 2013-14 school year. The following chart provides the projected growth in expense base aids for the 2013-14 school year:

2013-14 School Year Aid Projections Expense Aids (millions)					
Aid	Average Annual Growth	2012-13 Amount	2013-14 School Year Projected	2013-14 School Year Projected Increase	
Building Transportation BOCES Private and High Cost Excess Cost Aid Instructional Materials	4.1%	\$6,490.99	\$6,757.12	\$266.13	

When the increases in expenses base aids are combined with the competitive grants the allocable growth amount is projected to be \$605 million on a school year basis. This will bring total school aid to \$21.19 billion. The state financial plan impact of school aid in 2013-14 will include the 2012-13 "tail". In total, school aid spending for SFY 2013-14 is estimated to grow by an additional \$873 million.

The following table provides the school year increases projected for the 2013-14 school year:

2013-14 School Year Projections General Support for Public Schools					
		(billions)			
Aid Category	2012-13	2013-14	Change Amount	Change Percent	
Foundation Aid	\$14.894*	\$14.894*	\$.00	0.0%	
Expense Aids	\$6.490	\$6.757	\$0.266	4.1%	
Universal Pre-K	\$.383	\$.383	\$.00	0.0%	
High Tax Aid	\$.205	\$.205	\$.00	0.0%	
All Other	\$.355	\$.355	\$.00	0.0%	
Comp. Grants	\$.050*	\$.052*	\$0.002	N/A	
GEA	(\$2.786)	(\$2.786)	\$.00	0.0%	
GEA Restoration	\$.229*	\$.229*	\$.00	0.0%	
Allocable Growth 2012-13	\$.491*	\$.491*	\$.00	N/A	
Allocable Growth 2013-14	N/A	\$.605	\$.605	N/A	
Total	\$20.31	\$21.19	\$.873	4.3%	

*Note: Changes in these aid categories over the prior year are subject to a chapter of the laws of the fiscal year in which the school year commences.

**Note: The allocable growth for the 2012-13 school year is expected to be distributed into one or more of the aid categories.

APPENDIX

THE NEW YORK STATE TAX REVENUE AND ECONOMY MODEL

Technical Characteristics

This report represents a continuation of the long-standing relationship between the Senate Finance Committee and Global Insight. Prior to 1995, Global Insight (formerly WEFA) produced both the economic and revenue forecasts and issued a final report to the Senate Finance Committee. Under a relationship now in its ninth year, Global Insight continues to produce the economic and tax revenue forecasts using the New York State Tax and Revenue Model (NYSTREM) and serves in an advisory capacity to the Senate Finance Committee in the development of revenue forecasts.

The New York State Tax Revenue and Economy Model (NYSTREM) was developed for the New York State Senate by Global Insight to provide forecasts of quarterly tax revenues, by tax category, on a timely basis with the greatest accuracy possible. The model captures the latest historical and forecast information of the U.S. economy, the New York State economy, and New York State tax revenues.

The model and forecasting procedures have the following characteristics and considerations:

- the model is based on economic theory and tax revenue accounting relationships;
- tax variables are first seasonally adjusted to obtain consistency with other seasonally adjusted national and New York State data in modeling and forecasting processes, and are transformed back into non-seasonally adjusted variables to reflect the seasonality of tax collections;
- the New York State economy part of the model belongs to the system of Global Insight's Quarterly State Econometric Model. This system is composed of 51 state and D.C. models, which is further linked to Global Insight's national social and economic forecasting system;
- all of the expertise of the Global Insight Regional Economics Group is embedded in the modeling and forecasting processes;
- the Senate Finance Committee has access to the latest historical data and Global Insight's forecast of the U. S. economy each month; and
- NYSTREM is implemented in AREMOS, Global Insight's proprietary, state-of-the-art, econometric, PC-based software, providing the New York Senate Finance Committee with the ability to carry out simulations of the model as needed.

Equations in the model were estimated with the most appropriate methods that econometrics theory suggests based on the availability and characteristics of the data. Because state tax revenue is determined by the state, as well as the national economy, many U. S. and New York State economic and social variables must be used to provide an explanation of New York State tax revenue. Therefore, besides forecasting New York State's tax revenue, NYSTREM also forecasts the State's following variables:

- 2-digit manufacturing (26 components) and 1-digit non-manufacturing employment (16 components);
- 14 components of real income;
- 15 components of nominal income;
- 7 components of population by age;

- 18 components of net migration by age;
- 8 components of household by age and sex of head;
- 2 components of retail sales;
- housing starts, sales and prices;
- passenger motor vehicle registration;
- pari-mutuel racing attendance;
- total retail sales; and
- alcoholic beverage sales volume.

Global Insight needs to process hundreds of endogenous and exogenous data series for estimating equations in the model and producing the forecasts.