

OREGON ECONOMIC AND REVENUE FORECAST

SUMMARY

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

**March 2008
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EXECUTIVE SUMMARY

March 2008

Oregon Economic Forecast

The fourth quarter 2007 initial estimate of job growth was a 2.5 percent annual rate over the third quarter. This follows a decrease of 0.3 percent in the third quarter. This relatively strong fourth quarter is in sharp contrast to the slowing growth of jobs over the last two quarters. On an annual average basis, the year 2007 finished with job gains of 1.4 percent. On a Y/Y basis, jobs increased in the fourth quarter by 1.3 percent. The job growth has been positive Y/Y since the first quarter of 2004 but has slowed through the last 4 quarters.

Troubles to the U.S. economy are coming from two sources: housing and energy. The housing market downturn and subprime mortgage problems are working their way through the financial sector. As home prices are starting to retreat, consumers are not tapping their home equity values. Consumer spending may also slow due to tighter credit criteria, and energy prices are pinching budgets. These actions have the potential to impact all sectors of the economy.

The Oregon economy has likewise experienced a slowdown. Housing starts are down almost 17.0 percent in 2007 following an 11.0 percent drop in 2006. Although housing foreclosures are up, Oregon has one of the lowest rates in the country. We also have one of the lowest proportions of subprime mortgages. On the other hand, Oregon is relatively high in the proportion of variable rate mortgages. In terms of employment, Oregon job growth slowed dramatically in 2007 but ended with a relatively strong fourth quarter. Oregon's initial job claims are higher on a 4-week moving average in early January compared to 2007, but the last few weeks has shown some improvement.

Turning points are difficult to forecast. Many indicators are now pointing to a further slowing of the economy, but not all signals are negative. With the sun possibly setting on this expansion phase of the business cycle, the skies on the horizon are code colored reddish-orange—very cautious about further downturns in the economy.

OEA forecasts 0.3 percent growth for the first quarter of 2008. Job growth will be less in 2008 than in 2007, at 1.0 percent. Jobs will do slightly better in the second half of 2008, with a 1.3 percent growth rate and gradual improvement into 2009. OEA forecasts annual average job growth at 1.7 percent in 2009 and 1.8 percent in 2010.

OEA expects the wood products sector job growth to continue declining at a 0.5 percent rate in 2008 and 0.1 percent in 2009.

OEA projects that the computer electronics industry will grow 0.9 percent in 2008 and decline 1.0 percent in 2009. OEA expects this sector's job growth to remain relatively flat through the forecast horizon of 2013.

OEA expects the transportation equipment sector to see job declines of 7.8 percent in 2008 with a return to job gains of 1.9 percent in 2009.

Metals and machinery job growth was 6.4 percent in 2007, with continued growth of 5.7 percent expected in 2008 and 1.5 percent in 2009.

OEA forecasts employment in food processing to increase 0.9 percent in 2008 and 1.6 percent in 2009.

Construction employment will continue to decline in 2008 with job losses of 3.4 percent. 2009 will see essentially no improvement with minimal job growth of 0.1 percent.

Trade, transportation, and utilities sector employment will mildly increase 0.5 percent in 2008 followed by 1.9 percent growth in 2009.

The information sector, which includes traditional publishers such as newspapers and publishers of software, will continue strong growth of 5.0 percent in 2008 and milder growth of 0.8 percent in 2009.

The financial activities sector will continue to soften with job declines of 0.5 percent in 2008 before returning to positive job growth of 1.8 percent in 2009.

OEA projects that professional and business services will grow 0.8 percent in 2008 and 3.9 percent in 2009.

Education and health services will grow 3.1 percent in 2008 and 2.7 percent in 2009.

OEA projects that leisure and hospitality will grow 2.4 percent in 2008 and 1.8 percent in 2009, slower than the 3.9 percent growth of 2006 and 2007.

The government sector will increase by 1.4 percent in 2008 and 0.8 percent in 2009. OEA projects that local government employment will grow 2.1 percent in 2008 and 1.1 percent in 2009. OEA forecasts that state government employment will grow 0.5 percent in 2008 and 0.4 percent in 2009.

Forecast Risks

The forecast projects a slowing Oregon economy in 2008 with mild growth returning in 2009. This outlook faces heightened risks for a much deeper downturn in 2008. “Risks” are similar to the statistician’s probabilities. Based on information about likely outcomes, the statistician assigns probabilities to various outcomes. The indicators in the national and Oregon economies raise the probability of a more severe downturn. Unlike risk, uncertainty is a situation lacking in data and information. Uncertainty surrounds the financial system. The extent of the housing crisis and the securitization of bad loans are unknown. Whether the financial system will lead to a wide spread credit crunch is the largest question facing the US economy—and thus the Oregon economy. Broadly we place “uncertainty” under “risks”, and note that the Oregon economy is at a precarious juncture of the business cycle.

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 begun to stabilize. 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.

A variety of factors could disrupt oil supplies, 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 (nonresidential) started in the first quarter of 2007 and continued throughout the year. 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, it may delay a pickup in business investment and negatively affect Oregon's manufacturing.

We will continue to monitor and recognize the potential impacts of these risk factors on the Oregon economy. We have identified the major risks now facing the Oregon economy in the list 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. The federal fiscal stimulus package should help alleviate the slower consumer spending.
- *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.* Depreciation of the dollar against foreign currencies promotes U.S. exports 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 deepen 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, 2007 reached 3,745,455. That was an increase of 1.5 percent over the 2006 population. The recent growth since 2005 is considerably higher than the 1.1 percent annual growth rate between 2000 and 2005. 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 4.062 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. Its economy determines the 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 we have good economic and employment situations. The net migration during the 1980s, which included a major recession, contributed to 22 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 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 (65+) growth has picked up in pace and will surge 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 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 as the depression era small birth cohort transitions from the younger age group.

As the baby-boom generation matures, the once fast-paced growth of population aged 45-64 will gradually taper to nearly a 0 percent rate by 2012. The young adult population (aged 18-24) will

grow at an average of 0.6 percent annually, considerably slower than the rate averaging 1.2 percent experienced between 2000 and 2007. This will ease the pressure on public spending on college education. Children under the age of five show a declining trend in rate of growth averaging below the state overall rate of growth. 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

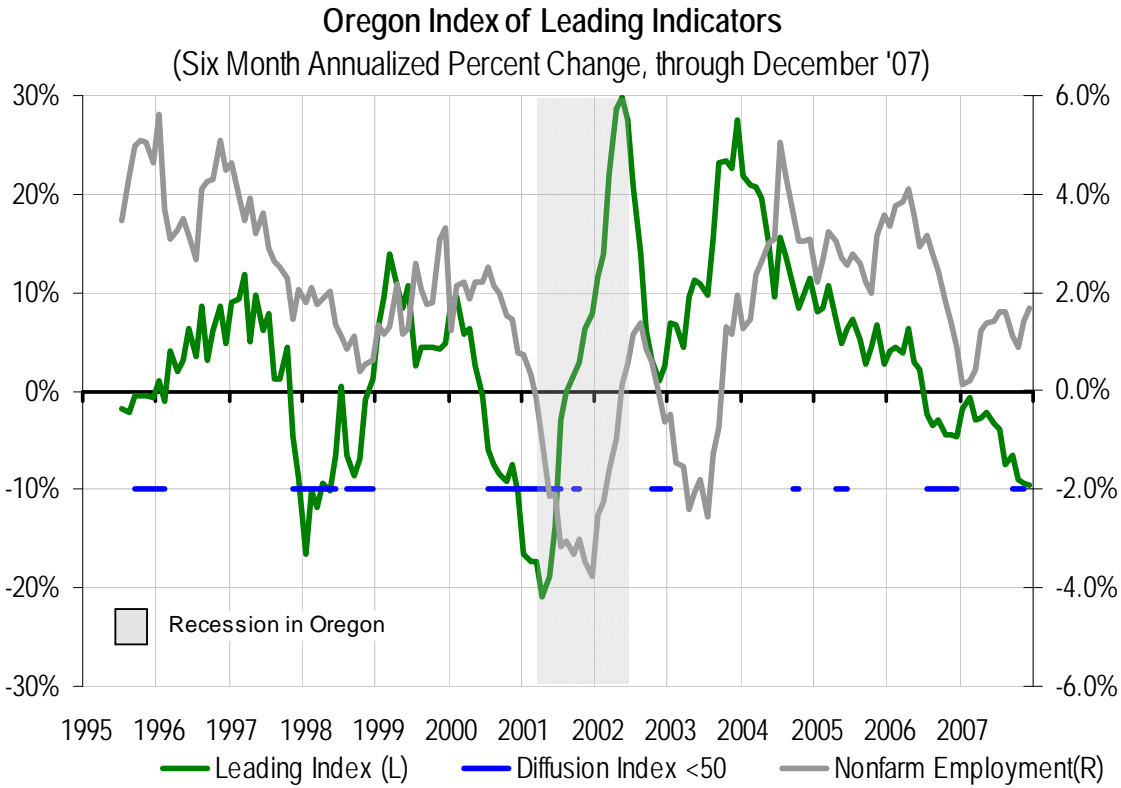
The March 2008 forecast for General Fund revenues is \$12,925.4 million, a decrease of \$183.1 million from the December 2007 forecast. The primary reason for the revision is the continued weakening of the national economy, with the baseline scenario involving a recession in the first half of 2008. The final calculation of the beginning balance for the biennium, now that the books are closed on the prior biennium, is \$1,436.7 million. Total resources for the biennium amount to \$13,985.5 million. Excluding legislatively-adopted appropriations, the projected ending balance in the General Fund is \$28.8 million.

Total General Fund revenues will increase 21.4 percent to \$15,697.7 million in 2009-11. Personal income tax growth of 24.3 percent, raising collections to \$13,911.2 million, is due in part to the \$1.084 billion kicker rebate distributed in the prior biennium. Corporate income taxes will resume growth following a flat 2007-09, increasing 6.2 percent to \$911.4 million. All other revenues will reach \$875.1 million, negligibly above the prior biennium's level.

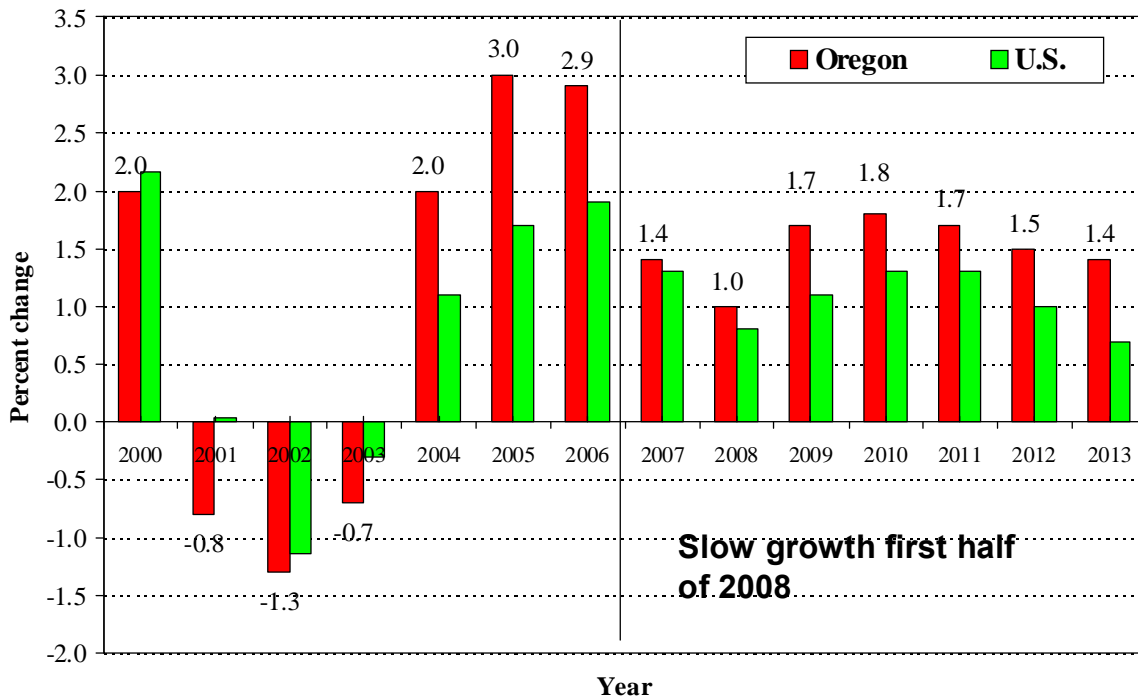
General Fund revenues will total \$17,723.2 million in 2011-13, an increase of 12.9 percent from the prior period. The growth is fueled primarily by a 14.0 percent increase in personal income tax collections to \$15,864.2 million. Corporate income taxes will reach \$952.4 million while all other revenues will total \$906.5 million.

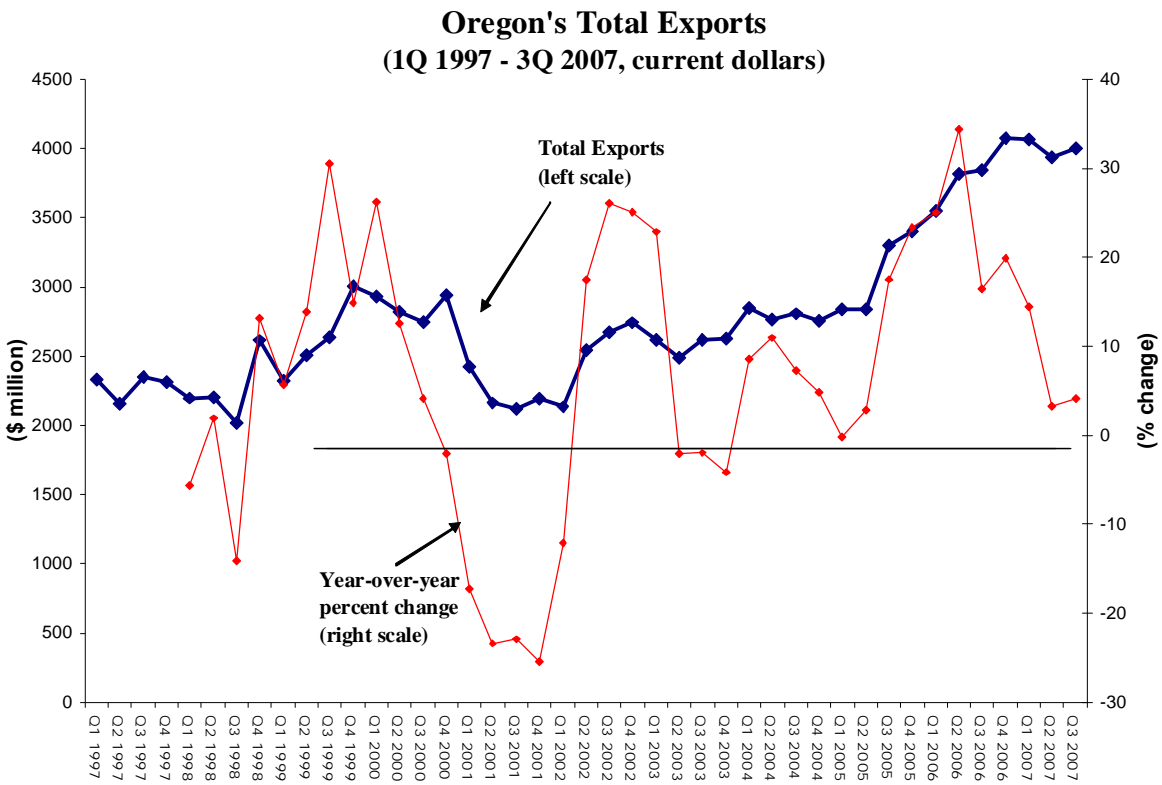
The forecast for total lottery earnings in 2007-09 is \$1,330.4 million, a decrease of \$17.5 million from the December forecast. A \$21.5 million decline in earnings related to video lottery was offset by an additional \$3.9 million in administrative savings included in the third quarter earnings transfer for the biennium. Total resources, including balance carry-forward and interest earnings, were \$1,408.6 million. Excluding dedicated and other legislatively-adopted allocations, the projected ending balance in the Economic Development Fund amounts to \$25.8 million.

The effect of the lowered forecast for video lottery sales is reflected in the long-run earnings forecast. For the 2009-11 biennium, earnings from lottery games will total \$1,376.7 million while total resources will amount to \$1,381.2 million. Earnings will reach \$1,542.8 million in the 2011-13 biennium, with available resources increasing to \$1,548.8 million.



Total Non-farm Employment Growth (Annual Percentage Change)





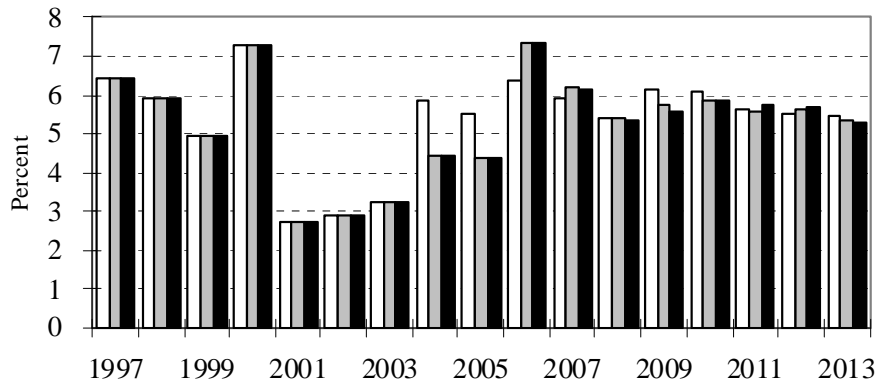
Oregon March 2008 Forecast Comparison— Alternative scenarios (Baseline does not assume a US recession)

	(Percent change)		
	2008	2009	2010
Employment			
Baseline	1.0	1.7	1.8
Pessimistic	-0.4	0.6	1.8
Optimistic	1.8	2.2	2.3
Personal Income			
Baseline	5.4	5.6	5.9
Pessimistic	3.7	5.1	5.4
Optimistic	6.7	6.0	6.1

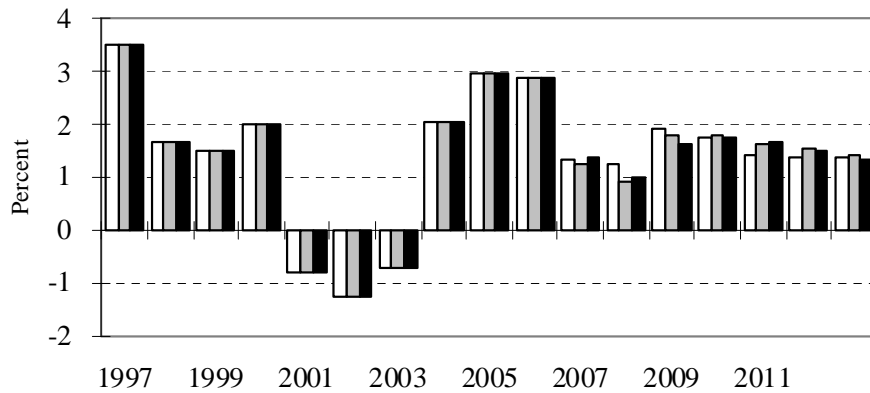
COMPARISON OF LAST THREE FORECASTS

□ Sep 2007 ▒ Dec 2007 ■ March 2008

PERSONAL INCOME GROWTH



EMPLOYMENT GROWTH



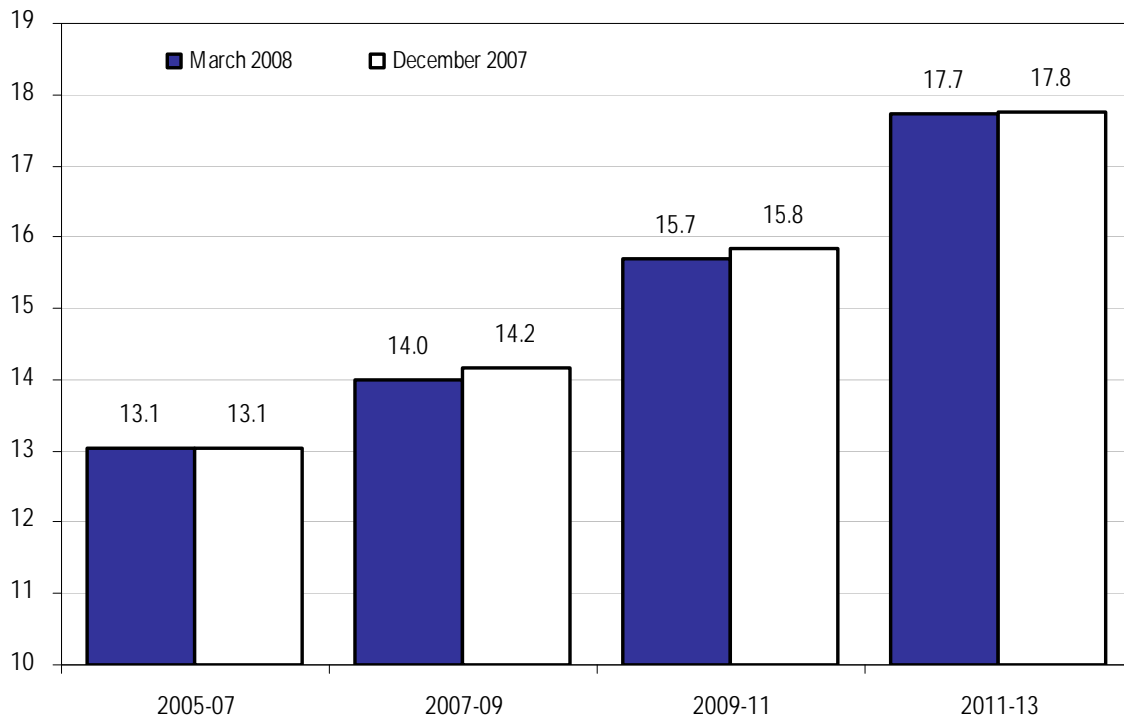
General Fund Resources

2007-09 Biennium

General Fund Resources (Millions)	December 2007 Forecast	March 2008 Forecast	Change from December	Change from COS 2007
Gross Personal Income Tax	12,431.1	12,277.8	(153.3)	(70.1)
Gross Corporate Income Tax ¹	921.0	858.3	(62.7)	(62.6)
Other Revenues ²	827.7	873.5	45.9	(15.0)
Gross GF Revenues³	\$14,179.8	\$14,009.6	(170.2)	(147.7)
Less Kicker Distributions	-\$1,071.2	-\$1,084.2	(13.0)	80.5
Net GF Revenues	\$13,108.6	\$12,925.4	(183.1)	(67.2)
Beginning Balance	\$1,429.4	\$1,436.7	7.3	(76.3)
Less Anticipated Administrative Actions ⁴	-\$57.3	-\$57.3	-	-
Less Legislatively-Adopted Actions ⁵	-\$319.3	-\$319.3	-	(9.9)
Net Available Resources	14,161.3	13,985.5	(175.8)	(153.4)
Proj. Expenditures ³	13,954.7	13,956.7	2.0	2.0
Ending Balance	206.6	28.8	(177.8)	(155.4)

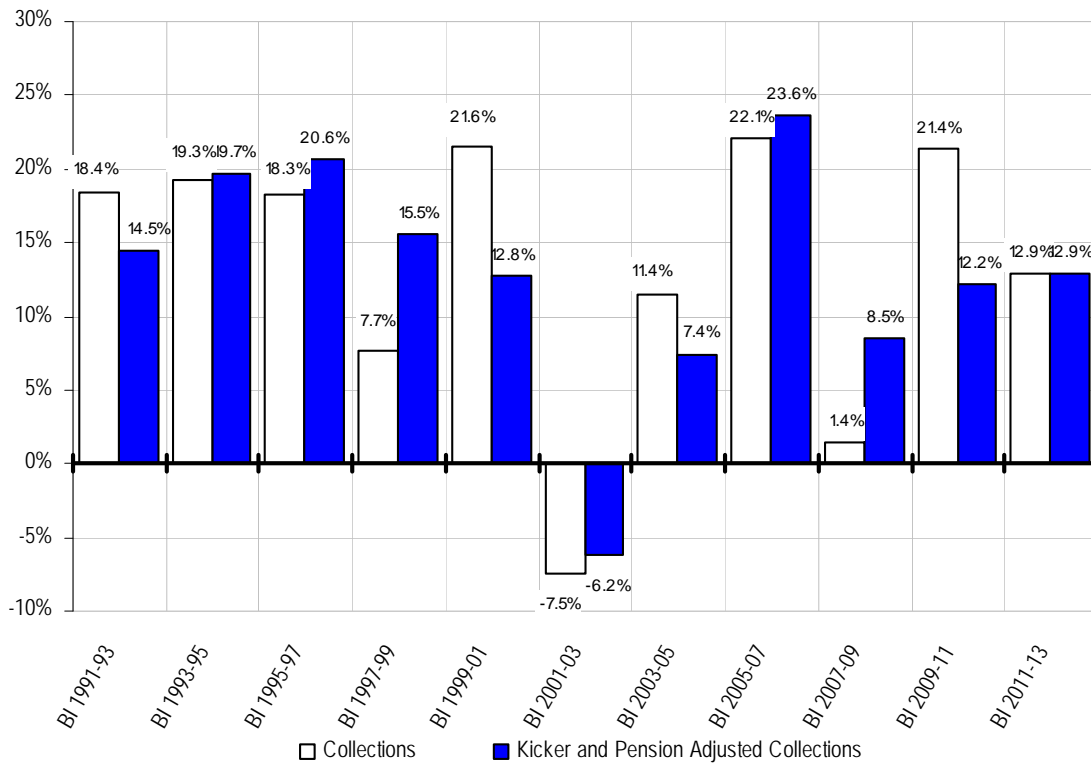
Notes: 1 Corporate income tax figure includes Corporate Multistate taxes.
 2 Other Revenues include Insurance, Cigarette, and Liquor taxes.
 3 Excludes reductions due to kicker refund/credit distributions.
 4 Represents costs associated with cashflow management actions, exclusive of internal borrowing.
 5 Transfer of surplus 2005-07 corporate income tax revenues to the Oregon Rainy Day Fund.

Comparison of General Fund Resource Forecasts (\$Billions)



Biennia following 2009-11 do not include projected beginning balances

Biennial Growth in General Fund Revenue



Personal Income Tax Statistics¹

Component	2006 Total		Change from 2005	Dec. Forecast Assumption
	Millions	Distribution		
Wages	\$54,681	64.1%	7.1%	6.1%
Dividends	\$2,035	2.4%	23.9%	7.1%
Interest	\$2,429	2.8%	35.9%	7.0%
Capital Gains	\$7,647	9.0%	6.8%	1.0%
Retirement ²	\$9,327	10.9%	9.8%	9.0%
Proprietors	\$3,173	3.7%	2.2%	4.0%
Schedule E ³	\$5,402	6.3%	5.3%	7.0%
Other ⁴	\$572	0.7%	100.7%	0.0%
Total	\$85,266	100.0%	8.4%	5.9%
Tax Liability	\$5,129		7.4%	6.6%
Eff. Rate / Elasticity		6.01%	0.88	1.12

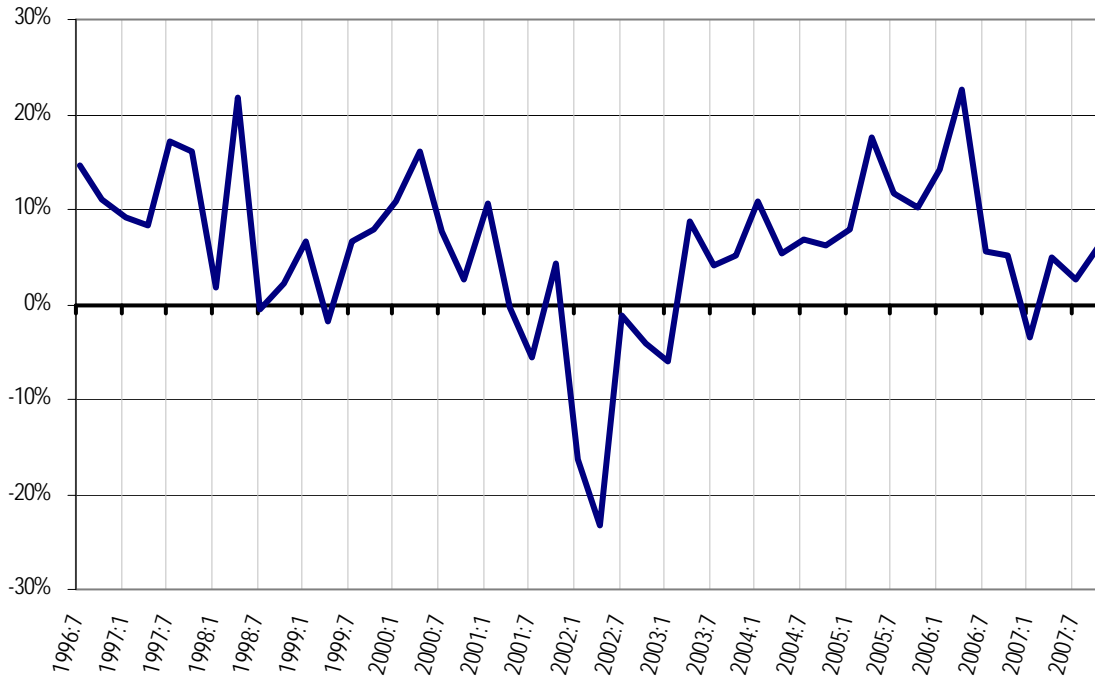
Notes: 1 Gross Income and Tax Liability as reported on Oregon full-year resident income tax returns.

2 Includes IRA, Pension, and taxable Social Security distributions.

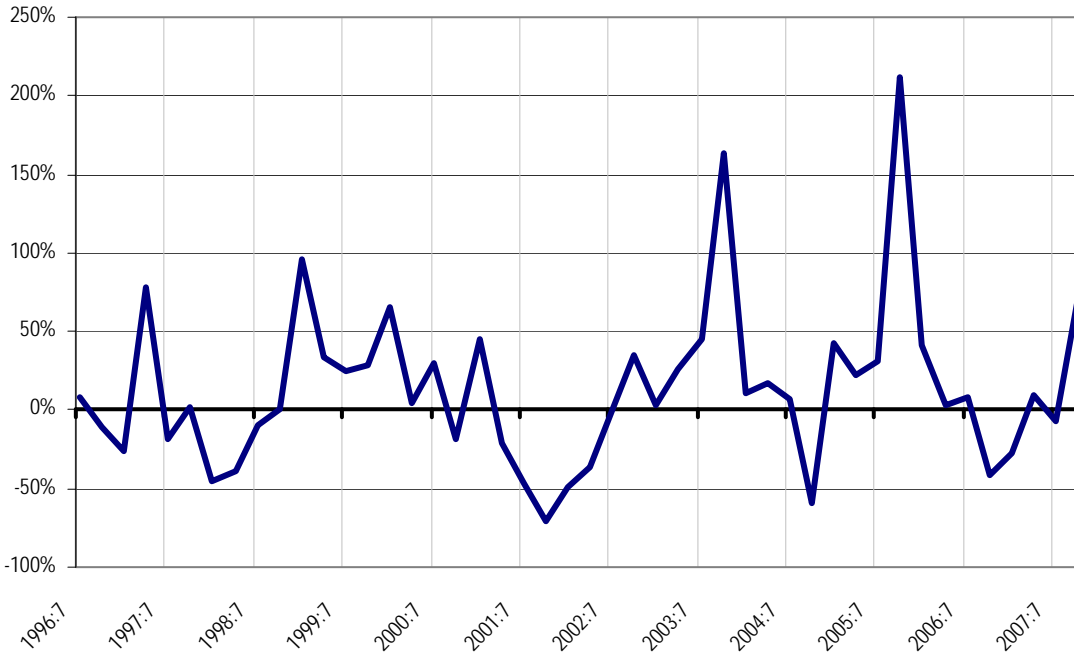
3 Includes S-Corp, Rent, and Royalty income.

4 Includes unemployment, alimony, state refunds, etc.

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)	Dec 2007	Mar 2008	Change from Dec	
	Forecast	Forecast	Amount	Percent
Beginning Balance	\$64.1	\$64.1	-	0.0%
Earnings	\$1,291.0	\$1,269.5	(21.5)	-1.7%
Administrative Savings	\$56.9	\$60.9	3.9	
Other Resources ¹	\$14.1	\$14.1	-	0.0%
Total Resources	\$1,426.1	\$1,408.6	(17.5)	-1.2%
Allocations	1,389.5	1,382.8	(6.7)	-0.5%
Ending Balance	\$36.6	\$25.8	(10.8)	-29.6%

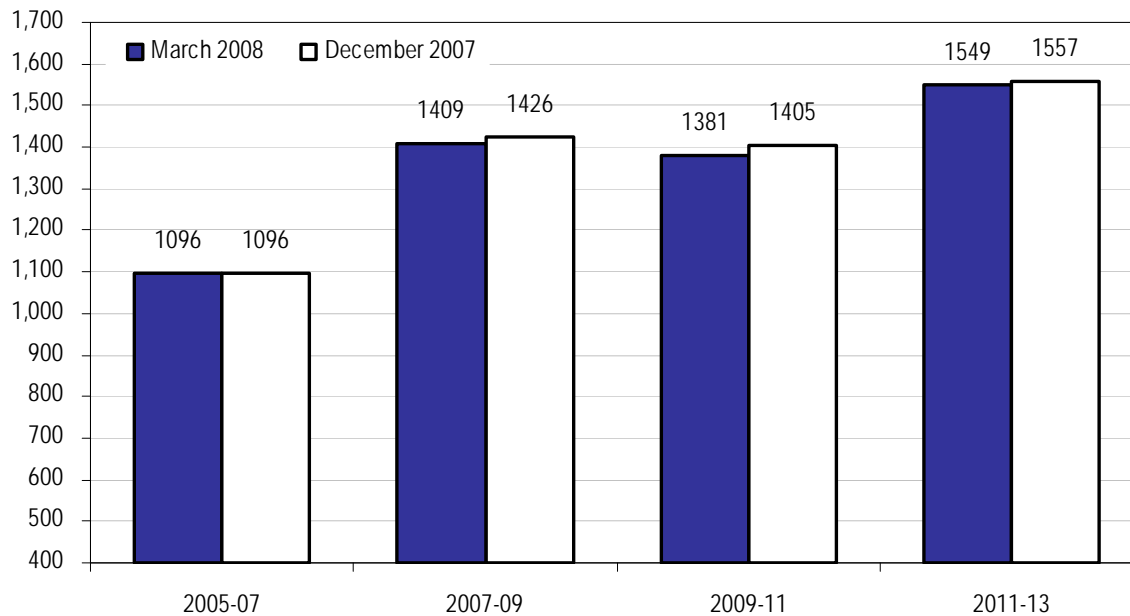
Note: Some totals may not foot due to rounding.

1. Includes interest earnings and reversions

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

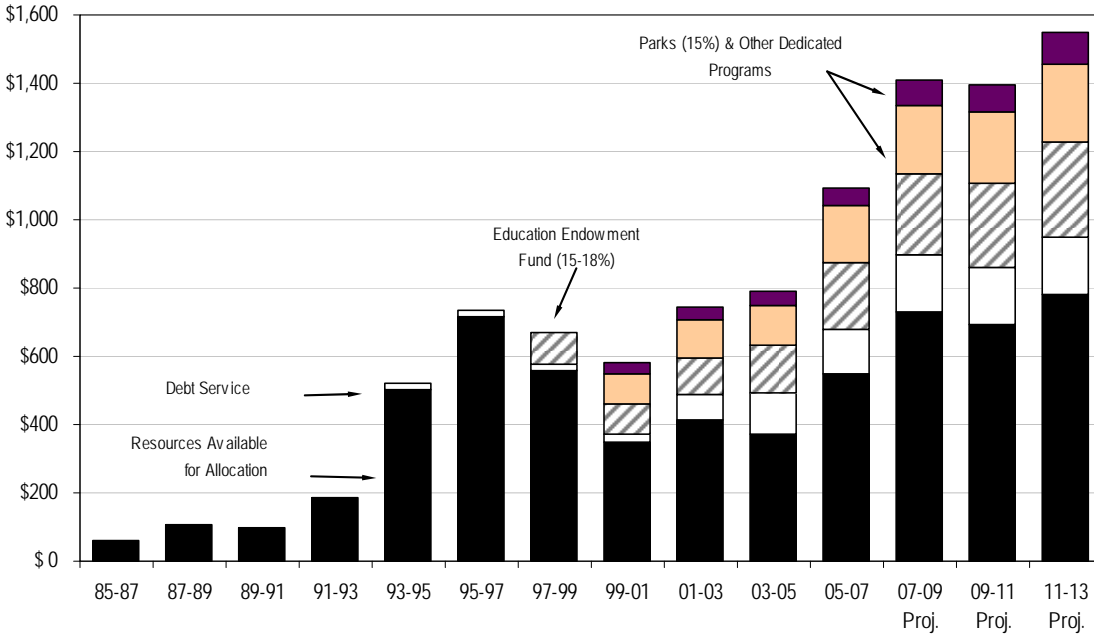
Comparison of State Lottery Resource Forecasts

(\$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