

# **OREGON ECONOMIC AND REVENUE FORECAST**

## **SUMMARY**

**State of Oregon  
Department of Administrative Services  
Office of Economic Analysis**

**December 2007  
Volume XXVII, No. 4**



# **EXECUTIVE SUMMARY**

**December 2007**

## **Oregon Economic Forecast**

After 16 consecutive quarters of job gains that started in the middle of 2003, Oregon lost some jobs in third quarter 2007. The initial estimate of job loss was an annualized rate of 0.3 percent. Nonetheless, on a year-over-year (Y/Y) basis, jobs increased in the third quarter by 0.9 percent. Total nonfarm jobs in Oregon now stand at 1,723,300, down 1,150 from the second quarter.

This slowdown in job creation has been expected after three years of strong job growth in Oregon. The national employment growth rate is also on the way down.

OEA forecasts Oregon's employment to rise by 1.2 percent for 2007, a sharp deceleration from 2005 and 2006. This is because OEA continues to assume that the rest of 2007 will see much more subdued growth. OEA projects the job growth in fourth quarter 2007 to be 0.5 percent, continuing the slowing trend since the 2.6 percent growth in the first quarter. Manufacturing will stabilize, and retail and services will continue to feel the impact from slower consumer spending.

The durable goods manufacturing sector will suffer job losses in 2007, reflecting weak wood product, transportation equipment, and computer and electronics industries. We expect some job gains in 2009 as the economy recovers from the housing slump. In fact, improvement in this industry is expected to start in late 2008.

The computer and electronic products industry, which contains semiconductors, will show a slow decline in jobs or flat growth during the forecast horizon. The out years are projected to keep this sector on a flat or slightly downward path. The sector is subject to further uncertainty as high tech firms try to become more cost-effective in manufacturing, research, and development.

Employment in the transportation equipment industry will decline 10.4 percent in 2007, partly reflecting the pullout of Freightliner commercial trucks from Portland. This sector will stabilize in 2008 and will fluctuate around business cycles in out years, with some growth in 2009.

Construction jobs will stay virtually flat in 2007. The housing sector slowdown has yet to exert its full impact, but for now the nonresidential sector has more than offset the loss in housing construction. We expect some job loss in 2008, followed by flat growth in 2009. If the housing sector deteriorates worse than expected, which is a distinct possibility at this point, 2007 could see a decline in construction jobs.

Retail trade jobs will increase in 2007. Much slower growth will show up in 2008, followed by a good 2.2 percent growth in 2009.

The professional and business services industry grew rapidly with the booming economy in 2004-2006. It will see a substantial slowdown in 2007. This industry will see basically flat growth in 2008.

Health services grew even during the recession. The robust growth continues in 2007, followed by similar increases in both 2008 and 2009.

Government employment is expected to increase by 1.4 percent in 2007, followed by growth of 1.4 percent in 2008 and 0.9 percent in 2009. Local government jobs will continue to experience mild growth to meet an increasing service demand due to population growth.

Despite flat growth in the third quarter, a healthy growth will return in the leisure and hospitality industry in 2008.

### **Forecast Risks**

Forecasts risks from prior forecasts still remain. In fact, the economy is facing heightened uncertainty.

With the national economy going through a slowdown in 2007, the risks are higher from any disturbances that could throw the economy off track. The same major drag for the slowdown, a slowing housing market, could hurt the economy further when it is most susceptible. The credit crunch and the ensuing instability in the global financial market bring added uncertainty. Businesses are nervous about potential repercussions from the turmoil in the financial markets across the world. Any geopolitical disruptions during this time would be more harmful than when the economy is stronger.

Despite good headline inflation numbers, inflation pressures still exist. The Fed continues to warn about a potential flare-up in inflation pressure. The expectation is that the softening economy will ease inflation pressures. However, sharply higher oil and gasoline prices coupled with a sharp rise in food prices will add inflationary pressure. A weaker dollar may contribute to price pressure through a run-up in import prices.

The housing market in Oregon and the U.S. continue to work off excesses accumulated in the past housing boom. Building permits and housing starts are sharply down. In fact, both have declined more than expected. With declining sales, home prices are coming down at the national level. While house price appreciation has continued in Oregon, some parts of the country have seen house prices drop substantially. House prices will continue to soften in most regions. Negative wealth effect from lower house values and less mortgage equity withdrawal will dampen consumer spending. There is a risk that the housing market may deteriorate worse than expected.

The subprime mortgage problem has led to bankruptcies and huge write-offs in the financial industry. While the credit squeeze continues for some borrowers, short-term financing through the commercial paper market has been stabilizing. Stricter lending standards also limit credit access, but qualified borrowers continue to enjoy stable financing.

Record oil prices remain a substantial risk. So far, the world economy has withstood the attack of high oil prices remarkably well. Still, there is no question that high oil prices are a significant threat to the already soft U.S. economy.

Oil supplies can be disrupted for many different reasons, and higher energy prices cannot be ruled out. Crude oil prices continue to hover around record levels. The global supply is still tight, and

demand is still strong, particularly from China and the rest of Asia. Geopolitical tensions continue to exist, and there is always room for speculative attacks. There is an indication that current oil prices are being partly supported by speculators.

A rebound in business spending started in the first quarter of 2007. We expect business spending to stay robust in 2007. However, the current instability in the global financial market and uncertainty surrounding the overall economy are weighing on business confidence, which may lead businesses to change their capital spending plan. At the same time, if the economy slows further, a pickup in business investment may be delayed, and Oregon's manufacturing may be negatively affected.

We will continue to monitor and recognize the potential impacts of these risk factors on the Oregon economy. The major risks now facing the Oregon economy are listed below:

- *Contagion of the credit crunch and financial market instability.* The current instability in the financial market is weighing on business confidence, which may lead businesses to change their capital spending plans. The central banks are ready to inject more money to alleviate short-term credit problems, and their measures have been successful so far. At the same time, the Fed has lowered interest rates to stimulate the economy.
- *A further worsening in the housing market.* Low interest rates and easy lending standards have aided a boom in home purchases and mortgage refinancing. With the subprime mortgage problem spreading and tighter lending standards in place, the mortgage market is not as conducive to residential real estate activity as in the past. Any drop in house price appreciation coupled with a large drop in mortgage equity withdrawal will slow down consumer spending. The Oregon housing market could be adversely impacted by a major housing correction in California and the rest of the nation. Continued gains in employment and personal income will be needed to keep consumer spending from falling.
- *A major deceleration in the U.S. economy and a global downturn triggered by the U.S. slowdown.* The U.S. economy has been an important engine of growth for the global economy. Thanks to a strong global economy, the chances are lower that the U.S. slowdown will set off a global downturn. The rest of the world is growing nicely even with a soft U.S. economy, but if the U.S. economy falters even more, the whole world will surely feel the impact. Asia in particular will be severely affected due to its large exposure to the U.S. economy.
- *A sharp fall of the U.S. dollar.* As the dollar depreciates against foreign currencies, U.S. exports are promoted as U.S. products become more price-competitive (or less expensive). Oregon's manufacturing sector has a large dependency on international markets. If the U.S. dollar falls too quickly, this could harm Oregon's trading partners because the lower dollar makes imports more expensive to U.S. consumers. As U.S. trading partners export less to the U.S., their economies may weaken and lower their demand for Oregon products. In the end, a controlled lowering of the U.S. dollar is most beneficial to the Oregon economy.
- *A sharp and major stock market correction.* This would slow consumer spending. Lower stock prices could also limit the ability of businesses to raise necessary capital in the equity markets.

- *A hard landing in China.* The Chinese economy is growing very fast. Building construction and other business investments are largely responsible for this economic growth. Inflationary pressure is strong. The central government's efforts to curb growth have produced minimal success. Limited experience in macro policymaking may result in an undesirable set of policy measures. A major slowdown in China will hurt most Asian economies, along with commodity-exporting countries, including Canada. Given that Canada and Asian countries are the major destinations of Oregon's manufacturing exports, the manufacturing sector would be negatively impacted.
- *Geopolitical risks.* Uncertainty still abounds in Iraq. Tensions with Iran and heightened security risks weigh on businesses and consumers. Disruptions in travel, oil supplies, and consumer confidence could be severe. The drop in business activity could be deeper if this uncertainty persists, or if the transition out of the Iraq war goes badly for the U.S. The winding down of military expenses will not greatly impact Oregon. There is also an upside risk that the transition will go more smoothly than anticipated, and stability in the Mideast will provide a stronger than forecasted stimulus to the economy.
- *Inflation and Federal Reserve Bank reactions.* A growing economy with surging energy costs is a formula for inflation. Even with a slowing economy, higher inflation than forecasted may force the Federal Reserve to raise interest rates more quickly and to higher levels. This action could further slow the U.S. economy and in turn slow down the Oregon economy as higher interest rates hurt consumers and businesses.
- *Rising regional energy prices.* More businesses may slow production and lay off workers. A geopolitical incident could dramatically disrupt gasoline and natural gas prices. Regionally, electricity generation is subject to weather patterns and natural gas prices. As demand surpasses the available capacity of hydro generation, electric generation may move towards natural gas-powered turbine engines. Higher electricity prices could result because they are pegged to natural gas prices.
- *Initiatives, referendums, and referrals.* Generally, the ballot box brings a number of unknowns that could have sweeping impacts on the Oregon economy.

## **Demographic Forecast**

Oregon's estimated population on July 1, 2006 reached 3,690,500. That was an increase of 1.6 percent over the 2005 population. The recent growth is considerably higher than the 1.1 percent annual growth rate between 2000 and 2004. Overall, population change since 2000 is much lower than the rate of growth of well over 2.0 percent during the early 1990s. Oregon's population will continue to grow at a moderately high rate in the near future. Based on the current forecast, Oregon's population will reach 4.068 million in the year 2013 with an annual rate of growth of 1.4 percent.

Oregon's economic condition heavily influences the state's population growth. Oregon's economy determines its ability to attract job seekers from other states and beyond. As Oregon's total fertility rate remains, and will remain, below the replacement level, long-term growth comes from net immigration. Working-age adults come to Oregon as long as Oregon can offer good economic and employment conditions. The net migration during the 1980s, which included a major recession, contributed to 22.0 percent of the population change. On the other extreme, net migration accounted

for 73.0 percent of the population change during the booming 1990s. This share of migration declined to 57.0 percent in 2002. As a sign of modest economic gain, the net migration will account for nearly 67.0 percent of the population change in the near future.

Growth in all age groups will show the effects of the baby-boom generation and their echo generations during the period of 2006-2013. It will also reflect demographics impacted by the depression era birth cohort combined with migration of the working age population and elderly retirees. After a period of slow growth in the past, the elderly population (aged 65+) growth will pick up speed as the baby-boom generation starts to enter this age group. The annual growth of the elderly population will exceed 5.0 percent in 2012 as the boomers continue to enter the retirement age. The youngest elderly (aged 65-74) will grow at an extremely fast pace due to the direct impact of the baby-boom generation entering retirement age. The elderly aged 75-84 will shrink in numbers until 2009, as the depression era birth cohort will dominate this group. The oldest elderly (aged 85+) will continue to grow at a moderately high rate due to the combination of cohort change, continued positive net migration, and improving longevity. However, the annual growth rate will continue to taper off during the forecast period.

As the baby-boom generation matures, the once fast-paced growth of population aged 45-64 will gradually taper to well below the 1.0 percent rate by 2013. The young adult population (aged 18-24) will grow at an average of 0.7 percent annually, considerably slower than the rate averaging 1.3 percent experienced between 2000 and 2006. This will ease the pressure on public spending on college education. Children under the age of five will increase at a moderately fast pace, reaching 1.5 percent in 2011. The K-12 population (aged 5-17) will show very slow growth, which will translate into slow growth in school enrollments. The 25-44 age group population has reversed the several year trend of decline. The decline was mainly due to the exiting baby-boom cohort. This age group has seen positive growth starting in the year 2003 and will approach 1.5 percent annual growth by the year 2011.

## **Revenue Forecast**

The December 2007 forecast for General Fund revenues is \$13,108.6 million, an increase of \$22.0 million versus the September 2007 forecast. While the overall uncertainty about the national economy has increased, the current state of the economy is consistent with OEA's assumptions underlying recent forecast updates. In addition, General Fund collections are tracking closely with the September forecast. There is little indication of a substantial adjustment to the revenue forecast at this time. Including the beginning balance of \$1,429.4 million, and adjusting for cash flow management costs and distribution to the Oregon Rainy Day Fund, net available General Fund resources total \$14,161.3 million. Subtracting legislatively-adopted appropriations of \$13,945.7 million, the projected ending balance is \$206.6 million.

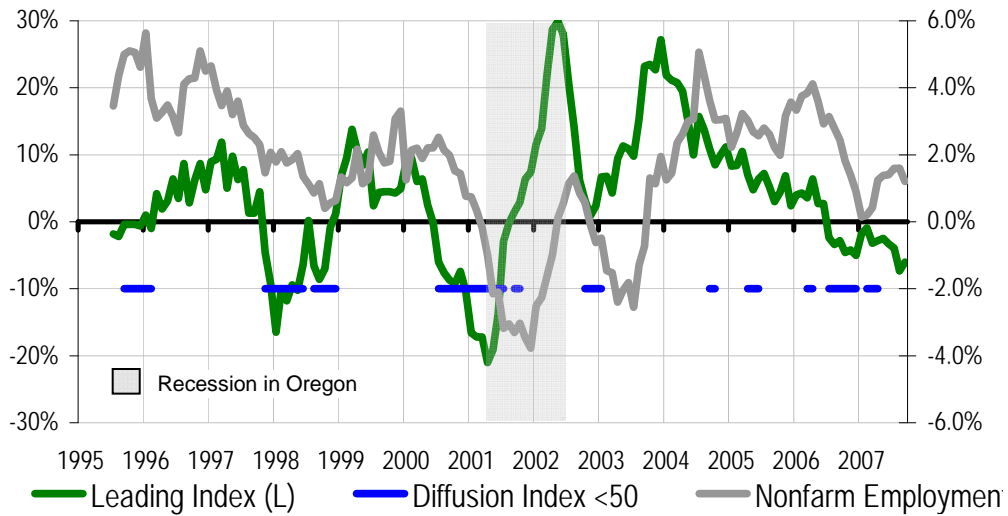
The forecast for General Fund revenues for the 2009-11 biennium is \$15,840.8 million, a 20.8 percent increase over the 2007-09 biennium. General Fund revenues will reach \$17,750.1 million in the 2011-13 biennium, a 12.1 percent increase from the prior biennium.

Projected lottery earnings for the 2007-09 biennium will equal \$1,347.9 million, an increase of \$12.9 million from the September forecast. Including the beginning balance in the Economic Development Fund and other sources of revenue, total resources available total \$1,426.1 million.

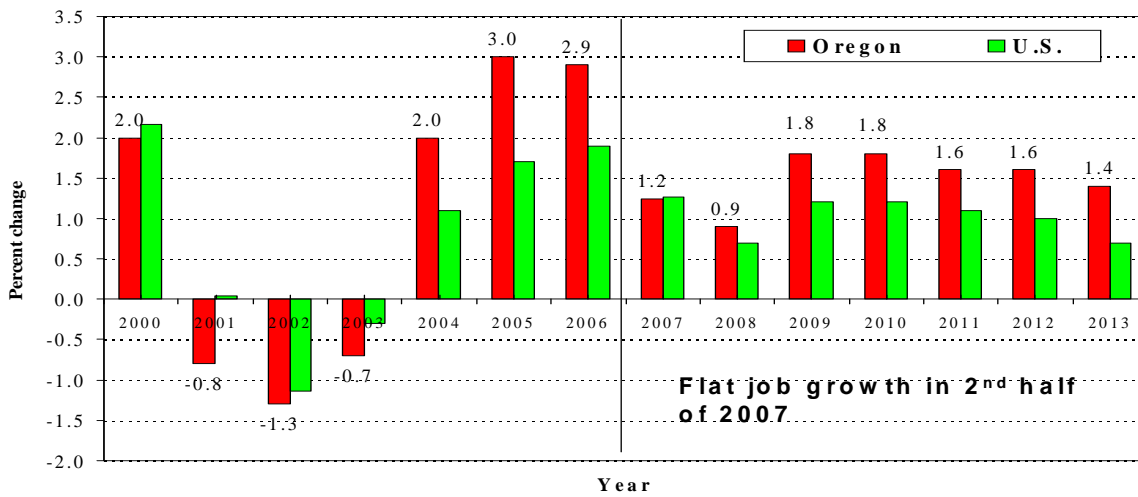
The projected ending balance in the fund, after accounting for dedicated distributions and legislatively-adopted allocations, is \$36.6 million.

As a result of the slightly lower projections for Video lottery sales, anticipated earnings for future biennia are modestly lower than in the September forecast. For the 2009-11 biennium, earnings will equal \$1,400.2 million, while available resources reach \$1,404.7 million. By the 2011-13 biennium, revenues will rise to \$1,551.1 million, with available resources totaling \$1,557.1 million.

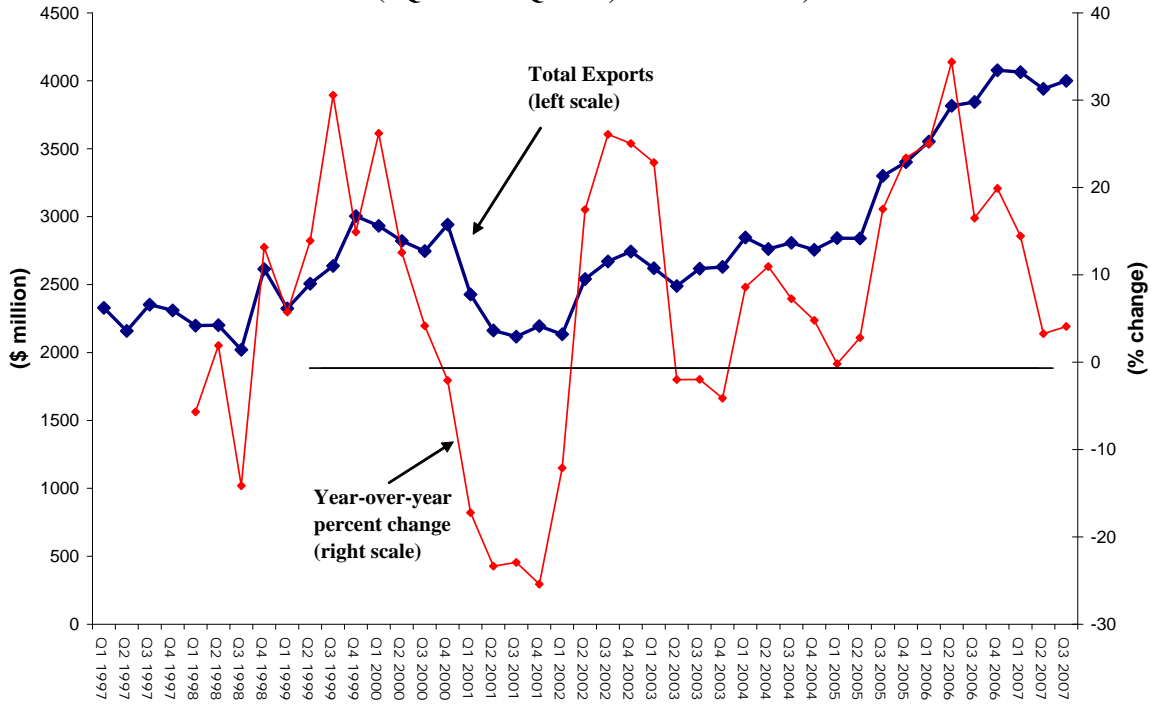
**Oregon Index of Leading Indicators**  
(Six Month Annualized Percent Change, through September '07)



## Total Non-farm Employment Growth (Annual Percentage Change)



**Oregon's Total Exports**  
(1Q 1997 - 3Q 2007, current dollars)



**Oregon Dec 2007 Forecast Comparison - Alternative scenarios**

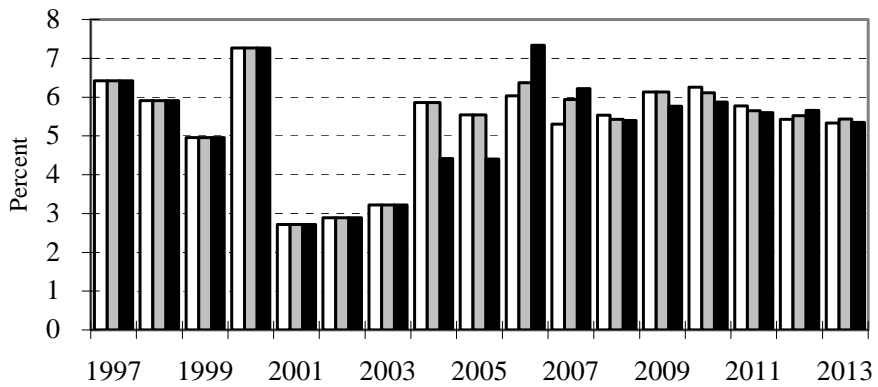
	(Percent change)		
	2007	2008	2009
<b>Employment</b>			
Baseline	<b>1.2</b>	<b>0.9</b>	<b>1.8</b>
Pessimistic	<b>1.1</b>	<b>-0.2</b>	<b>0.9</b>
Optimistic	<b>1.4</b>	<b>1.8</b>	<b>2.3</b>
<b>Personal Income</b>			
Baseline	<b>6.4</b>	<b>5.4</b>	<b>5.8</b>
Pessimistic	<b>5.9</b>	<b>3.6</b>	<b>5.4</b>
Optimistic	<b>6.5</b>	<b>6.6</b>	<b>6.1</b>

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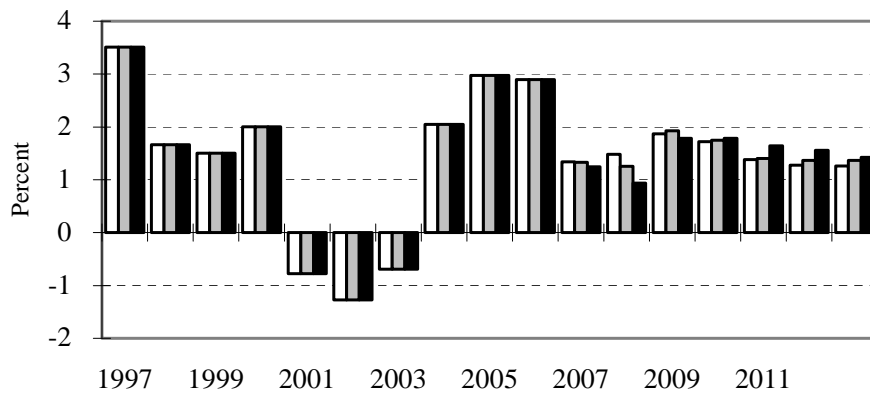
## COMPARISON OF LAST THREE FORECASTS

May 2007  
  Sep 2007  
  Dec 2007

### PERSONAL INCOME GROWTH



### EMPLOYMENT GROWTH



## 2007-09 General Fund Forecast Summary

(Millions)	2007 COS Forecast	September 2007 Forecast	December 2007 Forecast	Change from Prior Forecast	Change from COS Forecast
<b>Beginning Balance</b>	\$1,513.0	\$1,429.4	\$1,429.4	\$0.0	-\$83.6
<b>Structural Revenues</b>					
Personal Income Tax	\$12,347.9	\$12,403.4	\$12,431.1	\$27.8	\$83.2
Corporate Income Tax	\$920.9	\$920.6	\$921.0	\$0.4	\$0.1
All Other Revenues	\$888.5	\$833.8	\$827.7	-\$6.2	-\$60.9
<b>Gross GF Revenues</b>	\$14,157.3	\$14,157.8	\$14,179.8	\$22.0	\$22.4
Total Kicker Refunds/Credits	-\$1,164.7	-\$1,071.2	-\$1,071.2	\$0.0	\$93.5
<b>Net GF Revenues</b>	\$12,992.6	\$13,086.5	\$13,108.6	\$22.0	\$115.9
Administrative Actions <sup>1</sup>	-\$57.3	-\$57.3	-\$57.3	\$0.0	\$0.0
Legislative Actions <sup>2</sup>	-\$309.4	-\$319.3	-\$319.3	\$0.0	-\$9.9
<b>Net Available Resources</b>	\$14,138.9	\$14,139.3	\$14,161.3	\$22.0	\$22.4
<b>Confidence Intervals</b>					
67% Confidence	+/- 4.0%		\$524.3	\$12.58B to \$13.63B	
95% Confidence	+/- 8.0%		\$1,048.7	\$12.06B to \$14.16B	

1. Reflects cost of cashflow management actions, exclusive of internal borrowing.

2. Equals portion of 2005-07 corporate surplus designated for Rainy Day Fund.

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## 2007-09 Kicker Analysis

### Personal Income Tax

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COS Estimate <sup>1</sup>	\$12,071.7
2% Threshold	\$241.4
Current Forecast	\$12,187.6
Difference From COS	\$115.8
<b>Amount of Projected Kicker</b>	<b>None</b>
<i>Percent of 2008 Liability</i>	<i>0.0%</i>

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### Corporate Income Tax

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COS Estimate	\$920.9
2% Threshold	\$18.4
Current Forecast	\$921.0
Difference From COS	\$0.1
<b>Amount of Projected Kicker</b>	<b>None</b>
<i>Percent of 2007 Liability</i>	<i>0.0%</i>

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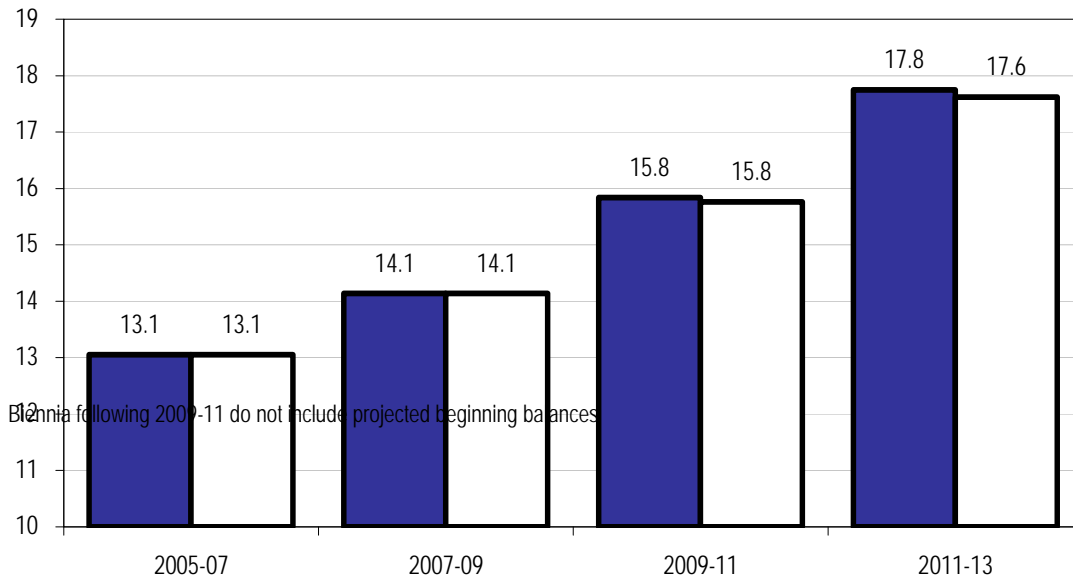
<sup>1</sup> Includes All GF Less Corporate Income Tax

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### Comparison of General Fund Resource Forecasts

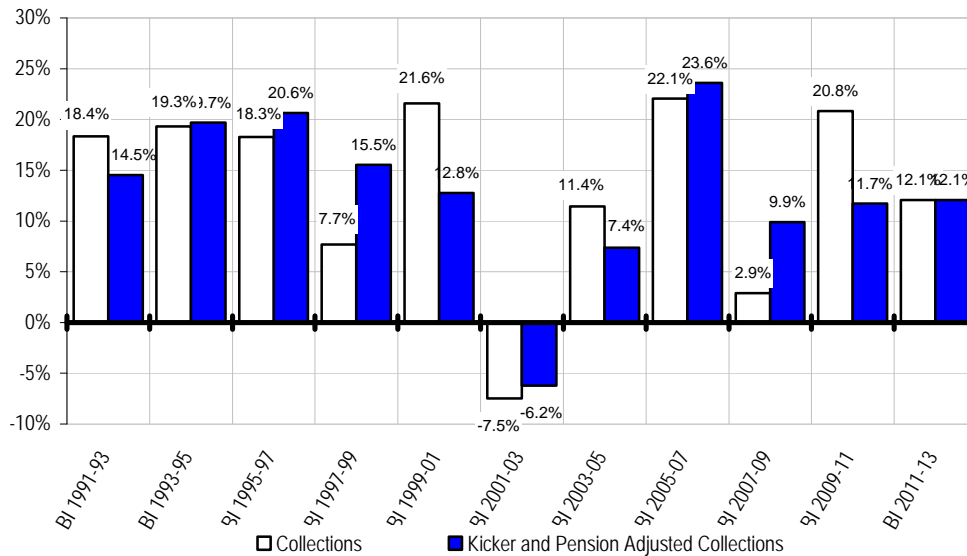
(\$Billions)

■ December 2007    □ September 2007

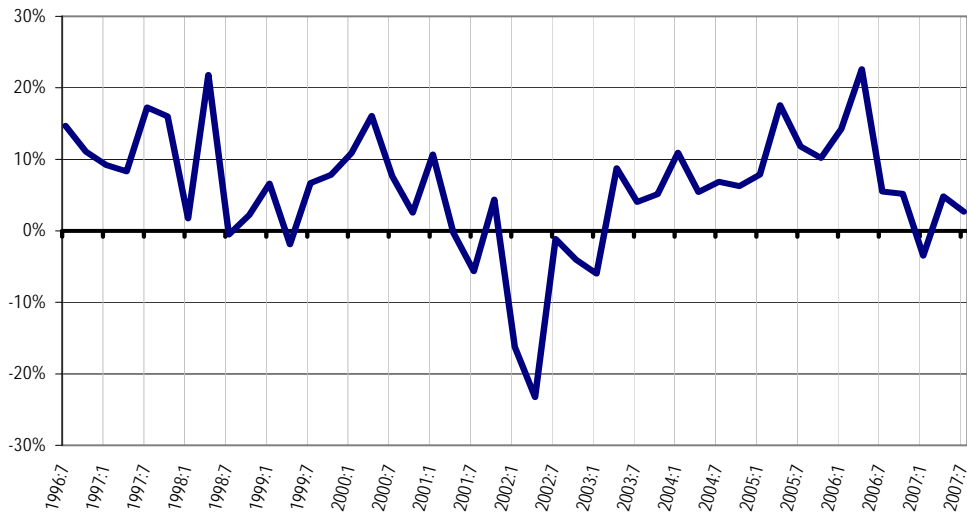


Biennia following 2007-11 do not include projected beginning balances

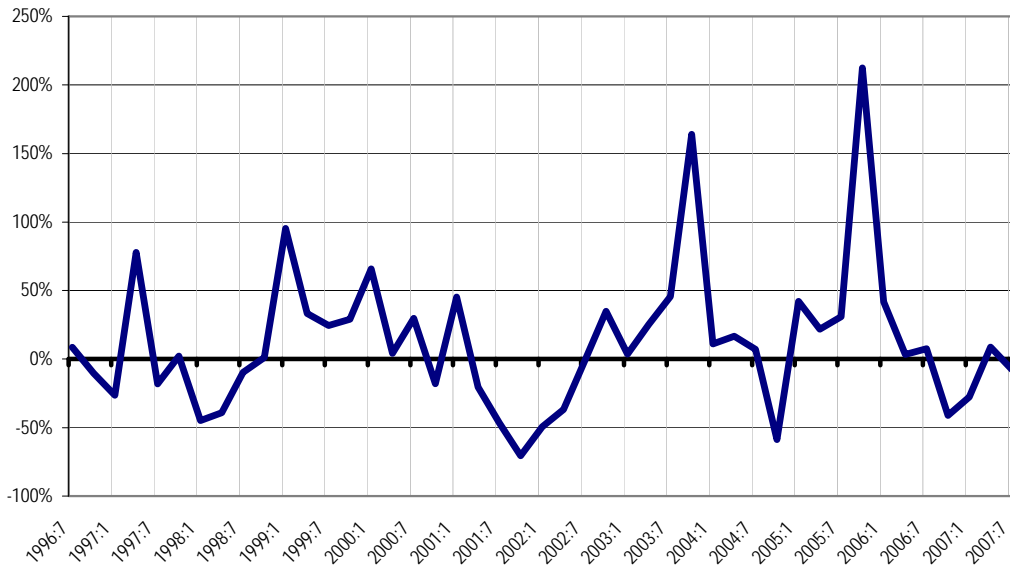
### Biennial Growth in General Fund Revenue



**Personal Income Tax Collections**  
(Quarterly, Year-over-year percent change)



**Corporate Income Tax Collections**  
(Quarterly, Year-over-year percent change)



## Lottery Resources

(Millions of Dollars)

**2007-09 Biennium**

(Millions)	Sep 2007	Dec 2007	Change from Sep	
	Forecast	Forecast	Amount	Percent
Beginning Balance	\$64.1	<b>\$64.1</b>	-	0.0%
Earnings <sup>3</sup>	\$1,278.8	<b>\$1,291.0</b>	12.2	1.0%
Administrative Savings	\$56.3	<b>\$56.9</b>	0.7	
Other Resources <sup>1</sup>	\$14.1	<b>\$14.1</b>	-	0.0%
<b>Total Resources</b>	<b>\$1,413.2</b>	<b>\$1,426.1</b>	12.9	0.9%
<b>Allocations</b>	<b>1,385.6</b>	<b>1,389.5</b>	3.9	0.3%
<b>Ending Balance</b>	<b>\$27.6</b>	<b>\$36.6</b>	9.0	32.5%

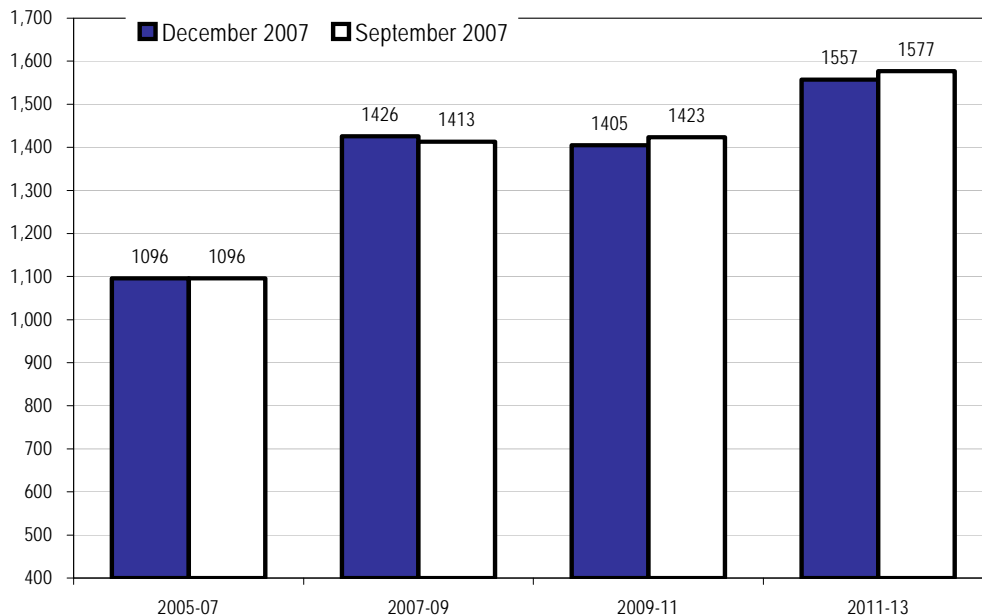
Note: Some totals may not foot due to rounding.

1. Includes interest earnings and reversions

2. Includes Education Stability Fund, Parks and Natural Resource Fund, and Debt Service.

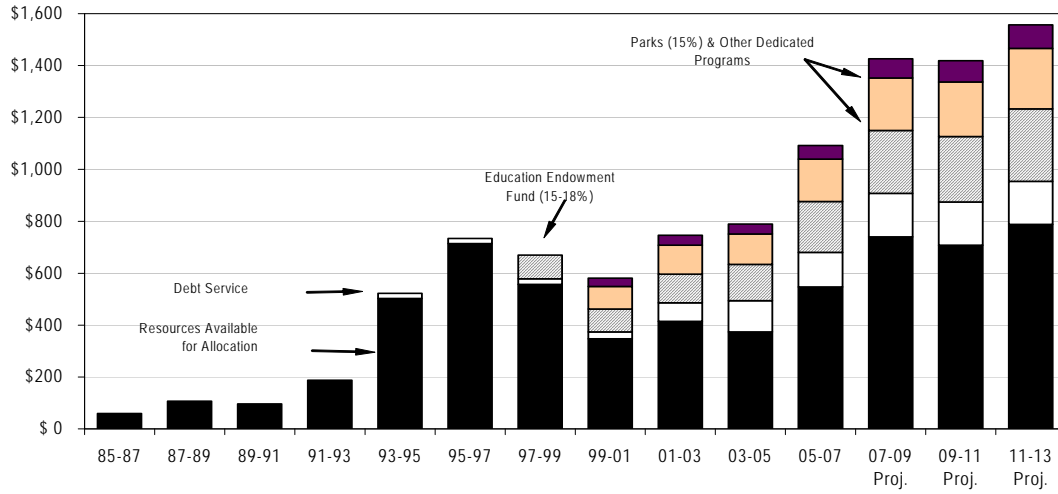
3. Includes impact of expected change to video retailer commission ra

**Comparison of State Lottery Resource Forecasts**  
(Millions)



Biennia following 2007-09 do not include projected beginning balances

## State Lottery Resources (\$Millions)



## 2 Percent Surplus Kicker History

Biennium	Tax Year	Personal		Corporate	
		Surplus / (Shortfall)	Credit Refund	Surplus / (Shortfall)	Credit
1979-81	1981	(141.0)	none	(25.1)	none
1981-83	1983	(115.2)	none	(109.9)	none
1983-85	1985	88.7	7.7%	13.4	10.6%
1985-87	1987	224.2	16.6%	6.8	6.2%
1987-89	1989	175.2	9.8%	36.2	19.7%
1989-91	1991	185.9	suspended	(23.0)	none
1991-93	1993	60.1	none*	17.9	suspended
1993-95	1994/5	162.8	6.3%	167.0	50.1%
1995-97	1996/7	431.5	14.4%	202.7	42.2%
1997-99	1997/8	167.3	4.6%	(68.6)	none
1999-01	2000	253.6	6.0%	(43.9)	none
2001-03	2002	(1,249.4)	none	(439.5)	none
2003-05	2004/5	(401.3)	none	101.0	36.0%
2005-07	2006	1,071.2	18.6%	344.1	suspended

Dollar figures in millions

\*1991-93 personal surplus was less than 2%

Data Source: Legislative Revenue Office, Office of Economic Analysis