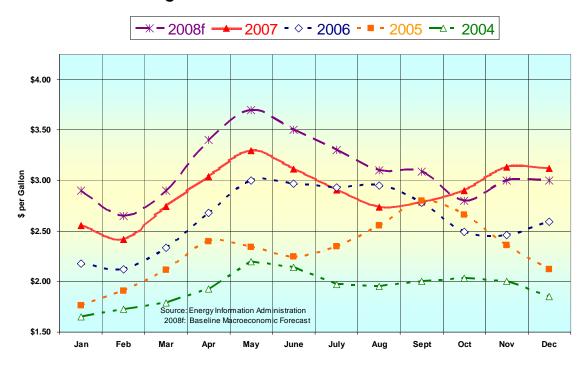


# **OREGON DEPARTMENT OF TRANSPORTATION**

# SUMMARY OF TRANSPORTATION ECONOMIC AND REVENUE FORECASTS

# Will Oregon Drivers See \$4 Gas This Summer?



## **FOREWORD**

This summary report presents a selection of Other Funds Revenue forecasts for the Oregon Department of Transportation. It is published twice a year to assist planners and policy-makers in their formulation of budgets and to support other decision-making activities. The forecast is consistent with Department of Administrative Services' *Oregon Economic & Revenue Forecast (Vol. XXVII, #4, December 2007)* and the associated baseline macroeconomic forecast from *Global Insight Inc. (GII)*.

This document is also available online at: <a href="http://www.oregon.gov/ODOT/CS/EA/reports.sht">http://www.oregon.gov/ODOT/CS/EA/reports.sht</a> ml and scroll down to "Transportation Revenue Forecasts."

Please provide us with feedback on this report by completing the Transportation Economic and Revenue Forecasts User Survey at <a href="http://library.state.or.us/services/surveys/survey.php?sid=200">http://library.state.or.us/services/surveys/survey.php?sid=200</a>.

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#### On the Cover:

With the start of a new year, many Oregonians are beginning to formulate their summer travel plans. As during the past 5 years, the price of gasoline is looming as a key factor in those plans. With gas somewhat less than \$3 currently, are Oregon drivers likely to encounter \$4/gallon at the pumps for this summer driving season? While the implications of higher gas prices on the revenue outlook to the State Highway Fund are examined elsewhere in this report's narrative, the discussion here is more of the "headline" variety.

The chart on the cover page lends perspective on this possibility. In contrast to the years spanning 2004-2006, gas prices this last fall and winter have stayed considerably elevated, by roughly 20 percent on average. The spike in prices for 2005 (the dashed orange line) was largely dominated by the events surrounding the devastating hurricanes, Katrina and Rita, in the Gulf Coast region.

Gasoline prices are predominately driven by the price of crude petroleum (more specifically "refiners' acquisition cost") and refining margins. One means to assess the likelihood of \$4 gas would be to ask what the price for crude oil would have to be to get us there for a sustained period of 3 to 4 weeks. Using the historical relationship between refinery acquisition costs, crude prices, and margins, analysis reveals that a sustained crude oil price in the neighborhood of \$110 per barrel would likely be at the root of \$4 gas at retail outlets. This is roughly 25 percent above current spot prices for crude (as of this writing), and moreover, it is 10 percent above the highest recorded price in inflation-adjusted terms. Given the extreme volatility of the past 5 years, this outcome certainly cannot be ruled out, but it may not be highly probable. Given slowing economic growth globally, coupled with more production capacity coming on line from non-OPEC producers, 2008 could very well be the start of some volatility on the downside. This would provide welcome relief to drivers and households in Oregon and nationwide.

The chart also displays the baseline outlook for gas prices (dashed purple line) from the macroeconomic forecast used to develop our transactions and revenue forecast. It offers a more sanguine prospect than \$4 per gallon, peaking in the area of \$3.70 for Oregon markets in early summer. Again, to skeptics, \$110 per barrel and \$4-plus gas may not seem beyond reach, but the odds are very low at the present time, except possibly for some isolated markets known for having a tendency to experience above average prices.

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# **EXECUTIVE SUMMARY**

Overall economic prospects have become considerably more tenuous since our last forecast (June, 2007). While Oregon has been spared the marked deterioration and volatility so far, the landscape going forward is hard to predict with any confidence.

Growth in Oregon's job markets began to slow in 2007 following the dramatic gains of 2005 and 2006. Although job growth for the first quarter of 2007 came in stronger than expected (a 2.6 percent annual rate), subsequent quarterly growth dropped off considerably from this pace. In fact, Oregon began losing jobs during the third quarter of 2007<sup>1</sup>. That decline ended Oregon's winning streak of 16 consecutive quarters of job gains. As a result, Oregon's year-over-year job growth is now ranked 35<sup>th</sup> in the nation, after having spent nearly three years among the top 10. Clearly Oregon's job market is dampening and subdued growth is expected to continue for a few years. Nevertheless, the state's total non-farm employment is forecast to grow at a rate slightly above the U.S. average for FY09 through FY13.

Overall, the State's pace of economic activity will continue growing at a moderate rate throughout the forecast period of FY08 to FY13 under baseline assumptions. Contraction in the residential construction sector, both regionally and nationwide, is a large part of this anticipated slowdown, and may become even more so as adjustments play out. As well, heretofore strength in business fixed investment spending is now expected to wane substantially. The only real prop to the economic outlook currently rests on robust exports. Personal income gains in the state, the principal element underlying

<sup>1</sup> The fourth quarter of 2007 did show a surprising burst, but that data may be subject to revision.

household spending, are expected to marginally outpace the nation during most of the forecast period. In sum, although gains are expected to continue throughout the forecast period, there are pervasive indications that things have down-shifted across a number of fronts going forward.

The current transportation revenue outlook mirrors this slowdown in the pace of economic activity. The forecast anticipates that gross revenues will be slightly lower than predicted in the previous forecast for FY08-FY10. In the out years, we expect slightly higher revenues than before, buoyed partly by the effects from House Bill 2210 implementation that mandates blending of ethanol with gasoline.

Highway Fund revenues consist of three main sources: Driver and Motor Vehicles revenues, Motor Carrier revenues, and Motor Fuels tax revenues. Motor Fuels tax revenues, which were about \$415.5 million in FY07, are expected to grow at an average annual rate of 2.1 percent throughout the rest of the forecast period of FY08 through FY13. Motor Carrier revenues are the second largest source of Highway Fund revenues. These include weight-mile tax revenues as well as motor carrier registration and fee revenues. In FY07, Motor Carrier revenues were \$269.7 million. These revenues are forecast to reach approximately \$272.7 million in FY08, a gain of 1.1 percent. We forecast that these revenues will increase at an average annual rate of 2.7 percent between FY08 and FY13. Driver and Motor Vehicles revenues, which primarily include vehicle registration, titles, and driver fees, reached \$218.6 million in FY07. These revenues are expected to grow by an average annual rate of 1.0 percent during the forecast period.

In summary, the outlook is for nearly 1.9 percent annual growth in gross revenues over the forecast period. This growth in nominal revenues is less than the expected escalation of costs for the Agency's construction and maintenance programs. So, in lieu of future fee and tax adjustments, the purchasing power behind the Agency's maintenance, preservation, bridge, and modernization program budgets will continue to erode.

# NATIONAL ECONOMIC OUTLOOK

After six months of headline economics news, it would be an understatement to say that things have changed dramatically since our last revenue forecast. Some of the major hits to the economy since last August include:

- A meltdown in the sub-prime mortgage market and a flood-tide of foreclosures.
- A seizing up of liquidity in money markets, enormous write-downs and credit losses by a wide variety of financial institutions, counterparty risk deterioration, and solvency concerns for a some private financial firms.
- Continued deterioration in residential housing and declining prices in major regional markets.
- Near record prices for crude oil (inflation adjusted) and elevated prices at the gas pump.

It is little wonder that "recession" has become a mainstay in the daily lexicon of pundits and laypersons alike.

The economic expansion nationwide has been running for about 6 years. Coupled with the risks that we have duly identified in past forecasts, a maturation of the recovery from 2001 and subsequent slowdown had largely been contained in the consensus outlook. Despite the admonition about the risks, the abruptness of the collapse in domestic and world financial markets was well beyond consensus expectations.

Since mid-September, the Federal Reserve has whacked 225 basis points from the fed funds rate (the interest rate for "overnight" borrowing of excess reserves by commercial

banks). This reduction was from a level that can be considered "neutral", not a high level customarily associated with tightening to head off excessive growth and inflation. There have been ardent and untested endeavors at propping up the residential mortgage market from the impact of cascading defaults and foreclosures. More recently, there has been a variety of initiatives for the injection of substantial fiscal stimulus into the pockets of consumers and incentives to businesses to gird aggregate demand against further softening.

Notwithstanding the tremors buffeting the U.S. economy, combined with the inherent lags associated with both monetary and fiscal stimulus, the consensus outlook is for the economy to skirt a full-blown recession (two consecutive quarters of declining real GDP). Nevertheless, the risk still remains and the odds of such a downdraft have risen to nearly 1 in 2, up from 1 in 3 or 4 since last summer.

In this light, the macroeconomic outlook is still for some job gains and real GDP growth in the first half of the year, albeit slight. With the assumption of continued monetary stimulus and some fiscal stimulus out of Congress relatively soon, the second half of 2008 should see a two-fold increase in the pace of growth. On an industry basis, the weakness is manifested largely in the nation's durable goods manufacturing, residential construction, and financial activity sectors. Offsetting this weakness are gains in the education-private and health services, retail and wholesale trades, and leisure/hospitality sectors.

After 2008 and out to 2013, the baseline projections are for a return to longer-run growth patterns, buoyed largely by labor force growth and productivity trends which will

generate nearly 3 percent annual real growth in GDP. Over this extended period, construction regains its footing, manufacturing grows because of productivity gains (muted job growth, however), and professional/business services exhibit strong growth.

The outlook for crude oil and gasoline prices has also undergone a marked change. Since last summer, the baseline assessment of market fundamentals has shifted. Now, after the recurring and pronounced price spikes, equilibrium prices for crude settle in the \$75 per barrel range, rather than in the \$60s. Such a parametric shift represents a hefty and new drag on household spending going forward in contrast to the prior way of thinking. This shift in thinking doesn't, however, remove the continuing, rather sanguine outlook for nearly flat prices in constant dollar terms going forward from here.

Most of the risks to the macro outlook that have been aired for the past 2-plus years have, to be succinct, been "let out of the bag" with the events of the past 6 months. The big question mark now doesn't relate to "if", but rather to the extent and duration of the slowdown. Thus, the risks are seemingly transferred to the degree of success that monetary and fiscal policies have in stimulating economic activity in a timely enough fashion, all the while having the housing market regain some sense of equilibrium – traditionally a slow process. Ineffectiveness will assure a prolonged period of lackluster economic performance. Success, on the other hand, may precipitate the need for a rather rapid policy reversal to keep inflation within bounds. Either case suggests a markedly different growth trajectory for the economy over the intermediate notwithstanding the possibility of surprises from the global economic arena.

Table 1 on page 5 summarizes these and several other national economic indicators.

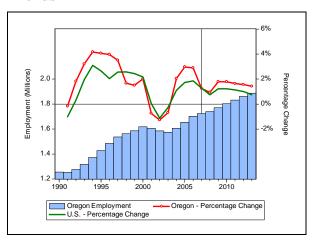
The transportation revenue forecast is consistent with Department of Administrative Services' December 2007 *Oregon Economic & Revenue Forecast* and the associated baseline macroeconomic forecast from *Global Insight Inc.* (GII). Further discussion of the national economic outlook is relegated to an appendix for the interested reader. In addition, a detailed treatment of the national and state economic outlooks is available at the web site of the Office of Economic Analysis (http://www.oea.das.state.or.us/).

# **OREGON ECONOMIC OUTLOOK**

Growth in Oregon's job markets began to slow in 2007 following the dramatic gains of 2005 and 2006. Total Non-Farm Employment looks like it will rise by just 1.2 percent in 2007. Although job growth for the first quarter of 2007 came in stronger than expected at a 2.6 percent annual rate, subsequent quarterly growth dropped off considerably from this pace. In fact, Oregon began loosing jobs during the third quarter of 2007. This decline effectively ends Oregon's winning streak of 16 consecutive quarters of job gains.

The state's lackluster growth has moved it from being among the top 10 during most of the 2004-2006 period to being ranked 35<sup>th</sup> nationwide in terms of job growth. Among western states, Oregon is, along with California, one of the slowest in job growth.

Figure 1: Oregon and U.S. Employment Trends



As shown in Figure 1, total employment in Oregon grew more slowly than the U.S. average during 2007. This has not happened since 2003. Yet the Office of Economic Analysis's forecast indicates that this new trend will not continue into 2008. While both the U.S. and Oregon are expected to

experience anemic growth in total employment during 2008, Oregon's 0.9 percent growth will slightly outpace the national average of 0.7 percent. An average annual growth rate of 1.6 percent is expected for Oregon between 2009 and 2013, while national employment is expected to grow at just 1.1 percent during the same period.

Oregon's manufacturing sector demonstrated continued weakness with four consecutive quarters of job losses. Overall, manufacturing employment showed a 4.2 percent job loss during the third quarter of 2007. Durable goods manufacturing appears to be stabilizing somewhat after several quarters of declines in excess of a 4.0 percent annual rate. Metals & Machinery showed an 8.5 percent increase in jobs during the third quarter of 2007, helped largely by expanding exports and continued strength in non-residential construction. Other industries did not perform as Employment in Computers & Electronics manufacturing increased just 0.3 percent, suffering under the weight of weak business capital spending and an uncertain business environment. Furthermore, Wood Products and Transportation Equipment manufacturing experienced job losses of 5.8 and 5.5 percent, respectively. Non-durable manufacturing, led by the state's Food manufacturing sector, also faltered with a third quarter decline of just over 13.6 percent.

Going forward, job levels for the State's manufacturing sector as a whole are expected continue a slow decline through the final quarter of 2007 and into 2008. Average growth of approximately 0.5 percent is then anticipated for 2009 through 2013.

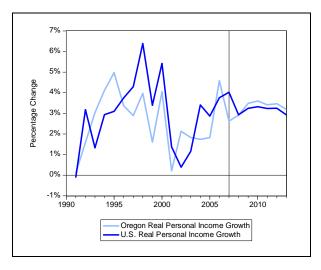
The non-manufacturing sector also displayed signs of weakness in recent quarters. Private non-manufacturing jobs fell 0.8 percent

during the third quarter of 2007. Education Services, which has been shaken by wide seasonal swings as of late, experienced the greatest quarterly growth at 21.0 percent. The Information industry, which includes software publishers, also showed positive growth at 4.6 percent. Yet most other non-manufacturing industries encountered little change in employment levels—in fact, Construction, Health Services, Leisure & Hospitality, Retail Trade, and Transportation, Warehousing & Utilities all experienced a less than one percent change (plus or minus) during the third quarter. Only Professional & Business Services and Wholesale Trade suffered larger declines, 7.1 and 1.2 percent respectively.

This slowing in the growth of non-manufacturing employment likely reflects declining consumer and business sentiment as the economy enters a bit of a rough patch. Nevertheless, the forecast predicts that positive growth will return, but with a rather subdued rate that averages just 2.0 percent throughout the forecast horizon of 2008 to 2013.

Although overall employment showed a decline during the third quarter of 2007, personal income Oregon demonstrated continued gains. Personal income, about 55 percent of which is derived from wages and salaries, appears to have increased by approximately 6.2 percent in 2007. When adjusted for inflation, this increase translates into a 2.6 percent change in real personal income for Oregonians. As shown in Figure 2 below, this growth rate falls below the nation's real growth in personal income of just over 4.0 percent. The forecast predicts that Oregon's rate of growth in real personal income will approximately equal the nation's in 2008, with 2.9 percent growth expected. Oregon's growth in real personal income will surpass the nation's for the rest of the forecast period, averaging 3.4 percent annually compared to the nation's 3.2 percent.

Figure 2: Oregon and U.S. Real Personal Income Growth Trends



In sum, Oregon's economy is expected to grow moderately during the next several years as national economic conditions worsen. Slowing growth, both nationally and globally, may lead to softening demand for Oregon's goods and services by both businesses and households. Lingering geopolitical uncertainty, which undermines consumer confidence and alters normal spending habits, could also negatively impact Oregon's economy. Furthermore, troubles in the housing market and the resulting credit crunch will continue to affect consumer behavior in the near future. In sum, although positive growth is expected throughout the forecast period, there are few signs that a robust economic expansion will occur in the near future. A summary of some economic indicators for Oregon is contained in Table 2 below.

**Table 1: National Economy, Percentage Change in Key Variables** 

	Ac	tual			Forecast		
	CY	CY CY		CY CY		CY	CY
	06	07	08	09	10	11	12
CONSUMER PRICE INDEX (CPI)	3.2%	2.7%	1.8%	1.8%	1.9%	1.8%	1.8%
EMPLOYMENT	1.9%	1.3%	0.7%	1.2%	1.2%	1.1%	1.0%
HOUSING STARTS	-12.6%	-25.8%	-17.0%	25.7%	13.1%	7.7%	0.0%
POPULATION	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%
REAL GROSS DOMESTIC PRODUCT (GDP)	2.9%	2.0%	2.0%	2.9%	2.8%	2.8%	2.6%
REAL PERSONAL INCOME	3.8%	4.0%	2.9%	3.2%	3.3%	3.2%	3.2%
REAL PRICE OF GASOLINE	10.1%	3.4%	-2.9%	-3.1%	-0.3%	-1.6%	-2.1%
UNIT SALES OF NEW AUTOMOBILES	1.5%	-2.9%	-0.5%	1.0%	2.6%	5.5%	3.1%

**Table 2: Oregon Economy, Percentage Change in Key Variables** 

	Ac	tual					
	CY	CY	CY	CY	CY	CY	CY
	06	07	08	09	10	11	12
THE CAN COUNTY TO THE	2 004	1.20/	0.004	1.00/	1.00/	4 50/	4 604
EMPLOYMENTTOTAL	2.9%	1.2%	0.9%	1.8%	1.8%	1.6%	1.6%
EMPLOYMENTHIGH TECHNOLOGY MFG.	1.7%	-2.7%	0.9%	0.3%	0.0%	-1.0%	-0.7%
EMPLOYMENTRETAIL TRADE	2.1%	2.8%	1.4%	2.2%	1.8%	1.6%	1.5%
EMPLOYMENTTRANSPORTATION	1.5%	-1.4%	1.6%	2.6%	2.7%	2.7%	2.4%
EMPLOYMENTWHOLESALE TRADE	3.5%	2.9%	1.3%	1.5%	1.4%	1.3%	0.8%
EMPLOYMENTWOOD PRODUCTS	-1.1%	-8.7%	-2.9%	0.5%	2.1%	1.0%	0.3%
HOUSING STARTS	-10.9%	-16.8%	-13.0%	15.8%	8.1%	2.9%	1.8%
POPULATION	1.6%	1.5%	1.4%	1.4%	1.4%	1.4%	1.4%
PORTLAND METRO CONSUMER PRICE INDEX	2.6%	3.5%	2.4%	2.2%	2.2%	2.1%	2.1%
REAL PERSONAL INCOME	4.6%	2.6%	2.9%	3.5%	3.6%	3.4%	3.5%
TIMBER HARVEST	-2.4%	-3.5%	-0.6%	-0.6%	0.0%	0.0%	0.0%

**Table 3: Percentage Change in Transactions for Key Transportation Variables** 

	Ac	tual			Forecast		
	CY	CY	CY	CY	CY	CY	CY
	06	07	08	09	10	11	12
MOTOR VEHICLE FUELS (GALLONS) ORIGINAL CLASS C LICENSES PASSENGER VEHICLE REGISTRATIONS TITLE TRANSFERS TRUCKING ACTIVITY (WEIGHT-MILE)	1.7%	-0.1%	1.7%	3.4%	2.0%	1.9%	1.8%
	2.4%	-1.2%	-3.6%	1.0%	1.5%	0.4%	0.7%
	0.8%	-1.9%	2.8%	0.8%	1.8%	0.4%	2.0%
	-2.6%	-2.5%	0.6%	1.3%	0.4%	0.8%	0.9%
	2.5%	-0.4%	1.1%	3.1%	3.6%	3.2%	3.0%

# TRANSPORTATION TRANSACTIONS

Table 3 on page 5 contains highlights of annual rates of change in a number of transactions for the major transportation variables in the current forecast. A supporting narrative of the Motor Fuels, Motor Carrier, and Driver and Motor Vehicles forecasts is provided below.

# Motor Fuels Usage

The volume of taxable fuels consumption continued to stay virtually flat in calendar year 2007. Total consumption was 0.4 percent lower than 2006's, in contrast to the 1.6 percent gain over 2005. The flat year-overyear volume witnessed in the first half of 2007 that was noted in our last forecast continued intact in the second half of the year. This was a little surprising given the unexpectedly strong growth in Oregon jobs that occurred in the fourth quarter. It is unlikely that the short-run effects of elevated prices for gasoline and diesel during much of the quarter were enough to offset the positive effects of job gains on travel demand. Instead, it may be a reflection of the cumulative price effects since the summer of 2003 on drivers' perceptions of the permanence of these high prices and the beginning of permanent changes in their driving habits and changes in the fuel efficiency of the light vehicle fleet. These are longer term changes in behavior that require more than one quarter to transpire. If such permanent changes have occurred, albeit slowly and somewhat incompletely, then going forward we should not expect as much of a rebound in consumption from a modest decline in (inflation-adjusted) prices.

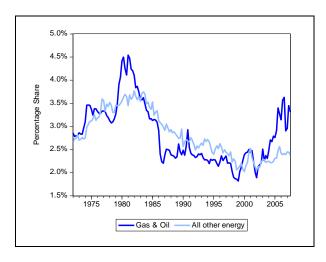
Notwithstanding the possibility of subtle changes in behavior and small shifts in the stock of light vehicles, the surprise in the pace of fuel consumption is that it didn't drop off materially in the face of the persistently high gas prices. For example, on an annual average basis, drivers encountered prices that were nearly double in 2006-2007 than what were experienced in 2002, the year prior to the steep run-up in prices. Similarly, crude oil prices were nearly 180 percent higher on average in 2006-2007 than in 2002. Regardless of these very elevated - and perhaps permanently so - prices, gas consumption has not declined. This has been the experience nationwide, as well.

A number of factors account for the relative buoyancy of gas and diesel taxable sales, and these serve to shore up the outlook for what is in store. First, the far most dominant factor in gas consumption statewide is the pace of overall economic activity. Job growth and increased volumes of business underlie strong demand for transportation services and for travel demands overall. Consumers and businesses do respond to higher prices for motor fuels, but the price effects can appear to be somewhat muted. Recent reactions to the higher prices have been tempered or counteracted by changing spending habits in the short run. Consumers have collectively been saving less, or dipping into assets, in order to cover the recent rise in the share of energy spending in their budgets.

Spending on energy may also be displacing spending on other more discretionary goods or services in the typical household budget. Recent research findings at the *National Bureau of Economic Research* have determined that the typical household offsets higher gas prices foremost with reduced spending on meals away from home and with less spending on higher priced groceries in favor of promotional items.

One reason for the economy's resilience to high gas prices is that such spending has taken a smaller share of the household budget the past 20 years, at least until recently. Figure 3 illustrates the point and draws attention to what has transpired the past couple of years. In the 1970s, the share of personal disposable income directed to gas purchases rose substantially from less than 3 percent to 4.5 percent as an outgrowth of the oil embargo and Middle East conflicts (dark blue line in the figure). Other energy spending (light blue line) followed suit, but not quite as dramatically. From the mid-1980s to 2003, the expenditure share of gas has declined precipitously to levels even lower than the period leading up to the oil crisis starting in the fall of 1973. Thus households were, at least for the first several years of the recent run-up in gas prices, able to absorb the price increases without having to reduce usage significantly. Another element that underlies the downward trend in budget shares is economy's increase in energy efficiency which has significantly lowered the overall energy intensity of both businesses and households alike.

Figure 3: Household Budget Shares, 1972 – 2007

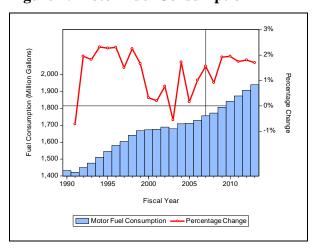


Despite the volatility in the markets for petroleum products, along with a job creation slowdown in Oregon during much of 2007,

our forecasting model for motor fuels usage has continued to be quite reliable. Since the last forecast in June 2007, the model's accuracy on a month-to-month basis was 1.2 percent based on conventional forecast error statistics. This is about on par with the precision level in the estimated econometric equation. On average for the year 2007, we were exactly right on with a forecast of \$415.5 million.

Figure 4 presents the outlook through FY13 for motor fuels sales, along with historical consumption back to FY90. For calendar year 2008 we are forecasting an overall gain of 1.3 percent. This is largely an outgrowth of the baseline state and macro economic forecasts. There is some job growth expected for Oregon (0.9 percent) and there is some softening in the price for crude oil and petroleum products, particularly in inflation-adjusted terms. A further prop to our forecast for sales growth in 2008, and especially in the years beyond on 2008, stems from recent legislation relating to reformulated gasoline.

**Figure 4: Motor Fuel Consumption** 



In the fall of 2007, Congress passed and the President signed new energy legislation as an outgrowth of somewhat unfavorable developments in global oil markets and concerns with climate change. One component of the legislation deals with the fuel efficiency of light passenger vehicles.

The law requires car and light truck makers to improve the mpg of vehicles under the CAFE standards to 35 miles per gallon by the year 2020. Since this is considerably beyond the horizon of our present forecast, and will be for a number of years, its effects are not captured in our fuel demand forecasts. (It will be, however, part of our long-range projections. These are done on an as-needed basis and routinely go out to 20-25 years into the future to help the Agency gauge the long-term prospects for fuels tax revenues.)

#### **Effects of House Bill 2210**

In the 2007 Regular Session, the Oregon Legislature passed House Bill 2210, the Biofuels Bill. Several sections of the bill pertain to the required use of ethanol as a blend with gasoline in lieu of using methyl tertiary butyl ether ("MTBE") to make reformulated gasoline that burns cleaner and mitigates ozone and carbon emissions. The Department of Agriculture promulgated administrative rules (O.A.R. 603-027) to implement the legislation in the fall of 2007. The mandate to distributors and retailers to implement the blending of ethanol spans three phases across the state. For the nine counties in the northwestern part of the state, blends with 10 percent ethanol (E10) need to be in place no later than January 15, 2008. The nine counties in the southwestern part of the state are to meet the blending requirements in mid-April. Finally, the remaining 18 counties, largely in the regions east of the Cascades, are to have the blends in place no later than September 16, 2008. Eschewing here a comprehensive discussion of the pros and cons of using ethanol to oxygenate gasoline, it is well known that ethanol is less fuel efficient than MTBE blended gas.

There is considerable debate over the actual extent of lower gas mileage that drivers are likely to experience. Poorer fuel efficiency by the light vehicle fleet will partly manifest itself in more gallons consumed and somewhat larger gas tax revenues.<sup>2</sup> While some estimates are for as much as a 10 percent loss in efficiency, most indications are for a probable range of 2 to 5 percent losses. (On a pure BTU basis, E10 is roughly 3.8 percent lower versus MTBE-blended gasoline by our calculations.) Coupled with this uncertainty over the lower miles per gallon (mpg) likely to result from E10, the staggered implementation of the bill's requirements makes an assessment of the likely effect of this new law on the State Highway Fund somewhat problematic.

A statistical analysis would be of considerable utility in this regard, but the necessary data will not be available until well into calendar year 2009. Even then, the findings may lack statistical significance and may not be definitive. In the meantime, some simulated alternative scenarios will have to suffice to bound the probable outcome of HB 2210 implementation. A range of fuel efficiency losses of 2 to 10 percent was examined, overlaid with the staggered phased-in implementation. The scenario adopted for this forecast rested on the most reasonable assumption that there will be, on net, a 2 percent decline in fuel efficiency with the new blend. In the event that fuel efficiency losses are greater than this baseline scenario, the positive revenue impact on the State Highway Fund will be understated. As such, the forecast will turn out to be conservative and, in essence, serve as a lower bound for the motor fuels revenue prospects, all else equal.

Against these economic and current law backdrops, the outlook beyond 2008 is for consumption to grow at a somewhat steady annual average rate of 2.2 percent. This is

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<sup>&</sup>lt;sup>2</sup> There are no material or similar considerations, however, applying to the impacts of the bill in promoting biodiesel blends in use fuels, which is predominately diesel fuel.

slightly above our prior forecast, owing largely to the impacts from HB 2210.

Underlying our growth forecast is a somewhat sanguine outlook, perhaps, for the probable course for prices of conventional fossil fuels. The real risk to the fuel use forecast actually resides – at least in the intermediate term – with the impact of high oil prices precipitating a major economic slowdown or recession. Either episode would not bode well for fuel sales. For a quantitative assessment of what such a scenario would look like, the reader is referred to a forecast report from quite a while back which looked at the ingredients of such a scenario that is still germane for the present time:

http://www.oregon.gov/ODOT/CS/EA/reports/forecast\_0904.pdf

#### **Motor Carrier**

Trucking activity and the freight industry affect the amount of revenue available to the State Highway Fund through the weight-mile tax, heavy vehicle registration fees, and other Motor Carrier fees. Changes in economic conditions within Oregon and the nation as a whole influence each of these revenue sources. Because growth in many of the economic variables affecting Motor Carrier activity appears to moderate for the next few years, the forecast of Motor Carrier revenues reflects similar softness.

The weight-mile tax is the largest source of trucking-related revenue. This highway use tax applies to trucks with a gross weight over 26,000 pounds. Generally, the tax paid by a motor carrier varies with the weight of the vehicle, the number of miles traveled, and the axle configuration. Certain qualifying motor carriers, such as those transporting logs, wood chips, sand, or gravel, may pay the highway use tax based on a flat monthly fee. The weight-mile revenue and transaction totals discussed in this report include this "flat-fee"

revenue as well as revenue from a small number of related fees.

An estimate of weight-mile "transactions" provides the basis for the current forecast of weight-mile revenues. This methodology, also used for prior forecasts, constructs a measure of weight-mile transactions by dividing weight-mile revenue by the tax rate paid by the typical heavy vehicle. The forecasting model incorporates several employment measures, as well as real fuel prices to estimate the weight-mile transactions.

As Figure 5 shows, the number of weightmile transactions grew quite strongly between FY03 and FY06, averaging about 4.2 percent annual growth. However, in FY07, a slight decline of 0.4 percent occurred largely because of high fuel prices and declines in durable manufacturing Oregon goods employment. The forecast anticipates a return to positive growth in weight-mile transactions as real gasoline prices slowly decline from the current high levels and Oregon employment in durable goods manufacturing begins to rebound. Overall, an average annual growth rate of 2.8 percent is expected between FY08 and FY13.

Percentage Change

Weight-mile Transactions Percentage Change

**Figure 5: Weight-mile Transactions** 

Other sources of heavy vehicle revenues to the State Highway Fund include <u>heavy</u> <u>vehicle registrations</u>, <u>permits</u> and <u>passes</u>, Road Use Assessment Fees (RUAF), and other fees paid by motor carriers. The current forecast methodology involves estimating the revenues of each of the largest components separately. Discussion of these revenue forecasts appears in the Highway Fund Revenue Forecast section below.

#### **Driver and Motor Vehicles**

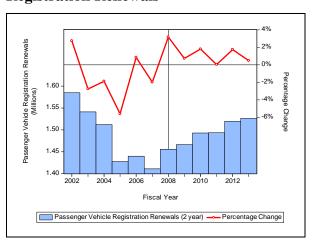
The Driver and Motor Vehicles Division (DMV) is responsible for administration of driver and motor vehicle related activities. Revenues collected from the fees charged for the various DMV activities flow to the State Highway Fund, the Transportation Operating Fund, the Transportation Safety Account, the Elderly and Disabled Special Transportation Fund, and apportionments to cities and counties statewide for road repair, maintenance and construction.

DMV activities are affected by various economic and demographic variables and provide a reflection of some very broad undercurrents in the state. The impacts of changes in population, employment, migration, and economic production are readily evident in many of the DMV data series.

Due to the stabilizing effect of demographics on DMV activities, legislative changes are easily noticeable in the different DMV series. Passenger vehicle registrations are a good illustration of this point. Legislation enacted in the 2001 session required most new vehicles to be originally registered for four years, with subsequent two-year renewals. It was implemented in two phases. The first phase began in January 2002, covering the majority of the state, and the second phase was implemented in January of 2004, adding the five Portland-area counties. As a result of these changes. two-year passenger registrations should have shown a decline beginning in 2002, with the effects of the changes lasting through 2007. However, DMV activities can be affected by economic shocks as well, and due to the vehicle manufacturers' attempts to stimulate their sales after September 11, 2001 with the introduction of low interest car loans and other incentives on new vehicle purchases, two-year registrations increased year-over-year for the eight months following September 2001. As the effects of the incentives faded, two-year registrations decreased as expected through 2005.

Beginning in 2006, vehicles that were registered for four years in 2002 were renewed. These renewals helped to offset the additional loss in two-year registration transactions from new vehicles registered in 2004. Similarly in 2008, vehicles originally registered for four years in 2004 will be renewing. This will end the legislative transition that began in 2002. After 2008, growth in two year registrations is expected to better mirror the demographic trends in Oregon than in the 2002-2008 period.

Figure 6: Two Year Passenger Vehicle Registration Renewals



Changes in the level of transaction activity and legislative changes in fee structures also impact the amount of revenue generated. The OTIA III legislation that passed during the 2003 session increased fees for a number of DMV activities. How the fee increases affect

Oregonians' willingness to pay for the same activities is an important consideration for future legislation. With more than three years of data since implementation of the OTIA III fee increases, a surprising result is the persistent impact that the fee increases have had on transaction quantities. We expected transactions to be affected for a few quarters after implementation of the fee increases. While this was true for some transactions, others have shown a significant decrease related to the fee increases beyond the first several quarters. In some cases, the fee increases have had a lasting impact on transactions. This effect is seen most notably in some of the title transactions and commercial licenses. It may well be, for instance, that some individuals have had secondary vehicles or commercial licenses that were not being used, and therefore they decided that it is not worth paying the increased fee for something that they are unlikely to use in the near future.

In general, the reduced volume of transactions generally occurs where the percent changes in fees are the greatest, or where the fees represent a larger share of the value of the vehicle. As we move further away from 2004, the fee change impact tends to diminish or becomes difficult to discern from other impacts in the models.

Overall, demographic and economic changes, combined with legislative impacts, explain most of the variation in total DMV transactions over time. Total DMV transactions increased in FY07 and are expected to average slight growth of 0.6 percent throughout the forecast period. However, future legislation will undoubtedly affect the DMV transactions forecast and resulting revenues.

# HIGHWAY FUND REVENUE FORECAST

Our current forecast shows a mixed picture for revenues compared to our forecast from last summer. Summarily, DMV revenues are scantly weaker (approximately \$2 to \$3 million), and Motor Carrier revenues are somewhat lower as well (from \$1 million weaker to as much as \$7.7 million lower). The outlook for motor fuel revenues is for slightly stronger inflows of \$9 to \$10 million more, largely stemming from the projected effects of HB 2210. The net result of these changes is for total gross revenues to be only marginally lower than in our prior outlook over the next 3 years, but to be slightly higher than before in the latter 3 years. On a cumulative basis stretching out over the entire forecast horizon, gross revenues are nearly \$6 million greater than previously, a negligible change overall from that perspective. The forecast for the 2007-09 biennium is \$5.1 million lower, a -0.3 percent drop. By the 2011-13 biennium, however, the forecast is higher by just over \$10 million or 0.5 percent.

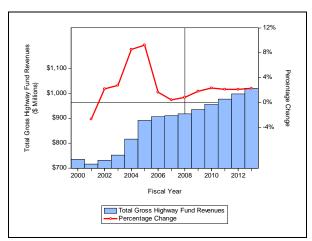
Differences between the current and prior forecast can originate from four primary sources. First, the forecast incorporates updated data on transportation transactions used for the purpose of estimating the parameters of equations contained in the forecast model. Second, it integrates the most recent revisions to the state economic outlook. Third, the forecast takes into account changes in the national macroeconomic outlook that affect transportation revenues, but may not be directly captured in the state forecast. And fourth. incorporating the effective implementation of new legislation can account for differences as well.

Figure 7 shows the recent behavior of gross revenues and the current forecast out to 2013. The past several forecasts have reflected the impacts of OTIA III (House Bill 2041) and

other legislative initiatives passed in the 2003 Regular Legislative Session. Most of the implementation of this legislation commenced in January 2004, and the effects were fully felt starting in FY05, as reflected by the comparatively pronounced jump in revenues for that year. Thereafter, revenue trends converge more toward the economic and demographic trends of the state, in lieu of any new revenue initiatives by the Legislature.

The current outlook forecasts that gross revenues will be lower than the prior forecast by relatively modest amounts. For FY08 and FY09, revenues are expected to be \$3.5 million and \$1.5 million lower than in the prior forecast, respectively. On an average annual basis, this difference translates into only a 0.3 percent decrease from the prior forecast. The remaining years of the forecast are somewhat higher than in the prior forecast. Overall, total gross revenues are expected to grow at an average annual rate of 2.1 percent between FY08 and FY13, a rate that is not too dissimilar to our prior revenue projection of 1.8 percent.

Figure 7: Total Gross Highway Fund Revenues



This growth in nominal revenues is, however, below the expected rate of cost escalation for construction and maintenance activities confronting the Agency's Highway Programs. As a result, the spending power of the State Highway Fund to support Maintenance, Preservation, and Modernization Programs will continue to erode.

Compared to the previous forecast, revenues available for apportionment after collection, administration, and program costs ("Net Revenues") are slightly lower in the 2007-09 biennium, and slightly higher in the 2009-11 and 2011-13 biennium. The revenue decrease stems from the slight reduction in gross revenues due to the lower projections for transactions receipts. The increase in revenue in the latter biennia stems from an expected increase in Motor Fuels revenues from the ethanol requirements in HB 2210, passed in the 2007 session. While MCTD and DMV revenues are expected to be lower throughout the forecast period than in the prior forecast, the increase in Motor Fuel revenues more than makes up this difference beyond the 07-09 biennium.

One additional change from the prior forecast relates to Senate Bill 994, passed during the 2007 Session. This legislation will have an effect on the resource capability of the Highway Fund. One aspect of this bill directs ODOT to distribute \$56.2 million from the State Highway Fund to Oregon counties. The implementation of this particular legislation is captured in the apportionment table (Table 7B on page 23). There is a one time apportionment to the counties in FY09 and commensurate decrease from the net to the State Highway Fund in the same year. Should the Secure Rural Schools and Community Self-Determination Act of 2000 (P.L. 106-393) be reauthorized, the counties would be required under Section 16 of SB 994 to match 10.9 percent of the funds received from the State.

# **Highway Fund Forecast**

Highway Fund revenues consist of four main sources: vehicle taxes, driver fees, weightmile taxes, and fuel taxes. Fuel taxes constitute the largest single source of revenue at forecast levels of approximately \$420 to \$470 million per year. These taxes are levied on motor fuels used in passenger vehicles and light to medium trucks that are not subject to the weight-mile tax. The weight-mile tax is levied on heavy trucks on a per mile basis, but is graduated in proportion to the weight of the truck. For very large truck configurations, there is a tax schedule that is based on gross weight and number of axles. Weight-mile taxes are the second largest source of revenue at forecast levels of \$240 to \$280 million a year. Licensing, vehicle registrations, and titles make up the third largest source of Highway Fund revenue with gross annual forecast revenues of \$218 to \$235 million.

#### **DMV Revenues**

Total DMV revenues are contained in row 4 of Table 4 and in Figure 8. These revenues are expected to oscillate around \$220 million through FY10 and then grow slowly throughout the remainder of the forecast period.

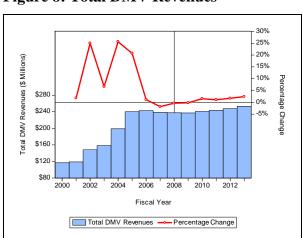


Figure 8: Total DMV Revenues

Rows 6 through 11 enumerate the costs associated with administration of DMV and transfers of the DMV revenues out of the Highway Fund to support OTIA projects or other statutory purposes. In FY08 there is a significant increase in collection costs shown in row 6. The major cause of the change is the expected increase in costs related to the Federal Real ID Act and Senate Bill 640, which was passed in 2005 and becomes effective July 1, 2008. Senate Bill 640 authorizes the Department to increase fees on certain transaction types by up to \$3 to cover the cost of implementing the legislation. If the fees do increase by \$3, revenues could increase by over \$2 million beginning in FY09. However, these potential, additional revenues are not included in the current forecast.

Net DMV revenues, as represented in row 12, are expected to show a sudden drop in FY08 and continue to decline through FY09 as costs increase at a quicker pace than revenue growth under existing fee levels. Beginning in FY10 net revenues are expected to stabilize as revenue growth catches up to costs. In FY12, if collection costs rise by the expected biennial amount of 8 percent, then once again the net revenues decline.

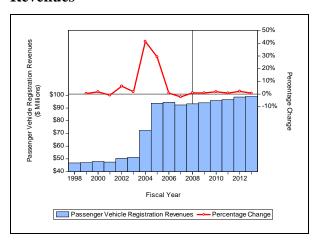
Rows 5 and 13 summarize the change in net revenues from the previous forecast. With no update in cost information available at this time, the changes in the DMV transaction revenues are responsible for the changes in net revenues as well. The recent slowdown in the economy and subsequent decline in demographic growth is expected to cause an average annual drop in net DMV revenues of 5.8 percent over our last forecast from FY08-FY13. The primary culprits of this expected revenue decline are driver license and title transactions.

Continued refinements in the estimating equations have increased the overall accuracy of our DMV forecasts both individually and

collectively. For example, the forecast for passenger vehicle registrations is only 1.7 percent different than the actual registration revenue for the first six months of 2007. This work has also served to decrease the variation from one forecast to the next when exogenous conditions are largely invariant, which is not this case this time.

The DMV revenue forecast is grouped into three major categories reflecting the primary revenue sources: vehicle registrations, driver licenses. and vehicle titles. Vehicle registrations make up the dominant portion of DMV revenues, led significantly by passenger vehicle registrations, which alone account for 80 percent of vehicle registration revenues and 40 percent of total DMV revenues. Registration revenues, as reported in row 1 of Table 4, totaled \$111.5 million in FY07, a decrease of 1.5 percent over FY06. It is also an increase of 1.4 percent over the forecast value from the June 2007 forecast. Beyond FY07, growth is expected to average 1.2 percent throughout the forecast period.

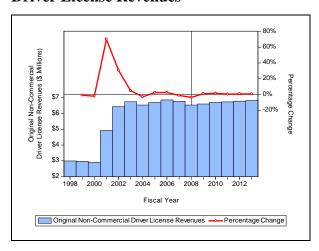
Figure 9: Passenger Vehicle Registration Revenues



Driver licenses include commercial and non-commercial licenses, permits, and related tests. Revenues, as shown in row 2, totaled \$33.6 million in FY07, a decrease of 1.3 percent over FY06. The FY07 value is 1.1 percent less than the June 2007 forecast value.

Revenue growth in the forecast period is expected to be negative through FY09, and then positive through FY13. Overall, an average annual growth rate of 1.8 percent is expected for FY08 through FY13. The shift from a four- to eight-year renewal cycle for commercial and non-commercial licenses largely accounts for the negative growth exhibited during the FY07-FY09 period and the large increase in FY13.

Figure 10: Original Non-Commercial Driver License Revenues

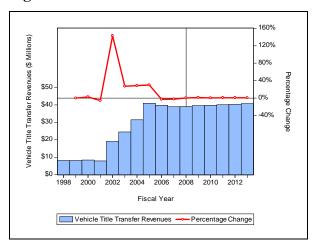


An additional change that might have a detrimental effect on driver license revenue is the implementation of rules requiring proof of identity prior to issuing or renewing a license or permit. How much this will affect revenues is unknown, but it could be substantial, especially if legal presence legislation is passed during the February 2008 legislative session.

Vehicle titles include a variety of title transactions. These span new light and heavy vehicle purchases, vehicles that are new to Oregon due to in-migration, and used vehicle transactions, as well as salvage titles and all other DMV transactions not elsewhere included. The largest component of the titles section is title transfers, accounting for over 50 percent of revenues in this group. Vehicle title revenues, as shown in row 3 of Table 4, for FY07 are \$73.5 million, a 2.8 percent

decrease from FY06. FY07 revenues are 1.1 percent lower than in the June 2007 forecast. Beyond FY07, revenue growth is expected to average 1.0 percent per year through the forecast period.

Figure 11: Vehicle Title Transfer Revenues



**Table 4: Highway Fund Revenue Collected by DMV (Millions of Dollars)** 

		Actı	ıal	Forecast					
		FY	FY	FY	FY	FY	FY	FY	FY
		06	07	08	09	10	11	12	13
	VEHICLE DECICED ATIONS	ф112. <b>2</b>	ф111 <b>г</b>	Φ111 O	¢112.0	01150	01160	¢110.7	ф110 O
	VEHICLE REGISTRATIONS	\$113.2	\$111.5	\$111.9	\$113.0	\$115.0	\$116.2	\$118.7	\$119.8
2	DRIVER LICENSES & OTHER	\$34.1	\$33.6	\$32.6	\$30.8	\$31.7	\$32.6	\$33.0	\$37.3
3	TITLE, PLATE & OTHER	\$75.6	\$73.5	\$73.3	\$74.1	\$74.9	\$76.0	\$77.2	\$78.1
4	TOTAL DMV COLLECTIONS	\$222.8	\$218.6	\$217.8	\$217.9	\$221.6	\$224.8	\$228.9	\$235.2
5	Change from Previous Forecast	\$0.0	\$0.3	(\$2.2)	(\$2.4)	(\$3.4)	(\$3.1)	(\$2.7)	(\$2.8)
7 8 9 10	COLLECTION/ADMINISTRATION & PROGRAM COST TRAFFIC SAFETY TRANSFER DEPARTMENT OF EDUCATION TRANSFER ODOT CENTRAL SERVICES ASSESSMENT REVENUE TRANSFER TO OTIA 1 & II	(\$60.4) (\$0.7) (\$0.1) (\$17.1) (\$6.8)	(\$62.8) (\$0.7) \$0.0 (\$17.8) (\$6.6)	(\$71.7) (\$0.8) (\$0.1) (\$20.6) (\$6.5)	(\$74.7) (\$0.8) \$0.0 (\$21.4) (\$6.3)	(\$73.0) (\$0.8) (\$0.1) (\$22.5) (\$6.3)	(\$74.5) (\$0.8) \$0.0 (\$22.9) (\$6.3)	(\$79.0) (\$0.9) (\$0.1) (\$24.3) (\$6.3)	(\$80.6) (\$0.9) \$0.0 (\$24.8) (\$6.4)
11	REVENUE TRANSFER TO OTIA III	(\$79.3)	(\$79.4)	(\$79.9)	(\$80.7)	(\$81.8)	(\$82.8)	(\$84.5)	(\$85.3)
12	NET DMV REVENUE	\$58.4	\$51.2	\$38.3	\$34.0	\$37.0	\$37.4	\$33.8	\$37.2
13	Change from Previous Forecast	\$0.0	(\$0.5)	(\$1.8)	(\$2.0)	(\$2.5)	(\$2.4)	(\$2.2)	(\$2.3)

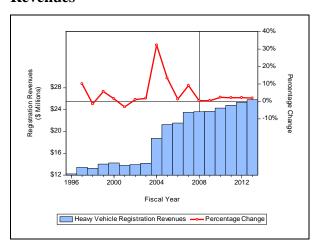
	Forecas	t	
BI	BI	BI	BI
05-07	07-09	09-11	11-13
\$224.7	\$224.9	\$231.2	\$238.5
\$67.7	\$63.3	\$64.3	\$70.3
\$149.0	\$147.4	\$151.0	\$155.3
\$441.4	\$435.7	\$446.5	<b>\$464.1</b>
\$0.3	(\$4.7)	(\$6.6)	(\$5.4)
(\$123.2)	(\$146.4)	(\$147.5)	(\$159.6)
(\$1.5)	(\$1.5)	(\$1.7)	(\$1.8)
(\$0.1)	(\$0.1)	(\$0.1)	(\$0.1)
(\$35.0)	(\$42.0)	(\$45.4)	(\$49.2)
(\$13.4)	(\$12.9)	(\$12.6)	(\$12.6)
(\$158.8)	(\$160.6)	(\$164.7)	(\$169.7)
¢100 (	\$ <b>7</b> 2.2	Φ <b>7</b> 4 5	Φ <b>71</b> 1
\$109.6	\$72.3	\$74.5	\$71.1
(\$0.5)	(\$3.8)	(\$4.9)	(\$4.5)

#### **Motor Carrier Revenues**

The Motor Carrier Transportation Division (MCTD) collects weight-mile taxes and other heavy vehicle fees. Table 5 contains the forecast revenue detail, along with projected collection/administration costs and transfers.

Row 1 contains information on the amount of weight-mile and flat fee revenues collected each fiscal year. In prior forecasts, this row also included temporary pass and cab card revenues. These revenues, which totaled \$1.4 million in FY07, are now included in row 3. In FY07, weight-mile and flat-fee revenues reached \$236.6 million. This represents a decline of 0.5 percent from FY06. At this time, the forecast anticipates an average annual growth rate of approximately 2.8 percent between FY08 and FY13. This growth rate is higher than the average annual rate of 2.4 percent predicted in our June 2007 forecast.

Figure 12: Heavy Vehicle Registration Revenues



Row 2 of Table 5 shows <u>heavy vehicle</u> registration fee revenues. It includes both International Registration Plan (IRP) registration fees paid by interstate carriers and Commercial registration fees paid by intrastate carriers. Together these heavy vehicle registration fees totaled \$23.5 million in FY07. Relatively sluggish growth is

predicted throughout the remainder of the forecast period, with an average annual growth rate of just 1.6 percent.

Row 3 shows the revenues from Road Use Assessment Fees (RUAF), permits, passes, and credentials such as weight receipts and cab cards. This row also includes OTIA III fee increments from the DMV heavy vehicle portion of the Local Fund. Revenues from weight receipt and commercial driver's license fee increases make up the OTIA III fee increments. Overall, the total of these heavy vehicle revenues reached \$9.7 million in FY07. The forecast predicts growth averaging 3.1 percent annually between FY08 and FY13.

Row 4 reports the total gross revenues for the Motor Carrier Division. Overall, the forecast predicts that gross revenues will grow at an average annual rate of 2.7 percent during the forecast period. Forecast expectations suggest that costs, as shown in rows 6 and 8, will also increase. Because the rate of increase for costs will likely exceed that of gross revenues, net revenues in row 11 will grow slightly more slowly than gross revenues throughout the forecast period. Row 12 of Table 5 provides a summary of the aggregate differences of net revenues from the prior forecast.

**Table 5: Highway Fund Revenue Collected by MCTD (Millions of Dollars)** 

		Actu	ıal			Foreca	ast		
		FY	FY	FY	FY	FY	FY	FY	FY
		06	07	08	09	10	11	12	13
1	WEIGHT-MILE TAX	\$237.8	\$236.6	\$239.2	\$246.7	\$255.5	\$263.5	\$271.3	\$278.8
2	IRP & COMMERCIAL VEHICLE REGISTRATIONS*	\$21.5	\$23.5	\$23.6	\$23.7	\$24.3	\$24.8	\$25.3	\$25.8
3	RUAF, PERMITS, PASSES & CREDENTIALS**	\$9.0	\$9.7	\$9.9	\$10.0	\$10.4	\$10.8	\$11.2	\$11.6
4	TOTAL MCTD COLLECTIONS	\$268.4	\$269.7	\$272.7	\$280.5	\$290.2	\$299.1	\$307.7	\$316.2
5	Change from Previous Forecast	\$0.0	(\$2.6)	(\$3.5)	(\$7.7)	(\$6.3)	(\$4.4)	(\$1.9)	(\$1.0)
		(444.0)	(****	(4.5.4.0)		(****	(***		
	COLLECTION/ADMINISTRATION & PROGRAM COST	(\$23.0)	(\$23.9)	(\$26.0)	(\$27.0)	(\$28.4)	(\$28.9)	(\$30.7)	(\$31.3)
	IFTA BUDGETED EXPENDITURES***	\$1.1	\$1.1	\$1.1	\$1.1	\$1.2	\$1.2	\$1.3	\$1.3
8	ODOT CENTRAL SERVICES ASSESSMENT	(\$5.8)	(\$6.1)	(\$6.8)	(\$7.1)	(\$7.5)	(\$7.6)	(\$8.1)	(\$8.2)
9	REVENUE TRANSFER TO OTIA I & II	(\$9.9)	(\$10.0)	(\$9.9)	(\$10.0)	(\$10.1)	(\$10.2)	(\$10.2)	(\$10.3)
10	REVENUE TRANSFER TO OTIA III	(\$29.6)	(\$30.4)	(\$30.6)	(\$31.3)	(\$32.2)	(\$33.1)	(\$34.0)	(\$34.9)
11	NET MCTD REVENUE	\$201.2	\$200.5	\$200.5	\$206.2	\$213.2	\$220.4	\$226.0	\$232.7
12	Change from Previous Forecast	\$0.0	(\$2.3)	(\$3.1)	(\$6.7)	(\$5.4)	(\$3.7)	(\$1.6)	(\$0.7)

	Forecas	t	
BI	BI	BI	BI
05-07	07-09	09-11	11-13
\$474.4	\$485.9	\$519.0	\$550.1
\$45.0	\$47.3	\$49.1	\$51.1
\$18.7	\$19.9	\$21.2	\$22.7
\$538.2	\$553.2	\$589.2	\$624.0
(\$2.6)	(\$11.2)	(\$10.6)	(\$2.9)
(\$46.8)	(\$53.0)	(\$57.3)	(\$62.0)
\$2.1	\$2.2	\$2.3	\$2.5
(\$11.9)	(\$13.9)	(\$15.1)	(\$16.3)
(\$19.9)	(\$19.8)	(\$20.2)	(\$20.5)
(\$59.9)	(\$61.9)	(\$65.4)	(\$69.0)
\$401.7	\$406.7	\$433.6	\$458.7
(\$2.3)	(\$9.8)	(\$9.1)	(\$2.3)

\*IRP: International Registration Plan. \*\*RUAF: Road Use Assessment Fees.

<sup>\*\*\*</sup>IFTA: International Fuel Tax Agreement.

#### **Motor Fuels Tax Revenues**

The Central Services Division–Financial Services Branch collects fuel tax revenues. Fuel tax collections are shown in Table 6. The fuel tax revenue forecasts continue to be quite accurate, despite the price volatility in petroleum markets the past four years. Actual revenues versus forecast revenues for the past several years have been typically within about plus/minus 1 percent.

Unlike for DMV and MCTD transactions, there have been no changes to the tax rates for gasoline and use fuels (largely diesel). Therefore, the revenue outlook mimics closely the fuel consumption forecast laid out above, with the important caveat that the latter was stated in terms of calendar years in order to correspond more closely with the narrative on the state and national economic backdrop.

The current forecast shows slightly more fuel tax revenue than the prior forecast. In the year FY08 it is \$2.2 million higher, and beyond, it is nearly \$9 to \$10 million per year more. This is 1.8 percent higher on average. Coupled with the impacts stemming from the implementation of HB 2210<sup>3</sup>, this is still well within the precision of the forecast equation and, so, is not a significant change, at least in the current and next biennia. Revenues are forecast to increase in FY08 by 1.7 percent, in contrast to the very slight decline we saw for FY07. Fuel tax revenues then increase at a slightly stronger rate of about 2.2 percent on average out through FY13, due to the continued, albeit slowing, economic growth prospects for the state and the boost from ethanol blend requirements.

In the current biennium, gross revenues are forecast to be up about 3.4 percent, or a little more than \$28 million, from the 2005-07

biennium. This is somewhat stronger than the prior projection. Revenue growth is forecast to regain strength in the next biennium, increasing by 4.6 percent or about \$44 million.

Collection and program administration costs stay largely invariant over the forecast horizon, so net fuel tax revenues to the State Highway Fund exhibit largely the same pattern as gross revenues.

of With an average annual base approximately \$448 million over the forecast interval out through FY13, collections generate the single largest amount of revenue for the Highway Fund, some 46 percent before collection and program costs. Each penny of gas tax generates about \$18.7 million gross and \$18 million net per year in fuel tax revenue through this forecast horizon. The same penny of tax plus its weight-mile equivalent produces on average about \$29.5 million gross and \$28.8 million net a year.

It is important to recognize the predictive capability of these foregoing "yield" results from gas taxes and weight-mile levies. They are averages and are based on a 1-cent increase only. For tax increases larger than one cent per gallon (say, for example, 5 cents or more), price elasticity effects are likely to cause a diminution in revenue yield. Direct analysis is strongly suggested over applying "rules of thumb" in these instances.

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<sup>&</sup>lt;sup>3</sup> See the full discussion of this legislation in the motor fuels transaction forecast on page 8 above.

**Table 6: Highway Fund Revenue Collected by Financial Services Branch (Millions of Dollars)** 

		Actu	al	Forecast					
		FY							
		06	07	08	09	10	11	12	13
1	MOTOR FUELS TAX	\$415.7	\$415.5	\$422.5	\$436.8	\$445.4	\$453.7	\$461.7	\$469.8
2	TOTAL FSB COLLECTIONS	\$415.7	\$415.5	\$422.5	\$436.8	\$445.4	\$453.7	\$461.7	\$469.8
3	Change from Previous Forecast	\$0.0	\$0.0	\$2.2	\$8.6	\$8.8	\$8.8	\$9.0	\$9.6
1	COLLECTION/ADMINISTRATION COST	(\$1.2)	(\$1.3)	(\$1.3)	(\$1.4)	(\$1.5)	(\$1.5)	(\$1.6)	(\$1.6)
5	ODOT CENTRAL SERVICES ASSESSMENT	(\$0.2)	(\$0.2)	(\$0.2)	(\$0.2)	(\$0.2)	(\$0.2)	(\$0.2)	(\$0.2)
6	SNOWMOBILE TRANSFER	(\$0.7)	(\$0.2)	(\$0.2)	(\$0.7)	(\$0.7)	(\$0.7)	(\$0.7)	(\$0.2)
7	CLASS I ATV TRANSFER	(\$2.1)	(\$2.3)	(\$2.6)	(\$2.9)	(\$3.1)	(\$3.4)	(\$3.7)	(\$4.0)
8	MARINE BOARD TRANSFER	(\$5.3)	(\$5.6)	(\$5.6)	(\$5.6)	(\$5.6)	(\$5.6)	(\$5.7)	(\$5.7)
9	CLASS II ATV TRANSFER	(\$1.1)	(\$1.2)	(\$1.3)	(\$1.5)	(\$1.6)	(\$1.8)	(\$1.9)	(\$2.1)
10	CLASS III ATV TRANSFER	(\$0.7)	(\$0.8)	(\$0.8)	(\$0.8)	(\$0.9)	(\$1.0)	(\$1.0)	(\$1.1)
11	TRANSPORTATION OPERATING FUND (TOF)	(\$4.1)	(\$4.1)	(\$4.1)	(\$4.1)	(\$4.1)	(\$4.1)	(\$4.1)	(\$4.1)
12	AVIATION TRANSFER	(\$0.1)	(\$0.1)	(\$0.1)	(\$0.1)	(\$0.1)	(\$0.1)	(\$0.1)	(\$0.1)
13	REVENUE TRANSFER TO OTIA I & II	(\$18.8)	(\$19.1)	(\$19.1)	(\$19.3)	(\$19.2)	(\$19.1)	(\$19.1)	(\$19.0)
14	REVENUE TRANSFER TO OTIA III	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
15	NET FSB REVENUE	\$381.4	\$380.2	\$386.5	\$400.2	\$408.3	\$416.0	\$423.4	\$431.0
16	Change from Previous Forecast	\$0.0	(\$0.1)	\$2.0	\$8.2	\$8.5	\$8.6	\$8.0	\$7.7

	Forecas	t	
BI	BI	BI	BI
05-07	07-09	09-11	11-13
\$831.2	\$859.3	\$899.0	\$931.5
\$831.2	\$859.3	\$899.0	\$931.5
\$0.0	\$10.8	\$17.6	\$18.7
			_
(\$2.5)	(\$2.7)	(\$3.0)	(\$3.2)
(\$0.4)	(\$0.4)	(\$0.5)	(\$0.5)
(\$1.4)	(\$1.4)	(\$1.5)	(\$1.5)
(\$4.4)	(\$5.5)	(\$6.5)	(\$7.7)
(\$10.9)	(\$11.2)	(\$11.2)	(\$11.3)
(\$2.3)	(\$2.8)	(\$3.4)	(\$4.1)
(\$1.5)	(\$1.6)	(\$1.9)	(\$2.1)
(\$8.2)	(\$8.2)	(\$8.2)	(\$8.3)
(\$0.2)	(\$0.2)	(\$0.3)	(\$0.3)
(\$37.8)	(\$38.4)	(\$38.4)	(\$38.1)
\$0.0	\$0.0	\$0.0	\$0.0
\$761.6	\$786.8	\$824.3	\$854.5
(\$0.1)	\$10.2	\$17.2	\$15.7

### **Highway Revenue Forecast Summary**

Table 7 summarizes the updated revenue forecast. For tractability, it is partitioned into two panels. The portion of the table labeled "7A" contains a consolidation of the results reported in Tables 4, 5, and 6 developed for each major division of ODOT. The portion labeled "7B" shows how the net revenues available for distribution are apportioned between counties, cities, and the State Highway Fund. A separate monthly forecast of the County/City Apportionments is available under "Highway Revenue Apportionment Forecasts" http://www.oregon.gov/ODOT/CS/EA/reports .shtml.

As noted above, the effects of several pieces of legislation from the 2007 Regular Session are incorporated in this forecast. SB 994 (Section 15) is explicitly shown in Table 7B. HB 2210, insofar it affects the volume of sales of gasoline, is implicit in the motor fuels revenue

**Table 7A: Highway Fund Revenue by Fiscal Year and Biennium (Millions of Dollars)** 

		Acti	Actual Forecast						
		FY	FY	FY	FY	FY	FY	FY	FY
		06	07	08	09	10	11	12	13
1	TOTAL MCTD COLLECTIONS	\$268.4	\$269.7	\$272.7	\$280.5	\$290.2	\$299.1	\$307.7	\$316.2
	TOTAL FSB COLLECTIONS	\$415.7	\$415.5	\$422.5	\$436.8	\$445.4	\$453.7	\$461.7	\$469.8
	TOTAL DMV COLLECTIONS	\$222.8	\$218.6	\$217.8	\$217.9	\$221.6	\$224.8	\$228.9	\$235.2
4	TOTAL GROSS HIGHWAY FUND	\$906.9	\$903.9	\$913.0	\$935.2	\$957.2	\$977.5	\$998.3	\$1,021.2
5	COLLECTION, PROGRAMS, & TRANSFERS (including OTIA)	(\$258.1)	(\$264.0)	(\$279.6)	(\$286.5)	(\$290.4)	(\$295.4)	(\$306.7)	(\$311.7)
6	NET REVENUE TO HIGHWAY FUND	\$648.8	\$639.9	\$633.4	\$648.6	\$666.7	\$682.2	\$691.7	\$709.5
7	OTIA I & II SET ASIDE - memo	\$35.4	\$35.8	\$35.6	\$35.6	\$35.6	\$35.6	\$35.6	\$35.6
8	DEBT SERVICE (OTIA I & II)	(\$15.2)	(\$22.1)	(\$31.0)	(\$33.6)	(\$33.6)	(\$33.6)	(\$33.6)	(\$33.6)
9	OTIA III Dedicated Revenues - memo	\$101.0	\$101.6	\$102.3	\$103.7	\$105.8	\$107.6	\$110.1	\$111.7
10	DEBT SERVICE (OTIA III)	(\$21.7)	(\$44.2)	(\$56.7)	(\$58.4)	(\$77.2)	(\$78.3)	(\$79.7)	(\$80.6)
11	NET OTIA I & II REVENUE FOR DISTRIBUTION	\$20.2	\$13.7	\$4.6	\$2.0	\$2.0	\$2.0	\$2.0	\$2.0
	NET OTIA III REVENUE FOR DISTRIBUTION - LOCAL	\$22.2	\$23.9	\$26.3	\$27.8	\$28.6	\$29.4	\$30.4	\$31.1
13	NET OTIA III REVENUE FOR DISTRIBUTION -STATE	\$57.1	\$33.5	\$19.3	\$17.6	\$0.0	\$0.0	\$0.0	\$0.0
14	TOTAL NET REVENUE FOR DISTRIBUTION	\$748.4	\$711.0	\$683.6	\$696.0	\$697.4	\$713.5	\$724.0	\$742.5

	Forecast					
BI	BI	BI	BI			
05-07	07-09	09-11	11-13			
\$538.2	\$553.2	\$589.2	\$624.0			
\$831.2	\$859.3	\$899.0	\$931.5			
\$441.4	\$435.7	\$446.5	\$464.1			
\$1,810.8	\$1,848.2	\$1,934.7	\$2,019.5			
(\$522.1)	(\$566.2)	(\$585.8)	(\$618.4)			
\$1,288.8	\$1,282.0	\$1,348.9	\$1,401.1			
\$71.2	\$71.2	\$71.2	\$71.2			
(\$37.3)	(\$64.6)	(\$67.2)	(\$67.3)			
\$202.7	\$206.1	\$213.4	\$221.8			
(\$66.0)	(\$115.1)	(\$155.4)	(\$160.3)			
\$33.9	\$6.6	\$4.0	\$3.9			
\$46.1	\$54.1	\$58.0	\$61.5			
\$90.6	\$36.9	\$0.0	\$0.0			
\$1,459.4	\$1,379.6	\$1,410.9	\$1,466.6			

Note: Row and column sums may vary slightly due to rounding.

**Table 7B: Distribution of Total Net Revenues (Millions of Dollars)** 

		Actual		Forecast							
	Distribution Percentage	FY	BI								
	rercentage	06	07	08	09	10	11	12	13	05-07	
1 COUNTY APPORTIONMENT (ORS 366.739)	24.38%	\$156.4	\$154.2	\$152.6	\$156.3	\$160.7	\$164.5	\$166.7	\$171.1	\$310.6	
2 SPECIAL COUNTY		(\$0.5)	(\$0.5)	(\$0.5)	(\$0.5)	(\$0.5)	(\$0.5)	(\$0.5)	(\$0.5)	(\$1.0)	
3   2007 SESSION SB 994 (Section 15)		\$0.0	\$0.0	\$0.0	\$56.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	
4 COUNTY APPORTIONMENT (OTIA I & II)	30.00%	\$6.1	\$4.1	\$1.4	\$0.6	\$0.6	\$0.6	\$0.6	\$0.6	\$10.2	
5 COUNTY APPORTIONMENT (OTIA III)	25.48%	\$25.7	\$25.9	\$26.1	\$26.4	\$27.0	\$27.4	\$28.0	\$28.5	\$51.6	
6 DEDICATED TO DEBT SERVICE (OTIA III)	84.07%	(\$17.4)	(\$16.2)	(\$14.4)	(\$13.7)	(\$13.7)	(\$13.7)	(\$13.7)	(\$13.7)	(\$33.6)	
7 NET COUNTY APPORTIONMENT (OTIA III-Local)	60.00%	\$4.3	\$4.5	\$4.5	\$4.5	\$4.6	\$4.6	\$4.6	\$4.7	\$8.8	
8 NET COUNTY APPORTIONMENT		\$174.7	\$172.0	\$169.6	\$229.9	\$178.6	\$182.8	\$185.8	\$190.6	\$346.6	
9 CITY APPORTIONMENT (ORS 366.739)	15.57%	\$99.9	\$98.5	\$97.5	\$99.8	\$102.6	\$105.0	\$106.5	\$109.3	\$198.4	
10 SPECIAL CITY		(\$0.5)	(\$0.5)	(\$0.5)	(\$0.5)	(\$0.5)	(\$0.5)	(\$0.5)	(\$0.5)	(\$1.0)	
11 CITY APPORTIONMENT (OTIA I & II)	20.00%	\$4.0	\$2.7	\$0.9	\$0.4	\$0.4	\$0.4	\$0.4	\$0.4	\$6.8	
12 CITY APPORTIONMENT (OTIA III)	16.99%	\$17.2	\$17.3	\$17.4	\$17.6	\$18.0	\$18.3	\$18.7	\$19.0	\$34.4	
13 DEDICATED TO DEBT SERVICE (OTIA III)	15.93%	(\$3.3)	(\$3.1)	(\$2.7)	(\$2.6)	(\$2.6)	(\$2.6)	(\$2.6)	(\$2.6)	(\$6.4)	
NET CITY APPORTIONMENT (OTIA III-Local)	40.00%	\$2.9	\$3.0	\$3.0	\$3.0	\$3.0	\$3.1	\$3.1	\$3.1	\$5.9	
15 NET CITY APPORTIONMENT		\$120.2	\$117.9	\$115.5	\$117.8	\$120.9	\$123.7	\$125.6	\$128.6	\$238.1	
16 HIGHWAY DIVISION (including small City/County)	60.05%	\$385.3	\$379.8	\$375.9	\$385.0	\$395.8	\$405.1	\$410.7	\$421.4	\$765.1	
17 SPECIAL COUNTY		(\$0.3)	(\$0.3)	(\$0.3)	(\$0.3)	(\$0.3)	(\$0.3)	(\$0.3)	(\$0.3)	(\$0.5)	
18 2007 SESSION SB 994 (Section 15)		\$0.0	\$0.0	\$0.0	(\$56.2)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	
19 SPECIAL CITY		(\$0.5)	(\$0.5)	(\$0.5)	(\$0.5)	(\$0.5)	(\$0.5)	(\$0.5)	(\$0.5)	(\$1.0)	
20 HIGHWAY DIVISION: TOTAL (OTIA I & II)	50.00%	\$10.1	\$6.9	\$2.3	\$1.0	\$1.0	\$1.0	\$1.0	\$1.0	\$16.9	
21 HIGHWAY DIVISION: TOTAL (OTIA III)	57.53%	\$58.1	\$58.5	\$58.9	\$59.7	\$60.9	\$61.9	\$63.3	\$64.3	\$116.6	
DEDICATED TO DEBT SERVICE (OTIA III)	100.00%	(\$1.0)	(\$24.9)	(\$39.5)	(\$42.1)	(\$60.9)	(\$61.9)	(\$63.3)	(\$64.3)	(\$26.0)	
23 STATE APPORTIONMENT (OTIA III)	0.00%	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	
24 NET HIGHWAY DIVISION HIGHWAY MODERNIZATION PROGRAM (included		\$451.8	\$419.4	\$396.7	\$346.6	\$396.1	\$405.3	\$410.9	\$421.6	\$871.2	
in NET HIGHWAY DIVISION)		\$60.2	\$59.8	\$60.4	\$62.5	\$64.0	\$65.6	\$67.0	\$68.5	\$120.0	
26 NET COUNTY APPORTIONMENT		\$174.7	\$172.0	\$169.6	\$229.9	\$178.6	\$182.8	\$185.8	\$190.6	\$346.6	
27 NET CITY APPORTIONMENT		\$120.2	\$117.9	\$115.5	\$117.8	\$120.9	\$123.7	\$125.6	\$128.6	\$238.1	
NET HIGHWAY DIVISION		\$451.8	\$419.4	\$396.7	\$346.6	\$396.1	\$405.3	\$410.9	\$421.6	\$871.2	
NET HIGHWAY FUNDS REVENUE		\$746.6	\$709.3	\$681.9	\$694.2	\$695.6	\$711.8	\$722.3	\$740.8	\$1,455.9	<b>\$</b> 1
30 SPECIAL COUNTY/CITY TRANSFERS TO ALLOTME	NT FUND	\$1.8	\$1.8	\$1.8	\$1.8	\$1.8	\$1.8	\$1.8	\$1.8	\$3.5	
TOTAL NET REVENUES FOR DISTRIBUTION		\$748.4	\$711.0	\$683.6	\$696.0	\$697.4	\$713.5	\$724.0	\$742.5	\$1,459.4	\$1

Forecast						
BI	BI	BI BI				
05-07	07-09	09-11	11-13			
\$310.6	\$308.9	\$325.2	\$337.8			
(\$1.0)	(\$1.0)	(\$1.0)	(\$1.0)			
\$0.0	\$56.2	\$0.0	\$0.0			
\$10.2	\$2.0	\$1.2	\$1.2			
\$51.6	\$52.5	\$54.4	\$56.5			
(\$33.6)	(\$28.1)	(\$27.4)	(\$27.5)			
\$8.8	\$9.0	\$9.1	\$9.3			
\$346.6	\$399.5	\$361.4	\$376.3			
\$198.4	\$197.3	\$207.7	\$215.7			
(\$1.0)	(\$1.0)	(\$1.0)	(\$1.0)			
\$6.8	\$1.3	\$0.8	\$0.8			
\$34.4	\$35.0	\$36.3	\$37.7			
(\$6.4)	(\$5.3)	(\$5.2)	(\$5.2)			
\$5.9	\$6.0	\$6.1	\$6.2			
\$238.1	\$233.3	\$244.6	\$254.2			
\$765.1	\$760.8	\$800.9	\$832.1			
(\$0.5)	(\$0.5)	(\$0.5)	(\$0.5)			
\$0.0	(\$56.2)	\$0.0	\$0.0			
(\$1.0)	(\$1.0)	(\$1.0)	(\$1.0)			
\$16.9	\$3.3	\$2.0	\$2.0			
\$116.6	\$118.5	\$122.8	\$127.6			
(\$26.0)	(\$81.6)	(\$122.8)	(\$127.6)			
\$0.0	\$0.0	\$0.0	\$0.0			
\$871.2	\$743.3	\$801.4	\$832.5			
\$120.0	\$122.9	\$129.6	\$135.4			
\$346.6	\$399.5	\$361.4	\$376.3			
\$238.1	\$233.3	\$244.6	\$254.2			
\$871.2	\$743.3	\$801.4	\$832.5			
\$1,455.9	\$1,376.1	\$1,407.4	\$1,463.1			
\$3.5	\$3.5	\$3.5	\$3.5			
\$1,459.4	\$1,379.6	\$1,410.9	\$1,466.6			

Note: Row and column sums may vary slightly due to rounding.

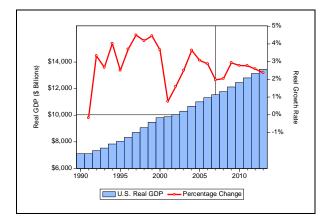
## **APPENDIX**

#### National Economic Outlook

The national economic outlook is somewhat more subdued than the prior forecast from the summer in 2007. Highlights of the key elements that affect our revenue outlook follow below. In each case, forecasts of national data are based on *Global Insight's* macroeconomic forecast that underpins the Office of Economic Analysis's December 2007 State Economic Forecast.

Figure 13 displays recent trends in the levels and growth rates of real GDP, along with the base case forecast over the 2007-2013 time frame. The recovery from the 2001 downturn continues to wane. In 2006, the economy grew approximately 2.9 percent. Growth for 2007 appears to be even slower, averaging just under 2.0 percent. A similar growth rate is expected for 2008 as well. However, real GDP growth will likely pick up a bit in the second half of 2008 and will range between 2.4 and 2.9 percent over the remaining years of the forecast period.

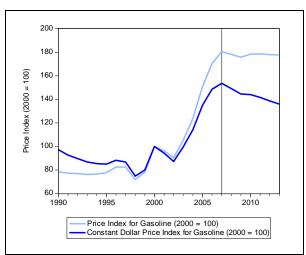
Figure 13: Real GDP and Real GDP Growth



With the recent changes in monetary policy directives as a result of the unsettling developments in financial markets, coupled

with probable near-term fiscal stimulus, it appears that some rather dramatic shifts may be in store for both the U.S. and Oregon economies. The downturn in the housing market is the primary impediment to the economy at this time. Increasing inventories of homes for sale, falling housing prices, and tightening credit standards all tend to dampen consumer spending. Higher gasoline and food prices will create additional inflationary pressures and will serve to negatively impact spending. Nevertheless. consumer expectations for positive growth continue throughout the forecast period as export the health care sector, government look to pick up some of the slack.

Figure 14: Gasoline Prices (Regular Unleaded)

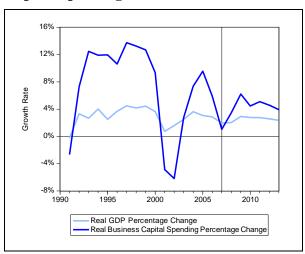


Although currently at relatively high levels, national gasoline prices on average have fallen from their peak reached in the second quarter of 2007. As shown in Figure 14, the baseline outlook suggests that prices will slowly recede out through 2013 to levels only marginally lower than at present (light blue

line in the chart). Based on recent experience, this indicated stability disregards the volatility inherent in the global marketplace for oil. Thus, actual experience is likely to stray from the projected path shown. Nevertheless, it is worth noting that, when adjusted for inflation, real gas prices decline in the forecast period to levels comparable to those seen in 2005.

As consumers get squeezed between declining home prices, mortgage loan resets, and rising prices for energy and food, falling demand for final goods and services appears to be impacting the business mood. In 2007, business capital spending on structures, plants, equipment and software weakened appreciably, growing just over 1.0 percent. Figure 15 illustrates the relationship between changes in real business capital spending and real GDP growth. Although the recent dip in capital investment spending ("CAPEX") appears considerable, it is much more muted than the 1998 to 2001 "dot-com" decline and the corresponding downturn in 2001. The current baseline outlook is for investment spending to begin rebounding during the second half of 2008. Average annual real growth of 4.6 percent is forecast for 2008 through 2013. However, as seen in the chart, it is not expected that growth will approach the rates observed during much of the 1990s.

Figure 15: GDP Growth and Business Capital Spending



Slowing employment growth is another potential threat to consumers and the economy as a whole. Employment generates wages and salaries, the dominant component of personal income which largely propels consumption spending. Based on recent reports, it appears that businesses becoming more cautious about hiring. As Figure 16 shows, the forecast reflects national employment growth of just 1.3 percent for 2007, considerably lower than 2006's 1.9 percent. Although Oregon's growth rate surpassed that of the nation in the 2004-2006 period, and reached 2.9 percent for the year, it looks to come in at less than half that for 2007. Even slower employment growth, less than 1.0 percent, is forecast for both Oregon and the nation during 2008. The labor market will likely begin slowly rebounding in 2009, with growth rates for the remaining years of the forecast averaging 1.1 percent nationally and 1.6 percent for Oregon.

Figure 16: Oregon and U.S. Employment Trends

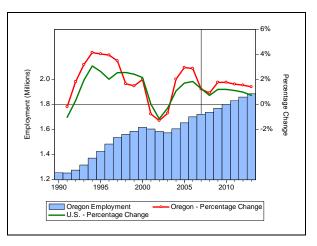


Figure 17 shows real personal income per capita in the U.S., currently at nearly \$33,000 (in 2000 dollars). Real personal income per capita looks to have increased about 3.1 percent in 2007. A slower rate of growth is expected for the remaining years of the forecast, averaging approximately 2.3 percent. Whereas this growth rate exceeds the average annual rate of 1.7 percent experienced since

1990, it still falls short of the rapid growth encountered during much of the late 1990s.

Figure 17: U.S. Real Personal Income per Capita

