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COUNCIL ON REVENUES

STATE OF HAWAII P.O. BOX 259 HONOLULU, HAWAII 96809-0259

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KURT KAWAFUCHI

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The Honorable Sylvia Luke Chair, House Committee on Finance State Capitol, Room 306 Honolulu, HI 96813

Chairpersons and Members of the Committees:

Thank you for inviting the Council on Revenues to appear before your committees to present the current tax revenue forecasts for the State of Hawaii. My name is Kurt Kawafuchi and I am the Chair of the Council on Revenues. Today, I would like to present a review of the recent trends and the Council's latest forecast. I will conclude with some of my own observations on certain factors that might affect Hawaii's economy and our General Fund tax revenues going forward.

Recent Revenue Trends

Results for fiscal year 2014

In fiscal year (FY) 2014, the State's General Fund tax revenues declined by 1.8%, from \$5.47 billion in FY 2013 to \$5.37 billion in FY 2014. The drop can probably be attributed to processing delays caused from City and County of Honolulu surcharge payments adversely impacting FY 2014's General Fund, to a special allocation of General Excise Tax revenues to the Hawaii Hurricane Relief Fund, and to certain tax law changes that also impacted the FY 2014's General Fund revenues. For example, Act 97, SLH 2011 scheduled the increases in the standard

deduction and personal exemption in the Individual Income Tax. Act 161, SLH 2013 increased allocations of the Transient Accommodations Tax (TAT) to the Tourism Special Fund. Act 89, SLH 2013 increased the film production tax credit beginning July 1, 2013.

The actual drop in the General Fund tax revenues from FY 2013 to FY 2014 was about \$97 million. The vast majority of the \$97 million decrease in General Fund revenues resulted from the special allocations to the Hawaii Hurricane Relief Fund and the processing delays from the City and County of Honolulu surcharge payments. Combined with the tax law changes mentioned above, these factors probably reduced the General Fund tax revenues by more than \$97 million; thus, adjusting for these factors, the General Fund tax revenues might have grown slightly in FY 2014.

Currently, the General Excise Tax (GET) makes up slightly more than half of the total General Fund tax revenues, or \$2.8 billion out of \$5.4 billion of the General Fund revenues. The GET is usually a good indicator of economic activity in Hawaii. Revenue from GET tax fell by 2.2% from FY 2013 to 2014, but the drop was caused partly by changes in County Surchage allocations and there is also uncertainty over the effects of Act 105 on the GET collections.

In previous years, data from the GET on contracting activities has been used to measure construction spending. However, the uncertainty over the effects of Act 105 (which eliminated the subcontractor's deduction) make the measure unreliable for comparisons between FY 2013 and FY 2014.

Total personal income (as reported by the Bureau of Economic analysis) grew by 2.9% in FY 2014 and the Department of Taxation reported that income tax withheld from wages grew by 4.0%. However, total net collections of the Individual Income Tax (after estimated tax payments and refunds) grew by only 0.6%.

Results since the beginning of FY 2015

Preliminary data for December show that the cumulative General Fund tax revenues for the first six months of FY 2015 (July through December of 2014) are up by 6.3% compared to the same period in FY 2014. Here is what happened with cumulative collections from the General Excise Tax and the Individual Income Tax in the first six months of FY 2015:

• Cumulative net collections of the GET (before allocations to the Hawaii Hurricane Relief Fund) were \$1,492 million, compared to \$1,393million for

the same period in FY 2014. The year-over-year growth rate for the tax is 7.1%.

• Cumulative net collections for the Individual Income Tax were \$953 million, compared to \$878 million for the same period in FY 2014, a growth rate of 8.5%.

The tabulation below shows the growth in cumulative General Fund tax revenues in FY 2015 over the same period in the previous fiscal year.

Growth rate in cumulative General Fund tax revenues, as of the end of:

July 2014	14.1%
August 2014	6.2%
September 2014	2.9%
October 2014	5.6%
November 2014*	7.1%
December 2014*	6.3%

The Council's Forecasts of General Fund Tax Revenues

Before providing the Council's latest forecast, I would like to provide a brief summary and explanation of how the Council produces its forecasts. The Council meets four times a year to forecast General Fund tax revenues. The forecasts are due by January 10, March 15, June 1 and September 10 of each year. Prior to a General Fund meeting, each Council member completes a survey provided by the Office of Tax Research and Planning (TRP) in the Department of Taxation. The survey asks for the member's forecasts for growth in key economic variables, including construction, the Honolulu consumer price index, total visitor arrivals coming to Hawaii by air, U.S. Gross Domestic Product (GDP), the U.S. GDP deflator (a measure of inflation in the national economy), total State wages, visitor expenditures, and Hawaii GDP in real (deflated) terms. After receiving the Council members' growth for key economic variables, the TRP staff inputs such variables into econometric models to estimate the implied growth in General Fund tax revenue.

The primary model used by TRP staff has a separate econometric equation to predict the growth in revenues from each major tax type (the Individual Income Tax, the Corporate Income Tax, the General Excise Tax, the Public Service Company Tax, and others). All of the models incorporate estimates for the effects of changes in tax law that will affect the General Fund tax revenues. TRP staff

^{*} Preliminary data.

provide historic data on the economic variables to be forecast by the Council members, the econometric predictions of General Fund revenue growth based on the Council's economic forecasts (including incorporating the effects of changes in tax laws), and information about matters of tax administration that could affect the General Fund tax revenues, such as delays in processing or unusual collections of delinquent taxes. However, TRP staff do not engage in any economic forecasting.

In their meeting, Council members review the results of the econometric models and consider other factors, such as the current trends in monthly collections and changes in the economy that might change the current trends. The members then decide on the official forecast for the growth in General Fund tax revenue. The forecast may or may not agree with the results of the econometric models. The Council forecasts only the total General Fund tax collections. To get the implied growth in collections of the individual tax types, TRP staff change the economic variables in the primary model until the model produces a growth rate for total General Fund tax revenues that matches the Council's forecast, so that the forecasts of tax revenue growth for the individual tax types are consistent with the Council's forecast for overall General Fund tax revenue growth.

The Council's Latest Forecasts

At its meeting on January 6, 2015 the Council on Revenues raised its forecast for growth in the State's General Fund tax revenues in FY 2015 from 3.5% to 4.5%, which implies an increase in the level of General Fund tax revenues from \$5.56 billion to \$5.61 billion. If we are to meet that forecast, General Fund tax revenues for the remainder of the fiscal year (January through June of 2015) will have to surpass those of the same period in FY 2014 by only 2.8%.

The Council left its forecasts for growth in General Fund tax revenues at 5.5% per year for FY 2016 to FY 2021. Although the growth rates were left unchanged, because they are applied to a higher base in FY 2015, the forecasts for the levels of General Fund tax revenues are higher in all years of the budget window.

In arriving at its forecast, the members noted that General Fund tax revenues have been growing faster so far in FY 2015 than their earlier forecast, but they expressed concern about the future. In their deliberations, they noted that construction spending was not growing as expected, that employment and salaries of federal civilian workers in Hawaii were down, and that the recent increases in the value of the dollar against the Japanese yen and other currencies will raise the price of a Hawaii vacation for foreign visitors and therefore may adversely affect tourism. The Council did not expect the adverse effect on tourism to be significant, however. While becoming more visible, the Chinese tourist market share is still not a substantial portion of the Hawaii tourism market. The Council

also noted that declining oil prices are expected to have a net positive influence on the U.S. economy, on the visitor industry, and on potential spending in Hawaii by consumers and businesses.

Revised forecasts of State General Fund tax revenues for FY 2015 through FY 2021 are shown in the table below. As in all multi-year forecasts, the estimates for the later years are subject to greater uncertainty.

General Fund Tax Revenues

Fiscal Year	Amount (in thousands of dollars)	Growth From Previous Year			
2015	5,611,930	4.5%			
2016	5,920,586	5.5%			
2017	6,246,218	5.5%			
2018	6,589,760	5.5%			
2019	6,952,197	5.5%			
2020	7,334,568	5.5%			
2021	7,737,969	5.5%			

Table 1 shows the forecasts, broken down by individual tax type.

Forecasting Is Challenging

The following materials are presented to give you some idea of the amount of uncertainty involved in the forecasts. As I mentioned before, one of the things the Council considers in deriving its forecast is the recent trend in collections of the General Fund tax revenues. Here is what we get if we try to project for the rest of FY 2015 based on collections as of the end of December 2014, when the cumulative General Fund tax revenues was up by 6.3%. (The projections are made after removing the effects of one-off events, such as the refund delays in FY 2010 and the allocations to the Hawaii Hurricane Relief Fund in FY's 2014 and 2015). Using the low, high and average of the shares over the past decade we get:

The low projected revenue growth rate for FY 2015 is -4.5% The high projected revenue growth rate doe FY 2015 is 15.2% The average projected revenue growth rate for FY 2015 is 6.7%.

Figure 1 shows errors in the Council's General Fund tax revenue forecasts in recent years.

Some Additional Factors That Might Affect Hawaii's Economy and Our General Fund Tax Revenues Going Forward

- The U.S. economy appears to be on a fairly strong recovery path. Nominal GDP growth was 3.6% in FY 2013, 4.0% in FY 2014 and 4.3% in the first quarter of FY 2015 (using Hawaii's fiscal year). A strong U.S. recovery should help Hawaii's visitor industry, which is heavily based upon U.S. mainland visitors.
- Japan appears to have adopted the strategy of monetary easing to help its economy. At the end of 2014, the yen hit a seven year low relative to the dollar. A weaker yen will adversely affect Hawaii's visitor industry by raising the price of a Hawaii vacation for Japanese visitors, although the effect is not expected to be strong. Further, Japan delayed the second scheduled sales tax increase which may have reduced spending by the Japanese consumer, including on travel to Hawaii.
- Low interest rates and an improving economy have led to five straight years of growth in auto sales in the United States. Sales of autos and other consumer durables may enter a cyclical decline if the need for them becomes sated, which may slow growth in the U.S. economy.
- Geopolitical events could have serious adverse effects on the global economic recovery and therefore Hawaii's economy. Perhaps the biggest danger is still the weakness in the euro area, especially among the heavily indebted members.
- Economic growth in China appears to be slowing, but easing of visa requirements and growing knowledge of Hawaii may offset any adverse effects on Chinese visitors to Hawaii. While Hawaii may be well known in parts of Southern China, it is not as well known in Northeastern China (e.g., Shanghai and Beijing) as other destinations with popular TV shows or movies, such as Seattle, Mauritius, and Thailand.
- The U.S. Federal Reserve is expected to raise interest rates this summer. Generally, we would expect this to be an encouraging sign, because it would mean the economy was deemed strong enough to allow the rate increase. However, the consequences for Hawaii may be ambiguous. The interest rate rise may cause the dollar to rise relative to other currencies, which may increase the cost of Hawaii vacations to foreign visitors. This may curb somewhat the expected positive effect on domestic tourism that would come from the stronger U.S. economy. Figure 2 shows what has happened to visitor expenditures from various market areas.

• Global oil prices have been falling dramatically. The drop may be attributed partly to increases in supply, such as from shale formations in North Dakota or oil sands in Alberta. However, the drop may be attributed also to slowing global demand. If the latter is the dominant cause of the drop in oil prices, it might be a symptom of slowing global economic growth, in which case, rather than expecting a boost to spending in our economy, we might anticipate slower economic growth if a slowdown abroad caused tourism to suffer.

Recent Legislation

In producing its forecasts, the Council adopted specific adjustments recommended by the Department of Taxation to reflect effects on General Fund tax revenues of tax law changes enacted by the Legislature. The following list includes measures that would affect the growth rate in General Fund tax revenues during the budget period relative to their base in FY 2014.

- Act 107, SLH 2014 reestablishes the energy systems development special fund. It also extends the \$1.05 per barrel rate for the Environmental Response Tax, which was set to expire at the end of FY 2015, through FY 2030, as well as the allocations of the tax to the General Fund. The effect on General Fund tax revenue is estimated to be a loss of \$2.6 million for FY 2015 and annual gains of \$15.5 million for FY's 2016 through 2030.
- Act 163, SLH 2014 increases allocations of the Conveyance Tax to the Rental Housing Trust Fund from 30% to 50% beginning July 1, 2014. The General Fund revenue loss is estimated to be \$11.5 million per year starting in FY 2015.
- Act 174, SLH 2014 increases allocations of the TAT to the counties from \$93 million to \$103 million for FY's 2015 and 2016. The General Fund revenue loss is \$10 million in each of FY's 2015 and 2016.
- Act 163 makes permanent the GET exemption for certain expenses paid by hotel operators and timeshare projects and removes the cap on the aggregate amount of the exemptions that can be claimed. The Act is estimated to reduce annual GET collections by about \$7 million less in FY 2015 and later years than it did in FY 2014.
- Act 62, SLH 2011, allocates GET revenues directly to the Hurricane Relief Fund to replace amounts that were taken from the Fund in prior years. The Act reduced GET allocations to the General Fund by \$55.5 million in FY 2014 and will do so again in FY 2015.

I am available to answer any questions you may have.

Sincerely,

KURT KAWAFUCHI Chair, Council on Revenues

Attachments

General Fund Tax Revenue Forecasts of the Council on Revenues

Presentation before the

Senate Committee on Ways and Means
and the House Committee on Finance

January 21, 2015

by Kurt Kawafuchi,

Chair, Council on Revenues

General Fund tax revenues (1.8%) in FY 2014 was adversely impacted by certain factors.

- In FY 2014, the State's General Fund tax revenues were \$5.37 billion, down by 1.8% from the previous year.
- Total personal income in Hawaii grew by 2.9%, but
 - General Excise Tax (GET) collections fell by 2.2% and owing to a special GET allocation of \$55.5 million to the Hawaii Hurricane Relief Fund, the GET allocated to the General Fund fell by 4.1%.
 - Collections of the Individual Income Tax rose by only 0.6%.
- Tax law changes (e.g., Act 105) and the special GET allocation reduced General Fund tax revenues in FY 2014 compared to FY 2013.
- Without the tax law changes or the special GET allocation, the General Fund tax revenues might well have grown slightly in FY 2014.

Growth in General Fund tax revenue has turned positive in FY 2015

- In the first six months of FY 2015:
 - General Fund tax revenues are up by 6.3% compared to FY 2014.
 - Collections of the General Excise Tax (GET) are up by 7.1%, and GET allocations to the General Fund (after the special allocation to the Hawaii Hurricane Relief Fund) are up by 7.4% compared to FY 2014.
 - Collections of the Individual Income Tax are up by 8.5% compared to FY 2014.
- Changes in tax laws are not expected to have much effect on the growth rate for General Fund tax revenues from FY 2014 to FY 2015.

How the Council produces its forecasts

- The Tax Department asks Council members to provide certain forecasts for key economic variables that help determine General Fund tax revenues, such as construction, total personal income, inflation, and visitor arrivals.
- The Department enters the economic forecasts into econometric models to predict tax revenues over the budget period.
- The models also take account of things like tax law changes and collection lags.
- The Tax Department also provides information on the recent trends in tax collections and any issues of tax administration that might affect General Fund tax revenues, such as unusual delinquent tax collections or lags in processing of returns and payments.

How the Council produces its forecasts (Cont.)

- When the Council meets, it evaluates the results of the econometric models and examines recent trends in collections.
- The Council also considers other economic or political changes that might materially affect tax collections.
- The members then agree on their official forecasts for growth rates of overall General Fund tax revenues.
- The Tax Department takes the official growth forecasts and adjusts
 the variables in one of its econometric models to produce forecasts
 for the individual tax types that are consistent with the Council's
 overall forecasts.

The Council's forecast for FY 2015 and FY 2016

- The Council's current forecast is that General Fund tax revenues will grow by 4.5% in FY 2015, to \$5.61 billion.
- The revenue growth for the first six months of the fiscal year (6.3%) is higher than the forecast rate for the full year.
- The last six months of the fiscal year generally provide more than half of the total General Fund tax revenues ---holiday season, April 20 deadline, etc.
- The revenues for the remainder of the fiscal year (January through June) will have to surpass those for the same period last year by only 2.8% if we are to meet the forecast.
- The growth rate forecast for FY 2016 is 5.5%.

Here are the Council's forecasts for FY 2015 and beyond

Table 1

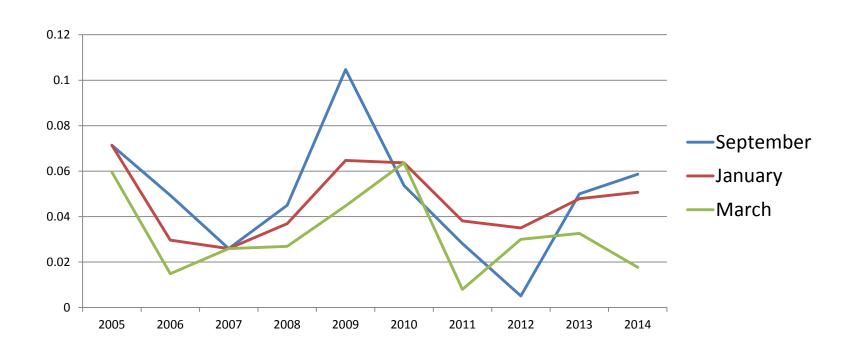
	General Fund					
	tax revenues (\$	Growth from				
Fiscal Year	billions)	previous year				
2015	\$5.61	4.50%				
2016	\$5.92	5.50%				
2017	\$6.25	5.50%				
2018	\$6.59	5.50%				
2019	\$6.95	5.50%				
2020	\$7.33	5.50%				
2021	\$7.74	5.50%				

Forecasting and forecast errors

- Here is the growth rate that would be projected if we utilize the low, high, and average shares of revenue for the six months of the fiscal year, i.e., January through June, based upon the share of total annual collections received as of the end of December.
- The projections are done after removing the effects of one-off events, such as the refund delays in FY 2010 and the allocations to the Hawaii Hurricane Relief Fund in FY's 2014 and 2015.
- Using the low, high and average of the shares over the past decade:
 - The low projected revenue growth rate is -4.5%
 - The high projected revenue growth rate is 15.2%
 - The average projected revenue growth rate is 6.7%.
- Because of the wide range of potential forecasts, this exercise shows how forecasting is challenging. The following figure shows the size of the errors in the Council's General Fund tax revenue forecasts in recent years.
- The figure shows the error in the September, January and March forecasts.

A Picture of the forecast errors in recent years

Absolute Values of Forecast Errors (in percents)



Some additional factors to consider

- The U.S. economy appears to be growing nicely. Nominal GDP growth was 3.6% in FY 2014 and 4.3% in the first quarter of FY 2015 (using Hawaii's fiscal year).
- Japan appears to have adopted a policy of monetary easing to help it economy. At the end of calendar year 2014, the yen hit a seven year low relative to the dollar.
- A weaker yen will adversely affect Hawaii's visitor industry by raising the price of a Hawaii vacation for Japanese visitors.

Additional factors (Cont.)

- Low interest rates and an improving economy have led to five straight years of growth in auto sales in the United States.
- But sales of autos (and other consumer durables) may enter a cyclical decline if the need for them becomes sated, which may slow growth in the U.S. economy.
- Some geopolitical events could hurt future economic prospects. For example, weakness in the euro area, especially among the heavily indebted members, might bring a financial crisis.

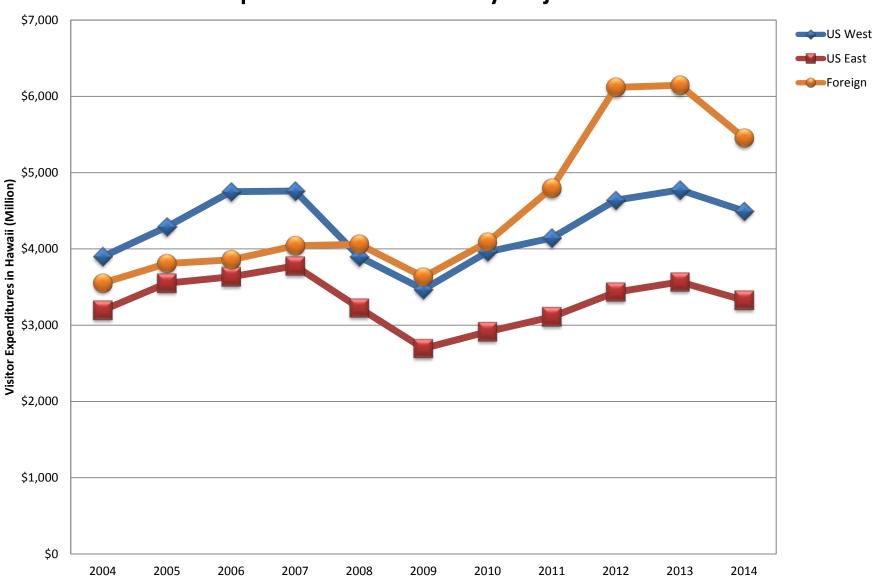
Additional Factors (Cont.)

- Economic growth in China appears to be slowing, but easing of visa requirements and growing knowledge of Hawaii may offset adverse effects on Chinese visitors to Hawaii.
- Hawaii may be well known in parts of Southern China, but in Northeastern China (Shanghai, Beijing) it is not as well known as other destinations with popular TV shows/movies (Seattle, Mauritius, Thailand).

Additional Factors (Cont.)

- The Fed is expected to raise interest rates this summer.
 If they do, it will be an encouraging sign that the U.S. economy is improving.
- The consequences for Hawaii are ambiguous, however, because higher interest rates would tend to strengthen the dollar in foreign currency markets.
- A stronger dollar may hurt foreign tourism in Hawaii, i.e., making Hawaii travel more expensive, and may curb the gains from increased domestic visitors.
- Figure 2 shows what has happened to visitor expenditures in Hawaii in recent years.

Visitor Expenditures in Hawaii by Major Market Areas



Note: *Visitor expenditures for 2014: Jan-Nov figure (year-to-date)

Additional factors (Cont.)

- Global oil prices have fallen dramatically.
- The drop in oil prices by itself should help Hawaii's economy. It should reduce transportation costs and give consumers and businesses more money to spend, including on trips to Hawaii.
- However, the drop may also be a symptom that global economic growth is slowing, which would be bad for tourism and Hawaii's economy.

Effects of legislation

- The Council adopted specific adjustments recommended by the Department of Taxation to reflect effects of tax law changes that will change General Fund tax revenues in FY 2015 or later years relative to their level in FY 2014, including the following:
- Act 107, SLH 2014 reestablishes the Energy Systems Development special fund. It also extends the \$1.05 per barrel rate for the Environmental Response Tax (which was set to expire at the end of FY 2015) through FY 2030, as well as the allocations of the tax to the General Fund. The effect on General Fund tax revenues is estimated to be a loss of \$2.6 million for FY 2015 and annual revenue gains of \$15.5 million for FY's 2016 through 2030.
- Act 163, SLH 2014 increases allocations of the Conveyance Tax to the Rental Housing Trust Fund from 30% to 50% beginning July 1, 2014. The annual General Fund revenue loss is estimated to be \$11.5 million per year beginning in FY 2015.

Effects of legislation (Cont.)

- Act 174, SLH 2014 increases allocations of the Transient
 Accommodations Tax to the counties from \$93 million to \$103
 million for FY's 2015 and 2016. The General Fund revenue loss is
 \$10 million in each year.
- Act 163 made permanent the GET exemption for certain expenses paid by hotel operators and timeshare projects and removed the cap on the aggregate amount of the exemptions that can be claimed. The Act is estimated to reduce GET collections in FY's 2015 and beyond by about \$7 million less than it did in FY 2014.
- Act 62, SLH 2011, allocates GET revenues directly to the Hurricane Relief Fund to replace amounts that were taken in prior years. The Act reduces allocations to the General Fund by \$55.5 million in each of FY's 2014 and 2015.

Table 1
ESTIMATES OF GENERAL FUND TAX REVENUES FROM THE MEETING OF JANUARY 6, 2015: FY 2015 TO FY 2021
Line item projections generated by Tax Research and Planning Office to be consistent with the Council's forecast for the total General Fund tax revenues
(in thousands of dollars)

	BASE ESTIMATED								
TYPE OF TAX	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
General Excise and Use Tax	\$2,944,487	\$2,825,041	\$2,973,863	\$3,189,610	\$3,370,803	\$3,534,148	\$3,699,109	\$3,858,902	\$4,014,121
Individual Income Tax	1,735,499	\$1,745,312	1,848,456	1,911,532	2,007,294	2,135,321	2,294,254	2,472,988	2,656,021
Corporate Income Tax	100,988	\$87,021	75,159	84,451	87,546	98,267	98,189	104,390	129,292
Public Service Company Tax	163,930	\$166,179	170,903	176,483	182,924	189,634	196,625	203,910	211,464
Tax on Insurance Premiums	131,906	\$137,179	142,178	147,296	154,118	160,504	167,811	175,693	183,704
Cigarette and Tobacco Tax	94,180	\$77,659	77,403	79,178	81,882	84,755	87,903	91,177	94,600
Liquor Tax	48,962	\$48,305	48,574	49,053	49,681	50,307	50,947	51,602	52,262
Tax on Banks and Other Financial Corps.	20,673	\$36,983	41,553	32,218	32,117	37,831	39,160	37,561	37,641
Inheritance and Estate Tax	14,886	\$14,789	15,018	15,286	15,590	15,902	16,221	16,549	16,883
Conveyance Tax	19,132	\$26,508	11,918	12,481	13,240	13,959	14,793	15,705	16,644
Miscellaneous Taxes*	20,725	\$18,063	16,204	16,203	16,200	16,195	16,191	16,187	16,182
Transient Accommodations Tax	171,556	\$187,229	190,701	206,795	234,823	252,937	270,994	289,904	309,155
GENERAL FUND TOTAL	\$5,466,923	\$5,370,268	\$5,611,930	\$5,920,586	\$6,246,218	\$6,589,760	\$6,952,197	\$7,334,568	\$7,737,969
GROWTH RATE	9.9%	-1.8%	4.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%

^{*} The figures on this line include penalty and interest charges, fees and license charges from various taxes, and allocations to the General Fund from the environmental response, energy and food security tax.

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Figure 1: Absolute Values of the Errors in Forecasts of General Fund Tax Revenues in Recent Years (in percents)

