

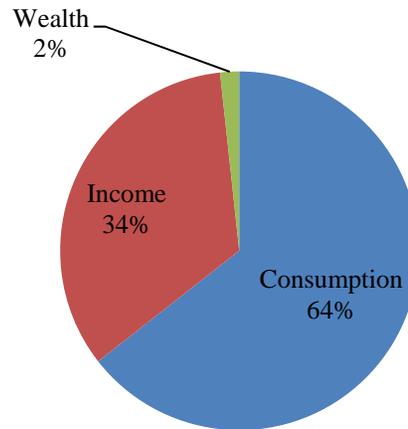
Marilyn M. Niwao, Vice Chair  
**Council on Revenues**

Senate Ways and Means / House Finance Joint Hearing  
January 2, 2018

**Where do Hawaii's tax dollars come from?**

# THE BULK OF HAWAII'S TAX REVENUE COMES FROM CONSUMPTION TAXES

STATE REVENUES BY TAX TYPE (FY 2016)




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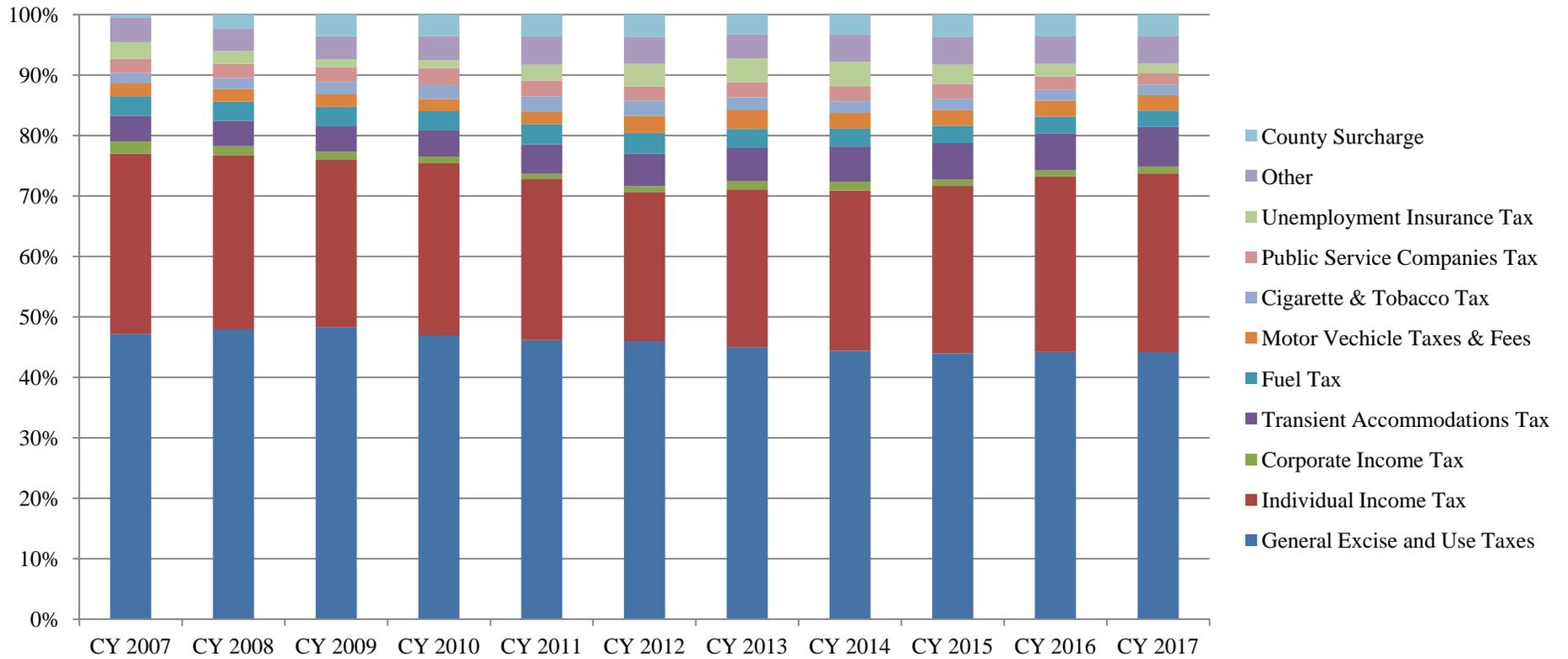
## STATE TAXES BY TYPE

Consumption	Income	Wealth
<ul style="list-style-type: none"> <li>• General Excise and Use Tax</li> <li>• Transient Accommodation Tax</li> <li>• Fuel Tax</li> <li>• Cigarette &amp; Tobacco Tax</li> <li>• Public Service Companies Tax</li> <li>• Insurance Premiums Tax</li> <li>• Liquor Tax</li> <li>• Motor Vehicle Taxes &amp; Fees</li> <li>• Franchise Tax</li> </ul>	<ul style="list-style-type: none"> <li>• Individual Income Tax</li> <li>• Corporate Income Tax</li> <li>• Unemployment Insurance Tax</li> </ul>	<ul style="list-style-type: none"> <li>• Estate Tax</li> <li>• Conveyance Tax</li> </ul>

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# GET AND INDIVIDUAL INCOME TAXES COMPRISE APPROXIMATELY THREE QUARTERS OF STATE REVENUE

COMPOSITION OF STATE TAX REVENUES



# General Excise & Use Tax

# GENERAL EXCISE AND USE TAX: WHAT IS IT?

- What are the General Excise and Use Taxes?
  - The GET is a gross receipts tax that is imposed on the privilege of doing business in the State of Hawaii. The Use Tax applies to purchases from out-of-state vendors that are not required to collect tax on their sales to Hawaii.
- Vs. Sales Tax?
  - A sales tax is levied on the customer but collected by business. The GET is levied on the business.
  - A sales tax is usually limited to retail sales of tangible goods whereas the GET is levied on almost all business activity.
- Vs. Value Added Tax (VAT)?
  - A VAT only taxes the value added by business. The GET taxes the gross receipts of the business, so it taxes some business-to-business transactions.

# GET RAISES SIGNIFICANT REVENUE THROUGH A LOW RATE AND A BROAD BASE

## Amongst the lowest sales tax rates in the country

State	State Tax		Avg. Local		Combined Rank
	Rate	Rank	Tax Rate	Tax Rate	
La.	5.00%	33	4.98%	9.98%	1
Tenn.	7.00%	2	2.46%	9.46%	2
Ark.	6.50%	9	2.80%	9.30%	3
Ala.	4.00%	40	5.01%	9.01%	4
Wash.	6.50%	9	2.42%	8.92%	5
Okla.	4.50%	37	4.36%	8.86%	6
Ill.	6.25%	13	2.39%	8.64%	7
Kans.	6.50%	9	2.12%	8.62%	8
N.Y.	4.00%	40	4.49%	8.49%	9
Calif.	7.25%	1	1.00%	8.25%	10
Hawaii	4.00%	40	0.35%	4.35%	45

## Highest per capita collections of any state

State	Collections per Capita	Rank
Hawaii	\$ 2,090	1
N.D.	\$ 1,835	2
Wash.	\$ 1,746	3
Nev.	\$ 1,412	4
Wyo.	\$ 1,384	5
Tex.	\$ 1,226	6
Miss.	\$ 1,144	7
Conn.	\$ 1,137	8
S.D. (b)	\$ 1,131	9
Ind.	\$ 1,100	10
N.M. (b)	\$ 1,082	11
Fla.	\$ 1,075	12
Ark.	\$ 1,069	13
Kans.	\$ 1,049	14
Ohio	\$ 1,025	15

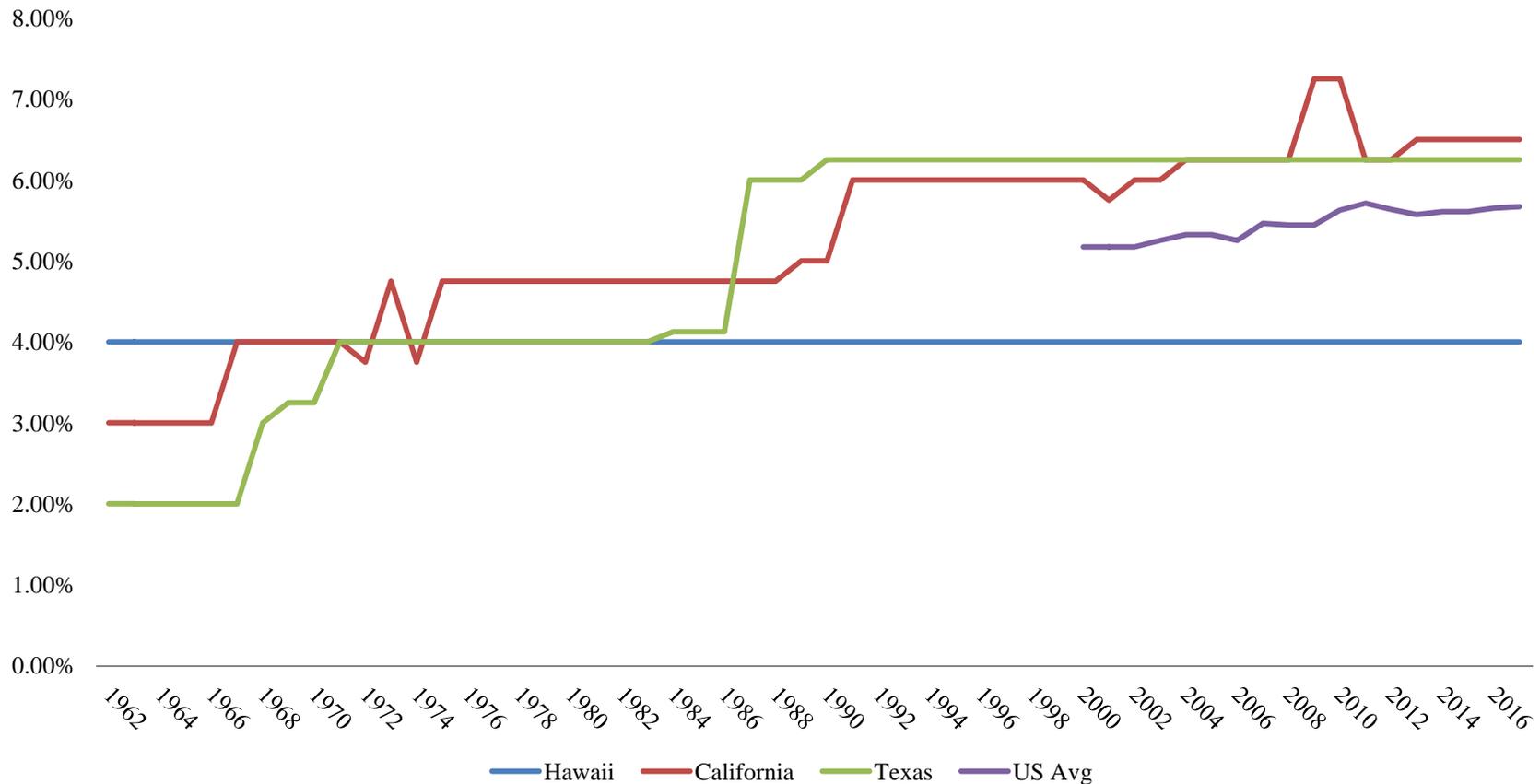
## Broadest scope of sales tax of any state

State	Sales Tax Breadth	Rank
Hawaii (a)	104%	1
N.D.	73%	2
S.D. (a)	65%	3
Wyo.	62%	4
N.M. (a)	59%	5
Nev.	49%	6
Miss.	47%	7
Ark.	43%	8
Tex.	42%	9
Maine	41%	10
Ariz.	41%	11
Fla.	40%	12
Ind.	40%	13
Idaho	38%	14
Wash.	38%	15

Source: Tax Foundation

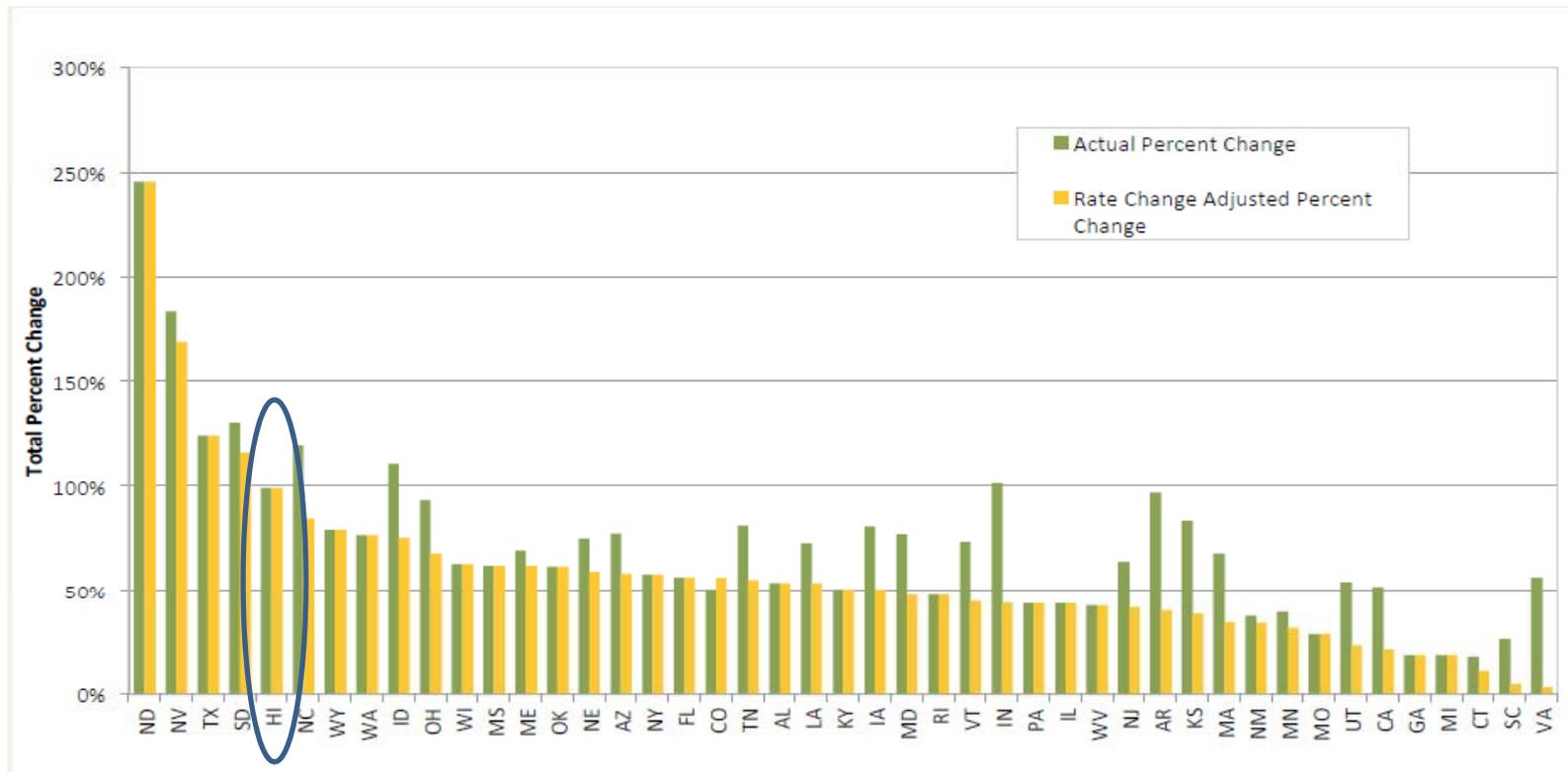
# HAWAII'S GET RATE HAS BEEN REMARKABLY STABLE RELATIVE TO THE RATES OF SALES TAXES IN OTHER STATES

STATE SALES TAX RATES



# HAWAII'S GENERAL EXCISE TAX HAS FARED BETTER THAN SALES TAX REVENUES IN OTHER STATES

ACTUAL AND TAX RATE ADJUSTED PERCENT CHANGE IN SALES TAX COLLECTIONS, 2000 - 2016



Source: Strategic Economics Group

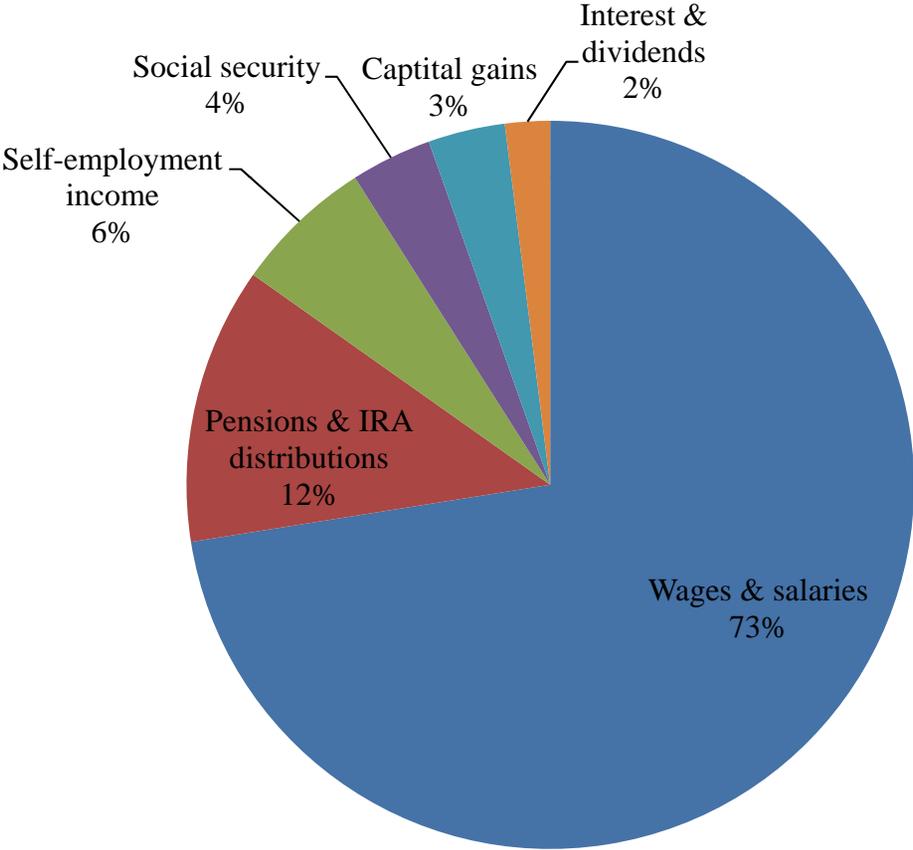
# Individual Income Tax

# NOTABLE FEATURES OF HAWAII INDIVIDUAL INCOME TAX

- Very progressive relative to other states
- Brackets not indexed to inflation (like Federal rates)
- Relatively low standard exemption compared to Federal (Federal \$12,600, HI: \$4,400)
- Refundable credits offset burden for lower income individuals
- Hawaii exports a large amount of tax burden to Federal government, particularly at high income levels
- The largest state specific exemption is pensions and social security, which is expected to grow with time

# HAWAII EXEMPTS 16% OF INCOME THROUGH PENSION DISBURSEMENTS

COMPOSITION OF FEDERAL INDIVIDUAL INCOME IN HAWAII



INCOME SOURCES	RATE
Wage & Salaries	Variable (See tax bracket)
Pensions & IRA distributions	0% (Employer contributions exempt)
Self-employment income	Variable (see tax bracket)
Social security	0%, (exempt)
Capital Gains	7.25%
Interest & Dividends	Variable (see tax bracket)

# HAWAII HAS ONE OF THE HIGHEST MARGINAL TAX RATES IN THE COUNTRY

- 43 states levy individual incomes taxes
- 8 states have a single-rate structures
- Hawaii will have the most brackets in the country (12 brackets in 2018, currently has 9). California and Missouri have the second most tax brackets with 10
- Hawaii has the second highest income tax rates of any state

Highest Marginal Tax Bracket		
1	California	13.30%
2	Hawaii (2018)	11.00%
3	Maine	10.15%
4	Oregon	9.90%
5	Minnesota	9.85%
6	Iowa	8.98%
7	New Jersey	8.97%
8	Vermont	8.95%
9	DC	8.95%
10	New York	8.82%
11	Hawaii (2017)	8.25%
11	Wisconsin	7.65%
12	Idaho	7.40%

# THE MEDIAN HAWAIIAN HOUSEHOLD REPORTS ABOVE AVERAGE INCOME, BUT RESIDENTS IN THE TOP 1.0% REPORT BELOW AVERAGE INCOME

## INCOME THRESHOLD OF TOP 1.0% OF FILERS BY STATE

\$64,859

Median HH income in Hawaii  
(6<sup>th</sup> highest in nation)

\$121,860

Income threshold of top10% of  
filers in Hawaii

Rank	State	Income threshold of top 1.0%
1	Connecticut	\$659,979
2	New Jersey	\$547,737
3	Massachusetts	\$539,055
4	New York	\$517,447
5	North Dakota	\$481,188
6	California	\$453,772
7	Texas	\$424,507
Avg	United States	\$389,436
<b>45</b>	<b>Hawaii</b>	<b>\$281,620</b>

Source: American Community Survey and DOTAX

Source: Economic Policy Institute

# MOST RESIDENT FILERS ARE IN MIDDLE AND UPPER-MIDDLE TAX BRACKETS

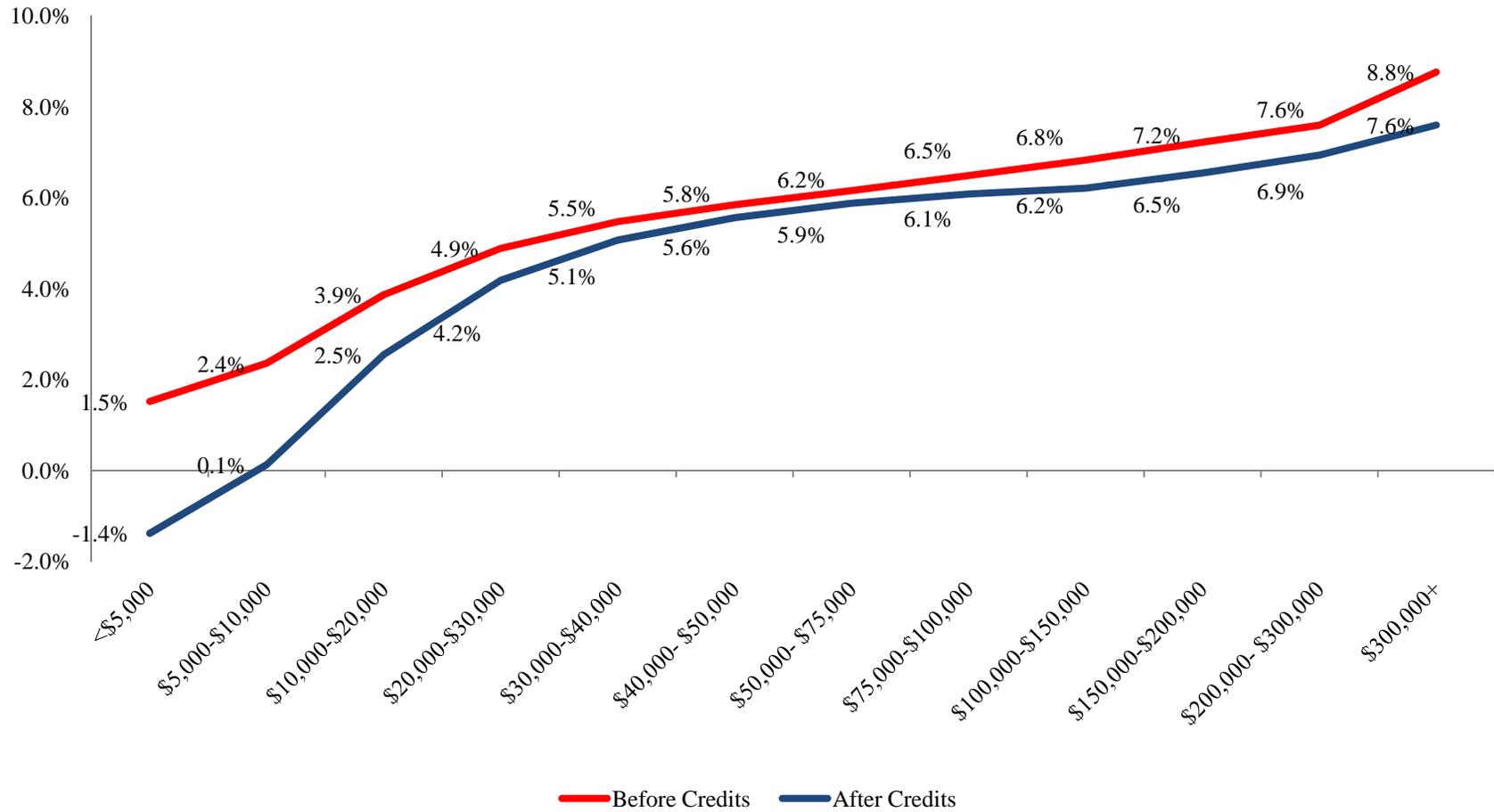
## 2013 JOINT FILERS BY TAX BRACKETS (RESIDENTS)

### Status - Joint

Tax Bracket	Marginal Rate	Returns With Taxable Income In the Tax Bracket		
		Number of Returns	% of Total No. of Returns	Amount of Taxable Income
\$0 to \$4,800	1.4%	43,029	19.6%	19,151,351
\$4,801 to \$9,600	3.20%	8,101	3.7%	58,093,778
\$9,601 to \$19,200	5.50%	16,785	7.6%	242,009,824
\$19,201 to \$28,800	6.40%	17,147	7.8%	411,129,792
\$28,801 to \$38,400	6.80%	16,396	7.5%	550,098,981
\$38,401 to \$48,000	7.20%	15,781	7.2%	681,365,652
\$48,001 to \$72,000	7.60%	36,390	16.6%	2,169,779,414
\$72,001 to \$96,000	7.90%	26,291	12.0%	2,183,916,220
\$96,001 to \$300,000	8.25%	35,466	16.1%	5,062,150,292
\$300,001 to \$350,000	9.00%	1,058	0.5%	342,401,741
\$350,001 to \$400,000	10.00%	703	0.3%	263,097,729
\$400,001 & Over	11.00%	2,505	1.1%	2,678,825,866
<b>ALL</b>		<b>219,652</b>	<b>100.0%</b>	<b>\$ 14,662,020,640</b>

# LOW INCOME FILERS HAVE LOW TAX LIABILITES AND BENEFIT FROM REFUNDABLE CREDITS

**EFFECTIVE TAX RATES BY INCOME**



## MAJOR STATE DEDUCTIONS AND EXEMPTIONS DERIVE FROM FEDERAL DEDUCTIONS

Deduction	Federal (2013)	Hawaii (2013)
<b>Major Federal</b>		
Employee Sponsored Health Insurance	\$260 Billion	\$1.3 Billion
New Pension Contribution and Earnings	\$140 Billion	\$700 million
Mortgage interest rate deduction	\$ 70 Billion	\$350 million
<b>State</b>		
Pension and Social Security exemption		\$226 million (expected to grow)*

\*Between 2010-2016, three-quarters of the state's net population growth was attributable to residents 65 and older. From 14.3% of population to 17.1% in 2016

# HAWAII EXPORTS A LARGE PORTION OF THE INDIVIDUAL INCOME TAX BURDEN TO FEDERAL GOVERNMENT

- The state and local tax exemption reduced resident's federal tax burden by \$343 million in 2015
- The tax burden most benefits high income earners

**Value of the State & Local Tax Deduction to Hawaii Taxpayers by Deciles (2015)**

Deciles	Fed AGI	Amount	Percent/total
0	<\$6,433	\$158,662	0.0%
0.1	\$6,433+	\$217,131	0.1%
0.2	\$13,994+	\$535,362	0.2%
0.3	\$21,811+	\$995,372	0.3%
0.4	\$29,435+	\$2,144,375	0.6%
0.5	\$38,177+	\$6,117,689	1.8%
0.6	\$49,042+	\$12,452,639	3.6%
0.7	\$64,283+	\$26,007,302	7.6%
0.8	\$86,163.5+	\$56,829,448	16.6%
0.9	\$121,860+	\$237,595,988	69.3%
<b>Total</b>		<b>\$343,053,968</b>	<b>100%</b>

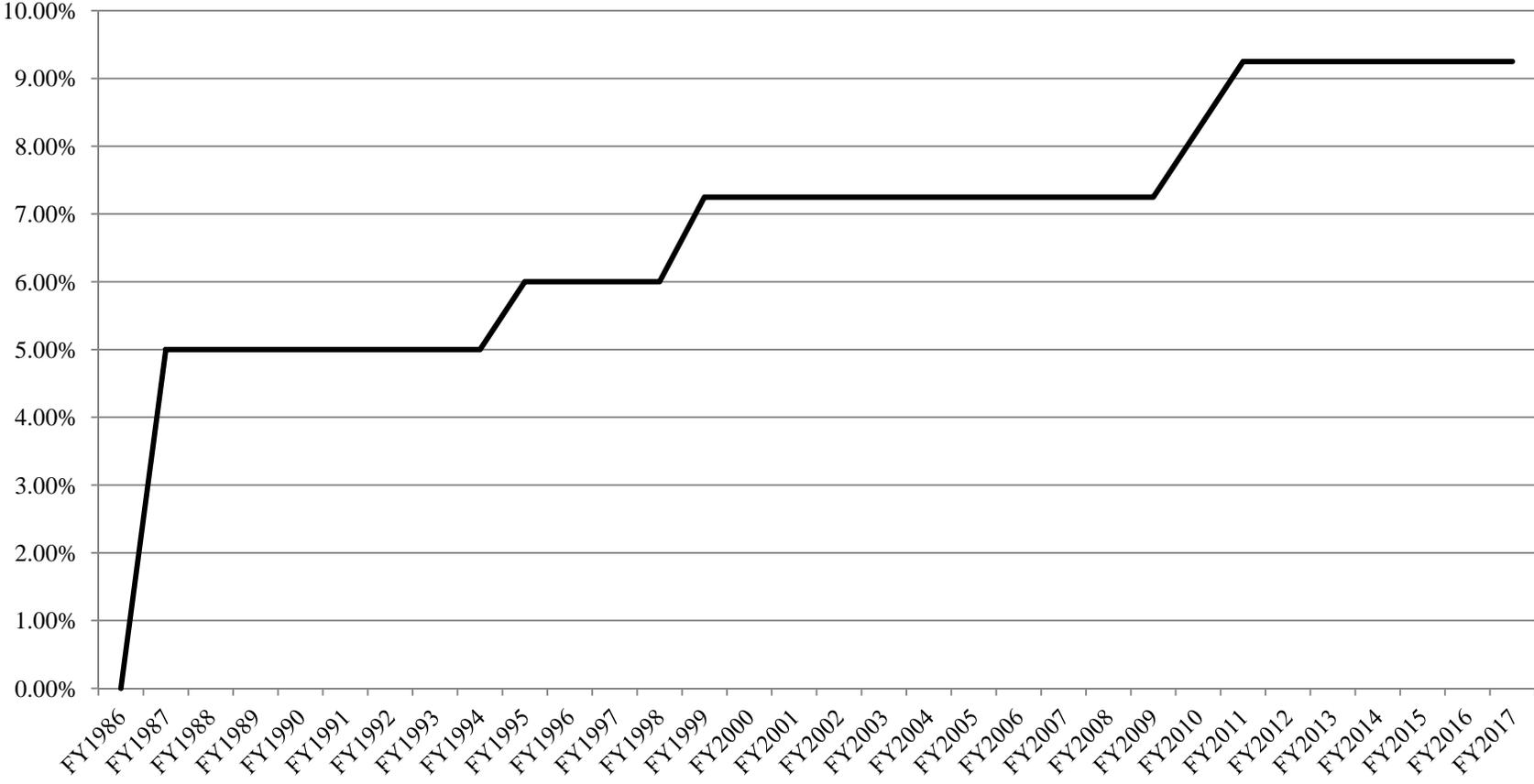
# **Transient Accommodation Tax**

# TRANSIENT ACCOMMODATION TAX

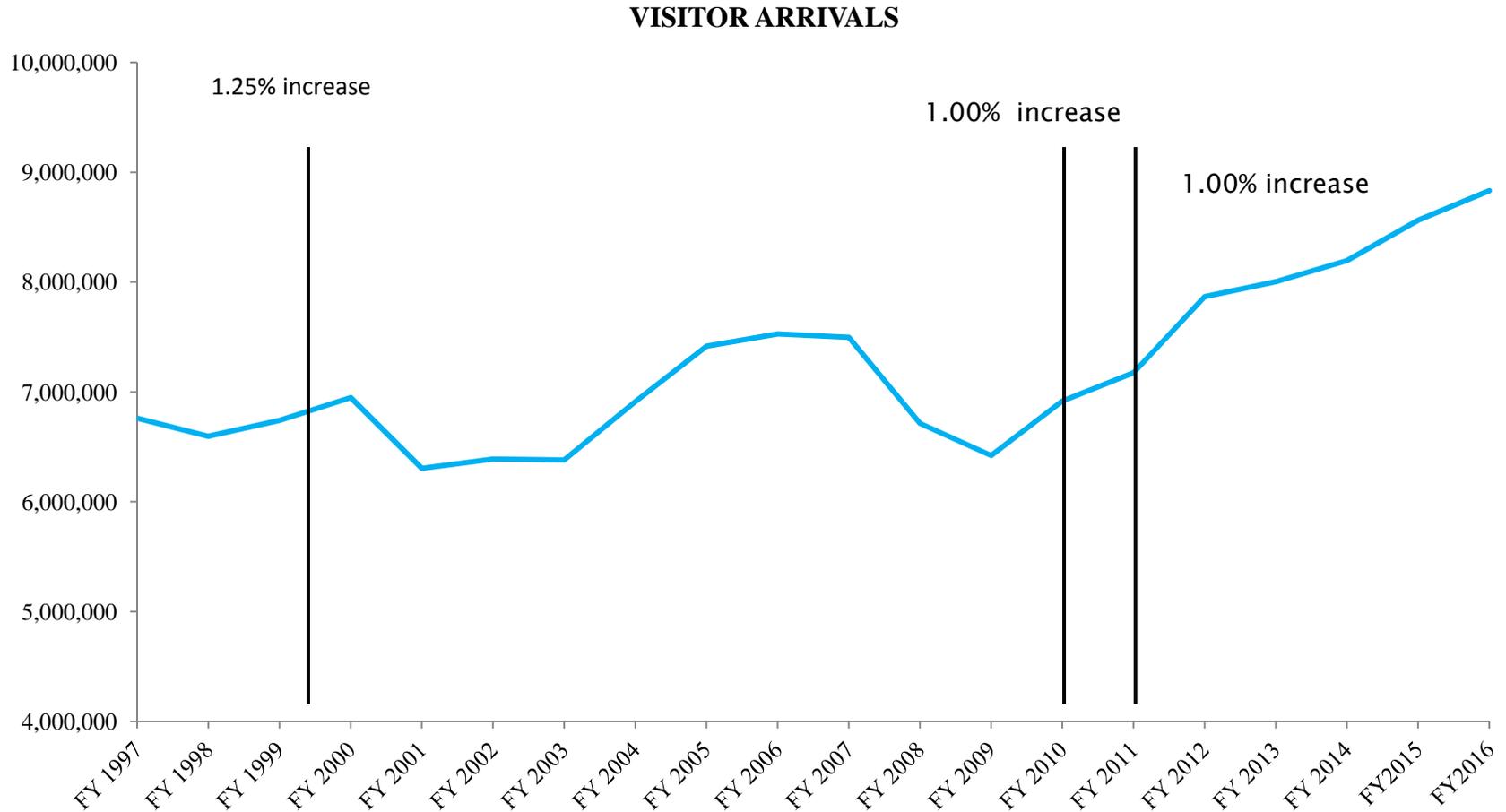
- Levied on gross rental proceeds derived from furnishing "transient accommodation" for less than 180 consecutive days
  - Transient Accommodation Tax: 10.25%
  - Timeshare Occupancy Tax: 10.25%
  
- **Exemptions:** NGOs (nonprofits and other non-governmental organizations , health care facilities, students, publicly subsidized lodging, military

# THE TAT HAS BEEN INCREASING SINCE ITS INCEPTION IN 1986, PARTLY DUE TO INCREASED TAX RATES OVER THE YEARS

**TRANSIENT ACCOMMODATION RATE**



# TAT RATE INCREASES DO NOT APPEAR TO HAVE ADVERSELY AFFECTED VISITOR ARRIVALS IN THE PAST

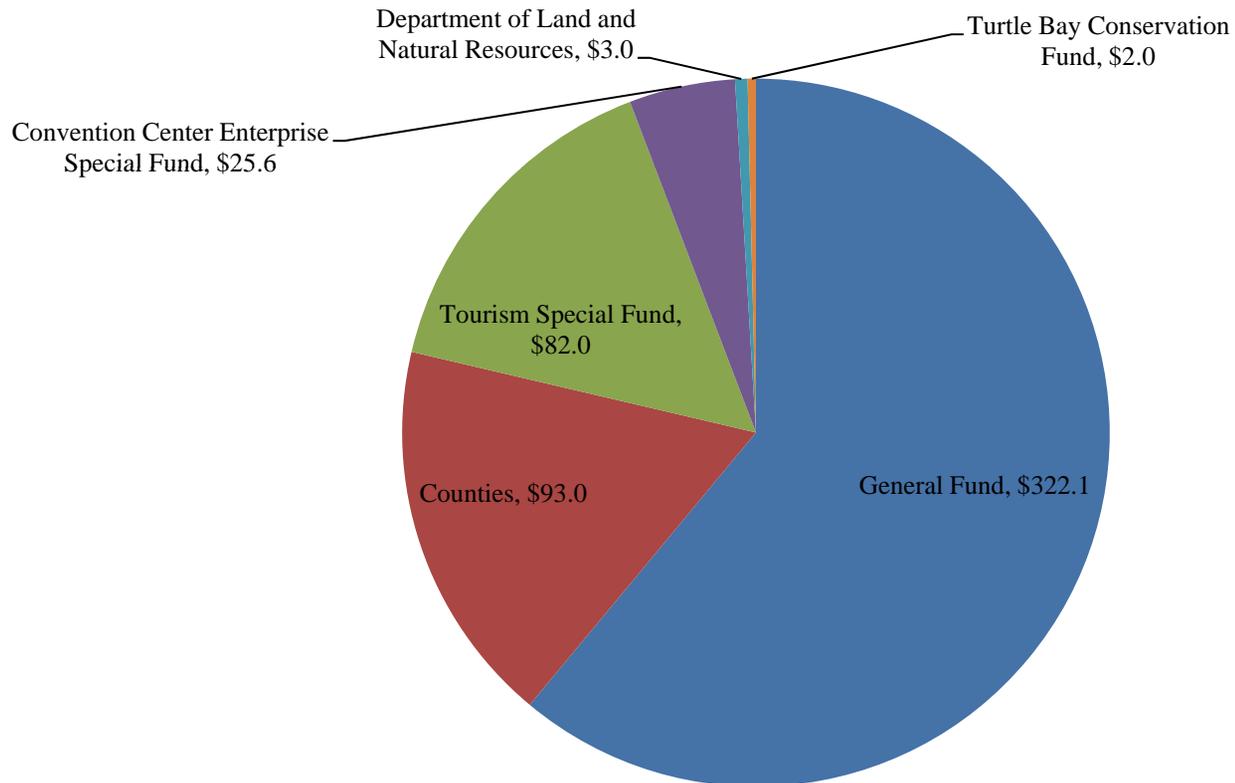


## HONOLULU PROVIDES THE LARGEST AMOUNT OF TAT REVENUE COMPARED TO OTHER INDIVIDUAL COUNTIES

TAT Liability by county				
	Oahu	Maui	Hawaii	Kauai
2011	45.5%	33.5%	12.1%	8.9%
2012	46.5%	32.5%	12.0%	9.0%
2013	48.0%	31.4%	11.7%	9.0%
2014	49.9%	28.2%	12.5%	9.4%
2015	48.1%	29.5%	12.8%	9.6%
<b>Mean</b>	<b>47.6%</b>	<b>31.0%</b>	<b>12.2%</b>	<b>9.2%</b>
<b>Allocation of TAT County Funds (\$103M/ year)</b>				
	44.1%	22.8%	18.6%	14.5%

# MORE THAN HALF OF ALL TAT REVENUE GOES TO THE GENERAL FUND

**DESTINATION OF TAT REVENUES EXPECTED FY 2018**  
**TOTAL : \$527M**



**How does the Council  
derive its estimates?**

# COUNCIL ON REVENUES FORECAST CONSIDERATIONS

- The output of three economic models
  - Regular Model
  - UCLA Model
  - Single Regression Equation Model
- Tax laws and tax law changes affecting tax collections
- The impact of DOTAX administrative policies and procedures, such as:
  - Timing of the collection of taxes
  - Payment of tax refunds to taxpayers
  - Allocations to the City and County of Honolulu
- Other factors discussed at Council meetings

## SELECTED ECONOMIC DATA: FY 2016 TO FY 2018

	FY 2016					FY 2017					FY 2018
	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Annual	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Annual	Jul-Sep
<b>1. U.S. GDP in Current Dollars (in billion)</b>	18,228	18,287	18,325	18,538	<b>18,345</b>	18,729	18,906	19,058	19,250	<b>18,986</b>	19,509
<b>2. U.S. GDP Implicit Price Deflator (2009=100)</b>	110.3	110.5	110.6	111.2	<b>110.7</b>	111.6	112.2	112.7	113.0	<b>112.4</b>	113.6
<b>3. Construction (\$ mil.)</b>	2,058	2,075	1,910	1,994	<b>8,037</b>	2,431	2,117	2,071	1,937	<b>8,557</b>	na
<b>4. Total Private Building Authorizations (\$ mil.)</b>	892	933	546	960	<b>3,331</b>	889	846	920	821	<b>3,476</b>	722
<b>5. Total Wages (\$ mil.)</b>	7,375	8,050	7,466	7,584	<b>30,475</b>	8,010	8,110	8,058	7,929	<b>32,107</b>	na
<b>6. Total Personal Income (\$ mil.)</b>	70,013	70,867	71,253	71,877	<b>71,003</b>	72,316	72,339	73,341	73,994	<b>72,997</b>	na
<b>7. Visitor Arrivals by Air (1,000)</b>											
<b>a. Total State</b>	2,197	2,122	2,173	2,183	<b>8,676</b>	2,266	2,200	2,224	2,311	<b>9,000</b>	2,396
<b>b. Domestic</b>	1,484	1,413	1,428	1,533	<b>5,857</b>	1,542	1,466	1,451	1,618	<b>6,077</b>	1,621
<b>c. International</b>	713	709	746	650	<b>2,818</b>	724	734	773	693	<b>2,923</b>	775
<b>8. Average Daily Visitor Census (1,000)</b>											
<b>a. Total State</b>	212	211	226	211	<b>215</b>	218	216	235	223	<b>223</b>	228
<b>b. Domestic</b>	155	153	159	158	<b>156</b>	159	156	163	166	<b>161</b>	165
<b>c. International</b>	57	58	68	52	<b>59</b>	59	60	72	57	<b>62</b>	63
<b>9. Honolulu CPIU (1982-84=100) 1/</b>	262.5	262.5	264.0	264.0	<b>263.3</b>	266.5	266.5	270.7	270.7	<b>268.6</b>	na
<b>10. State General Fund Tax Revenue (\$ mil.)</b>	1,593	1,432	1,504	1,665	<b>6,194</b>	1,546	1,500	1,576	1,694	<b>6,315</b>	1,692
<b>11. General Excise &amp; Use Tax (\$ mil.)</b>	831	754	818	802	<b>3,206</b>	801	784	832	822	<b>3,239</b>	901
<b>12. Individual Income Tax (\$ mil.)</b>											
<b>a. Net Individual Income Tax</b>	520	498	496	602	<b>2,117</b>	510	511	556	616	<b>2,193</b>	543
<b>b. Declaration of Estimated Taxes</b>	120	70	124	245	<b>559</b>	86	75	178	213	<b>552</b>	150
<b>c. Withholding Tax on Wages</b>	438	443	469	460	<b>1,810</b>	464	461	526	465	<b>1,916</b>	461
<b>13. TAT (\$ mil.)</b>	115	96	124	112	<b>447</b>	150	100	140	120	<b>508</b>	135
<b>14. Civilian Unemployment Rate (%)</b>	3.5	3.1	3.0	3.2	<b>3.2</b>	3.0	2.8	2.8	2.9	<b>2.9</b>	2.4
<b>15. Non-Agricultural Wage and Salary Jobs (1,000)</b>	635	650	644	646	<b>643</b>	644	657	650	654	<b>651</b>	651
<b>16. Hotel Occupancy Rate (%)</b>	79.4	77.8	80.7	77.5	<b>78.9</b>	80.5	77.7	81.2	79.2	<b>79.7</b>	81.3
<b>17. Hotel Average Daily Room Rate (\$/day)</b>	243	246	258	240	<b>247</b>	257	259	273	254	<b>261</b>	261

1/Data are for every 6 months.

na - not available.

## SELECTED ECONOMIC DATA: FY 2016 TO FY 2018

	FY 2016					FY 2017					FY 2018
	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Annual	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Annual	Jul-Sep
<b>1. U.S. GDP in Current Dollars</b>	3.4%	3.1%	2.5%	2.5%	<b>2.9%</b>	2.8%	3.4%	4.0%	3.8%	<b>3.5%</b>	4.2%
<b>2. U.S. GDP Implicit Price Deflator (2009=100)</b>	1.0%	1.1%	1.1%	1.2%	<b>1.2%</b>	1.2%	1.5%	2.0%	1.6%	<b>1.5%</b>	1.8%
<b>3. Construction</b>	15.7%	15.8%	8.5%	-7.4%	<b>7.4%</b>	18.1%	2.0%	8.5%	-2.9%	<b>6.5%</b>	na
<b>4. Total Private Building Authorizations</b>	13.0%	-2.8%	-58.0%	14.3%	<b>-14.3%</b>	-0.3%	-9.4%	68.5%	-14.5%	<b>4.3%</b>	-18.8%
<b>5. Total Wages</b>	5.2%	7.4%	3.4%	6.1%	<b>5.6%</b>	8.6%	0.7%	7.9%	4.6%	<b>5.4%</b>	na
<b>6. Total Personal Income</b>	5.1%	5.0%	4.4%	3.6%	<b>4.5%</b>	3.3%	2.1%	2.9%	2.9%	<b>2.8%</b>	na
<b>7. Visitor Arrivals by Air</b>											
<b>a. Total State</b>	3.6%	4.3%	3.6%	1.7%	<b>3.3%</b>	3.1%	3.6%	2.3%	5.9%	<b>3.7%</b>	5.8%
<b>b. Domestic</b>	4.2%	5.4%	4.1%	1.3%	<b>3.7%</b>	3.9%	3.8%	1.6%	5.5%	<b>3.8%</b>	5.2%
<b>c. International</b>	2.5%	2.1%	2.7%	2.8%	<b>2.5%</b>	1.5%	3.4%	3.6%	6.6%	<b>3.7%</b>	7.1%
<b>8. Average Daily Visitor Census</b>											
<b>a. Total State</b>	3.6%	3.2%	0.9%	1.1%	<b>2.1%</b>	2.6%	2.4%	3.9%	6.0%	<b>3.7%</b>	4.9%
<b>b. Domestic</b>	1.9%	3.4%	0.1%	0.3%	<b>1.4%</b>	2.5%	2.1%	2.6%	5.1%	<b>3.1%</b>	4.3%
<b>c. International</b>	8.4%	2.7%	2.8%	3.5%	<b>4.3%</b>	2.6%	3.4%	7.0%	8.5%	<b>5.4%</b>	6.5%
<b>9. Honolulu CPIU (1982-84=100) 1/</b>	1.3%	1.3%	2.4%	2.4%	<b>1.8%</b>	1.5%	1.5%	2.5%	2.5%	<b>2.0%</b>	na
<b>10. State General Fund Tax Revenue</b>	18.1%	1.4%	4.1%	8.9%	<b>8.0%</b>	-3.0%	4.8%	4.8%	1.7%	<b>2.0%</b>	9.5%
<b>11. General Excise &amp; Use Tax</b>	10.2%	2.3%	4.6%	3.7%	<b>5.2%</b>	-3.6%	3.9%	1.7%	2.5%	<b>1.0%</b>	12.5%
<b>12. Individual Income Tax</b>											
<b>a. Net Individual Income Tax</b>	14.8%	-0.3%	6.8%	5.4%	<b>6.5%</b>	-2.1%	2.5%	12.2%	2.4%	<b>3.6%</b>	6.6%
<b>b. Declaration of Estimated Taxes</b>	75.5%	8.0%	6.7%	-1.7%	<b>12.1%</b>	-28.5%	7.7%	43.0%	-12.7%	<b>-1.2%</b>	74.9%
<b>c. Withholding Tax on Wages</b>	6.2%	0.7%	7.8%	4.4%	<b>4.7%</b>	5.9%	4.2%	12.0%	1.2%	<b>5.9%</b>	-0.8%
<b>13. TAT</b>	7.9%	6.2%	8.7%	1.6%	<b>6.1%</b>	29.8%	3.6%	12.8%	7.1%	<b>13.8%</b>	-9.6%
<b>14. Civilian Unemployment Rate (change)</b>	-0.8	-0.9	-0.9	-0.6	<b>-0.8</b>	-0.5	-0.3	-0.2	-0.3	<b>-0.3</b>	-0.6
<b>15. Non-Agricultural Wage and Salary Jobs</b>	1.8%	2.1%	1.7%	1.3%	<b>1.8%</b>	1.5%	1.1%	0.9%	1.3%	<b>1.2%</b>	1.1%
<b>16. Hotel Occupancy Rate (change)</b>	0.7	3.1	0.7	-0.2	<b>1.1</b>	1.1	-0.1	0.5	1.7	<b>0.8</b>	0.8
<b>17. Hotel Average Daily Room Rate</b>	3.9%	2.9%	2.5%	2.0%	<b>2.8%</b>	5.7%	5.6%	5.9%	6.0%	<b>5.8%</b>	1.4%

1/Data are for every 6 months.

na - not available.

**What are the Council's  
current forecasts?**

## FORECASTS OF KEY ECONOMIC INDICATORS FROM THE MEETING OF SEPTEMBER 7, 2017: FY 2018 to FY 2024

Fiscal Year	2018	2019	2020	2021	2022	2023	2024
	<b>A. VALUE</b>						
Hawaii Total Personal Income (1982-1984 Constant Million Dollars)	27,752	28,171	28,591	29,017	29,467	29,909	30,355
Hawaii Total Personal Income (\$Millions)	76,275	79,257	82,237	85,230	88,298	91,362	94,487
Construction Completed (\$Millions)	9,252	9,642	9,955	10,247	10,527	10,789	11,063
Honolulu CPIU (1982-1984 = 100)	275	282	289	295	301	307	313
Visitor Arrivals by Air (Thousands)	9,226	9,386	9,523	9,657	9,788	9,922	10,059
U.S. GDP (\$ Billions)	19,684	20,460	21,250	22,055	22,893	23,763	24,666
U.S. GDP Deflator (2005 = 100)	125	127	129	131	134	137	140
Calendar Year Wages (\$Millions)	32,336	33,507	34,666	35,803	36,927	38,061	39,203
Visitor Expenditures by Air (\$Millions)	16,860	17,421	17,958	18,486	19,000	19,528	20,071
Hawaii Real GDP (2009 Constant Million Dollars)	74,811	75,836	76,845	77,844	78,848	79,857	80,871
	<b>B. ANNUAL PERCENTAGE GROWTH RATE</b>						
Hawaii Total Personal Income (1982-1984 Constant Million Dollars)	1.47	1.51	1.49	1.49	1.55	1.50	1.49
Hawaii Total Personal Income (\$Millions)	3.83	3.91	3.76	3.64	3.60	3.47	3.42
Construction Completed (\$Millions)	5.13	4.22	3.25	2.93	2.73	2.49	2.54
Honolulu CPIU (1982-1984 = 100)	2.39	2.44	2.31	2.19	2.09	1.98	1.93
Visitor Arrivals by Air (Thousands)	2.42	1.73	1.46	1.41	1.36	1.37	1.38
U.S. GDP (\$ Billions)	3.71	3.94	3.86	3.79	3.80	3.80	3.80
U.S. GDP Deflator (2005 = 100)	1.68	1.93	1.94	1.92	1.92	1.92	1.92
Calendar Year Wages (\$Millions)	3.74	3.62	3.46	3.28	3.14	3.07	3.00
Visitor Expenditures by Air (\$Millions)	3.81	3.33	3.08	2.94	2.78	2.78	2.78
Hawaii Real GDP (2009 Constant Million Dollars)	1.40	1.37	1.33	1.30	1.29	1.28	1.27

# ESTIMATES OF GENERAL FUND TAX REVENUE FROM THE MEETING OF SEPTEMBER 7, 2017: FY 2018 TO FY 2024<sup>1</sup>

(In thousands of dollars unless otherwise specified)

TYPE OF TAX	BASE		ESTIMATED						
	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
General Excise and Use Tax	3,206,154	3,239,225	3,365,590	3,484,017	3,606,528	3,734,638	3,864,419	4,004,304	4,128,122
Individual Income Tax	2,116,392	2,192,341	2,285,253	2,415,567	2,517,342	2,634,487	2,760,243	2,887,921	3,020,250
Corporate Income Tax	93,036	76,761	91,257	89,489	103,600	106,104	109,332	111,234	113,502
Public Service Company Tax	152,760	122,159	125,861	130,243	134,802	139,471	144,301	149,300	154,471
Tax on Insurance Premiums	153,173	164,688	169,774	173,738	177,994	182,731	187,633	192,792	207,425
Cigarette and Tobacco Tax	83,685	82,792	83,120	85,101	87,525	90,085	92,806	95,622	98,540
Liquor Tax	50,590	51,167	51,677	52,288	52,876	53,447	54,018	54,596	55,181
Tax on Banks and Other Financial Corps.	12,691	9,174	8,156	6,505	5,173	4,553	3,848	3,461	16,787
Inheritance and Estate Tax	49,613	18,968	19,287	19,659	20,040	20,425	20,817	21,217	21,624
Conveyance Tax	26,415	49,737	53,433	57,582	61,983	66,781	71,748	76,952	81,650
Miscellaneous Taxes*	16,067	15,845	16,258	16,253	16,247	16,241	16,234	16,228	16,221
Transient Accommodations Tax	233,781	292,357	317,103	339,558	360,690	381,629	402,417	423,302	444,633
<b>GENERAL FUND TOTAL</b>	<b>6,194,356</b>	<b>6,315,215</b>	<b>6,586,769</b>	<b>6,870,000</b>	<b>7,144,800</b>	<b>7,430,592</b>	<b>7,727,816</b>	<b>8,036,929</b>	<b>8,358,406</b>
<b>GROWTH RATE</b>	<b>8.0%</b>	<b>2.0%</b>	<b>4.3%</b>	<b>4.3%</b>	<b>4.0%</b>	<b>4.0%</b>	<b>4.0%</b>	<b>4.0%</b>	<b>4.0%</b>

<sup>1</sup> Line item projections generated by Tax Research & Planning Office to be consistent with the Council's forecast for the total General Fund tax revenues.

\*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.

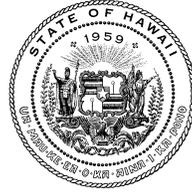
# Effects of Recent Passage of 2017 Tax Cuts and Jobs Act?

## IMPACT OF 2017 TAX REFORM ACT

- It will be less easy for Hawaii to export a large amount of its tax burden to the Federal government.
  - Deductibility of Hawaii State income, GET (sales) tax, and real property taxes paid will be capped at \$10,000 for itemized deductions
- Accelerates payment of deductible expenses from 2018 to 2017.
- Increases incentive for individuals to establish and maintain their tax residences in lower tax states.
- Other consequences will require further time to analyze.

DAVID Y. IGE  
GOVERNOR

SHAN TSUTSUI  
LT. GOVERNOR



KURT KAWAFUCHI  
CHAIR

MARILYN M. NIWAO  
VICE-CHAIR

**MEMBERS:**

Carl S. Bonham  
Christopher Grandy  
Ed Case  
Jack P. Suyderhoud  
Kristi L. Maynard

## COUNCIL ON REVENUES

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

January 2, 2018

The Honorable Donovan M. Dela Cruz  
Chair, Senate Committee on Ways and Means  
Hawaii State Capitol, Room 208  
Honolulu, Hawaii 96813

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

Chairpersons and Members of the Committees:

Thank you for inviting the Council on Revenues (Council) to appear before your committees to present its current General Fund tax revenue forecasts for the State of Hawaii. My name is Marilyn Niwao, and I am the Vice-Chair of the Council on Revenues. Unfortunately, the Council's Chair, Kurt Kawafuchi, could not attend this briefing today. As a starting point, the following is an overview of the Council's process to derive its forecasts followed by a discussion of the Council's recent forecasts.<sup>1</sup>

### **Overview**

#### *Overview of Sources of Hawaii General Fund Tax Revenues*

The bulk of the State of Hawaii's tax revenue comes from consumption taxes, such as the Hawaii General Excise taxes and Transient Accommodation taxes. In addition, income taxes from individuals and corporations also are significant sources of revenue. Estate and conveyance taxes comprise only a small part of the overall state tax revenue.

#### General Excise Taxes

The General Excise Taxes (GET) is a gross income tax on receipts of sales and other business activities in Hawaii. It is imposed on the privilege of doing business in the State of Hawaii. It raises significant revenue through a low rate and broad base. Unlike a

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<sup>1</sup> Because the Council on Revenues will have its next general fund meeting during the afternoon of Monday, January 8, 2018, we may supplement this testimony with additional written testimony using updated information.

retail sales tax that is primarily used by other states, the GET is imposed on services and rental income, in addition to tangible goods. As such, it has been remarkably more stable in generating revenue than the sales taxes utilized by other states.

### Individual Income Taxes

The Hawaii income taxes are very progressive relative to other states. Refundable credits such as the Food credit and Renter's credit offset the burden for lower income individuals.

The largest state specific exemptions are pensions and social security, which are expected to grow with time due to state demographics and the aging baby boomers.

Hawaii has one of the highest marginal tax rates in the country. However, the income threshold of the top 1% of filers in Hawaii is relatively very low at \$281,620. Although there are many wealthy individuals with residences in Hawaii, they oftentimes choose to be residents in other lower-taxed states. In addition, Hawaii does not have the types of businesses that generally pay more.

Aside from certain limitations for higher earners, there is no cap on the amount of state and local taxes (SALT) that could be deducted on the returns of Hawaii taxpayers for 2017 and earlier years, and Hawaii was able to export a large portion of the individual income tax burden to the Federal government. With the change of tax laws effective in 2018 and the SALT limitations of \$10,000, this would affect many higher income Hawaii taxpayers.

### Transient Accommodation Taxes

Transient Accommodation Taxes (TAT) are imposed on transient accommodations for less than 180 consecutive days. More than half of all TAT revenue goes to the General Fund.

#### *Factors Considered by the Council in its Forecasts*

The Council is tasked with the responsibility of forecasting General Fund Tax Revenue Growth and Total Personal Income Growth. In forecasting General Fund Tax Revenue growth rates, the Council considers:

1. The output of three economic models (discussed in Exhibit A as the "Regular Model," the "UCLA Model," and "Single Regression Equation Model").
2. Tax laws and tax law changes affecting tax collections.
3. The impact of DOTAX administrative policies and procedures, such as the timing of the collection of taxes, payment of tax refunds to taxpayers, and allocations to the City and County of Honolulu.
4. Other factors raised and discussed at Council meetings.

Other factors include, but are not limited to, the potential effect of external international and national events, noncompliance with existing tax laws, the effect of possible internet tax fraud in collection efforts, and monthly tax collections. After discussion of various factors and the results of the economic models, 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 output of the economic models since the forecast encompasses other considerations not directly incorporated in the economic models.

The Council forecasts only the total General Fund tax collections. To get the implied growth in collections of the individual tax types, the DOTAX Tax Research Planning Office (TRP) staff change the economic variables in the primary model until that 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 State of Hawaii recognizes General Fund Tax Revenue on the cash basis of accounting. The cash basis of accounting records revenues when cash is received and tax refunds disbursed. This method differs from the accrual basis of accounting which accounts for revenues when earned.

Errors in forecasting General Fund growth rates can be the result of:

- 1) errors in estimating the underlying economic growth rates;
- 2) timing differences (i.e., where there was a delay in the collection of taxes or payment of refunds);
- 3) errors in estimating the impact of new tax laws or compliance with existing tax laws; or
- 4) errors in estimating the impact of other factors or external events.

### **The Council's Forecasts of General Fund Tax Revenues**

#### *Results for fiscal year 2017*

In fiscal year 2017 (FY17), which ran from July 1, 2016 to June 30, 2017, the State's General Fund tax revenues increased by 2.0% over FY16. This was lower than the Council's forecasted rate of 2.5% and considerably lower than the FY16 growth rate of 8.0%. In dollar terms, General Fund revenue grew to \$6,315.2 million in FY17 from \$6,194.4 million in FY16.

The general excise tax (GET) comprises approximately half of total General Fund tax revenues. GET revenue grew by only 1.0% from FY16 to FY17. Individual income tax revenue, the second largest source of General Fund revenue, grew by 3.5%

The deceleration in revenue growth of the GET and the General Fund was in part due to timing differences in the receipt of funds. In September 2015, a litigation settlement with online travel companies resulted in a \$29M revenue gain. This resulted in abnormally high revenue in the first half of FY16 to which FY17 revenues are being compared.

Additionally, accounting adjustments transferred \$40.6M out of the GET fund in the beginning of FY17. Of the \$40.6M, \$15.6M was transferred in July 2016 to a litigated fund, and \$25M was transferred from the GET to the Transient Accommodation Tax (TAT) fund in August 2016 (note: the \$25M transfer would not have affected the General Fund numbers). If the \$29M is taken out from the reference year FY16 and \$40.6M is added back into the GET fund, the annual growth rate for the GET would have been 3.6% and 2.9% for the General Fund.

*Results for the first five months of fiscal year 2018*

At its meeting in September 7, 2017, the Council revised its forecast for General Fund revenues up from 4.0% to 4.3%. At that meeting, the Council noted that Hawaii's economy continued to be strong, but cited uncertainty about the future. In particular, the Council expressed concerns that Hawaii's economy may reach the end of its current expansionary cycle during the seven-year budget window. It noted that visitor arrivals and expenditures, job counts, and construction activities all continued to be strong. However, the Council was concerned that the construction cycle may have peaked.

The Council also has expressed concerns about international events, such as a potential North Korea conflict, which may affect Hawaii's economy. In addition, the Council has discussed noncompliance with Hawaii tax laws and the shift of retail sales taxed locally to online purchases, which for the most part remains untaxed by out-of-state sellers.

The Council also raised the forecast for growth in FY19 to 4.3%, but lowered the forecast for growth from 4.5% to 4.0% for FY20 to FY24.

General Fund Tax Revenues Growth Forecasts

Fiscal Year	Amount (in Thousands of Dollars)	Growth From Previous Year
2018	6,586,769	4.3%
2019	6,870,000	4.3%
2020	7,144,800	4.0%
2021	7,430,592	4.0%
2022	7,727,816	4.0%
2023	8,036,929	4.0%
2024	8,358,406	4.0%

Subsequent to its September 2017 meeting, the preliminary data through November 30, 2017 shows a General Fund growth rate of 4.7% for the first five months of FY18 compared to the same period in FY17. Cumulative net collections of GET revenue for FY18 were \$1,415M, compared to \$1,339.9M for the same period in FY17, for a partial year-over-year growth rate of 5.6%.

Below is the cumulative growth rate in General Fund revenues during FY18 over the same period in FY17.

July 2017	12.2%
August 2017	8.9%
September 2017	9.5%
October 2017	5.1%
November 2017*	4.7%

\* Preliminary data

To date, the cumulative growth rate (4.7% as of November 2017) has remained above the Council's forecasted 4.3% growth rate for FY18. At the Council's most recent meeting on September 7, 2017, only the July and August 2017 general fund cumulative growth rate of 8.9% was available for consideration.

The first several months of the fiscal year had larger than average growth rates in part due to the low GET collection amounts that occurred in July and August of 2016. In other words, the growth numbers are larger because last year's base numbers were unusually low. Additionally, collections that were due in the last part of FY16 were processed in the early part of FY17.

Cumulative net collections of individual income tax revenues for FY18 were \$909 million compared to \$827 million for the same period in FY17, for a year-over-year growth rate of 10.0%. Cumulative net collections of corporate income tax for FY17 were \$6 million compared to \$43 million for the same period in FY16, for a year-over-year growth rate of -86% (i.e., a significant decline).

Below is a breakdown of net individual and corporate income tax revenues through November 2016 compared to the same five-month period for FY17.

**Year-on-year net income tax collections FY16 and FY17 – by Component\***

	FY17	FY16	DIFFERENCE	
			AMOUNT	% CHANGE
<b>Income Tax – Corp.</b>	<b>6,080</b>	<b>43,914</b>	<b>(37,834)</b>	<b>-86.2%</b>
Estimated tax payments	52,011	58,931	(6,919)	-11.7%
Payment with returns*	(15,605)	17,451	(33,056)	-189.4%
Refunds	(30,326)	(32,468)	2,142	-6.6%
<b>Income Tax – Ind.</b>	<b>909,294</b>	<b>826,500</b>	<b>82,794</b>	<b>10.0%</b>
Estimated tax payments	170,910	132,695	38,215	28.8%
Payment with returns	47,575	47,478	97	0.2%
WH Tax on Wages	815,427	758,154	57,272	7.6%
Refunds	(124,617)	(111,828)	(12,789)	11.4%

\* Based on preliminary data for November

The breakdown of net income tax revenues for corporations shows that the largest drags on corporate income tax revenues are lower payments with returns. For individual income tax revenues, the component with the largest increase is the declaration of

estimated taxes. There is also an increase in individual income tax refunds and an increase in withholding taxes on wages.

Revenues from corporate taxes, apart from being a small portion of general fund revenues, are extremely volatile since tax planning efforts by corporations may allow them to shift tax liabilities over multiple years.

The Council expects that inflation, as measured by the Honolulu Consumer Price Index for All Urban Consumer (CPI-U), to be slightly above 2% per year over the forecast horizon. As a matter of comparison, the Honolulu CPI-U increased 1.8% in FY16 and 2.0% in FY17, as reported by the U.S. Bureau of Labor Statistics.

The Council also expects that the number of visitor arrivals by air will increase at an annual average growth rate of about 1.5% over the forecast window of FY18 through FY24, remaining elevated in the near term and then gradually declining in the years further out.

Another key economic factor impacting the growth of tax revenue collections is the strength of the construction industry. Construction permits (private building authorizations), an indicator of future construction activity, increased 4.3% in FY17 over FY16. The Council forecasts average growth rates for construction activity of 5.1% for FY18, 4.2% for FY19, and 3.2% in FY20.

Total personal income, a comprehensive indicator of Hawaii's economy, is expected to grow between 3.4% and 3.9% in the subsequent years. At its latest total personal income meeting on October 25, 2017, the Council lowered its forecast of growth in total personal income to 3.0% for calendar year 2017 and 3.5% for calendar year 2018.

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 2017 Legislature, including the following:

- Act 107, SLH 2017 reinstates three tax rates and brackets (9.0%, 10.0%, and 11.0%) for the highest-income taxpayers imposed by Act 60, SLH 2009, for taxable years beginning after December 31, 2017. The gain to the General Fund is estimated to be \$50.7 million in FY19, \$53.3 million in FY20, \$55.9 million in FY21, \$58.7 million in FY22, \$61.6 million in FY23, and \$64.7 in FY24.
- Act 107, SLH 2017 establishes a nonrefundable earned income tax credit (EITC) equal to 20 percent of the Federal EITC. The tax credit applies to tax years 2018 through 2022. The loss to the General Fund is estimated to be \$16.7 million in FY19, \$20.4 million in FY20, \$23.8 million in FY21, \$27.1 million in FY22, \$30.1 million in FY23, and \$0.0 in FY24.
- Act 107, SLH 2017 repeals the sunset date (December 31, 2017) for the amendments to the refundable food/excise tax credit by Act 223, SLH 2015. The resulting loss to the General Fund is estimated to be \$6.5 million per year from FY19 to FY24.

The Honorable Donovan M. Dela Cruz

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- Act 143, SLH 2017 amends the motion picture, digital media, and film production tax credit by limiting total amount of credit to \$35 million per year and extending the credit to January 1, 2026. Total tax credits claimed per qualified production shall not exceed \$15 million. The estimated revenue loss to the General Fund is \$35 million from FY20 to FY24.
- Act 54, SLH 2017 exempts certain affordable rental housing projects from the general excise and use tax. The legislation limits total amount of exemptions to \$7 million per year starting July 1, 2017 through June 20, 2022. The expected revenue loss is \$7 million in FY19 to FY22.
- Act 1, SLH 2017 increases the TAT rate from 9.25% to 10.25%, effective January 1, 2018 through December 31, 2030, and allocates the tax revenue generated from the increase to the Mass Transit Special Fund. The Act also increases the annual allocation to the counties from \$93 million to \$103 million, beginning in FY18. The expected revenue loss to the General Fund is \$10 million from FY18 to FY24.

The Council also took into account provisions from earlier legislation, including the following:

- Acts 117 and 121, SLH 2015 changed allocations of the TAT. According to Act 121, TAT allocations for FY16 and later are as follows: Tourism special fund \$82 million; Counties \$93 million (except \$103 million in FY16 and FY 2017); Convention Center special fund \$26.5 million; and Turtle Bay conservation easement \$1.5 million. Act 117 allocated \$3 million annually to the Special Land Development fund starting in FY17. The changes in allocations are expected to yield \$2 million in additional General Fund tax revenues in FY17 and thereafter. Note that Act 107, SLH 2017 directs \$103 million from FY18 and beyond.
- Act 120, SLH 2015 provides a tax credit for converting cesspools to a septic system or connecting to a wastewater system. The tax credit expires December 31, 2020 and is estimated to reduce General Fund tax revenues by \$5 million annually from FY17 through FY21.
- Act 223, SLH 2015 modifies the food/excise tax credit (an increase for certain taxpayers) for tax years 2016 and 2017. The Act is estimated to reduce General Fund tax revenues by \$6.5 million in FY17 and in FY18.
- Act 89, SLH 2013 amends the motion picture digital media and film production tax credit. The Act increases the credit rate from 15% to 20% for productions on Oahu and from 20% to 25% for productions on the neighbor islands. The Act also increases the cap on the amount of the credit per production from \$8 million to \$15 million and moves the expiration date for the credit from January 1, 2016 to January 1, 2019. The Act is estimated to raise the annual cost of the tax credit by about \$21 million.

The Honorable Donovan M. Dela Cruz  
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*Effect of Recent Passage of Tax Cuts and Jobs Act*

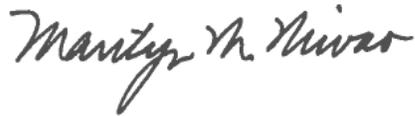
Although the massive Federal tax law changes in the Tax Cuts and Jobs Act (the “Act”) reduces overall tax rates, many Hawaii taxpayers may find themselves paying more taxes depending on their circumstances. In particular, for the tax years 2018 through 2025, the Act limits deductions for taxes paid by individual taxpayers by limiting the aggregate deduction to \$10,000 (\$5,000 for married filing separately) for State and local income taxes, State and local real property taxes, State and local personal property taxes, and general sales taxes (if elected). Accordingly, the timing of State tax collections may be accelerated one time into late December 2017 or early January 2018.

Since the Council will be meeting on January 8, 2018, it has not had a chance to meet to discuss the effects of the new Act on Hawaii General Fund collections. In any case, any new Hawaii conformity laws passed will likely have an impact on future State revenue collections.

Thank you for this opportunity to testify. I would like to thank Seth Colby, PhD, Tax Research & Planning Officer and staff of the TRP for their assistance in providing graphs, data, and assistance in putting together this report, and to Kurt Kawafuchi, J.D., LL.M., MBA, CPA (not in public practice), Chair of the Council on Revenues, for his assistance in this presentation.

I am available to answer any questions you may have.

Respectfully submitted,



Marilyn M. Niwao, M.S.P.H., J.D., CPA, CGMA  
Vice Chair, Council on Revenues

Attachment

# Exhibit A

## **BACKGROUND - TRP'S ECONOMIC MODELS AND THE GENERAL FUND FORECASTS**

The Council on Revenues (Council) meets to produce forecasts of General Fund tax revenues four times each year. The forecasts are transmitted to the Governor and to the Legislature in reports that are due by January 10, March 15, June 1, and September 10. Before each Council meeting, the Tax Research and Planning Office (TRP) in the Department of Taxation sends the Council members a survey to complete. The survey asks the members for their individual forecasts for economic variables ("indicators") that predict what will happen to Hawaii's economy over the next seven years. The economic indicators are listed below:

- 1) Real growth of Hawaii total personal income
- 2) Nominal growth of construction completed in Hawaii
- 3) Honolulu consumer price index
- 4) Growth in the number of total State visitor arrivals by air
- 5) Nominal growth of U.S. GDP
- 6) U.S. GDP deflator
- 7) Nominal growth of total wages in Hawaii
- 8) Nominal growth in visitor expenditures by air in Hawaii
- 9) Real growth of Hawaii GDP

Each survey sent to the members is accompanied by the results from the previous survey and by a table with the forecasts from the previous meeting. After the members return their surveys, the TRP provides them with a workbook for the meeting. The workbook contains a table with the average of the members' forecasts for each economic indicator, a table with historical data on the economic indicators, and tables with predictions of General Fund tax revenues based on the members' economic forecasts.

The TRP uses the Council's forecasts for economic indicators to predict General Fund tax collections from the following taxes:

- 1) General excise and use taxes
- 2) Individual income tax
- 3) Corporate income tax
- 4) Public service company tax
- 5) Tax on insurance premiums
- 6) Cigarette and tobacco tax
- 7) Liquor tax
- 8) Tax on banks and other financial corporations
- 9) Inheritance and estate tax
- 10) Conveyance tax
- 11) Miscellaneous taxes
- 12) Transient accommodations tax

The TRP uses three models to make its predictions. The first model, referred to as the “Regular Model,” has a separate regression equation for each of the above-listed taxes, except for the transient accommodations tax (TAT) and the inheritance and estate tax. The TAT is simply predicted to grow by the rate of growth of visitor arrivals plus the rate of inflation in Honolulu. Collections from the estate tax are assumed to grow at the rate of inflation (as measured by the U.S. GDP deflator) because we have not had enough experience with the new tax to develop a regression equation. The results for each equation are summed to get the forecast for total General Fund tax collections.

The second model, referred to as the UCLA Model, contains only three regression equations and predicts collections for the general excise tax, the individual income tax, and the corporate income tax. These three taxes accounted for 87% of total General Fund tax revenues in fiscal year ended June 30, 2017. The collections for the remaining taxes are predicted using the same equations as in the first model. The UCLA model was developed by Anderson Forecasting under a contract with the Department of Taxation in 2009.

At the request of Council members, the TRP added a third model in 2012 which uses a single regression equation to forecast total General Fund tax collections.

The regression equations from all of the models predict future tax collections based on the Council's forecasts for what will happen to Hawaii's economy. However, the amount of taxes paid into the General Fund also depends on new legislation, such as changes in tax rates, in tax credits, or in the portion of a tax that is dedicated to the General Fund. To take account of the effects of new legislation, the TRP uses revenue estimates that were prepared for the Legislature. The revenue estimates are combined with the regression results to predict the actual General Fund tax collections.

To clarify the nature of the TRP's contribution to the work of the Council, TRP does not engage in forecasting. Instead, it provides a conditional prediction of General Fund tax revenues, based on the Council's economic forecasts. That is, the TRP provides regression results that predict what the tax collections will be if the economy behaves as forecast by the Council. Essentially, the regressions tell us what to expect if tax collections react to economic changes the way they have reacted to similar economic changes in the past. Then, special adjustments are added to account for changes in tax laws and for other things that might cause the reaction to be different in the future than it was in the past.

The TRP updates the regression equations at least once each year, trying new variables and different equations to improve its predictions, and adding adjustments to take account of new legislation that affects tax collections. In addition, the TRP informs the Council of any changes that it believes might materially affect the General Fund tax revenue forecast, such as unusual receipts from court settlements, or changes in processing times of refunds.

How have the models performed? If the Council's forecasts were completely accurate, so that any prediction error was solely the fault of the models, here is what the results would look like from the March meeting in recent years:

<b>Fiscal Year</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
	(Growth Rate)			
Actual GF	-1.8%	6.8%	8.0%	2.0%
Council's Forecast	0.0%	5.5%	6.7%	2.5%
Regression Models:				
1) Regular	1.5%	5.0%	8.9%	5.0%
2) UCLA	1.9%	5.2%	8.8%	5.4%
3) Single Equation	1.6%	4.7%	6.9%	4.0%