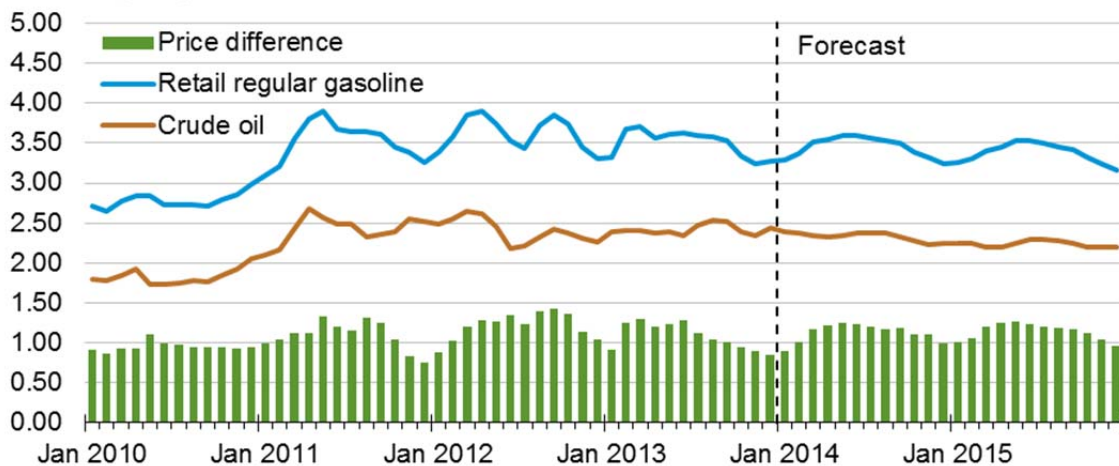


SUMMARY OF TRANSPORTATION ECONOMIC AND REVENUE FORECASTS

U.S. Gasoline and Crude Oil Prices



dollars per gallon



Crude oil price is composite refiner acquisition cost. Retail prices include state and federal taxes.

Source: Short-Term Energy Outlook, January 2014.

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 in financial planning, the formulation of transportation budgets, and to support other decision-making activities. The forecast is consistent with the Department of Administrative Services' *Oregon Economic & Revenue Forecast (Vol. XXXIII, No. 4, December 2013)* and the associated baseline macroeconomic forecast from *IHS Global Insight Inc. (GII)*.

<http://www.oregon.gov/ODOT/TD/EA/reports.shtml> and scroll down to "Transportation Revenue Forecasts."

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On the Cover: What Can Drivers Expect at the Gas Pump This Summer?

The chart on the cover page gives the baseline outlook for gasoline and crude oil prices from the Energy Information Administration (EIA) of the federal Department of Energy for the next two years.¹ The price for crude oil is for the refiners acquisition cost, which is a weighted composite of domestically produced and imported crude. Gasoline is the regular grade.

Based on crude oil prices, the EIA has a somewhat sanguine prognostication for gas prices going forward. Both historically and projected, gas prices mirror crude acquisition cost very closely. The graph has prices for regular gas – on average nationwide – hitting an average peak of only \$3.58 this summer and only \$3.50 in 2015. Annual averages are for \$3.46 and \$3.39, respectively. These are both down marginally from 2013's average of \$3.51; representing annual declines of 1.4 and 2.0 percent in nominal dollars.

The main underlying actor for the encouraging outlook is principally the sharp rebound in domestic oil production over the past three years to levels not experienced since 1988. This has not only rejuvenated the country's energy sector, but has also impacted the structure of oil markets globally. A more detailed discussion is developed in the context of our narrative for the motor fuels forecast.

While \$3.50 per gallon for the next two years is good news for households and the economy in general, it should be noted that prices on the west coast are on average higher than elsewhere due to more stringent blending requirements. On the west coast, prices run approximately 8 to 9 percent higher than the national average. Thus, the baseline outlook out west is for about \$3.75 and \$3.70 for 2014 and 2015. Nonetheless, it may well be that 2014 will become the first year in the last five or six that there will be more vacations rather than "stay-cations," especially if labor markets and consumer confidence continue to strengthen.

¹ Crude prices are in terms of gallons, rather than in customary units of barrels (1 barrel = 42 gallons). This provides information on what the gross operating margins for refining are likely to be. When converted to dollars per barrel, the projected prices are about \$98 and \$94 per barrel on average for 2014 and 2015, respectively. In other words, about where oil prices have been for the past several months, and about 4 to 8 percent lower for all of 2013.

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EXECUTIVE SUMMARY

National Economy

In contrast to 2011 and 2012, the nation's economy displayed consistent acceleration in 2013. Real GDP grew at faster rates from quarter to quarter, and 2013QIII had a final tally of annualized growth of 4.1 percent. This was the first quarter of strong economic growth since the fourth quarter of 2011, nearly 2 years prior. In essence, the third quarter of 2013 was the best growth achieved since the recovery began in the summer of 2009. Notwithstanding, it required over 4 years for the economy to get there, further confirmation of the very substandard pace of the economic rebound.

Despite the positive surprise in the real GDP advance in the third quarter – the latest for which data are official – the overall growth for the whole year is not likely to differ much from rates witnessed in 2011 and 2012 at 1.8 percent and 2.8 percent, respectively. Consensus estimates indicate that 2013 will show growth in real GDP at about 2.7 percent, even with the strong third quarter.

The single most potent source of the third quarter's growth resided in inventory accumulation. Inventory investment accounted for 40 percent of the 4.1 percent in real growth. Another third of the comparatively robust expansion was attributed to personal consumption spending. Since this sector accounts for over two-thirds of aggregate demand, it has been the backbone to the weakly expanding economy. Durable goods spending related to autos and housing have been the stout performers, largely a classic example of “pent-up” demands driving consumer spending. To be sustained, however, healthier gains in real disposable income will be required. Nonresidential investment outlays, net

exports, and restrained government spending (both federal and state/local) have been the laggards and have held back a stronger expansion over 2010-2013.

The economic rebound from the 2007-2009 recession remains sluggish – and protractedly so. To illustrate the latter point, we have only to retrieve what the consensus outlook was over four years ago in early 2010. At that time the economy was 6 months into recovery and the prevailing macroeconomic outlook predicted the economy by now would be in the third consecutive year of approximately 3.5 percent growth. However, growth in 2012-2013 is only about 75 percent of projections from four years ago. The economy continues to have difficulty in gaining any significant traction toward a full-employment trajectory. Moreover, there have been no brief spurts in quarterly growth at rates in the 5-6 percent range that usually occur in recoveries out of major contractions such as this one just experienced.

Job growth in the macro outlook is not much different than last time, a seemingly counterintuitive result in some ways given the third quarter's healthy pace. Year-over-year job gains remain in the 1.5 to 2.0 percent range out through 2015, and start to decelerate slowly thereafter. See the narrative on the [National Economic Outlook](#) for additional detail.

Oregon Economy

Oregon's economy tends to swing somewhat more than the national economy in both downturns and upturns. Thus, our job losses were far more than proportional to those incurred nationally. However, in the recovery phase, our job markets are also somewhat more resilient. In addition, Oregon's

economy displays a tendency to lag the nation by a quarter or two and sometimes more. Unless net-migration into the state continues to be significantly affected during the current economic recovery, these patterns are expected to be preserved in the current business cycle. Job levels that surpass the state’s prior peak in late 2007 won’t be seen until first half of 2015; which is over seven years of an economic trough from the standpoint of state’s total employment.

Revenue Outlook

As should be expected, the sharp economic contraction in jobs and real personal incomes and a sluggish rebound did not bode well for highway revenues in the 2008-2013 timeframe. Not only was travel demand pummeled, but even vehicle fee revenues from new car sales were severely impacted. The deterioration overall was the most significant since the recession in 1980-1982, which also hit the state especially hard. With the ensuing economic recovery that has been projected since mid-2009, however, the contrast with our June 2013 forecast is extremely slight. The macro and state economic backdrops have not changed materially since our last forecast. The most significant difference merely defers the degree of the ramp-up to healthier job growth by one to two quarters depending on the particular industry sector that is examined.

The forecasts since June 2009 have incorporated the effects of HB 2001 (“*Jobs and Transportation Act*” – JTA) that was passed during the 2009 Legislative Session. Full implementation of the highway funding legislation was completed in January 2011; so, the “steady state” revenue enhancement from JTA has been in place for nearly three years.

A comparison of our current forecast with the prior one shows:

- For the ’13-15 biennium, gross revenues are projected to be virtually unchanged. They are higher very slightly by only \$1 million or 0.1 percent.
- The forecast for ’15-17 reflects a downward revision: down from the prior outlook by \$26.4 million or -2.45 percent.

So, the overall gross revenue outlook is a little softer than the prior forecast. Table ES.1 highlights the changes in the forecast by major revenue source.

Table ES.1: GROSS REVENUES – Change from Prior Forecast
[\$millions/{%change}]

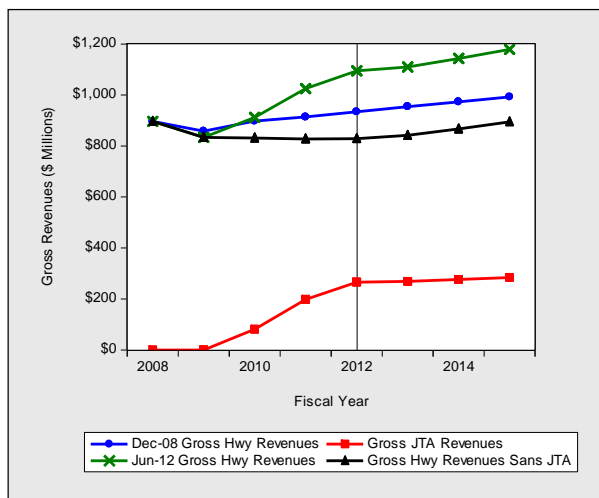
	’13-15 BI	’15-17 BI
TOTAL	\$1.0 {0.1 % }	-\$26.4 {-2.5 % }
<u>DMV:</u>	\$1.4 MM	+\$1.1 MM
<u>MCTD:</u>	\$9.7 MM	-\$15.7 MM
<u>Fuel Taxes:</u>	-\$10.1 MM	-\$11.8 MM

Currently, DMV fee revenues are projected to be virtually unchanged from the previous forecast. Heavy truck fees and tax revenues are very slightly lower than the last forecast, however. On average they are down by \$1.5 million annually, or approximately 0.4 of a percent. Motor fuels tax revenues reflect the largest revision in the updated forecast. Revenues average per year \$5.5 million lower, or 1.06 percent, than the prior outlook. Nevertheless, as the Oregon economy gets closer to getting back to peak job levels in the latter part of the horizon, the levels of fuel consumption become more robust than earlier in the recovery.

Over the forecast period out to FY19, motor fuel revenues grow at an annual average pace of 1.9 percent. The June 2013 forecast had an annual average rate through FY17 of 2.4 percent. In the present outlook, the comparable growth through FY17 only is 2.1 percent on average.

Figure ES-1 illustrates the revenue impacts overall with the updated economic assumptions and the JTA legislation since the December 2008 report. It captures some of the broad composites in our present forecast, along with a comparison to the December 2008 forecast (“Dec-08 Gross Hwy Revenues”). In addition it shows how aggregate gross revenues compare to revenues without JTA (“Gross Hwy Revenues sans JTA”). Finally, it isolates the gross revenue enhancements aggregated across all sources in the line labeled “Gross JTA Revenues.” The ramp up in JTA revenues for the years 2010 and 2011 stems from the staggered phase-in of fee and tax increases over the October 2009 to January 2011 period.

Figure ES-1: Gross Revenue Forecast Comparison



Legislation from the 2013 Regular Session

There were no major transportation funding initiatives in the Legislature in the 2013 regular session. However, there were several bills which may have some relatively minor revenue implications for the State Highway Fund.

SB 833 Driver’s Cards

As an outgrowth of legislation from the 2008 Special Session (SB 1080), major restrictions were placed on the issuance or renewal of drivers licenses, permits, and ID cards. This was to comply with the federal ID Act law. SB 833 provides for a distinctly different “driver’s card,” conditional on satisfactory documentation by the applicant. The card is only for a Class C, non-commercial driving privilege. The card has a four-year term and costs \$64, not including a required \$6 fee for the Student Driver Training Fund. The initial implementation date was for this bill was January of 2014. However, a referendum was successfully filed placing the legislation on the November 2014 ballot. If the referendum fails, the new implementation date will be December 4th, 2014. This forecast assumes the bill will implemented on December 4th.

HB 2435 Bio-Diesel Tax Exemption

HB 2435 exempts vehicles up to 26,001 pounds (gross vehicle weight) from paying the use-fuel excise tax if the vehicle is fueled using B20 biodiesel (made up of 1 part bio-fuel and 4 parts traditional petro-diesel). The fuel tax rate is 30 cents per gallon for petro-diesel. While biodiesel can be formulated from a variety of feed stocks, the legislation limits it to used cooking oil, which belongs to a large group of Fatty Acid Methyl Esters (FAME’s). The tax exemption is to commence January 1, 2014, and sunsets on December 31, 2019 under this bill.

HB 2263 Business Regulation Fees

Fees are to be increased, effective January 1, 2014, for dealer business certificates, for dismantler business certificates, for vehicle appraiser certificates, and for vehicle show licenses.

Since these activities have been deemed by the state DOJ as “non-highway” related, the revenues are not part of the SHF nor in this Highway Fund Revenue forecast.

SB 810 Road User Charge (RUC) Project

SB 810 institutes a road user tax based on miles driven in Oregon, rather than a fuels tax charge for gallons consumed. The bill essentially authorizes the creation of a program of charging voluntary participants using the state’s highway/streets network 1.5 cents per mile of travel, instead of the statutory fuel tax of 30 cents per gallon. The bill authorizes a spending limitation to put the necessary administrative rules and supporting infrastructure in place, beginning in the fall of

2013. The legislation directs the operational phase of the initiative to be up and running by July 1, 2015 – or the beginning of FY16. This would be the second half of the 2015-17 biennium. As a result there are no revenue implications for the current biennium that began July 2013.

The program caps the voluntary participation at 5,000 light duty vehicles (those less than 10,001 pounds). The 5,000 participation limit is segmented into three vehicle groups: Up to 1,500 eligible vehicles with fuel efficiency capabilities less than 17 miles per gallon (MPG); up to 1,500 eligible vehicles of 17 to 22 MPG; and the balance (up to 2,000) with fuel efficiencies in excess of 22 MPG. Generally, vehicles with an efficiency of less than 17 MPG would pay lower user taxes under the RUC than what would be paid under the fuels tax structure. Those with efficiencies in excess of 22 MPG would pay more under a RUC tax structure than would be incurred under the fuels tax. The RUC applies only to those miles driven in Oregon.

NATIONAL ECONOMIC OUTLOOK

In contrast to 2011 and 2012, the nation's economy displayed consistent acceleration in 2013. Real GDP grew at faster rates from quarter to quarter, and 2013QIII had a final tally of annualized growth of 4.1 percent. This was the first quarter of strong economic growth since the fourth quarter of 2011, nearly 2 years prior. Moreover, for reasons touched upon below in the macroeconomic backdrop, it revealed even stronger fundamentals than in 2011QIII. In essence, the third quarter of 2013 was the best growth achieved since the recovery began in the summer of 2009. Notwithstanding, it required over 4 years to be realized, further confirming the very substandard pace of the economic rebound, as well as perhaps the particular mix of policies emanating from Washington.

Not only has the pace of business activity started to accelerate, the sources of the spurt is starting to broaden. Consumer spending – representing over 2/3's of all final spending on goods and services – has been stabilizing, though restrained by muted expansion of wage and salary incomes. Fixed investment outlays by business and particularly households (new houses) also made a solid contribution to growth in the third quarter of 2013. Government spending at the state and local levels seems to have shaken off the doldrums of budget cut backs to remove fiscal drag on the economy at that level. Federal budget problems, however, still weighed somewhat negatively on growth. Our foreign trade has also started to make a contribution through growing exports (manufactured goods and petroleum products) and by shrinking imports (substantial declines in imported crude oil as well as imports of refined petroleum products).

The single most potent source of the third quarter's growth resided in inventory accumulation, just as 2011QIV's was. Inventory investment accounted for 40 percent of the 4.1 percent in real growth. However, the distinguishing aspect this time is that the inventory gains were viewed as largely voluntary, not an involuntary accumulation as in 2011QIV. As pointed out in the 3 to 4 prior reports, the latter tended to borrow from future activity as businesses scaled back output to bring inventory back to target or desired levels after an unplanned overstocked situation arose due to weakened demand. With the instance now of intended inventory builds, there is a consensus that firms are anticipating good market demand conditions and are producing more so as to not miss sales opportunities. This is a harbinger of better times ahead and, coupled with other expanding sources of growth, may serve as a catalyst for sustained growth in 2014-2015.

Of course, Oregon's economic condition is closely aligned with the nation's, and the pace of economic activity regionally is what dictates the usage and capacity demands placed on the state highway system and its local roads and bridges. It also has a very direct bearing on the revenues generated from fees and user taxes to maintain and enhance the state's road/bridge infrastructure.

The very encouraging pace of real growth has not carried over to labor markets. Growth in jobs muddled along at 1.6 percent year-over-year after the reading for job growth in December 2013. Preliminary data revealed only a net gain of 74,000, when about 190,000 was the consensus. Many pundits are expecting a significant revision upward for December when the next report is released.

So, it appears as if private employers are able to meet growing demand with less than commensurate increases in the work force. This attests to strong productivity gains (more output per man-hour of workers). This, however, is starting to wane in early 2014, with a somewhat favorable implication for faster job growth perhaps.

On average, the economy generated job growth of 182,000 per month in 2013. This was about on par with 2012 at 186,000, but stronger than 2011's at a 132,000 monthly rate. These are rates, however, that are barely sufficient to keep unemployment from rising. The unemployment rate continues to drop slowly, down to a rate of 6.7 percent in the last household survey at the end 2013. For the year, it was still high at 7.4 percent. However, this rate relies on the conventional definition from the survey of households. The jobs picture is substantially more negative when part-time workers who seek full-time employment are counted, as well as discouraged job seekers who have left the civilian labor force entirely are recognized. In addition, for some labor subgroups, such as teenagers, the unemployment picture is even more dismal.

It is customary for employment gains to lag gains in output, as firms meet growing product and service demands with more hours for existing employees (including rescissions of mandatory furlough leave), increasing capacity utilization, and strong productivity growth. However, total labor input (the combination of workers and hours of work – “nonfarm aggregate hours”) may be at a tipping point of indicating stronger demand for new hires going forward, especially beginning in mid-2014.

The current macro outlook for both real GDP and employment growth is somewhat mixed. Real growth in 2014 is still somewhat restrained at rates only about one-half of potential. Job growth will stay similarly

restrained at 1.7 percent, about the same as the past two years of 2012 and 2013. 2015 looks to have more vigorous expansion for real GDP at about 3.2 percent, but job growth is expected to be only 1.8 percent.

Some obstacles continue to persist which pose headwinds toward getting the recovery on track in a major way. However, the number of them is starting to shrink in comparison to prior reports. Indeed, some of the headwinds seem to be shifting toward tailwinds that could spark positive surprises going forward into 2015.

- Business fixed investment spending, while seemingly encouraging of late, may be less robust than usual unless capacity utilization rates rise significantly, or foreign demand for our exports gain serious momentum. The last three years saw some weakness in capital goods and plant spending, and healthier growth is not expected until the mid-part of 2015, which is a delay of a quarter or two from prior forecasts.
- It will be hard to sustain a strong recovery going forward unless the financial sector continues to mend. Although Fed policy has been extremely favorable on this front, new regulations stemming from the Dodd-Frank financial industry legislation are creating a vastly different landscape for financial institutions to navigate.
- Household balance sheets (both on an overall net worth basis, as well as on a debt service to disposable income basis) still continue to be make good progress in the aggregate. Some notable strengthening has occurred recently, and it looks as if this will have to run its course into the late 2014-15 timeframe to largely

complete itself – barring any major shocks to the continued recovery in jobs.

- With increased household savings from balance sheet de-leveraging and slower than customary growth in personal incomes, personal consumption spending is likely to be sub-par for a similarly protracted span. This will be exacerbated by an inability of households to turn to the equity in their houses to support spending if incomes languish, as was the case for sustaining consumer spending in the 2001-2003 downturn.
- There does not seem to be an end to continual flare ups in geo-political tensions. These pose a risk to solid economic growth globally.
- There is the potential for policy missteps – either at the federal fiscal level (e.g. the “fiscal cliff”), at the monetary policy level (how much and how fast to “taper QE3”), or both – that could pose some headwinds to a sustained recovery and full employment growth.
- For a number of countries – both developed (e.g. Japan) and emerging – currency depreciation is becoming the growth policy of choice. For those with thin capital and foreign exchange markets, the prospects for financial instability rise considerably. Collateral with this would be a strengthening U.S. dollar, which hinders our exports, but does temper price inflation on our imports.

As mentioned earlier, some headwinds identified in prior reports seem to be shifting

somewhat. These may now be positive elements in the outlook going forward:

- The economy is closer to escape velocity after 4 years of slow growth. Thus, it is less susceptible to derailment should any of the risk factors play out as enumerated above.
- Housing continues to stabilize from its free-fall over the period of 2006-2010. Signs are surfacing that things are starting to gather considerable steam, particularly in selected markets such as Texas and Florida. Housing related activity is said to account for roughly one-seventh of total economic activity. So, gaining strength in this sector will help to propel stronger growth overall.
- The worse seems to be past in the case of Europe. The region appears to have weathered the financial crisis, and growth is starting to take hold. This is a net positive for the prospects for global growth.
- The renaissance in the country’s oil and natural gas sectors has rather potent consequences for economic activity and energy prices to stimulate economic growth.

Table 1 summarizes several national economic indicators upon which the forecasts are based. The transportation revenue forecast is consistent with Department of Administrative Services’ December 2013 *Oregon Economic & Revenue Forecast* and the associated baseline macroeconomic forecast from *Global Insight Inc. (GII)*. In addition, detailed excerpts on the national outlook from GII, and the complete state economic outlook are available at the web site of the Office of Economic Analysis <http://www.oea.das.state.or.us>.

OREGON ECONOMIC OUTLOOK

Oregon's economy, much like the nation's, continues to grow, and, although the pace has been sluggish by historical standards coming out of a recession, growth is picking up. Construction employment, which was impacted severely by the recession, has finally shown signs of life growing significantly in the first and second quarters of 2013. Oregon's exports continue to remain at historically high levels although growth has stalled in 2012 and 2013. Housing is finally beginning to recover as growth in housing starts remains strong, and home prices are finally rising, providing some support for economic growth. Despite slow wage growth and lingering high unemployment, consumers are feeling more confident about the future, with consumer sentiment reaching levels recently not seen since before the recession. Additionally, people are moving into Oregon as seen through the surrendered license data at rates comparable to 2007, before the financial crisis took hold. All this points to an economy that is beginning to see widespread growth and an expectation of continued if mild expansion.

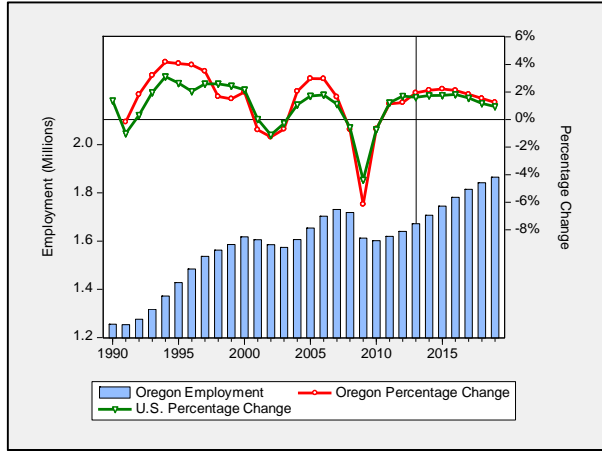
Total Non-Farm Employment peaked in the first quarter of 2008 at 1,739,000 and declined to 1,593,000 in the first quarter of 2010, a loss of nearly 150,000 jobs. The state's job growth resumed in the second quarter of 2010, but growth has been inconsistent since. 2011 and 2012 experienced modest growth in the first and fourth quarters but sandwiched in between were weak second quarters and the third quarter of 2011. The fourth quarter of 2012 through the second quarter of 2013 experienced growth above two percent and was the first time since prior to the recession of consecutive quarters of growth at that pace or better. However, third quarter growth was once again below 1 percent.

Going forward, Oregon's employment growth is not expected to experience any further bumps in the road and sustain moderate growth averaging over 2 percent at an annual rate through 2016. In the remainder of the forecast, growth is expected to slowly deteriorate, falling to 1 percent by the end of 2019. However, it is discouraging to note that it is not until the second quarter of 2015 that we regain pre-recession peak employment levels. This represents a 7-year span for the complete cycle, a duration that is very nearly as long as what was experienced in the 1980-1982 recession.

Historically, average employment growth in Oregon is stronger than in the U.S. The exceptions usually occur during recessionary conditions, where Oregon's particular industry mix can lead to greater employment swings compared to the U.S. overall. While both the U.S. and Oregon have experienced negative growth in aggregate employment during 2008-2010, Oregon shed relatively more jobs throughout the recent downturn. On an annualized basis Oregon experienced an average decline of 2.6 percent in Total Non-Farm Employment for 2008-2010, while the nation saw an average annual decline of "only" 1.9 percent. However, Oregon's employment growth is expected to outpace the national average throughout the forecast period. Oregon's employment is expected to grow at an annual rate of 1.9 percent through 2019, while the U.S. employment is expected to grow 1.5 percent during the same period. This matches the expected growth rates from the previous forecast covering the same period.

Figure 1 illustrates the total nonfarm employment estimates for Oregon from 1990 through 2019, as well as a comparison of the annual growth rates for both the state and nation as a whole.

Figure 1: Oregon and U.S. Employment Trends



The pace of economic activity has a direct and very significant influence on tax revenues derived from usage of the state highway system. A more detailed look at specific industries in Oregon can help shed light on where the strengths and weaknesses currently reside, and what the outlook is for these sectors.

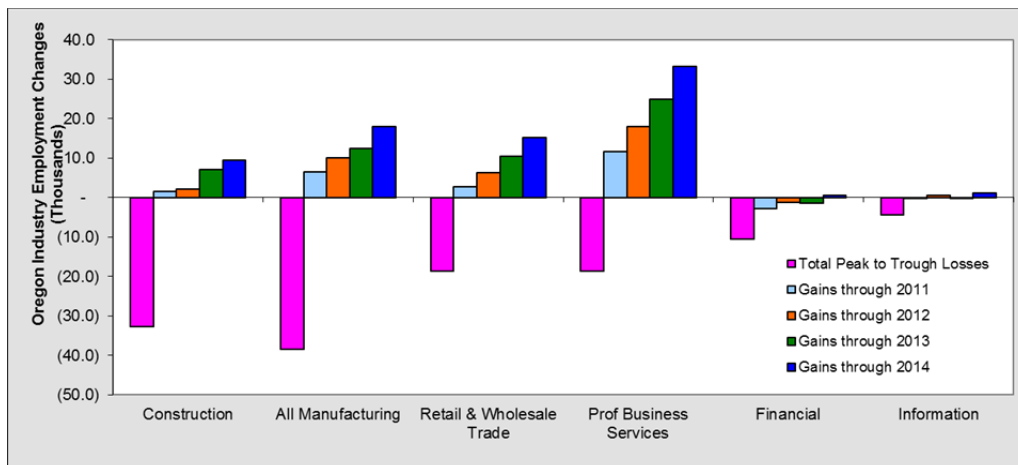
Figure 2 highlights some of the industry sectors which have special significance in this regard. They are **Construction**, **Manufacturing** (both durable goods and non-durables) and **Retail & Wholesale Trade**, along with **Professional and Business Services**, **Finance**, and **Information** sectors.

As noted above, total employment losses from the peak employment in the first quarter of 2008 to trough employment in the first quarter of 2010 was a net loss of almost 150,000 jobs. The key sectors underpinning travel demand placed on the state’s highway and roads network [**Construction**, **Manufacturing**, and **Retail & Wholesale Trade**] accounted for over sixty percent of these job losses. However, going forward, these sectors only account for less than one third of overall growth in jobs through 2014. This is certainly not encouraging news for strong growth in motor fuel and weight-mile taxes.

Another sector reinforcing this slow job recovery is **Finance**, partly reflecting the malaise in construction, covering both residential and commercial building. **Professional and business services**, among one of the larger industries in the state, reveals one of the more potent rebounds in jobs. It is one of the few large sectors that is expected to lead the economic recovery along with **Health Services** (not contained in the chart), and is expected to add considerably more jobs by 2014 than it lost during the recession.

The relative growth rates projected for some of these sectors along with others indicators are reported in Table 2 on page seven.

Figure 2: Oregon Employment by Selected Sector, 2008-2014



Oregon's **real personal income** growth has rebounded mildly after experiencing negative growth in 2009 and 2010. Personal income, about 50 percent of which is derived from wages and salaries, has slowed in 2013 as wage growth slowed. As shown in Figure 3, Oregon's recent progress mirrors that of the U.S. Going forward the forecast predicts growth for Oregon to slightly outpace that of the U.S. averaging 3.2 percent through 2019, while the U.S. averages 3.0 percent. These estimates match that of the previous forecast.

Figure 3: Oregon and U.S. Real Personal Income Growth Trends



In short, 2011 was the turning point in the Oregon's economy as personal income growth rebounded in the first quarter and employment growth became consistently positive. In 2012, employment growth continued to expand and income growth decelerated slightly. 2013 has seen steady employment growth in the first two quarters followed by a lackluster third quarter. However, growth should rise in the fourth quarter to end the year averaging 1.9 percent. Meanwhile, income growth declined in the first quarter of 2013 as the payroll tax break expired, followed by strong growth in the second quarter. Third quarter growth was more mild and is expected to slow further in the fourth quarter but remain positive and average 1.4 percent for the year.

There are a couple notable risks to continued growth, although the likelihood of Oregon slipping back into a recession appears negligible as recent talk has been about the quality of jobs being created, not if jobs will be created. The main concern for Oregon is a production slowdown in Asian countries, which has already led to stagnant export growth. Also, the tightening of U.S. fiscal policy by means of sequestration and the continued debt ceiling crisis has impacted federal employment and continues to create uncertainty for private sector businesses. On the upside, the steady employment growth in Oregon has now spread outside the Portland Metro area with half of the private sector growth in recent months coming outside of the Portland Metro area.

Oregon's population growth is also picking up strength as labor markets rebound, allowing job seekers easier access to opportunities in Oregon. Total population is expected to rise by 0.88 percent in 2013, from a low of 0.53 percent in 2011. This increase is driven by net migration, as more people move into Oregon than leave the state. Population growth is expected to accelerate through 2018, reaching 1.24 percent, then hold steady through 2020. However, note that these rates are considerably below those experienced during the 1990's expansion and are also lower than rates prior to the recent recession, as shown in Figure 4.

Figure 4: Annual Growth Rate in Oregon's Population

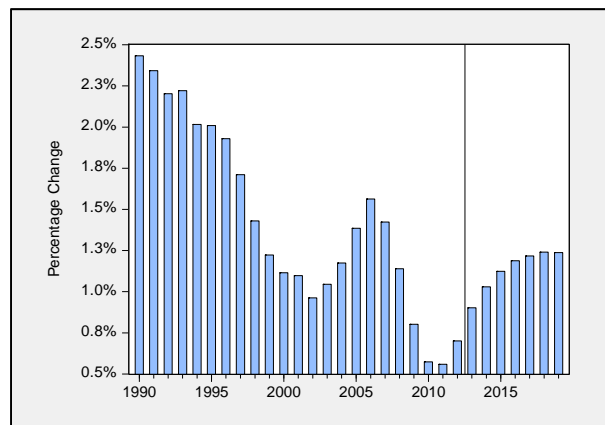


Table 1: National Economy, Percentage Change in Key Variables

	Actual		Forecast							
	CY 11	CY 12	CY 13	CY 14	CY 15	CY 16	CY 17	CY 18	CY 19	
CONSUMER PRICE INDEX (CPI)	3.1%	2.1%	1.5%	1.6%	1.7%	1.9%	1.9%	1.9%	1.9%	
EMPLOYMENT	1.2%	1.7%	1.6%	1.7%	1.8%	1.8%	1.6%	1.2%	0.9%	
HOUSING STARTS	4.5%	28.0%	16.7%	26.1%	28.5%	8.8%	-0.4%	0.5%	1.3%	
POPULATION	0.7%	0.7%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	
REAL GROSS DOMESTIC PRODUCT (GDP)	1.8%	2.8%	1.5%	2.5%	3.2%	3.2%	3.1%	2.9%	2.8%	
REAL PERSONAL INCOME	3.6%	2.3%	1.6%	3.2%	3.3%	3.3%	3.6%	3.2%	3.0%	
REAL PRICE OF GASOLINE	23.2%	1.4%	-3.8%	-4.0%	-2.9%	-1.8%	0.2%	1.1%	1.2%	
UNIT SALES OF NEW AUTOMOBILES	8.1%	18.9%	5.0%	2.2%	3.9%	6.6%	1.7%	-1.5%	1.1%	

Table 2: Oregon Economy, Percentage Change in Key Variables

	Actual		Forecast							
	CY 11	CY 12	CY 13	CY 14	CY 15	CY 16	CY 17	CY 18	CY 19	
EMPLOYMENT--TOTAL	1.1%	1.2%	1.9%	2.1%	2.2%	2.1%	1.8%	1.5%	1.2%	
EMPLOYMENT--CONSTRUCTION	1.4%	1.7%	5.9%	3.4%	3.7%	4.1%	2.5%	2.0%	1.4%	
EMPLOYMENT--HIGH TECHNOLOGY MFG.	4.1%	1.6%	-0.6%	4.6%	2.4%	1.3%	1.0%	0.3%	0.3%	
EMPLOYMENT--RETAIL TRADE	0.9%	1.3%	2.2%	2.3%	1.9%	1.8%	1.6%	1.4%	0.6%	
EMPLOYMENT--TRANSPORTATION	2.3%	1.2%	2.4%	2.4%	2.6%	3.0%	3.0%	2.2%	1.1%	
EMPLOYMENT--WHOLESALE TRADE	1.3%	1.5%	2.7%	1.8%	1.4%	1.8%	1.8%	1.4%	1.1%	
EMPLOYMENT--WOOD PRODUCTS	-3.7%	2.7%	4.3%	2.4%	8.0%	4.7%	-0.9%	0.6%	-0.7%	
HOUSING STARTS	5.3%	35.5%	36.3%	13.6%	20.5%	17.0%	2.5%	1.9%	0.0%	
POPULATION	0.6%	0.7%	0.9%	1.0%	1.1%	1.2%	1.2%	1.2%	1.2%	
PORTLAND METRO CONSUMER PRICE INDEX	2.9%	2.3%	1.8%	1.4%	1.6%	1.8%	1.9%	1.8%	2.0%	
REAL PERSONAL INCOME	3.6%	2.7%	1.4%	3.3%	3.6%	3.8%	3.9%	3.3%	3.2%	
TIMBER HARVEST	13.1%	-1.5%	-2.1%	7.1%	9.5%	1.9%	2.1%	1.8%	1.7%	

Table 3: Percentage Change in Transactions for Key Transportation Variables

	Actual		Forecast							
	CY 11	CY 12	CY 13	CY 14	CY 15	CY 16	CY 17	CY 18	CY 19	
MOTOR VEHICLE FUELS (GALLONS)	-2.8%	-1.4%	1.3%	2.5%	2.1%	1.9%	1.7%	1.5%	1.3%	
ORIGINAL CLASS C LICENSES	-0.7%	3.5%	7.3%	-1.5%	1.6%	1.4%	0.4%	-0.1%	0.2%	
PASSENGER VEHICLE REGISTRATIONS	0.7%	1.5%	0.4%	1.0%	0.5%	1.0%	0.1%	0.3%	0.0%	
TITLE TRANSFERS	3.0%	-1.5%	1.8%	0.8%	1.3%	0.7%	-0.8%	-0.2%	0.1%	
TRUCKING ACTIVITY (WEIGHT-MILE)	2.0%	-0.8%	4.8%	4.0%	3.3%	2.7%	2.1%	2.1%	1.8%	

TRANSPORTATION TRANSACTIONS

Table 3 on page seven 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. These are all expressed in terms of quantities or amounts of transactions; in other words in terms of physical units. Five transportation variables are highlighted in the table, out of over several hundred captured in the forecast model. Overall, usage on the highway and road network (motor vehicle fuels and trucking activity) show somewhat stronger growth than driver and vehicle transactions (original driver licenses, passenger vehicle registrations, and titles). The reason is rather intuitive: usage has a stronger correlation to the pace of economic activity, while driver/vehicle transactions are influenced more by the state's demographics. The latter is far less dynamic than the former. The conversion of transactions into revenues involving fees and tax rates is done later in the report as the "Highway Fund Revenue Forecast."

It should be noted that the tables refer to calendar year data so as to align better with the earlier narratives about the economic situation nationally and for the state.

Motor Fuels Usage

It has been well recognized in past reports that fuel consumption in Oregon, and as well nationwide, has languished in the economic recovery. There has not been as a lethargic recovery in fuel demand since the 1980-82 recession, which was also a particularly harsh one for the state. The decline in 2008-09 was the most severe downturn in fuel use in nearly

30 years. Reduced economic activity in both instances manifested itself in reductions in travel demands for both personal and business purposes, and as a result reduced fuel use.

For 2013, it looks as though taxable fuel demand will come in at a rate of 1.3 percent higher over 2012. Usage overall in 2012 was down from the prior year by 1.45 percent. This followed a 2011 that was down by 2.8 percent from 2010. So, the pattern of fuel usage by light duty vehicles and medium heavy trucks in Oregon has been slow and very uneven coming out of the recession of 2008-2009.

On a 12-month cumulative sales basis (perhaps a more reliable metric for the fundamental pace of motor fuels usage), year-over-year comparisons suggest continued softness since the first half of 2010. Rolling 12-month sales in the first half of 2010 rose at rates in the range of 2.2 to 2.5 percent, but it has since significantly softened recently to about a 0.7 percent rate of decline. Both a slowly recovering economy for the 2011-2013 period and elevated fuel prices restraining the discretionary spending power of consumers have served to dampen usage.

A broad range of economic and demographic variables accounts for the observed behavior for fuel demand of late. These factors are all captured in the multivariate model developed to generate the forecast for fuel consumption in the state. Taxable fuel use is at the heart of the outlook for fuel tax revenue going forward.

First, crude oil and gasoline prices have risen considerably since 2009, albeit they are still lower than what drivers confronted in 2008. Prices for crude oil and derived petroleum

products have continued to be elevated since early 2010. However, the percentage increases in both are muted in the year-over-year comparisons due to the continual civil unrest the past three years in North Africa and in the Middle East that spawned higher risk premiums associated with potential supply disruptions. These still remain largely in place given the current state of geopolitical tensions, although they have narrowed somewhat of late. [A fuller discussion of the structural developments in both domestic and global markets appears at the end of this narrative on motor fuels: “Developments in Domestic Crude Oil Production.”] Despite the elevated prices, the derived demand nature of fuel consumption strongly suggests price inelasticity for price increases as well as for price declines. Drivers demand motor fuels as an intermediate input into end pursuits such as commuting to work, to school, and for recreational/leisure/social activities. It is only fuel use largely tied to discretionary activities that is mostly impacted.

Second, the tepid pace of the recovery of motor fuels consumption may cause some to conjecture that the advent of alternative-fuel vehicles may have measurably affected the overall use of gas/diesel and their growth trajectories. Since manufacturers of these vehicles tout more fuel efficiency, the reasoning is that the same amount of miles of travel is accomplished with less fuel consumption. Notwithstanding the buyer subsidies created to soften the higher upfront capital costs, the market penetration of these vehicles is still comparatively nascent. As a result, the effect on the fuel efficiency of the entire fleet of passenger vehicles and light trucks (with roughly a median age of nearly 11 years) has been imperceptible in the short- to intermediate-term. There is probably a considerable ways to go for major strides toward greatly enhanced efficiency of the overall fleet and for a perceptible impact on fuel consumption to be accomplished. Based on our long-run analysis, this starts to occur a

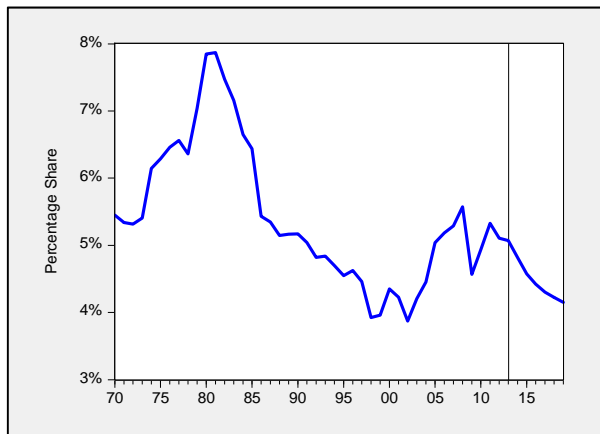
considerable ways beyond the horizon of our present revenue forecast (through 2019). The changing landscape of fuel efficiency standards for light vehicles is discussed in additional detail below.

Third, growth in usage at prices below peak prices may be retarded partly because drivers have been slower than usual to revert back to their short-run habits under more normal circumstances. Drivers engage in a number of steps to conserve on fuel consumption to mitigate the impact of the prior, high prices on their budgets. In the short-run – that is, the case in which the stock of vehicles is largely fixed – these have routinely encompassed trip chaining, temporary changes to alternative modes, carpooling, and maintaining higher air pressure in their vehicle tires. With the pinch at the pump being reduced considerably since mid-2008, it might be anticipated that some of these measures would be reversed and for usage to regain its growth at the historical norm of about 2 percent. With the overall economic backdrop and heightened consumer anxiety, however, there may be the effects of slower reversion, or even some more permanent adjustments taking hold. This has been embodied in the forecast by subtle changes in the estimated lag structure to gas prices.

Fourth, the overall pace of economic activity in the state has a far more potent influence on gasoline and diesel fuel usage than any of the foregoing elements. Job gains disappeared in the spring of 2008, nearly six years ago. As has been the mainstay outlook for the Oregon economy since – “slow recovery” – this is expected to persist into first half of 2014. Even more telling, expected job growth never attains robust rates as has typically occurred in past recoveries. The collateral variables such as aggregate personal income and population are similarly restrained. As a consequence, the recovery in fuel consumption is slower than the norm.

Fifth, it has been maintained for the past six years that the amount that households have to devote to transportation fuels also serves to explain the shortfall in fuel consumption. In connection with record high gas prices over the 2005-2008 timeframe, the budget shares that households had to devote to energy use rose dramatically - to levels unseen since the late 1970s. The effect of this is tantamount to a tax, hampering their ability to spend on other items, particularly those of a non-essential or “luxury” nature. The result is a diminution to the production-income stream and slower economic activity than otherwise expected. Again, these responses are manifested in reduced fuel use, stemming from curtailed recreation and reduced “outside-the-home” entertainment activities. These are more discretionary activities, than are vehicle trips to work or school. Presently, and going forward, this effect will continue to pose some challenges for stronger fuel use inasmuch as the budget share is projected to remain quite elevated over the low levels experienced in the 1986-2002 time span. Figure 5 provides an indication of the persistent headwinds that households have encountered, and will continue to, albeit at somewhat diminishing levels going forward.

Figure 5: Household Budget Shares on Energy



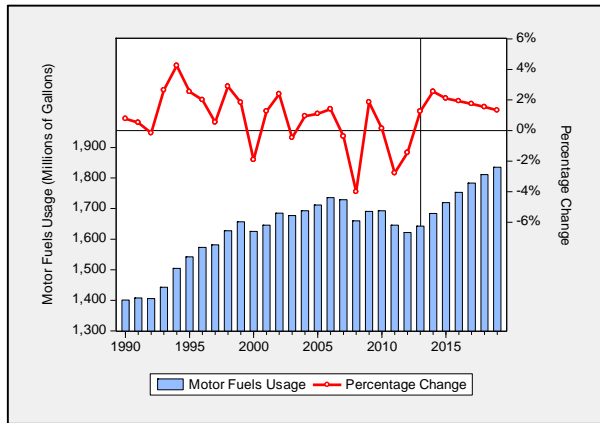
Sixth, and finally, there has been increasing recognition of some very broad – but slowly

developing – demographic shifts that are starting to get underway. Two prominent shifts have received the bulk of attention: the aging of the population with “Boomers” leaving the work force for retirement and the advent the millennial generation. The latter covers the age group of 18 to 37 that have just entered – or are about to – young adulthood. The travel demand behavior of these two very large age cohorts may be affected by this progression. If these patterns are sufficiently different than for the overall population, then there may be implications for user tax receipts and as well as even vehicle/driver fee revenues going forward.

This element is distilled in the fuel use forecast model in the form of Oregon’s Labor Force Participation Ratio (LFPR), as tracked by the Oregon Employment Department (OED). The ratio is formed from the measure for the total civilian labor force relative to the working age population (ages 16 through 64).The estimated effect is presently small, but it indicates a little lower fuel consumption results as these shifts start to take place. The LFPR for Oregon is from the OED and is linked with BLS projections at the federal Department of Labor.

Figure 6 presents the outlook through CY19 for motor fuels sales, along with historical consumption back to CY1990. For calendar years 2013 and 2014, we are forecasting usage growth of 1.3 and 2.6 percent, respectively, as overall economic growth becomes gradually stronger. This is reflected in the figure with sales remaining comparable to consumption at rates like those in 2006-2007.

Figure 6: Motor Fuel Consumption



This outlook is largely an outgrowth of the baseline state and macroeconomic forecasts. Both 2011 and 2012 witnessed gains in total nonfarm employment of 1.1 and 1.2 percent, respectively. This growth represented a combined increase in payrolls on the order of 40,000. Income gains were, however, not quite as robust, as pressure continued to restrain wage and salary increases. Going forward, job gains start to gather steam in the first half of 2014 and continue at a reasonably healthy – thought not robust – pace through 2016. Personal income growth is somewhat more subdued given the relative slack in most labor sectors. Gas prices may pose some headwind for consumption (all else equal) in contrast to levels seen in 2009, but nothing on the order of what was experienced in 2008 under our most probable scenario. A prop to our forecast for taxable fuel consumption over 2014-19 continues to stem from legislation in 2007 relating to reformulated gasoline, discussed in more detail below under the heading “Effects of HB 2210.”

Corporate Average Fuel Economy (CAFE) Standards

Over the past six years, there have been a number of pieces of legislation geared partly toward increasing the fuel efficiency of the fleet of light duty vehicles (passenger cars and pickups).

In the fall of 2007, Congress passed, and then-President Bush signed, new energy legislation as an outgrowth of somewhat unfavorable developments in global oil markets and concerns over anthropogenic global warming. One component of the energy legislation dealt with the fuel efficiency of light passenger vehicles. The law required car and light truck makers to improve the miles per gallon (mpg) of vehicles under the CAFE standards to 35 miles per gallon by the year 2020. This target for overall fuel efficiency was subsequently accelerated to 2017 with more recent federal legislation in 2009.

In July of 2011, the Administration mandated a new target for the fuel efficiency of light vehicles by the year 2025, with certain milestones in the interim years. The EPA promulgated rules for implementation in August of 2012. The overall targeted standard is for 54.5 mpg for new cars and light trucks by model year (MY) 2025 (“CAFE Standards-2025”).

The recently promulgated CAFE-2025 fuel efficiency targets are a very aggressive, and perhaps optimistic reach at ramping up the fuel efficiency of new cars and light trucks by 2025. At first glance, 54.5 mpg for new light duty vehicles in 2025 sounds like a quantum leap that would very adversely affect revenue streams needed to maintain and enhance the State Highway Network, as well as local roads and bridges. After all, the current efficiency of new cars and light trucks in 2013 was only about 30 mpg, or 55 percent less. (The current fuel efficiency of the entire existing fleet of light vehicles is about 20.8 mpg.)

The effects from the legislated efficiency increase do not begin to register until well after 2019, which is the terminal year of the current forecast. The effects, therefore, do not show up in the current fuel demand forecast. (It will be, however, more evident in

the long-range projections using a more aggregated structure. These are done on an as-needed basis and routinely go out 20-25 years into the future to help the Agency gauge the very long-term prospects for fuels tax and vehicle/driver fee revenues.)

Effects of House Bill 2001

The 2009 Oregon Legislature passed a very broad-based, multi-modal transportation funding package, *The Jobs and Transportation Act of 2009*. A wide array of vehicle fees, both for light passenger vehicles and heavy trucks, were raised. In addition, use taxes from motor fuel usage and weight-mile taxes for heavy trucks in weight classes above 26,000 pounds were raised. The revenue impacts of HB 2001 are more appropriately discussed in fuller detail in the section “Highway Fund Revenue Forecast” below.

Nevertheless, there probably needs to be some recognition here of the probable impacts of the gasoline tax and use fuel (diesel) tax that were implemented January 2011. State motor fuels taxes increased from 24 cents/gallon to 30 cents at that time. All else equal, a hike in the fuel tax will manifest itself as a price increase at the retail pump. Since fuel demand is a derived demand – use stems from enabling activities that consumers like or need to do, not from actual consumption – the price sensitivity of fuel demand is quite low in the short-run (“inelastic”). A fuel tax is, however, a permanent increase to retail prices, whereas “retail prices” sans taxes can fluctuate up or down depending largely on variations in the price of crude oil and from changes in margins at the refining stage, as well the mode of operations at refineries. Consumer perceptions regarding the permanency between price changes and tax increases may differ.

These distinctions may suggest that the sensitivity to a price increase stemming from

a fuel tax increase may be somewhat more potent than that due to price changes based on market-based fundamentals. There is some empirical evidence that supports this thesis, although the effect is not enough to move the degree of responsiveness out of the “inelastic” zone.

Based on these studies, coupled with the econometric estimates embodied in our forecasting equation, we gauge the likely impact from a six-cent tax increase per gallon to be quite muted. Based on present price levels as a basis for comparison, the effect is probably about a one-half of one percent reduction in fuel usage. This represents about 10 million gallons annually, compared to total usage on the order of 1.7 - 1.8 billion gallons. This is well within the statistical precision of the forecast model, and no special allowance for the tax change affecting usage is justified at the present time beyond what is embodied in our retail fuel price variable (which includes state and federal taxes).

House Bill 2210 – Ethanol Blend

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 an administrative rule (O.A.R. 603-027) to implement the legislation in the fall of 2007.

It is well understood that ethanol-blended gas 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, however.

Lower fuel efficiency by the light vehicle fleet will partly manifest itself in more gallons being consumed and somewhat larger gas tax

revenues. 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 loss. (On a pure BTU basis, E10 is roughly 3.8 percent lower than MTBE-blended gasoline by our calculations.) Coupled with this uncertainty over the lower mpg likely to result from E10, the staggered implementation of the bill's requirements across the state in 2008 makes an assessment of the likely effect of this new law on the State Highway Fund somewhat problematic at best.

The complete phase-in of blending across the state occurred in the final quarter of 2008. With the span since this completed implementation of the blending mandate, some empirical analysis for the efficiency impact in the context of the econometric specifications for motor fuels demand has been ongoing. A somewhat broad range of models was examined, and all of them indicated that the efficiency loss is statistically significant, though not large. The results suggested a comparatively narrow range of about 1.7 to 2.2 percent more gasoline use under the blending mandate than without it. Current point estimates are indicating about 1.9 percent lower fuel efficiency as a result of the E10 blend.

Anecdotal evidence is mounting that drivers are detecting very little efficiency loss with highway driving, but a drop off does seem to occur with city driving. Using the rule of thumb of 45%/55% for the highway/city mileage proportions and the 3.8 percent lower energy content in the ethanol blend, this would suggest 2.09 percent increase in fuel usage. This comports closely with the statistical findings from the past five years discussed earlier.

Developments in Domestic Crude Oil Production

Hardly a week goes by without headline news on the renaissance in domestic oil and natural gas production. The reversal in production rates has been to levels not seen since 1988 – two and a half decades ago. The rebirth of production in the U. S. is being spearheaded by technological advances in horizontal drilling and hydraulic fracturing of shale rock formations. The enormous oil and gas reserves in shale formations have been known for roughly 30 years. However, it has only been over the past decade where crude oil prices have been sufficiently high to incentivize extraction by the exploration and production sector (“E&P”) of the integrated oil industry. The implications domestically are huge, and globally they border on monumental.

There are a number of stylized facts that come to the surface from the transformation that is presently underway. Moreover, they are distributed around the globe.

First, in the U. S. domestic crude oil production has increased to over 8 million bbls/day. This represents an increase of 1.2 million bbls/day - or 17 percent - in just the past three years. At that rate of growth, many industry observers - both in the U. S. as well as internationally – assert that the U. S. will become the largest liquid crude producer worldwide by as soon as 2015-2016. This would mean displacing Saudi Arabia and Russia as the top two currently.

Secondly, with rising domestic crude production, U. S. imports – especially from Nigeria, Venezuela, and Saudi Arabia – are commensurately reduced. In addition, the displaced imports into the U. S. start to create gluts in other, non-U. S. markets.

Third, the domestic crude surpluses being created in the U. S. (such as West Texas

Intermediate crude at the hub in Cushing, Oklahoma) enable substantial gains in exports of petroleum products (mostly diesel) at very aggressive prices in foreign markets. This has caused the shutdown of refining capacity in Europe, for example. As well, our imports of refined fuels from Europe have also been displaced with record refining capacity utilization rates in the U. S. as of late.

In Europe, there appears to be an upper bound on their crude benchmark - Brent – as their imports of refined products from the U. S. gain market share. The premium of Brent still embodies some risk elements stemming from geopolitical tensions in North Africa and the Middle East, but even that has been coming down substantially recently.

In Asia, prodigious imports of both crude and refined products continue to sustain robust economic growth. China is already the world's leading crude importer. It will still rely mainly on crude production from the Middle East, on domestic refining and on U. S.-refined fuels to a lesser extent to sustain this growth going forward.

In the Middle East, some production cuts will probably have to occur to avoid a major glut of crude and significantly lower prices. The increased production gains in North America are projected to roughly equal growth in crude demand globally. As a consequence, swing capacity available to meet variations in demand worldwide, and/or momentary supply disruptions, will rise commensurately with the cutbacks. This will further retard price pressure on Middle East crude for markets internationally.

The primary implication all of this resides in the impact on the price of crude and resultant prices for refined petroleum products. Basically, the market transformation that's just beginning points to prices for crude and gasoline mimicking pretty much the pattern reflected in the chart from the EIA on the

cover page for a number of years. How long will the shale oil and natural gas boom last? A number of factors are involved as to how long this transformation plays out, each with considerable uncertainty.

It is well known that shale oil production is more costly than conventional extraction. In addition, depletion rates seem to be much higher than for conventional wells. Horizontal drilling and hydraulic fracturing are also not without potential environmental impacts that may or may not be feasibly mitigated. So, it is problematic at best to say what the duration will be at this time. Estimates vary widely: from 3-5 years to as long as 25 years. One aspect of note in this context is that virtually all of the shale oil production in the U. S. has come out of private land holdings. However, the bulk of shale oil reserves are thought to reside on federal lands. These are as of yet untapped. Moreover, the potential of shale oil reserves in foreign lands is only just now being determined and assessed.

The principal implication for fuel demand from this transformation would be that motor fuel prices in the U. S. may level out more than experienced in the recent past. When adjusted for inflation at the consumer level, they could conceivably decline. This would stimulate demand somewhat. In addition, there may be, at the margin, a reduced market penetration of alternative-fuel vehicles that achieve greater fuel efficiency as conventionally fueled vehicles demonstrate to car buyers lower operating costs.

Summary Outlook for Motor Fuels Usage

Against the backdrops of the economy and recent changes in legislation, the outlook is for consumption to grow at a somewhat steady annual average rate of 1.9 percent over the period 2014-2019, once the 2011-2013 lull is behind us. This pace is slightly lower than the prior forecast (2.4 percent over 2013

to 2017). For this forecast over the shorter 2013-2017 interval, growth is projected at an annual average pace of 2.1 percent. A large part of the growth can be attributed to the ramp up to somewhat stronger economic performance in the mid-part of the forecast period, especially by surpassing prior peak employment levels in the first half of 2015. The impacts from HB 2210 on light vehicle fuel efficiency will continue to bolster usage, as well.

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. In addition state and federal legislation can impact trucking activity.

The **weight-mile tax** is the largest source of trucking-related revenue. This highway use tax applies to trucks with a gross weight over 26,001 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. The carriers generally have the option of paying on a monthly or quarterly schedule. Certain qualifying motor carriers, such as those transporting logs, wood chips and sand/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 the monthly, quarterly and “flat-fee” revenue, as well as revenues from a small number of trip-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 normalizing

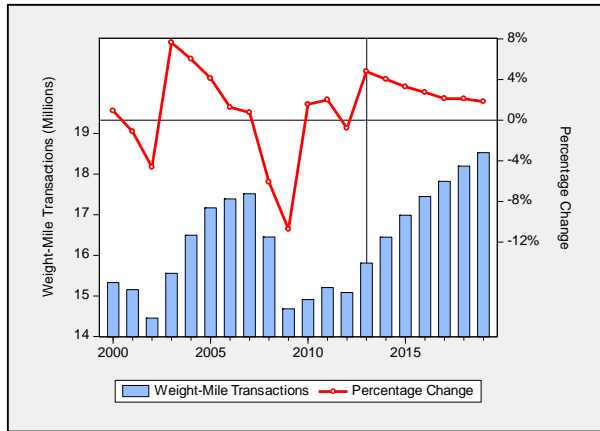
revenue by the tax rate paid for a typical heavy vehicle. The forecasting model regresses the normalized weight-mile transactions on Oregon construction and durable goods employment, as well as real fuel prices and real manufacturing output to estimate weight-mile transactions.

As Figure 7 illustrates, the number of weight-mile transactions grew strongly between CY03 and CY05, averaging about 5.9 percent annual growth. Following these years of strong growth, CY06 and CY07 growth was much more modest, averaging only about 1.0 percent. As recessionary conditions struck in the second half of CY08 growth declined 6.1 percent for the year. At the height of the recession, trucking activity bottomed out in CY09 where transactions declined by 10.7 percent. The drop in consumer spending, followed by the decline in Oregon durable goods manufacturing and construction employment, were the big factors behind the large declines in truck traffic. As the economy began to slowly recover in CY10, growth in weight-mile transactions was once again positive at 1.6 percent followed by slightly stronger growth in CY11 at 2.0 percent. Unfortunately, growth in CY12 stalled and declined by 0.8 percent. In CY13, growth has rebounded in the third quarter and is expected to end the year at 4.8 percent over CY12. This growth is expected to continue throughout the forecast but at somewhat more modest rates. For the CY13 through CY17 period growth is expected to average 2.7 percent.

Compared to the previous forecast, growth in CY13 is stronger than expected, sparked primarily by a robust third quarter. This impact continues through CY14 with growth maintaining an improvement over the prior forecast. However, in the previous outlook CY15 was forecast to reflect fairly strong growth as the economy shifted into high gear from the slow pace of the previous few years. Now, with a strong end to CY13, the forecast

model is not projecting such a bump upward in CY15. Instead, growth in CY15 through CY17 is expected to be slower than the previous forecast.

Figure 7: Weight-Mile Transactions



Other sources of heavy vehicle revenues to the State Highway Fund include **heavy vehicle registrations, permits and passes, Road Use Assessment Fees (RUA),** 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.

Driver and Motor Vehicles

The Driver and Motor Vehicle Services 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 into the State Highway Fund, the Transportation Operating Fund and into other funds administered by ODOT divisions such as Transit and Rail. Additionally some fees net of costs are transferred to outside entities; for example, RV-related fees are transferred to the Oregon Parks and Recreation Department. Lastly, revenues remaining after transfers and costs are deducted are apportioned to cities and

counties statewide for local 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. In general, DMV activities are more strongly affected by demographic changes rather than by economic changes, and so are more immune to the cyclical nature of the economy. However, severe recessions like the present one, from which the economy is sluggishly recovering at best, do impact growth in DMV transactions, both driver and vehicle related. Slowing in-migration rates and tighter household budgets negatively impacted growth in new and renewal driver transactions and well as vehicle registrations and title transactions.

Due to the stabilizing influence of the state’s demographics on DMV activities, legislative changes are very evident in the different DMV series. As fees or laws change impacting access to DMV services, these effects can be seen in changes in demand. A current example is the impact of a fee change in driver records.

Since 2006 ODOT has provided electronic access to certain types of driving records for qualified parties, known as Real-Time Access to Oregon Driver Record Service (RADR). The original fee was \$0.50 per record, and was increased in October 2009 to \$2.00 per record. In 2011, a fee study was conducted by Portland State University which outlined a methodology and an initial estimate for the fair market value of electronic driver records. The initial estimate was \$6.68 per record. In 2012, ODOT and DAS partnered with NICUSA, Inc., which manages the “Oregon.gov” web portal, to provide web portal services for online access to the RADR

records at a cost of \$3.00 per record. This fee was added to the fair market value for a total cost per record of \$9.68. The new fee rate and portal service effective date was June of 2012. The fair market estimate was recalculated in June of 2013 and will be updated biennially. The current fee is \$9.63 per record.

This fee change from \$0.50 to \$9.63 for the RADR records has impacted sales as the fee has changed over time. Figure 8 displays the RADR sales over time and is separated into three color blocks corresponding to fee levels.

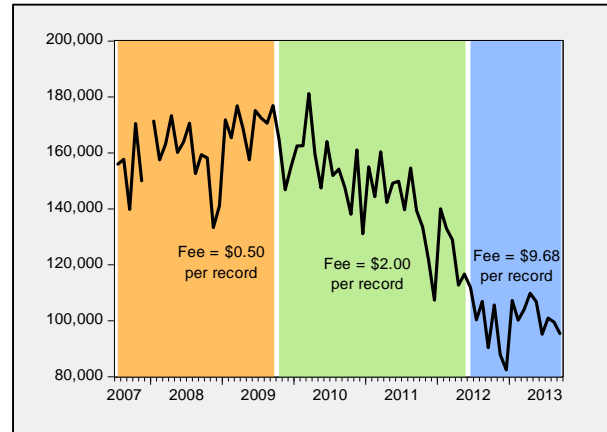
Looking at the first color block covering the period from July 2007 through September 2009, the first item to note is the missing data point for December 2007. The number of RADR records sold in that month was 401,684 records and represents most probably an outlier. After removing that observation from the graphed line, the average over the period was 162,000 records sold per month and sales grew slightly over the period at a rate of about 0.3% per month. It is important to note that this transaction activity appears insensitive to the recession as sales increased through 2008 and 2009.

The second color block spans the period from October 2009 through May 2012. Initially it appears that despite the fee increase in October from \$0.50 per record to \$2.00 per record, sales held up through March of 2010. Beginning in the second quarter of 2010 sales started declining, with the decline accelerating as implementation of the most recent fee increase approached. This may reflect market anticipation of the fee increase. The average monthly RADR records sold each month were 146,000 over this period and an average monthly decline in sales was 0.9%, ranging from an average drop of 0.8% to 1.1% by the end of the period.

The last color block represents the period from June 2012 to present. The fee change

from \$2.00 per record to \$9.68 was implemented on June 4th 2012. Since this increase, sales have remained flat averaging 100,000 per month.

Figure 8: Online Driving Record Service Monthly Sales Volume



As the fee has changed from \$0.50 per record to \$9.63 we've seen demand fall from 162,000 to 100,000 per month. The primary purchasers of these records are insurance companies, and as the fee has increased these companies have been extending the purchase cycle. So instead of possibly purchasing a record batch every month they might switch to every six months. This provides a good example of how fee changes affect demand for DMV products.

The other way that legislation or policy changes can affect demand is through actions that affect access to DMV services. An example of this can found by examining the evolving laws related to non-commercial driver licenses. SB 1080 passed in 2008 and the preceding executive order which took effect in February of 2008, changed the requirements for a non-commercial driver license establishing that an applicant needed to show both proof of legal presence in the United States and a Social Security number, unless a person was not eligible for a Social Security number. This change in the law negatively impacted sales of non-commercial licenses. Prior to implementation of SB 1080,

the monthly average non-commercial license issuance rate was about 11,500. Since then the average has fallen to about 9,200 per month, a drop of 20 percent. Clearly the legislation restricted access to some customers causing an immediate decline in demand. However, looking at more recent data there has been an increase in sales. The current sales rate is about 10,300 per month, which accounts for about half of the loss. So, as the economy has picked up, there has been an increase in the licensing rate amounting to about half of the loss from SB 1080.

Legislation passed in the 2013 Session will allow those who cannot prove legal presence access to a driver card granting the holder the legal right to drive in Oregon. This legislation currently has been referred to the voters in November of 2014, but if upheld it will take effect in December of 2014. Once the backlog of people who want the legal right to drive but have been unable to do so work their way through the process it is

expected that the legislation will add back the equivalent of about half of the remaining loss from SB 1080.

Overall, demographic and economic changes combined with legislative impacts explain most of the variation in total DMV transactions over time. Total DMV transactions declined sharply in 2008 and 2009 as the recession hit, followed by no growth in 2010 as the recession lingered and as HB 2001 was implemented. As the economy began to recover, 2011 saw slight positive growth, followed by stronger growth in 2012. Going forward, the forecast is for transaction growth in 2013 exceeding that of 2012. Growth is expected to be inconsistent but positive through 2016 and then stagnate in the out years. Overall growth is expected to average 0.8 percent per year over the period covering 2013 through 2019, which is just slightly less than the 1.1% average annual growth expected for Oregon's population, a key driver to many DMV transactions.

HIGHWAY FUND REVENUE FORECAST

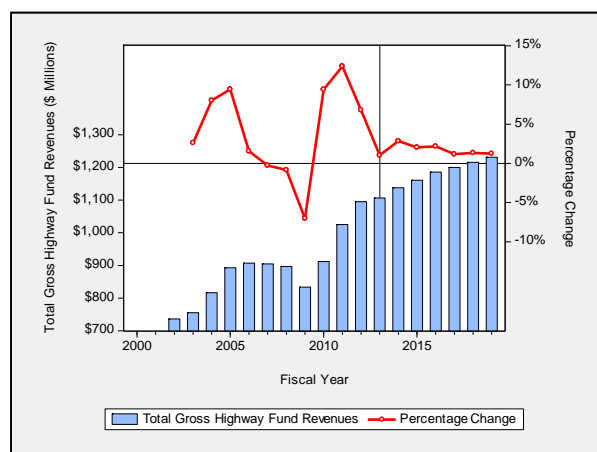
The economic backdrop underlying travel demands and freight movement in the state continues to show some signs of improvement, albeit somewhat inconsistently. Nevertheless, the outlook for revenues is largely unchanged compared to the previous forecast. DMV vehicle and driver fee revenues, which are driven largely by demographic changes and consumer responses to fee increases, are virtually unchanged from the prior forecast. Motor Carrier and Motor Fuels revenues are traditionally far more sensitive to the pace of business activity in Oregon and nationally. The forecast of Motor Carrier revenues is, in the net, slightly lower driven by a marginally slower growth in trucking activity. The outlook for Motor Fuels revenues is similarly somewhat weaker than in the last forecast. Travel demands and fuel use by individuals and businesses are still somewhat stagnant in the economic recovery so far.

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 effects of new funding legislation, particularly those that are phased in over a span of time such as the HB 2001 was, can account for differences, as well.

Figure 9 shows the recent behavior of gross revenues in the current forecast out to 2019. The forecasts for the past eight years have reflected the incremental revenue 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 registered by the start of FY05, as reflected by the comparatively pronounced jump in revenues shown in the figure. FY04 through FY08 reflected the robust economic conditions of that period complemented with the revenue enhancements of OTIA III. Beyond FY09, the large increases in revenues for FY10 through FY12 reflect the phased implementation of the *Jobs and Transportation Act* (HB 2001 from the 2009 Session). The final few years of the forecast converge more toward the economic and demographic fundamentals currently projected for the state.

Figure 9: Total Gross Highway Fund Revenues



As stated above, the current outlook is mixed only very slightly from the prior forecast. In FY14 and FY15 gross revenues are expected to be higher by \$8.4 million and \$7.4 million lower respectively, due to continued softness in the economic recovery. FY16 is expected to be slightly weaker by \$14.7 million, as well. The slight downward shift in the revenue continues through FY17 in the

updated forecast, although it diminishes on a relative basis.

In connection with summary Table 7 at the end of the report (on page 31), a graph is provided which summarizes the composite effect of HB 2001, while “controlling” for the differences in economic assumptions. This is featured as Figure 15 in the related discussion and shows what the new revenue forecast would have been under the same economic backdrop with and without this significant piece of legislation.

This boost in nominal revenue growth is much needed due to the expected rate of cost escalation for construction and maintenance activities confronting the Agency’s Highway Programs. Prior to passage of the JTA, the spending power of the State Highway Fund to support Maintenance, Preservation, and Modernization Programs had been eroding as costs increase at a faster pace than revenues.

Jobs and Transportation Act, 2009

During the 2009 legislative session, HB 2001 (also known as the Jobs and Transportation Act, “JTA”) was signed into law. This was the most comprehensive piece of Transportation funding legislation to be passed since the OTIA III legislation (House Bill 2041) was enacted during the 2003 Session. The JTA contains 71 sections covering many different areas of transportation. Most germane to the revenue forecast are the sections relating to fee and user tax increases. These increases provide extra funding for the state highway system and local roads, along with servicing the debt on bond issuances to fund major statewide projects that are outlined in Section 64 of the bill.

The fee and tax increases were not implemented simultaneously. The DMV fee increases were implemented on October 1, 2009. The heavy vehicle registration fee

increases became effective on January 1, 2010. The increases to the road user assessment fee, weight-mile tax, and flat fees had a staggered implementation beginning in October 1, 2010 with full implementation by December 1, 2010. Lastly, the motor fuels tax increase went into effect on January 1, 2011.

Highway Fund Forecast

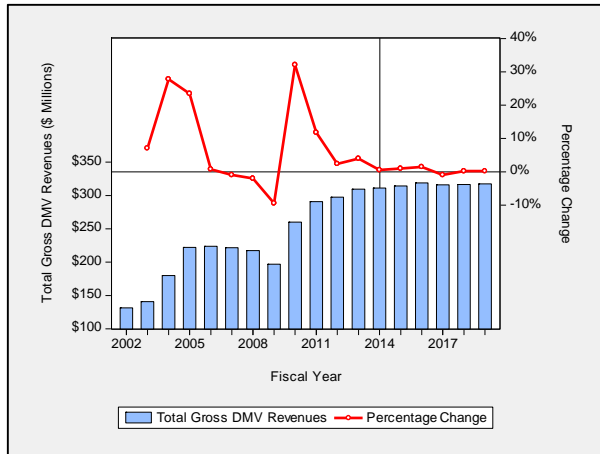
The forecast horizon covered in this revenue outlook now extends out through FY19. Thus, it adds the 2017-19 biennia to the projected revenue trajectories. Highway Fund revenues consist of four main sources: vehicle taxes, driver fees, weight-mile taxes, and fuel taxes. Fuel taxes constitute the largest single source of revenue at forecast levels of approximately \$498 to \$547 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 single largest source of revenue at forecast levels of \$277 to \$313 million a year. Licensing, vehicle registrations, and titles make up the third largest source of Highway Fund revenue with gross annual forecast revenues ranging from \$311 to just over \$317 million per year.

DMV Revenues

Total DMV revenues are reported in row 4 of Table 4 and in Figure 10. The sharp revenue increase in FY10 and FY11 was due to the additional revenues generated from the JTA. In FY12, with JTA fully implemented, growth averaged 2.4 percent. In FY13, revenues grew 4.0 percent, as light vehicle sales improved, along with an anticipated increase

in non-commercial license renewals. Beyond 2013 growth is expected to slow, averaging 0.4 percent from FY14 through FY19, less than half of the population growth rate.

Figure 10: Total DMV Revenues



Rows 6 through 11 and 13 through 15 give the costs associated with administration of DMV, and transfers of the DMV revenues out to support JTA and OTIA projects, and for other statutory purposes. Costs, including program, administration, and central services assessment, are expected to increase at an average rate of 6.8 percent per biennia through the 2017-19 biennium.

Net DMV revenues, as represented in row 11, increased rapidly in FY11 as the JTA revenues were added. In FY12 net revenue growth was strong, averaging 5.3 percent as growth outpaced costs, followed by slower but still sizable growth in FY13 at 2.5 percent. However, as costs continue to rise and gross revenue growth softens, net revenue growth generally declines throughout the forecast. Overall net revenues are expected to decline on average 1.4 percent from FY14 through FY19.

Row 5 summarizes the change in gross revenues from the previous forecast. Overall, there is an expected cumulative increase of \$3.7 M from FY12-FY17. This increase is the combination of an improving economy,

which has led to an increase in vehicle title, driver, and registration transactions, as well as new legislation passed during the 2013 Session. Specifically in FY13 and FY14, a rise in vehicle sales has led to an increase in title and registration transactions in FY13, followed by an increase in driver and title transactions in FY14. Beyond FY14, the increases are a mix of economic and demographic gains along with legislative action. The legislative changes are highlighted in the Driver discussion below, and the other changes are due to a softening of registration revenue, offset by an uptick in title related transactions.

Row 9 has been added to show the incremental revenue increase from the electronic driver records sold to disseminators. The initial forecast estimated incremental revenues would average about \$5.6 M per year, and the first full fiscal year (FY13) of revenue matched that estimate. Going forward, revenues are expected to soften slightly through FY16 before picking back up to a \$5.6 M steady state. However, with just over a year of data, there exists a lot of uncertainty in the forecast and over the next couple years we will be able to see more clearly how this substantial fee increase permanently impacts demand for these products.

Row 10 is also new and highlights the revenue associated with SB 833 from the 2013 Session. A discussion of this legislation is located in the Driver section below. Since the previous forecast, this law has been referred to the voters in November of 2014. This forecast assumes the law will be upheld and will be implemented in December of 2014, eleven months later than was anticipated in the previous forecast. The initial spike in revenues for FY15 and FY16 is due to the expected revenue generated from the pent up demand, and FY17-FY18 represents the steady state additional revenue. In FY19 there is an additional revenue stream

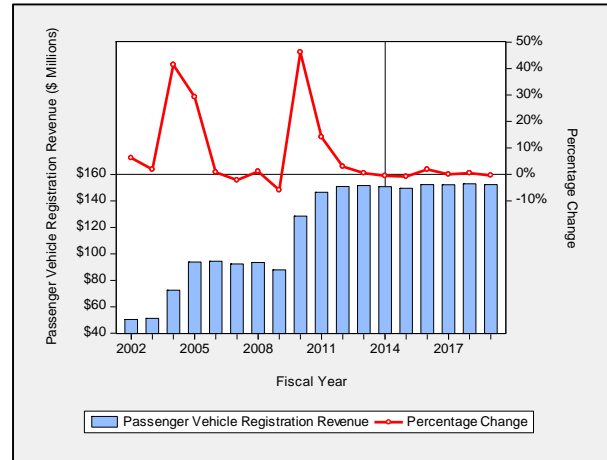
from the first renewals of the originals issued four years prior, bumping up the FY19 total.

Continued refinements in the estimating equations have in general increased the overall accuracy of our DMV forecasts over time. However, the 2008-2012 period covering the recession and uncertain recovery has created larger forecast errors, as the models continued to predict consistent future growth while actual growth has not been as strong or as timely as predicted. What is encouraging about the last two forecasts are that there has been growth in historical revenues exceeding forecast, while simultaneously expectations are for continued future growth, albeit at a somewhat subdued rate.

Vehicle Registration Revenues

The DMV revenue forecast is grouped into three major components 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 46 percent of all DMV revenues. Total registration revenues, as reported in row 1 of Table 4, amount to \$181.7 million in FY13, an increase of 0.4 percent over FY12. FY14 revenues are expected to equal \$180.4 million, a 0.7 percent decline over FY12. The previous forecast predicted registration revenues to be flat in FY13, followed by slight growth in FY14, and stronger growth in FY15, and FY16. Currently, we expect growth to stagnate in FY15, followed by stronger growth in FY16. Overall, total registration revenues are expected to be slightly lower than the previous forecast and growth should average 0.3 percent through the forecast period from FY14-FY19.

Figure 11: Passenger Vehicle Registration Revenues



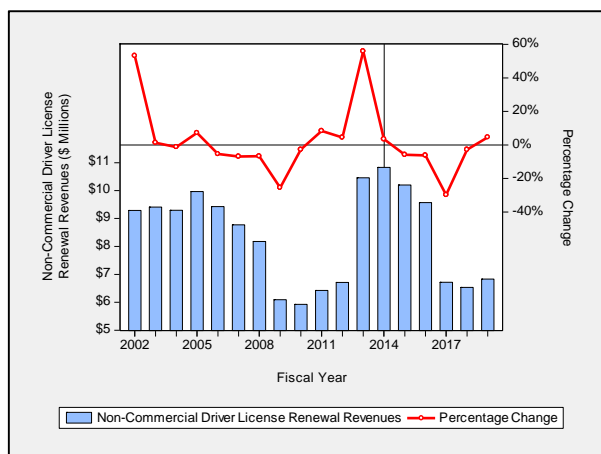
Driver Revenues

Driver revenue includes original issuance, renewal, and replacement, commercial and non-commercial licenses and permits, testing fees and other associated fees. Revenues, as shown in row 2, totaled \$33.1 million in FY13, an increase of 11.4 percent over FY12 as non-commercial license renewals surged. Revenue growth in the forecast period is expected to be positive through FY15 then decline through FY18. The shift from a four-to eight-year renewal cycle for commercial and non-commercial licenses is the root cause for the decline in revenue growth in FY16 through FY18. For example, the large increase in FY13 is from licenses renewed for eight years beginning in October of 2004 and expiring in October of 2012. As Figure 12 shows below, the number of eight-year renewals peaked in early 2005, and fell steadily through 2008. This is the dominant factor for the overall decline in revenues toward the end of the forecast horizon. While this cycle will continue to repeat itself into the future, growth in revenues controlling for this fluctuation will depend on the renewal rate of license holders.

As noted above, a factor weighing on the accuracy of the forecast is the non-commercial driver license renewal rate. Licenses that

were issued/renewed in October of 2000 or later were issued/renewed for an eight year period instead of the previous four year period. These licenses began expiring in October of 2008. What the average renewal rate would be from this shift to an eight year cycle, was, and still is a relevant consideration. Currently the renewal rate is about 67 percent, higher than our original expectation of 63 percent and equal to the previous forecast value.

Figure 12: Non-Commercial Driver License Renewal Revenues



A final issue is the legislative changes impacting an individual’s ability to obtain, renew, or replace a license, permit, or ID card. SB 1080, enrolled during the 2008 Special Session, required an individual who was seeking issuance or renewal of a driver license, permit, or ID Card to provide proof of legal presence in the United States and a valid Social Security number along with other standard requirements. This important change provided a prohibitive barrier to some and has led to a drop in the number of transactions for licenses, permits, and ID Cards.

SB 833, enrolled during the 2013 Session, provides some relief from this requirement for potential drivers. It allows an individual who can prove they have been a resident in Oregon for at least a year, and can meet the other standard requirements, the opportunity to

obtain a driver card, which would grant the individual legal driving privileges. This only applies to individuals seeking issuance, renewal, or replacement of a class C non-commercial driving privilege and not an ID Card or a commercial endorsement. The cost of the card is \$64 plus the \$6 Student Driver Training Fund fee, and the card is valid for four years. This new law’s effective date is now presumed to be December 4th, 2014. This is a result of a successful referendum effort to repeal it, which postponed the original implementation date that was January 1, 2014. Voters will decide in November whether this law will be repealed or not.

Once implemented, the impact of SB 833 is for an initial spike in driver cards as those who seek legal driving privileges and were unable to get a license during the 2008-2014 period are now able to apply for a card followed by a steady state amount until FY19 when renewals from the first issuances of the driver cards are processed. The backlog is expected to last three quarters, as individuals must schedule an appointment to apply for a driver card and DMV has anticipated three quarters to clear this backlog of customers. If this expected pent up demand materializes it will create an ongoing surge in renewals every four years beginning in FY19.

Vehicle Title and Other Revenues

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, used vehicle transactions, as well as salvage titles and all other DMV transactions not elsewhere included such as vehicle trip permits, plate manufacturing revenue, and vehicle and driver record sales. The largest component of the titles section is title transfers, accounting for over 50 percent of revenues in this group. Revenues, as shown in row 3 of Table 4, for FY13 were \$94.6 million, an 8.0 percent increase over FY12. FY14 revenues are

expected to be \$96.8 million, a 2.3 percent increase over FY12. Roughly \$5 million of the FY13 increase is due to the increase in the RADR employment driver record fees, shown row 9 of Table 4 below. The remainder of the increase is due to an uptick in vehicle sales, both new and used. Beyond FY13 growth is expected to average 0.8 percent per year with slightly negative growth in FY18 and FY19.

Figure 13: Vehicle Title Transfer Revenues

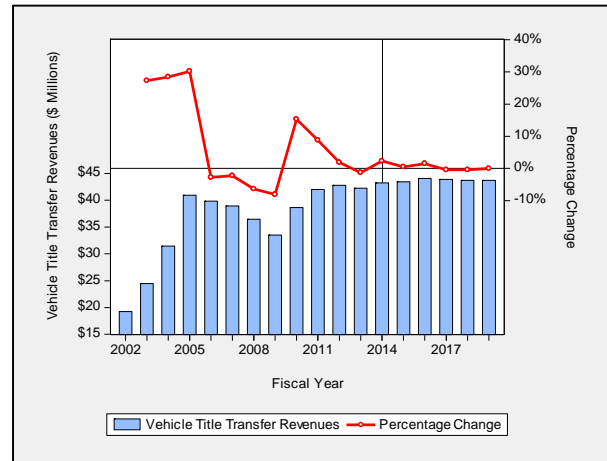


Table 4: Highway Fund Revenue Collected by DMV (Millions of Dollars)

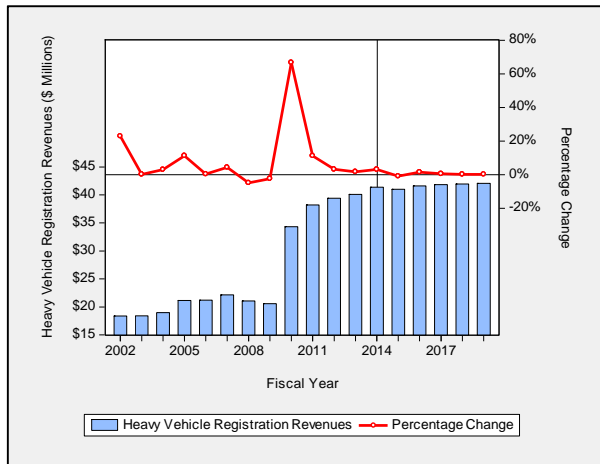
	Actual		Forecast						Actual BI 11-13	Forecast		
	FY 12	FY 13	FY 14	FY 15	FY 16	FY 17	FY 18	FY 19		BI 13-15	BI 15-17	BI 17-19
1 VEHICLE REGISTRATIONS	\$181.0	\$181.7	\$180.4	\$180.2	\$183.7	\$184.2	\$185.4	\$185.1	\$362.7	\$360.6	\$368.0	\$370.5
2 DRIVER LICENSES & OTHER	\$29.1	\$33.1	\$33.9	\$36.4	\$35.4	\$31.3	\$31.2	\$32.5	\$62.2	\$70.3	\$66.7	\$63.7
3 TITLE, PLATE & OTHER	\$87.6	\$94.6	\$96.8	\$97.5	\$99.6	\$100.2	\$99.8	\$99.5	\$182.2	\$194.3	\$199.8	\$199.4
4 TOTAL DMV COLLECTIONS	\$297.7	\$309.5	\$311.1	\$314.1	\$318.7	\$315.7	\$316.4	\$317.1	\$607.2	\$625.2	\$634.4	\$633.5
5 Change from Previous Forecast	\$0.1	\$1.3	\$0.3	\$1.1	\$0.8	\$0.3	NA	NA	\$1.3	\$1.4	\$1.0	NA
6 COLLECTION/ADMINISTRATION & PROGRAM COST	(\$74.9)	(\$76.4)	(\$80.7)	(\$82.3)	(\$87.0)	(\$88.8)	(\$93.9)	(\$95.8)	(\$151.2)	(\$163.1)	(\$175.9)	(\$189.6)
7 TRAFFIC SAFETY TRANSFER	(\$0.5)	(\$0.5)	(\$0.5)	(\$0.5)	(\$0.5)	(\$0.5)	(\$0.6)	(\$0.6)	(\$0.9)	(\$1.0)	(\$1.1)	(\$1.2)
8 DEPARTMENT OF EDUCATION TRANSFER	(\$0.1)	\$0.0	(\$0.1)	\$0.0	(\$0.1)	\$0.0	(\$0.1)	\$0.0	(\$0.1)	(\$0.1)	(\$0.1)	(\$0.1)
9 E-GOV RECORDS INCREMENTAL REVENUE TRANSFER	(\$0.6)	(\$5.6)	(\$5.3)	(\$5.1)	(\$5.3)	(\$5.6)	(\$5.6)	(\$5.6)	(\$6.2)	(\$10.4)	(\$10.9)	(\$11.3)
10 DRIVER CARD REVENUE TRANSFER	\$0.0	\$0.0	\$0.0	(\$2.7)	(\$2.0)	(\$0.8)	(\$0.8)	(\$1.8)	\$0.0	(\$2.7)	(\$2.8)	(\$2.6)
11 ODOT CENTRAL SERVICES ASSESSMENT	(\$23.4)	(\$23.9)	(\$24.2)	(\$24.7)	(\$25.0)	(\$25.5)	(\$25.9)	(\$26.4)	(\$47.3)	(\$48.9)	(\$50.6)	(\$52.3)
12 NET DMV REVENUE	\$198.3	\$203.2	\$200.3	\$198.7	\$198.7	\$194.5	\$189.5	\$186.9	\$401.5	\$399.0	\$393.2	\$376.4
13 REVENUE SET-ASIDE TO OTIA I & II - memo	(\$6.9)	(\$7.4)	(\$7.0)	(\$7.0)	(\$6.9)	(\$6.6)	(\$0.5)	\$0.0	(\$14.3)	(\$14.0)	(\$13.5)	(\$0.5)
14 REVENUE PLEDGED TO OTIA III - memo	(\$72.6)	(\$73.3)	(\$75.2)	(\$75.8)	(\$77.1)	(\$77.1)	(\$77.3)	(\$77.1)	(\$145.9)	(\$151.0)	(\$154.3)	(\$154.4)
15 REVENUE DUE TO JTA (HB 2001) - memo	(\$95.7)	(\$96.8)	(\$98.9)	(\$99.7)	(\$101.7)	(\$102.1)	(\$102.4)	(\$102.2)	(\$192.5)	(\$198.6)	(\$203.8)	(\$204.6)

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 shows the amount of weight-mile and flat fee revenues collected each fiscal year. In FY13, weight-mile and flat-fee revenues totaled \$259.7 million, increasing slightly over FY12. FY14 is expected to see strong growth averaging 6.7 percent, kicked off by a strong first quarter of FY14, followed by slower growth through the remainder of the forecast. Overall, growth is expected to average 3.2 percent through FY19.

Figure 14: Heavy Vehicle Registration Revenues



Row 2 of Table 5 shows heavy vehicle registration fee revenues. The chart in the accompanying Figure 14 portrays the forecast here. 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 \$40.1 million in FY13, a 1.8 percent increase over FY12. Revenues are expected to grow slowly throughout the forecast, averaging 0.8 percent per year.

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 Local Fund fee increments from the commercial driver permits, licenses, and tests, along with weight receipts. Overall, the total of these heavy vehicle revenues were \$9.8 million in FY13, a 4.2 percent increase over FY12 resulting from a boost in temporary pass revenue. Beyond FY 13, growth is expected to average 3.1 percent between FY13 and FY19.

Row 4 reports the total gross revenues for the Motor Carrier Division and row 5 the change from the prior forecast. Overall gross revenues are expected to grow at a 2.9 percent annual rate through FY19, but are lower than the previous forecast, totaling \$4.1 million less with weight-mile as the primary contributor for this shortfall. However, as noted above weight-mile ended FY13 stronger and has started FY14 significantly stronger than the previous forecast. In the prior forecast, we expected continued slow growth in weight-mile though calendar year 2014 and strong growth in 2015 and 2016. With the strong growth seen currently in FY14, it is no longer expected that there will be an additional bump in growth in 2015 or 2016, rather a more steady growth path. This leads to stronger growth early in FY14, but slower growth in FY15 and FY16, while roughly the same growth in FY17 as compared to the prior forecast.

Row 9 reports the revenues net of collection costs. Net revenues totaled \$272.0 million in FY13. Beyond FY13, growth is expected at an annual rate of 3.0 percent through the remainder of the forecast period. Collection and administration costs, as shown in rows 6 and 8, are expected to increase throughout the forecast, averaging 3.9 percent per biennia.

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

	Actual		Forecast						Actual	Forecast		
	FY 12	FY 13	FY 14	FY 15	FY 16	FY 17	FY 18	FY 19	BI 11-13	BI 13-15	BI 15-17	BI 17-19
1 WEIGHT-MILE TAX	\$257.8	\$259.7	\$277.2	\$285.2	\$294.1	\$300.9	\$307.1	\$313.4	\$517.5	\$562.5	\$595.0	\$620.5
2 IRP & COMMERCIAL VEHICLE REGISTRATIONS*	\$39.4	\$40.1	\$41.4	\$41.0	\$41.6	\$41.9	\$42.0	\$42.1	\$79.5	\$82.4	\$83.5	\$84.0
3 RUAF, PERMITS, PASSES & CREDENTIALS**	\$9.4	\$9.8	\$9.8	\$10.2	\$10.9	\$11.0	\$11.4	\$11.7	\$19.2	\$20.0	\$21.9	\$23.1
4 TOTAL MCTD COLLECTIONS	\$306.6	\$309.6	\$328.4	\$336.5	\$346.6	\$353.8	\$360.4	\$367.2	\$616.2	\$664.9	\$700.4	\$727.6
5 Change from Previous Forecast	\$0.0	\$1.9	\$9.7	(\$0.0)	(\$8.2)	(\$7.5)	NA	NA	\$1.9	\$9.7	(\$15.7)	NA
6 COLLECTION/ADMINISTRATION & PROGRAM COST	(\$29.3)	(\$29.9)	(\$29.7)	(\$30.3)	(\$30.1)	(\$30.7)	(\$30.4)	(\$31.0)	(\$59.3)	(\$60.0)	(\$60.7)	(\$61.5)
7 IFTA BUDGETED EXPENDITURES***	\$1.1	\$1.1	\$1.1	\$1.1	\$1.1	\$1.1	\$1.1	\$1.1	\$2.2	\$2.2	\$2.2	\$2.2
8 ODOT CENTRAL SERVICES ASSESSMENT	(\$8.6)	(\$8.8)	(\$9.7)	(\$9.9)	(\$10.8)	(\$11.0)	(\$12.1)	(\$12.3)	(\$17.4)	(\$19.5)	(\$21.8)	(\$24.4)
9 NET MCTD REVENUE	\$269.7	\$272.0	\$290.1	\$297.5	\$306.8	\$313.2	\$319.0	\$324.9	\$541.7	\$587.6	\$620.0	\$643.9
10 REVENUE SET-ASIDE TO OTIA I & II - memo	(\$9.0)	(\$9.0)	(\$9.4)	(\$9.4)	(\$9.5)	(\$9.6)	(\$1.7)	\$0.0	(\$18.0)	(\$18.7)	(\$19.1)	(\$1.7)
11 REVENUE PLEDGED TO OTIA III - memo	(\$27.2)	(\$27.5)	(\$29.1)	(\$29.6)	(\$30.4)	(\$31.0)	(\$31.5)	(\$32.0)	(\$54.6)	(\$58.7)	(\$61.4)	(\$63.4)
12 REVENUE DUE TO JTA (HB 2001) - memo	(\$72.0)	(\$72.7)	(\$76.7)	(\$78.2)	(\$80.3)	(\$81.8)	(\$83.1)	(\$84.5)	(\$144.6)	(\$154.9)	(\$162.1)	(\$167.6)

*IRP: International Registration Plan.

**RUAF: Road Use Assessment Fees.

***IFTA: International Fuel Tax Agreement.

Motor Fuels Tax Revenues

The Central Services Division–Financial Services Branch collects fuel tax revenues. Fuel tax collections are contained in Table 6. The fuel tax revenue forecasts continue to be reasonably accurate, once the forecasting model is evaluated for misses in the macroeconomic forecast. This is despite the price volatility in petroleum markets for nearly the past decade. While actual revenues versus forecast revenues for the past several years have been typically within about plus/minus 2 percent, the disparity has magnified somewhat with the economic and financial turbulence from late 2007 to the first half of 2011. Fortunately, the forecasts have regained better tracking performance of late, further testament that the worst of the economic contraction and volatility are hopefully behind us. Recent forecast performance has been coming in at about only a 1 percent relative error.

For the first time since 1993, there has been a change in the fuels tax rate. So, unlike discussions on fuel tax revenues for the past 18 years, there is finally a distinction in our narrative between gallons consumed and the revenue generated from those sales. HB 2001 changed the forecast landscape appreciably and the fuel tax revenue outlook no longer mimics the fuel consumption forecast laid out above. Moreover, there is always the caveat that the gallons forecast was stated in terms of calendar years in order to correspond more closely with the narrative on the state and national economic backdrop, whereas the context of motor fuels revenue is in terms of fiscal years.

The current forecast shows a minute diminution in fuel tax revenue for FY14 from the prior forecast conducted in June 2013. It is down by \$1.6 million, or approximately 0.3 percent; very nearly unchanged in other words. The JTA didn't affect fuel tax

revenues until mid-way through FY11. The new forecast has motor fuels tax revenues somewhat below prior forecasts for the years FY14 through FY17. On average, revenues are only about \$5.5 million lower per year for the forecast interval.

Over the forecast period out to FY19, motor fuel revenues grow at an annual average pace of 1.9 percent. The June 2013 forecast had an annual average rate through FY17 of 2.4 percent. In the present outlook, the comparable growth through FY17 only is 2.1 percent on average.

Collection and program administration costs for the Fuels Tax Group 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. With an average annual base of approximately \$523 million over the forecast interval of FY14 to FY19, fuels tax collections generate the single largest amount of revenue for the Highway Fund, almost 45 percent before collection and program costs. Each penny of gas tax generates about \$17.5 million gross and \$16.8 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 \$27.4 million gross and slightly more than \$26.7 million net a year.

It is important to recognize the predictive capability of the foregoing “yield” results from motor fuel taxes and weight-mile levies on heavy trucks. 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 sensitivity effects are likely to cause a diminution in expected revenue yield. Moreover, as advanced in the motor fuels transaction narrative, sensitivities to permanent tax rate changes are most likely

higher than for strict price changes. Direct analysis on a case by case basis is strongly recommended over applying “rules of thumb” in instances of more than one cent increments. Further illustrations of this point appear at pages 16-18 in the context of several DMV products.

2013 Legislative Session

There were no initiatives in the session directed at enhancing fuel tax revenues, as there was in 2009. There were two, however, that do affect fuel tax revenues. The first, HB 2435 provides exemption from use-fuel excise taxes for the use of a bio-diesel (B20). The second relates to a pilot program that will launch a very significant path toward restructuring the way in which user taxes are assessed on light duty vehicles and medium heavy trucks (gross weight up to 26,001 pounds). A brief discussion of each is provided below.

HB 2435

HB 2435 exempts vehicles up to 26,001 pounds (gross vehicle weight) from paying the use-fuel excise tax if the vehicle is fueled using B20 biodiesel (made up of 1 part bio-fuel and 4 parts traditional petro-diesel). The fuel tax rate is 30 cents per gallon for petro-diesel. While biodiesel can be formulated from a variety of feed stocks, the legislation limits it to used cooking oil, which belongs to a large group of Fatty Acid Methyl Esters (FAME’s). The tax exemption is to commence January 1, 2014, and sunsets on December 31, 2019 under this legislation.

Revenue impacts from the use of B20 and its tax exempt status are highly uncertain at this time, given the lack of detailed information about the industry and supply conditions. Conservative estimates gauge the revenue loss of at least \$1.5 million approximately per year at this juncture. More refined data starting in the FY15 time frame will presumably permit

more precise estimates of the revenue shortfall due to this legislation.

It is noteworthy to recognize that light duty and medium heavy vehicles still impose the same costs on the State Highway Network, as well as on local roadways. Using B20 instead of all petro-diesel does not mitigate or avoid the system costs imposed by these two classes of vehicles. However, fuel tax revenue attributed to B20 biodiesel vehicles is eliminated. This starts to distort the revenue/cost ratio (Highway Cost Allocation Study’s “equity ratios”) for the light duty vehicle class and the medium heavy vehicle class, and creates a new obstacle toward meeting the State Constitutional mandate for the HCAS and setting fees and user taxes for broad vehicle classes that maintain parity between revenues generated and cost causation.

SB 810 Road User Charge (RUC) Project

SB 810 institutes a road user tax based on miles driven in Oregon, rather than a fuels tax charge for gallons consumed. The bill essentially authorizes the creation of a program of charging voluntary participants using the state’s highway/streets network 1.5 cents per mile of travel, instead of the statutory fuel tax of 30 cents per gallon. [Oregon was the first in the nation to implement a motor fuels tax, in 1919 at 1 cent per gallon.] The bill authorizes a spending limitation to put the necessary administrative rules and supporting systems in place, beginning in the fall of 2013. The legislation directs the operational phase of the program to be up and running by July 1, 2015 – or the beginning of FY16. This would be the second half of the 2015-17 biennium. As a result there are no revenue implications for the current biennium.

The plan caps the voluntary participation at 5,000 light duty vehicles (those less than 10,001 pounds). The 5,000 participation limit

is segmented into three vehicle groups: Up to 1,500 eligible vehicles with fuel efficiency capabilities below 17 miles per gallon (MPG); up to 1,500 eligible vehicles of 17 to 22 MPG; and the balance (up to 2,000) with fuel efficiencies in excess of 22 MPG. Generally, vehicles with an efficiency of less than 17 MPG would pay lower user taxes under the RUC than what would be paid under the fuels tax structure. Those with efficiencies in excess of 22 MPG would pay more under a RUC tax structure than would be incurred under the fuels tax. The RUC applies only to those miles driven in Oregon.

The revenue impacts from the up-to-5,000 participant vehicles in the program once it becomes operational in FY16 are quite muted, as well as being somewhat speculative at this juncture. The actual revenue impacts rests ultimately on the vehicle types and comparative penetrations into three vehicle groups of eligible participants. The revenue outcome, however, is the result of two revenue streams: Those revenues that are generated by the 1.5 cents per mile road tax, and revenues foregone or not realized from reduced receipts from fuel tax payments avoided. [The exemption from paying the fuels tax can be executed by either making a request for a tax refund to ODOT for fuel taxes paid by participants, or the display of an ODOT issued emblem to be exempt from paying the tax at the point of sale.]

Simple break-even analysis indicates that participation in the pilot should skew toward lower MPG vehicles (less than 17 MPG), and away from high efficiency vehicles – subject to the cap restrictions. This would result in reduced fuel tax receipts, offset by the revenues from the mileage tax of 1.5 cents per mile. In the net, it is anticipated that lower overall revenues would result in the program. In the first year of operation (FY16), nearly \$100,000 in user tax revenue is foregone. In the later years of the pilot, lost revenue is on the order of \$250,000 annually. [These are mostly years beyond the current forecast horizon that ends in FY19.]

SB 810 specifies a 50/30/20 apportionment of the “moneys collected from the road usage charges” to the State Highway Fund, counties, and municipalities, respectively. By itself, this would not reflect lost revenues from foregone fuel tax. The estimated gross revenue from vehicles in the RUC program is approximately \$600,000 per year in its fourth year (FY19). So, the state apportionment share would be only \$300,000 annually. Ultimately, however, the reduced fuel tax revenue would register with lower base and lower JTA fuel tax revenues and trickle through to slightly decreased apportionments under the traditional apportionment shares for net fuel-based tax revenue.

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

	Actual		Forecast						Actual BI 11-13	Forecast		
	FY 12	FY 13	FY 14	FY 15	FY 16	FY 17	FY 18	FY 19		BI 13-15	BI 15-17	BI 17-19
1 MOTOR FUELS TAXES	\$490.8	\$487.2	\$498.2	\$510.2	\$520.7	\$530.6	\$539.2	\$546.9	\$978.0	\$1,008.4	\$1,051.3	\$1,086.1
2 TOTAL FSB COLLECTIONS	\$490.8	\$487.2	\$498.2	\$510.2	\$520.7	\$530.6	\$539.2	\$546.9	\$978.0	\$1,008.4	\$1,051.3	\$1,086.1
3 Change from Previous Forecast	\$0.0	\$1.5	(\$1.6)	(\$8.5)	(\$7.3)	(\$4.5)	NA	NA	\$1.5	(\$10.1)	(\$11.7)	NA
4 COLLECTION/ADMINISTRATION COST	(\$1.5)	(\$1.6)	(\$1.5)	(\$1.5)	(\$1.5)	(\$1.6)	(\$1.5)	(\$1.6)	(\$3.1)	(\$3.1)	(\$3.1)	(\$3.1)
5 ODOT CENTRAL SERVICES ASSESSMENT	(\$0.2)	(\$0.2)	(\$0.2)	(\$0.2)	(\$0.2)	(\$0.2)	(\$0.2)	(\$0.2)	(\$0.5)	(\$0.4)	(\$0.4)	(\$0.3)
6 SNOWMOBILE TRANSFER	(\$0.8)	(\$0.7)	(\$0.8)	(\$0.8)	(\$0.8)	(\$0.8)	(\$0.8)	(\$0.9)	(\$1.5)	(\$1.5)	(\$1.6)	(\$1.7)
7 CLASS I ATV TRANSFER	(\$3.2)	(\$2.9)	(\$3.1)	(\$3.3)	(\$3.5)	(\$3.7)	(\$3.9)	(\$4.2)	(\$6.0)	(\$6.3)	(\$7.2)	(\$8.2)
8 MARINE BOARD TRANSFER	(\$5.1)	(\$5.0)	(\$5.0)	(\$5.0)	(\$5.0)	(\$5.0)	(\$5.0)	(\$5.0)	(\$10.0)	(\$10.0)	(\$10.0)	(\$9.9)
9 CLASS II ATV TRANSFER	(\$1.1)	(\$1.0)	(\$1.1)	(\$1.1)	(\$1.2)	(\$1.3)	(\$1.4)	(\$1.5)	(\$2.1)	(\$2.2)	(\$2.5)	(\$2.9)
10 CLASS III ATV TRANSFER	(\$1.1)	(\$1.0)	(\$1.0)	(\$1.1)	(\$1.1)	(\$1.2)	(\$1.2)	(\$1.3)	(\$2.1)	(\$2.1)	(\$2.3)	(\$2.5)
11 CLASS IV ATV TRANSFER	(\$0.2)	(\$0.3)	(\$0.3)	(\$0.3)	(\$0.3)	(\$0.3)	(\$0.4)	(\$0.4)	(\$0.4)	(\$0.6)	(\$0.7)	(\$0.7)
12 TRANSPORTATION OPERATING FUND (TOF)	(\$5.4)	(\$5.4)	(\$5.4)	(\$5.5)	(\$5.5)	(\$5.6)	(\$5.6)	(\$5.7)	(\$10.8)	(\$10.9)	(\$11.1)	(\$11.3)
13 AVIATION TRANSFER	(\$0.1)	(\$0.1)	(\$0.1)	(\$0.1)	(\$0.1)	(\$0.1)	(\$0.1)	(\$0.1)	(\$0.3)	(\$0.3)	(\$0.3)	(\$0.3)
14 HB 2435 (2013 Session) B20 FUEL TAX EXEMPTION	\$0.0	\$0.0	(\$0.5)	(\$1.5)	(\$1.5)	(\$1.5)	\$0.0	\$0.0	\$0.0	(\$2.0)	(\$2.9)	\$0.0
15 NET FSB REVENUE	\$472.1	\$469.0	\$479.3	\$489.8	\$499.9	\$509.3	\$519.0	\$526.2	\$941.1	\$969.1	\$1,009.3	\$1,045.2
16 REVENUE ALLOCATION TO OTIA I & II SET-ASIDE - memo	(\$19.6)	(\$19.3)	(\$19.2)	(\$19.2)	(\$19.1)	(\$19.3)	(\$1.7)	\$0.0	(\$38.9)	(\$38.3)	(\$38.4)	(\$1.7)
17 REVENUE PLEDGED TO OTIA III - memo	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
18 REVENUE DUE TO JTA (HB 2001) - memo	(\$98.2)	(\$97.5)	(\$99.7)	(\$102.1)	(\$104.2)	(\$106.1)	(\$107.8)	(\$109.4)	(\$195.7)	(\$201.8)	(\$210.3)	(\$217.2)

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” at <http://www.oregon.gov/ODOT/TD/EA/reports.shtml>.

Figure 15 highlights the impact of the JTA revenues on the current forecast. As discussed on page 20 under the JTA section, beginning in October of 2009 revenues from the increases in DMV fees began accruing, followed by early payment of heavy vehicle registrations in November and December of 2009. The rest of the heavy vehicle registration increases began in January 2010, totaling \$81.1 million in FY10. In October of 2010 the increase in the weight-mile, flat fee, and road user assessment fees took effect, but as with the heavy vehicle registrations, the full revenue impact was not seen the month the fees are increased. Instead a small portion of revenue received in October were the new JTA fees, while most of November and virtually all revenue from December forward were at JTA fee rates. The final piece of the JTA was the motor fuels tax increase implemented in January 2011. Total gross JTA revenues for FY11 totaled \$198.0 million, which only contained a partial year of the fuel tax increase. The first full year of JTA revenues was FY12, and revenues totaled \$265.9 million. Revenues grew slightly in

FY13, totaling \$267.0 million. In the forecast horizon, JTA revenues are expected to increase, with growth averaging 1.7 percent annually, 0.2 percentage points slower than the previous forecast.

Also shown in Figure 15 is a comparison of the December 2013 forecast to the December 2008 forecast with the JTA revenues removed. This apples-to-apples comparison shows that the current gross highway fund forecast is expected to generate a reduced amount of revenue over the December 2008 forecast (red line), averaging \$110.7 million less per year covering the period from FY12 through FY15 when the JTA revenues are removed (blue line). The primary cause for the disparity in revenues is the rapid deterioration of economic conditions that reduced the demand for motor fuels and related trucking activity over what was expected in the December 2008 forecast. We use the December 2008 forecast for comparison as it was the last forecast produced prior to the inclusion of the JTA legislation in the revenue outlook and therefore provides a useful benchmark for comparison to our current forecast.

Figure 15: JTA Revenue Impact

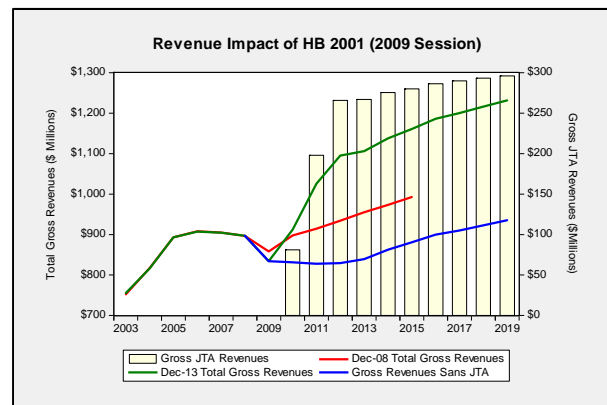


Table 7A: Highway Fund Revenue by Fiscal Year and Biennium (Millions of Dollars)

	Actual		Forecast						Actual BI 11-13	Forecast		
	FY 12	FY 13	FY 14	FY 15	FY 16	FY 17	FY 18	FY 19		BI 13-15	BI 15-17	BI 17-19
1 TOTAL MCTD COLLECTIONS	\$306.6	\$309.6	\$328.4	\$336.5	\$346.6	\$353.8	\$360.4	\$367.2	\$616.2	\$664.9	\$700.4	\$727.6
2 TOTAL FSB COLLECTIONS	\$490.8	\$487.2	\$498.2	\$510.2	\$520.7	\$530.6	\$539.2	\$546.9	\$978.0	\$1,008.4	\$1,051.3	\$1,086.1
3 TOTAL DMV COLLECTIONS	\$297.7	\$309.5	\$311.1	\$314.1	\$318.7	\$315.7	\$316.4	\$317.1	\$607.2	\$625.2	\$634.4	\$633.5
4 TOTAL GROSS HIGHWAY FUND	\$1,095.1	\$1,106.3	\$1,137.7	\$1,160.8	\$1,186.0	\$1,200.0	\$1,216.0	\$1,231.2	\$2,201.4	\$2,298.5	\$2,386.1	\$2,447.2
5 COLLECTION, PROGRAMS, & TRANSFERS (incl.obligated OTIA & JTA)	(\$498.4)	(\$511.3)	(\$528.4)	(\$539.9)	(\$552.6)	(\$558.4)	(\$567.1)	(\$574.1)	(\$1,009.7)	(\$1,068.4)	(\$1,111.0)	(\$1,141.2)
6 NET REVENUE TO HIGHWAY FUND	\$596.6	\$595.1	\$609.3	\$620.9	\$633.4	\$641.6	\$648.9	\$657.1	\$1,191.7	\$1,230.2	\$1,275.0	\$1,306.0
7 OTIA I & II SET ASIDE - memo	\$35.6	\$35.6	\$35.6	\$35.6	\$35.6	\$35.6	\$35.6	\$35.6	\$71.2	\$71.2	\$71.2	\$71.2
8 DEBT SERVICE (OTIA I & II) - memo	(\$32.8)	(\$33.4)	(\$33.2)	(\$35.1)	(\$32.1)	(\$27.7)	(\$27.7)	(\$27.7)	(\$66.2)	(\$68.3)	(\$59.9)	(\$55.5)
9 OTIA III Dedicated Revenues - memo	\$92.9	\$93.8	\$96.9	\$97.8	\$99.9	\$100.6	\$101.3	\$101.6	\$186.7	\$194.7	\$200.6	\$202.8
10 DEBT SERVICE (OTIA III) - memo	(\$112.2)	(\$111.8)	(\$114.1)	(\$118.3)	(\$120.4)	(\$99.5)	(\$94.2)	(\$94.2)	(\$224.0)	(\$232.4)	(\$219.8)	(\$188.5)
11 JTA Total Gross Revenues - memo	\$265.9	\$267.0	\$275.3	\$279.9	\$286.2	\$290.0	\$293.3	\$296.0	\$532.8	\$555.2	\$576.1	\$589.4
12 JTA Allocation for Long-Range Planning and TIC Transfers - memo	(\$27.0)	(\$24.0)	(\$24.0)	(\$24.0)	(\$24.0)	(\$24.0)	(\$24.0)	(\$24.0)	(\$51.0)	(\$48.0)	(\$48.0)	(\$48.0)
13 DEBT SERVICE (JTA) - State Only - memo	\$0.0	\$0.0	(\$20.5)	(\$27.4)	(\$43.2)	(\$54.4)	(\$54.4)	(\$54.4)	\$0.0	(\$47.9)	(\$97.6)	(\$108.8)
14 Oregon Travel Experience Transfer - State Only - memo	(\$0.5)	(\$5.0)	(\$6.6)	(\$6.6)	(\$6.6)	(\$6.6)	(\$6.6)	(\$6.6)	(\$5.4)	(\$13.1)	(\$13.1)	(\$13.1)
15 E-GOV Records Incremental Revenue Transfer - memo	(\$0.6)	(\$5.6)	(\$5.3)	(\$5.1)	(\$5.3)	(\$5.6)	(\$5.6)	(\$5.6)	(\$6.2)	(\$10.4)	(\$10.9)	(\$11.3)
16 Driver Card Revenue Transfer - memo	\$0.0	\$0.0	\$0.0	(\$2.7)	(\$2.0)	(\$0.8)	(\$0.8)	(\$1.8)	\$0.0	(\$2.7)	(\$2.8)	(\$2.6)
17 NET OTIA I & II REVENUE FOR DISTRIBUTION	\$2.8	\$2.2	\$2.4	\$0.5	\$3.5	\$7.9	\$7.9	\$7.9	\$5.0	\$2.9	\$11.3	\$15.7
18 NET OTIA III REVENUE FOR DISTRIBUTION - LOCAL	\$31.0	\$42.3	\$43.9	\$44.6	\$45.5	\$45.7	\$45.9	\$46.1	\$73.2	\$88.6	\$91.2	\$92.0
19 NET OTIA III REVENUE FOR DISTRIBUTION -STATE	(\$43.4)	(\$53.3)	(\$53.8)	(\$57.5)	(\$58.3)	(\$37.0)	(\$31.4)	(\$31.2)	(\$96.7)	(\$111.3)	(\$95.3)	(\$62.7)
20 NET JTA REVENUE FOR DISTRIBUTION - LOCAL	\$119.4	\$121.5	\$125.7	\$128.0	\$131.1	\$133.0	\$134.7	\$136.0	\$240.9	\$253.6	\$264.1	\$270.7
21 NET JTA REVENUE FOR DISTRIBUTION ABOVE D/S -STATE	\$61.2	\$62.3	\$43.9	\$38.1	\$24.0	\$13.7	\$14.6	\$15.3	\$123.5	\$82.1	\$37.7	\$29.9
22 TOTAL NET REVENUE FOR DISTRIBUTION	\$767.7	\$770.0	\$771.4	\$774.6	\$779.2	\$804.8	\$820.6	\$831.1	\$1,537.6	\$1,546.0	\$1,584.1	\$1,651.7

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

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

	Distribution Percentage	Actual		Forecast						Actual	Forecast			
		FY 12	FY 13	FY 14	FY 15	FY 16	FY 17	FY 18	FY 19	BI 11-13	BI 13-15	BI 15-17	BI 17-19	
1	COUNTY APPORTIONMENT (ORS 366.739)	24.38%	\$131.4	\$131.9	\$135.2	\$137.8	\$140.5	\$142.2	\$143.8	\$145.6	\$263.2	\$273.0	\$282.7	\$289.4
2	SPECIAL COUNTY (ORS 366.772)		(\$0.5)	(\$0.5)	(\$0.5)	(\$0.5)	(\$0.5)	(\$0.5)	(\$0.5)	(\$0.5)	(\$1.0)	(\$1.0)	(\$1.0)	(\$1.0)
4	COUNTY APPORTIONMENT (OTIA I & II)	30.00%	\$0.9	\$0.6	\$0.7	\$0.2	\$1.0	\$2.4	\$2.4	\$2.4	\$1.5	\$0.9	\$3.4	\$4.7
5	COUNTY APPORTIONMENT (OTIA III)	25.48%	\$23.7	\$23.9	\$24.7	\$24.9	\$25.5	\$25.6	\$25.8	\$25.9	\$47.6	\$49.6	\$51.1	\$51.7
6	DEBT SERVICE (OTIA III)	84.07%	(\$12.9)	(\$3.8)	(\$3.8)	(\$3.8)	(\$3.8)	(\$3.8)	(\$3.8)	(\$3.8)	(\$16.8)	(\$7.7)	(\$7.7)	(\$7.7)
7	COUNTY APPORTIONMENT (OTIA III-Local)	60.00%	\$4.1	\$4.2	\$4.4	\$4.6	\$4.6	\$4.5	\$4.5	\$4.5	\$8.3	\$9.0	\$9.1	\$9.0
8	COUNTY APPORTIONMENT (JTA)	30.00%	\$71.7	\$72.9	\$75.4	\$76.8	\$78.7	\$79.8	\$80.8	\$81.6	\$144.6	\$152.2	\$158.4	\$162.4
9	NET COUNTY APPORTIONMENT		\$218.3	\$229.1	\$236.1	\$239.9	\$245.8	\$250.2	\$252.9	\$255.6	\$447.4	\$475.9	\$496.0	\$508.6
10	CITY APPORTIONMENT (ORS 366.739)	15.57%	\$83.9	\$84.2	\$86.3	\$88.0	\$89.7	\$90.8	\$91.8	\$93.0	\$168.1	\$174.3	\$180.5	\$184.8
11	SPECIAL CITY (ORS 366.805)		(\$0.5)	(\$0.5)	(\$0.5)	(\$0.5)	(\$0.5)	(\$0.5)	(\$0.5)	(\$0.5)	(\$1.0)	(\$1.0)	(\$1.0)	(\$1.0)
12	CITY APPORTIONMENT (OTIA I & II)	20.00%	\$0.6	\$0.4	\$0.5	\$0.1	\$0.7	\$1.6	\$1.6	\$1.6	\$1.0	\$0.6	\$2.3	\$3.1
13	CITY APPORTIONMENT (OTIA III)	16.99%	\$15.8	\$15.9	\$16.5	\$16.6	\$17.0	\$17.1	\$17.2	\$17.3	\$31.7	\$33.1	\$34.1	\$34.5
14	DEBT SERVICE (OTIA III)	15.93%	(\$2.4)	(\$0.7)	(\$0.7)	(\$0.7)	(\$0.7)	(\$0.7)	(\$0.7)	(\$0.7)	(\$3.2)	(\$1.5)	(\$1.5)	(\$1.5)
15	CITY APPORTIONMENT (OTIA III-Local)	40.00%	\$2.7	\$2.8	\$2.9	\$3.1	\$3.1	\$3.0	\$3.0	\$3.0	\$5.5	\$6.0	\$6.0	\$6.0
16	CITY APPORTIONMENT (JTA)	20.00%	\$47.8	\$48.6	\$50.3	\$51.2	\$52.4	\$53.2	\$53.9	\$54.4	\$96.4	\$101.4	\$105.6	\$108.3
17	NET CITY APPORTIONMENT		\$147.8	\$150.7	\$155.2	\$157.7	\$161.6	\$164.5	\$166.3	\$168.0	\$298.6	\$313.0	\$326.1	\$334.3
18	HIGHWAY DIVISION (including small City/County)	60.05%	\$323.6	\$324.8	\$333.0	\$339.3	\$345.9	\$350.3	\$354.2	\$358.7	\$648.4	\$672.3	\$696.2	\$712.9
19	SPECIAL COUNTY (ORS 366.772)		(\$0.3)	(\$0.3)	(\$0.3)	(\$0.3)	(\$0.3)	(\$0.3)	(\$0.3)	(\$0.3)	(\$0.5)	(\$0.5)	(\$0.5)	(\$0.5)
20	SPECIAL CITY (ORS 366.805)		(\$0.5)	(\$0.5)	(\$0.5)	(\$0.5)	(\$0.5)	(\$0.5)	(\$0.5)	(\$0.5)	(\$1.0)	(\$1.0)	(\$1.0)	(\$1.0)
21	HIGHWAY DIVISION: TOTAL (OTIA I & II)	50.00%	\$1.4	\$1.1	\$1.2	\$0.3	\$1.7	\$3.9	\$3.9	\$3.9	\$2.5	\$1.4	\$5.7	\$7.9
22	HIGHWAY DIVISION: TOTAL (OTIA III)	57.53%	\$53.4	\$54.0	\$55.8	\$56.3	\$57.5	\$57.9	\$58.3	\$58.4	\$107.4	\$112.0	\$115.4	\$116.7
23	DEBT SERVICE (OTIA III)	100.00%	(\$96.9)	(\$107.2)	(\$109.5)	(\$113.8)	(\$115.8)	(\$94.9)	(\$89.7)	(\$89.7)	(\$204.1)	(\$223.3)	(\$210.7)	(\$179.3)
24	STATE APPORTIONMENT (OTIA III)	0.00%	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	
25	HIGHWAY DIVISION: NON-DEDICATED JTA REVENUES	48.75%	\$58.2	\$59.2	\$61.3	\$62.4	\$63.9	\$64.8	\$65.7	\$66.3	\$117.4	\$123.6	\$128.7	\$132.0
26	HIGHWAY DIVISION: DEDICATED JTA DEBT SERVICE	51.25%	\$61.2	\$62.3	\$64.4	\$65.6	\$67.2	\$68.2	\$69.0	\$69.7	\$123.5	\$130.0	\$135.3	\$138.7
27	DEBT SERVICE (JTA)		\$0.0	\$0.0	(\$20.5)	(\$27.4)	(\$43.2)	(\$54.4)	(\$54.4)	(\$54.4)	\$0.0	(\$47.9)	(\$97.6)	(\$108.8)
28	OREGON TRAVEL EXPERIENCE TRANSFER		(\$0.5)	(\$5.0)	(\$6.6)	(\$6.6)	(\$6.6)	(\$6.6)	(\$6.6)	(\$6.6)	(\$5.4)	(\$13.1)	(\$13.1)	(\$13.1)
29	NET HIGHWAY DIVISION		\$399.8	\$388.3	\$378.3	\$375.3	\$370.0	\$388.5	\$399.7	\$405.7	\$788.1	\$753.6	\$758.5	\$805.4
30	Memo: HIGHWAY MODERNIZATION PROGRAM (included in NET HIGHWAY DIVISION)		\$71.8	\$72.0	\$74.9	\$76.7	\$78.6	\$80.2	\$81.6	\$82.9	\$143.8	\$151.5	\$158.8	\$164.5
31	NET COUNTY APPORTIONMENT		\$218.3	\$229.1	\$236.1	\$239.9	\$245.8	\$250.2	\$252.9	\$255.6	\$447.4	\$475.9	\$496.0	\$508.6
32	NET CITY APPORTIONMENT		\$147.8	\$150.7	\$155.2	\$157.7	\$161.6	\$164.5	\$166.3	\$168.0	\$298.6	\$313.0	\$326.1	\$334.3
33	NET HIGHWAY DIVISION		\$399.8	\$388.3	\$378.3	\$375.3	\$370.0	\$388.5	\$399.7	\$405.7	\$788.1	\$753.6	\$758.5	\$805.4
34	NET HIGHWAY FUNDS REVENUE		\$765.9	\$768.2	\$769.7	\$772.9	\$777.5	\$803.1	\$818.8	\$829.3	\$1,534.1	\$1,542.5	\$1,580.6	\$1,648.2
35	SPECIAL COUNTY/CITY TRANSFERS TO ALLOTMENT FUND		\$1.8	\$1.8	\$1.8	\$1.8	\$1.8	\$1.8	\$1.8	\$1.8	\$3.5	\$3.5	\$3.5	\$3.5
36	TOTAL NET REVENUES FOR DISTRIBUTION		\$767.7	\$770.0	\$771.4	\$774.6	\$779.2	\$804.8	\$820.6	\$831.1	\$1,537.6	\$1,546.0	\$1,584.1	\$1,651.7

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