APPENDIX A:

REPORT OF THE PFM GROUP CONSULTING LLC –

"State of Hawaii Tax Review Commission: Study of the Hawaii Tax System"

State of Hawaii
Tax Review Commission
Study of the Hawaii Tax System

November 14, 2017

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Introduction and Project Background

Report Background

Article VII, Section 3 of the Hawaii State Constitution requires that a Tax Review Commission be appointed, as provided by law, on or before July 1, 1980, and every five years thereafter. The commission is required to submit to the Legislature an evaluation of the State's tax structure, recommend revenue and tax policy and then dissolve. This requirement was a product of a 1978 Constitutional Convention. As a result, Chapter 218 of the Laws of 1979 created the Hawaii Tax Review Commission (Commission or TRC), which is to consist of seven members who are appointed by the Governor, with the consent of the Senate. As its primary responsibility, the Commission is to "conduct a systematic review of the State's tax structure, using such standards as equity and efficiency."[1]

While the 2012 Commission focused its primary research efforts on the question of revenue adequacy in light of budget challenges associated with the Great Recession and its aftermath, the 2017 Commission sought research assistance on three specific areas of tax policy. These are:

- Who bears the burden of Hawaii's taxes (including how much is exported to visitors)?
- What are the most effective ways to reform Hawaii's taxes to make them less regressive?
- What are the best ways to generate more revenue through new and existing sources, and through improved compliance with Hawaii's tax laws?

In February 2017, the TRC engaged PFM Group Consulting LLC (PFM or project team) to perform a systematic review of the State's tax structure, with particular emphasis on assisting the Commission with addressing the three questions. PFM had also been retained by the 2012 Tax Review Commission and was able to use that prior knowledge and experience in its 2017 analysis, and findings.

Discussions with members of the TRC indicated that the analysis of question one should present State and county tax incidence by income class, and also estimate the portion of each tax that is exported to nonresidents. Similar studies have been done for past Tax Review Commissions in 1989 and 2005.

With respect to question two, the project team determined that solutions should consider reducing State reliance on more regressive taxes in favor of taxes that are more progressive, or making the individual income tax more progressive, and that resulting reform recommendations should be designed to either raise tax revenue, or to be revenue neutral.

Finally, the third area of study should consider, at least broadly, how much revenue will be needed to maintain the current level of government services (tax adequacy). The RFP provided that one way to meet this test would be to identify resources that could cover the unfunded or underfunded liabilities for pension and health care benefits for retired state workers. The analysis in this area was to identify possible additional revenue by 2018 to fund the annual required contribution (ARC) to the Employer-Union Benefits Trust Fund, as well as including a qualitative assessment of the effects of current proposals on the overall economy and on its major sectors. It should be noted that later the TRC requested that PFM also analyze sufficiency related to the Hawaii Employees' Retirement System (ERS), and this analysis was made a part of the project and its final report.

With this direction, PFM developed a detailed project plan for the execution of this engagement.

[1] Hawaii Revised Statutes, Chapter 232E-3, Tax Review Commission Duties.

Methodology

To conduct the review within the specified areas of focus, PFM used the following methodology and key elements. In general, PFM relies on official state budget, revenue, economic, demographic and related data and information. This is augmented by other widely used and understood data sources, such federal data maintained by U.S Census Bureau, Bureau of Economic Analysis and Bureau of Labor Statistics. It also includes other government sources, such as the Federation of Tax Administrators, the National Association of State Budget Officers and the National Conference of State Legislatures.

Within each phase of the project, the PFM team has provided regular updates and communication with the Tax Review Commission and the project managers within the Department of Taxation. PFM has also prepared several written documents and presentations to assist the Commission in its advisory role.

The project plan called for the study to be conducted in four phases. The following details these phases:

Planning and Research Design

This phase communicated project details, finalized a detailed project plan, organized, scheduled and conducted a project kick-off and devised reporting and communications protocols. The project was staffed by analysts and subject matter experts with prior work experience in state budgeting and tax policy supported by a PhD level economist to assure that the project was executed efficiently and in the context of Hawaii state government's capabilities and the state's economic capacity.

Information Gathering

To help the project team understand current revenue and expenditure trends, State priorities and likely future performance, the project team engaged in extensive data gathering as well as structured interviews with department leaders, subject matter experts and internal and external stakeholders.[2] Many of these interviews were conducted on site in Hawaii in March 2017. The team reviewed past research and current modeling and forecasting around key revenue sources (GET, personal and corporate income tax, specific excise taxes) and selected expenditure drivers. Recent and past Commission reports were also reviewed and key budget and financial information (proposed and enacted budgets, CAFRs and annual reports) and reports were also reviewed. Workforce information, including pension and other post-employment benefits (OPEB) valuations and reports, collective bargaining agreements and pay plans, State statutes, regulations, civil service rules and other legal mandates, benefit schedules, health plans, headcount breakdown and other relevant information was collected and included in this analysis.

Modeling, Analysis and Evaluation

The team designed and constructed analytical models to assist in the synthesis, manipulation and analysis of the large amount of data and information collected and to test results of various scenarios. As indicated by baseline and future year revenue modeling, the team analyzed, reviewed and compared the State's revenue trends and performance to determine to what extent the current revenue system was sufficient to attain and/or maintain structural budget balance.[3]

[2] A full list of interviews, discussion groups and presentation groups can be found in Appendix A.
[3] Revenue growth rates and model outputs can be found in Appendix B.

The team identified alternative revenue approaches and structures used in other states, analyzed their applicability and appropriateness for the State of Hawaii and quantified, to the extent possible given the available data, changes in revenue bases or rates and their impact on the Hawaii economy in the aggregate and as they may relate to key industries or sectors. Also, the project team examined taxpayer and household characteristics, including income, supported by other analysis and research to assess the relative regressivity of the major revenue sources.

The project team also conducted best practice research that used a variety of nationally accepted tax subject matter experts (such as the Brookings Institute, Center on Budget and Policy Priorities, Council on State Taxation, Institute on Taxation and Economic Policy, Rockefeller Center on Government, Tax Policy Center, Tax Foundation and the Urban Institute).

Optimal Alternatives Phase

The team met or spoke with the Tax Review Commission and key contacts within the Department of Taxation on multiple occasions to provide project updates, vet findings and to resolve any outstanding project issues. In July, the project team provided the TRC and key staff with a project update and discussed high level findings based on the data and analysis compiled to date. The team sought feedback on areas for further research and study and carried out follow-up discussions and interviews with key staff and stakeholders. Following this mid-project briefing, the project team conducted additional analysis, did follow-up research to refine revenue projections and assumptions and further developed high level findings. This analysis was used to create the resulting draft report.

Once the TRC had sufficient time to review the draft report, the project team appeared at a following meeting of the Commission to present on the report and answer questions. Based on written and oral feedback, the project team prepared a final report for the TRC to consider as it crafts its report to the legislature.

Timing Issues

The project team began its work in March and provides this final report in September. In the meantime, the State Legislature considered multiple public policy issues with an impact on the State revenue structure. In at least two prominent instances, legislative changes have impacted on the project team's State tax structure and tax policy analysis.

The first relates to changes to the Individual Income Tax. During the summer, the Legislature passed and Governor Ige signed a bill that reinstated three top marginal income tax brackets that had expired in December 2015. At the same time, the bill also created a state earned income tax credit equal to 20 percent of the value of the federal earned income tax credit. Because these changes were made while the project was still in the analytical phase, the project team has taken these into consideration while conducting its analysis and writing its report.

The second concerns continued funding for the rail project on Oahu. A plan to extend funding for that project was not completed during the regular legislative session. A special session was held in late-August, and a plan approved and signed by Governor Ige on September 5, 2017. That plan extends the 0.5 percent GET surcharge on Oahu for three additional years, through 2030. It also raises the statewide Transient Accommodations Tax (TAT) by 1 percent for the next 13 years. Given the fact that the project team's draft report had already been submitted to the Commission (in August 2017), there was not sufficient time to consider these changes in the

draft report's analysis. The project team has provided a brief update related to its analysis after these changes in the final report.

State Background

As part of the 2012 TRC report, PFM provided an extensive history of Hawaii and its government structure and approaches to revenues and expenditures. That background is still relevant but not repeated here.

From the perspective of a study of tax issues since 2012, Hawaii has experienced much of the same trends and approaches as other states. The Great Recession had a profound impact on state budgets with no real exceptions. As a result, the years in the period leading up to the 2012 TRC were primarily focused on stabilizing existing revenue structures or making changes necessary to raise sufficient revenue to balance state budgets. In many cases, these revenue raising changes were broad-based so as to 'spread the pain' associated with tax increases and to resist, as much as possible, exacerbating the negative effects of tax increases on an already fragile economy. Hawaii did its share of revenue-raising during that timeframe, with 2009 in particular spawning a variety of changes – some of which were temporary changes. The PFM report in 2012 analyzed some of the temporary changes to determine whether they should be allowed to expire.

Thankfully, economic conditions in the U.S (and for most states) have improved significantly since that particular time period. In fact, in the years immediately after the 2012 report, most states either made tax law changes that were a net reduction in revenue or made little or no changes to their tax structure. As state revenues improved, that opportunity increasingly presented itself. Hawaii embarked on no major revenue increasing measures during this time period, and most tax law changes were relatively narrow.

In the past couple of years, tax policy among the states has diverged, with several states again facing budget pressures on either the expenditure side or revenue estimates not hitting their targets. This has created a dichotomy where some states that embarked on significant multi-year tax reductions (usually individual or corporate income tax rate reductions) have worked to continue to phase those in, while other states, looking to balance their budgets, have resorted to either focused excise tax increases (cigarette and tobacco taxes and similar 'sin taxes' in particular) or, in some instances, broad-based tax increases (sales tax rate increases or base expansion being the most prominent).

During this timeframe, Hawaii has not had to rely on tax changes to balance its budget – its underlying economy has performed quite well, and the tourism industry in particular continues to meet expectations in terms of visitors and length of stays. It did, however, make a significant change in its individual income tax rate structure in 2017, but this was (at least partly) to enact a state Earned Income Tax Credit that should make the overall State tax structure a bit less regressive.

In the coming years, however, there is likely to be continued pressure on the State budget related to long-term retiree pension and health care costs and concerns about federal support for key programs and federal policy (such as issues related to travel and immigration) that might negatively impact the State economy and budget. These issues will no doubt be areas of interest and concern for the TRC and state policymakers and stakeholders. As appropriate, these will be touched upon during the remainder of the report.

Current Revenue Structure

Overview

States have wide latitude in how they choose to raise revenue to fund government services. State revenue methods have evolved over the years. Prior to 1902, the largest source of state revenue across the U.S was property taxes – a total of 45 percent. During this time period, local governments also largely relied on property taxes – 73 percent of all local government revenue.[4]

However, in the early 20th century, state governments began to diversify their revenue sources, turning increasingly to state sales and income taxes. State sales taxes were a product of the Great Depression, and by the 1930s approximately half of the states had enacted a form of the tax.[5]

Personal and corporate income taxes had a similar genesis. Ten states adopted individual income taxes before 1920, with Wisconsin, and Mississippi even doing so before the adoption of the federal income tax in 1913. Additional states enacted income taxes in the Great Depression era, particularly Western states as a reaction to a decline in property tax collections during that era. It is notable that Hawaii adopted an income tax before any State (in 1901), but this was well before it achieved statehood in 1959.[6]

The rise of the importance of income and sales taxes led to a concomitant reduction in the importance of the property tax. In fact, by 1992, property taxes comprised 1.2 percent of state revenues and 18 percent of combined state and local revenues.[7]

Given Hawaii's history with the income tax, it is not surprising that its state and local tax structure has focused more on income and consumption taxes and less on those associated with wealth (property taxes). In many respects, this is a trend that continues at the state and local level around the country – although the property tax is, across the U.S., still the predominant source of local tax revenue.

While taxes are generally the largest source of state and local revenue, other sources are also important. In fact, at the local level in particular, the rise of the importance of fees and charges for services is an important development.

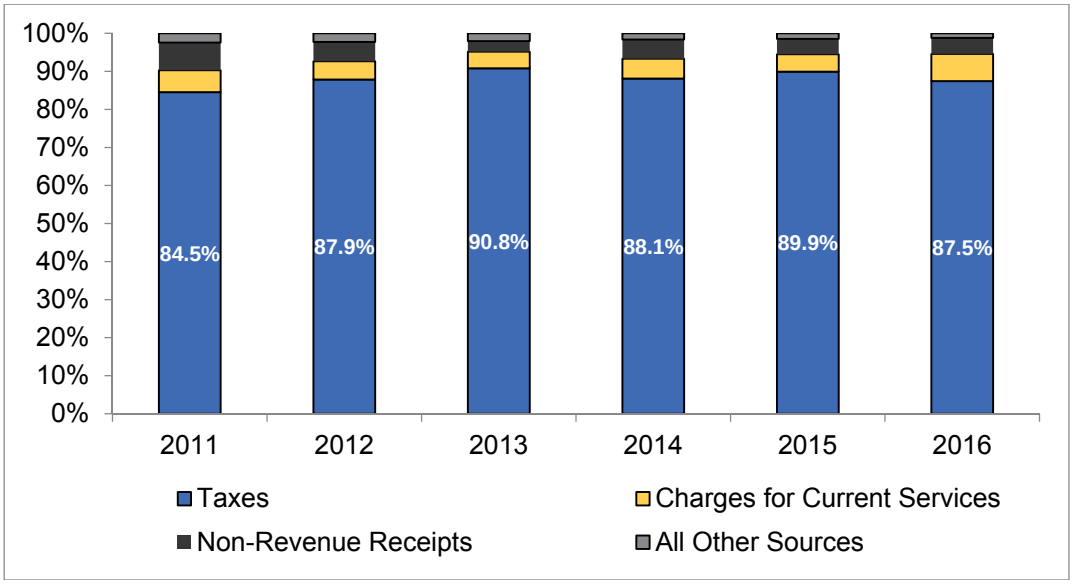
General Characteristics

As in many states, Hawaii derives the great majority of its total General Fund revenues from taxes. Other sources, including charges for services and non-revenue receipts (e.g. sales of real property and investments; general obligation and revenue bond proceeds; deposits, gifts, donations, private grants; transfers from other funds; etc.) provide the remainder of the revenue that funds operations and services.

In fiscal year (FY) 2016, Hawaii collected $7.1 billion in General Fund revenue. **Of that total, 87.5 percent was tax revenue**; the remaining 12.5 percent was composed of charges for current services (7.1 percent), non-revenue receipts (4.2 percent) and all other sources (1.2 percent). This distribution is reflective of other years in recent history, as shown in the following table.

[4] John Joseph Wallis, "A History of the Property Tax in America," in Property Taxation and Local Government Finance, Wallace E. Oates, ed. Cambridge: Lincoln Institute of Land Policy, pp. 123-147, 2001. Accessed electronically at http://econweb.umd.edu/~wallis/MyPapers/PTFinal.pdf
[5] Tax Foundation, "When Did Your State Adopt Its Sales Tax?" July 11, 2014, accessed electronically at https://taxfoundation.org/when-did-your-state-adopt-its-sales-tax/
[6] Tax Foundation, "When Did Your State Adopt its Income Tax?"
[7] Ibid.

Figure 1: General Fund Revenue Sources, FY2011-2016



Source: Tables Indicating the Basis for Revenue Estimates, Executive Biennium Budgets 2013-2015, 2015-2017 and 2017-2019

What the State Taxes

Across the U.S., taxes generally have as their basis one of the following three methods:

- **Tax consumption** (purchases of goods and services by individuals and businesses);
- **Tax income** (generally all sources, including wages, rents, dividends and interest);
- **Tax wealth** (generally property, which can be real estate or personal property).

As mentioned in the overview, three major taxes generally comprise the vast majority of the taxes imposed in a state, (when combining state and local government taxes). These three also align with the three methods of taxation. They are:

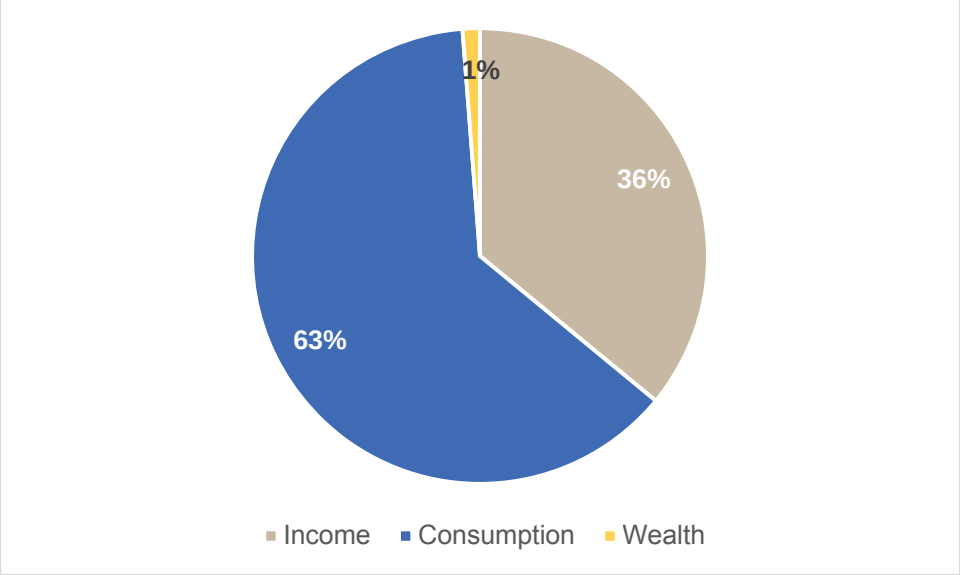
- **Sales and use tax** (consumption);
- **Income tax** (income);
- **Property tax** (wealth).

There are additional taxes that fit into each category. For example, Hawaii's general excise tax (GET) is primarily a consumption tax (although collected from most business activities), as are the transient accommodations tax (TAT), cigarette and tobacco and alcohol taxes. The corporate income tax is another addition to the taxes on income. The inheritance tax is an additional tax on wealth.

The following details the Hawaii State taxes broken into the consumption, income and wealth components:[8]

[8] Taxes on income include the individual and corporate income tax and the tax on banks and other financial corporations. Consumption taxes include GET, public service company tax, tax on insurance premiums, the TAT, and tax on cigarettes and tobacco and liquor. Wealth taxes include inheritance/estate and conveyance tax.

Figure 2: Hawaii Taxes by Type, 2016



Source: Hawaii Council on Revenues

The major caveat of this break-down is that it does not include local government property taxes. This is typical, as the majority of local government revenue in the U.S. comes from the property tax (both real and personal property), while few states use this as a primary revenue source. In the case of Hawaii, its Constitution prohibits a State property tax, so this situation is not likely to change anytime in the foreseeable future.

The State's largest revenue source is the General Excise Tax (GET), which is primarily a tax on consumption. In FY2016, collections totaling $3.2 billion accounted for 51.8 percent of all General Fund revenues collected and 45.3 percent of all revenues collected. **The Individual Income Tax (IIT) is the second largest revenue source for Hawaii**, generating $2.1 billion in FY2016 (equal to 34.2 percent of General Fund revenues and 29.9 percent of total revenues). Taken together, the GET and IIT accounted for 86.0 percent of General Fund revenues. The remaining portion came from the combination of many smaller sources – the next largest being the Transient Accommodations Tax (TAT), accounting for $233.8 million, or 3.8 percent.

Other smaller tax sources include Public Service Company Tax, Taxes on Insurance Premiums, Corporate Income Taxes, Cigarette and Tobacco Taxes, Liquor Taxes, Inheritance and Estate Taxes, Conveyance Taxes, Taxes on Banks and Other Financial Corporations, and Miscellaneous Taxes.

Table 1: 2016 General Fund Tax Revenue

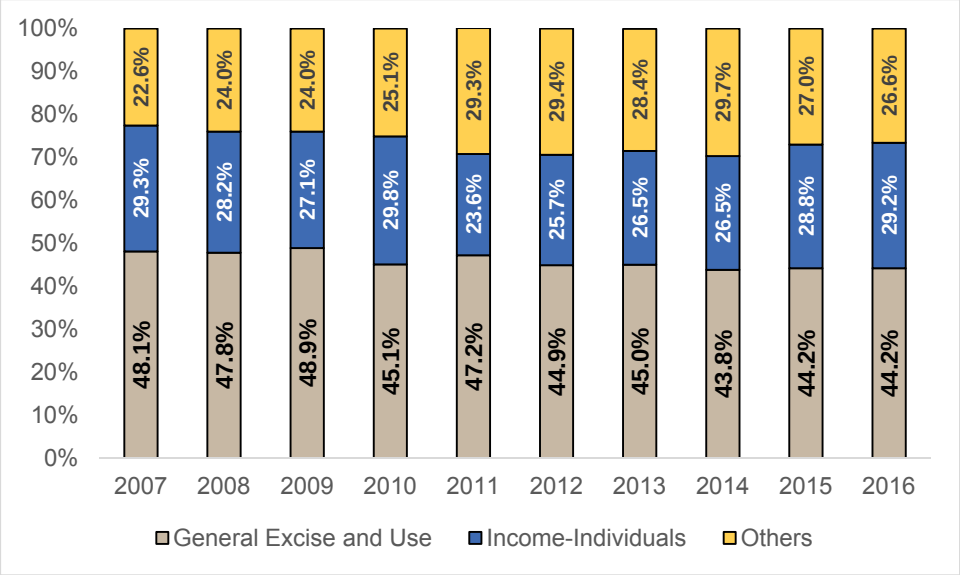
Tax	Revenue	% of Total	Tax Type
General Excise and Use Tax	$3,206,154,000	51.8%	Consumption
Individual Income Tax	$2,116,392,000	34.2%	Income
Transient Accommodations Tax	$233,781,000	3.8%	Consumption
Public Service Company Tax	$152,760,000	2.5%	Consumption
Tax on Insurance Premiums	$153,173,000	2.5%	Consumption

Tax	Revenue	% of Total	Tax Type
Corporate Income Tax	$93,036,000	1.5%	Income
Cigarette and Tobacco Tax	$83,685,000	1.4%	Consumption
Liquor Tax	$50,590,000	0.8%	Consumption
Inheritance and Estate Tax	$49,613,000	0.8%	Wealth
Conveyance Tax	$26,415,000	0.4%	Wealth
Miscellaneous Taxes	$16,067,000	0.3%	N/A
Tax on Banks and Other Financial Corps.	$12,691,000	0.2%	Income
Total	**$6,194,357,000**	**100.0%**	

Source: Hawaii Council on Revenues

The following details the relative share and dollar value of the three broad categories of Hawaii state taxes:

Figure 3: Hawaii Tax Revenue Composition (All Funds), 2007-2016



Source: Hawaii Department of Taxation Annual Report, 2016

The following table provides more detailed breakdown on the State's tax revenues from FY2011 to FY2016:

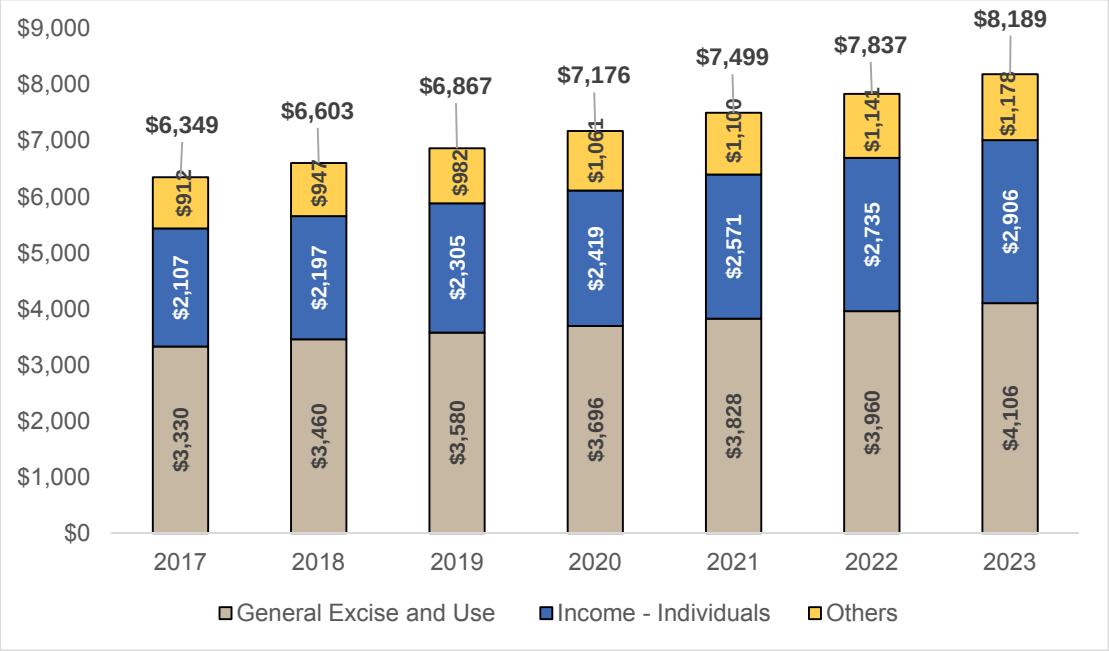
Table 2: Hawaii Tax Revenues, FY2011-FY2016 (millions)

Tax Revenues	2011	2012	2013	2014	2015	2016
General Excise and Use Tax	$2,496	$2,698	$2,945	$2,825	$2,993	$3,206
Individual Income Tax	$1,247	$1,541	$1,736	$1,745	$1,988	$2,116
Transient Accommodations Tax	$60	$126	$172	$187	$203	$234
Public Service Company Tax	$118	$151	$164	$166	$164	$153
Tax on Insurance Premiums	$141	$117	$132	$137	$146	$153
Corporate Income Tax	$35	$73	$101	$87	$52	$93
Cigarette and Tobacco Tax	$106	$103	$94	$78	$83	$84
Liquor Tax	$48	$49	$49	$48	$50	$51

Tax Revenues	2011	2012	2013	2014	2015	2016
Inheritance and Estate Tax	$7	$14	$15	$15	$12	$50
Conveyance Tax	$22	$19	$19	$27	$12	$26
Miscellaneous Taxes	$20	$83	$21	$18	$16	$16
Tax on Banks/Financial Corps.	$32	$5	$21	$37	$18	$13
Total Tax Revenues	**$4,329**	**$4,978**	**$5,467**	**$5,370**	**$5,735**	**$6,194**

As with many states, Hawaii uses a consensus revenue estimating process. The Hawaii Council on Revenues meets on a quarterly basis to develop the overall revenue estimate that is used by the Governor and the Legislature in preparing the state budget. Going forward, the following breaks down projected tax collections (based on the State's Council of Revenues most recent estimate):

Figure 4: Hawaii Projected Tax Collections (General Fund), 2017-2023 (millions)



Source: Hawaii Council on Revenues Estimates as of May 30, 2017

The following details the most recent estimate of the Hawaii Council on Revenues on a more detailed basis.[9] It is notable that the current Hawaii FY2018 revenue estimate projects less than one percent growth (primarily because of a decrease of $92.6 million in Non-revenue receipts). In the following years, the official estimate projects growth of between 3.8 and 4.3 percent, with all but one year being over 4 percent. These estimates will be relied upon throughout the analysis.[10]

[9] It should be noted that the Council on Revenues only determines the overall revenue growth rate for the period it estimates. The Department of Taxation then applies individual growth rates across the various revenue sources to get to the aggregate growth rates.
[10] Because the Council on Revenue meets quarterly, adjustments to growth rate assumptions are common. At the same time, these adjustments are often 'on the margin' and will not materially impact on future revenue estimates (absent a major change in the economy or other event that specifically impacts a revenue source).

Table 3: Projected General Fund Revenue, 2017 to 2023: Baseline Scenario (millions)

Tax Revenues	2017	2018	2019	2020	2021	2022	2023
General Excise and Use Tax	$3,330	$3,460	$3,580	$3,696	$3,828	$3,961	$4,106
Individual Income Tax	$2,107	$2,197	$2,305	$2,419	$2,571	$2,735	$2,906
Transient Accommodations Tax	$250	$278	$295	$312	$329	$345	$362
Public Service Company Tax	$158	$163	$169	$174	$180	$186	$192
Tax on Insurance Premiums	$157	$162	$166	$170	$175	$181	$187
Corporate Income Tax	$95	$83	$92	$140	$142	$149	$150
Cigarette and Tobacco Tax	$86	$88	$91	$94	$97	$100	$104
Inheritance and Estate Tax	$51	$51	$52	$53	$54	$55	$56
Liquor Tax	$51	$52	$52	$52	$53	$53	$54
Conveyance Tax	$27	$29	$30	$33	$37	$41	$46
Miscellaneous Taxes	$16	$16	$16	$16	$16	$16	$16
Tax on Banks and Other Financial Corps.	$22	$26	$20	$17	$17	$15	$12
TOTAL TAXES	***$6,349***	***$6,603***	***$6,867***	***$7,176***	***$7,499***	***$7,837***	***$8,189***

Non-Tax Revenues	2017	2018	2019	2020	2021	2022	2023
Charges for Current Services	$539	$406	$420	$429	$440	$450	$463
Non-Revenue Receipts	$339	$246	$250	$255	$259	$263	$267
Judiciary	$36	$37	$37	$38	$38	$39	$40
Repayment of Loans & Advances	$21	$19	$22	$23	$24	$26	$27
Revenues from Use of Money and Property	$22	$25	$22	$21	$20	$18	$17
Federal	$13	$12	$12	$12	$11	$11	$11
Revenues from Other Agencies	$3	$3	$3	$3	$3	$3	$3
Fines, Forfeits & Penalties	$2	$2	$2	$2	$2	$2	$2
Licenses & Permits	$1	$1	$1	$1	$1	$1	$1
TOTAL NON-TAX REVENUES	***$976***	***$751***	***$769***	***$782***	***$798***	***$813***	***$831***

TOTAL GENERAL FUND REVENUES	**$7,325**	**$7,354**	**$7,637**	**$7,959**	**$8,297**	**$8,650**	**$9,020**

Source: Council on Revenues

The focus of the PFM analysis for the 2017 Tax Review Commission is primarily on tax burden, regressivity (particularly methods to reduce it for the State tax structure) and opportunities to increase revenue to meet existing and future needs related to providing health care and other benefits for retired state employees. As a result, the discussion mostly focuses on the key tax revenue sources that impact on these topics.

Discussion of Hawaii's Primary General Fund Taxes

The following details recent performance for the State's key tax revenue sources, which for this discussion is limited to those that provided over $150 million per year in tax revenue to the General Fund in FY 2016. Beyond these individual sources, there will also be some discussion of excise taxes in general, particularly in relationship to their use in other states.

It is notable that the five revenue sources that each make up at least $150 million in General Fund revenue (GET, Individual Income Tax, TAT, Tax on Insurance Premiums and the Public Service Company Tax) make up nearly 95 percent of total General Fund revenue.

General Excise Tax

FY2016: $3,206.2 million (57.6 percent of General Fund revenue)

Overview

The GET is a business privilege tax on gross proceeds of sales or income. **Unlike a typical state or local sales tax, the GET is imposed on the business (although in most cases the GET is added to the price of the good or service when the sale is completed)**. The rate is 0.5 percent on wholesaling, wholesale services, producing and sugar processing and pineapple canning. All other activities are taxed at 4.0 percent, except insurance commissions (0.15 percent). Besides the retail sales typically taxed by a state consumption tax (which in most states is a sales and use tax), the GET also taxes most services, including professional services.[11] Besides professional services, the GET also taxes contracting, theatre, amusement, radio, interest, commissions and rentals.

The City/County of Honolulu levies an additional surcharge of 0.5 percent. In prior years, the State's General Fund has received 10.0 percent of the City/County surcharge revenue to cover administrative costs associated with collection and remittance to the City/County. The issue of the portion of the surcharge that should be allocated to the State for administration was the subject of considerable debate during the last legislative session. During the 2017 special legislative session, this percentage was reduced from 10.0 to 1.0 percent.

The GET is complemented by a use tax levied on tangible personal property imported or purchased from unlicensed sellers for use in the State. The purchase price or value of the tangible personal property is the base for calculating the tax. The use tax rate is 0.5 percent if for resale and 4.0 percent for use or consumption. The tax also applies to services or contracting performed by an unlicensed seller at a point outside the State and imported or purchased for use in the State. As with the GET, the City/County of Honolulu levies an additional use tax surcharge of 0.5 percent.[12]

[11] While some services are included in the sales tax base of most states, very few tax professional services. The few that do are primarily states without a broad-based individual income tax.

[12] Hawaii Department of Taxation, "Outline of the Hawaii Tax System as of July 1, 2016," accessed electronically at http://files.hawaii.gov/tax/news/pubs/16outline.pdf

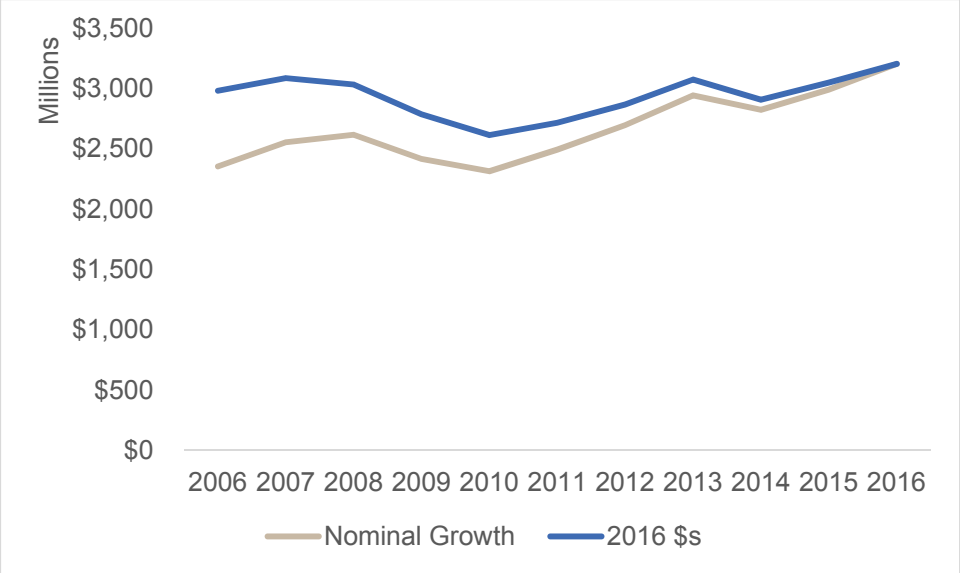
Table 4: Hawaii General Excise Tax Description

	Rate	Description/Overview	Receiving Fund
General Excise Tax	4.0%	Retail sale of goods, sale of services, contracting, commissions, rent, interest, and other activities; utilities exempt	*State General Fund*
	0.5%	Wholesaling, selected intermediary services, manufacturing, producing, real property subleasing, canning and blind, deaf or totally disabled persons	
	0.15%	Insurance solicitors	
	Exempted	Gross income from contracting and other services exported out of the state, exports of tangible personal property, sales of tangible personal property to the federal government, financial services income, or income subject to the public service company tax income (and others not listed).	
General Excise Tax (Use)	4.0%	On tangible personal property imported or purchased from an unlicensed seller. Tax on value of services performed by unlicensed sellers at a point outside the state and imported or purchased for use in the state	*State General Fund*
	0.5%	On goods imported for resale at retail	

Recent Experience

GET revenue has generally exhibited an upward trajectory with declines associated with The Great Recession (FY2009 and FY2010) and a decline in FY2014. From FY2007 to FY2016, GET revenues have increased by $650 million, which reflects a CAGR of 2.6 percent. This performance is shown in the following figure:

Figure 5: General Excise Tax (General Fund Revenue) 2007-2016



Source: Department of Taxation Annual Report, 2016

Legislative Actions

Effective for FY2012, GET exemptions were suspended for certain entities and activities (mostly business-to-business transactions), which subjected them to the 4.0 percent rate.[13] Suspended exemptions included:

- Amounts deducted from gross income received by a contractor
- Gross receipts of home service providers acting as service carriers providing mobile telecommunications services to other home service providers
- Gross income of nonprofit organizations from certain conventions, conferences, trade show exhibits or display spaces
- Amounts received from the sale of liquor, cigarettes and tobacco products and agricultural, meat, or fish products to persons or common carriers engaged in interstate or foreign commerce
- Amounts received as high technology research and development grants
- Gross proceeds from the sale of items to the federal government:
  - Liquor
  - Tobacco products and cigarettes
  - Other tangible personal property
- Leasing or renting aircraft or keeping aircraft solely for leasing or renting for commercial transportation of passengers and goods or the acquisition or importation of aircraft or aircraft engines
- Use or sale of liquor, cigarette and tobacco products imported into the State and sold to any person or common carrier for consumption out of State by person, crew, or passengers on shippers vessels or airplanes

The temporary suspension was effective on July 1, 2011 and sunsetted on June 30, 2013. This, of course, broadened the GET base for FY2012 and FY2013 – primarily because of additional pyramiding. It is notable that there was a significant increase in GET revenue in both FY2012 and FY2013, with an actual reduction in GET collections in FY2014, which is consistent with the return to the previous GET base related to these business-to-business transactions.

In fact, the Council on Revenues estimated that the suspension added about $50 million to total GET collections in FY2012 and $70 million in FY2013. It is notable that the 2012 PFM report to the TRC recommended sunsetting the suspension as planned (and occurred).

There have been other (mostly smaller impact) changes made to the GET in the years since the 2012 TRC report. These include:

- Eliminated the GET exemption for liquor, tobacco and food sold to common carriers (2013, effective January 1, 2014). The estimated revenue impact from this change was an increase of $5.9 million.
- Made permanent the GET exemptions for common hotel managers and employees expenses paid by hotel operators and timeshare projects (2013, effective January 1, 2013).

Projected Outlook

Going forward, the Council on Revenues projects 3.5 percent revenue growth for GET in the out-years of its forecast. This reflects growth similar (but slightly below) overall state tax revenue growth.

[13] Act 105, SLH 2011.

Key Considerations

The GET is a unique tax that defies ready categorization among other major state consumption taxes. Many national surveys (even from knowledgeable tax practitioners, including the Federation of Tax Administrators, which is the professional organization for State revenue department directors and their management staff) list it as synonymous with state sales taxes. This overlooks (or glosses over) the fact that the tax applies to an entity's sales or gross income – as opposed to most state sales taxes, which are transaction-based. It also creates different rules for application of nexus.

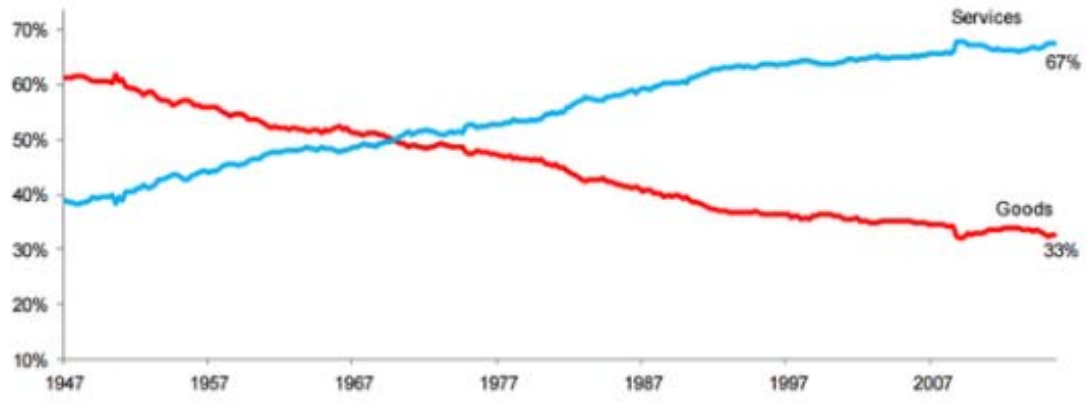
Most studies of state tax structures recognize that the Hawaii GET is applied to a very broad base. This impacts on key tax principles that the project team was to consider in its analysis. Many state sales tax structures exempt certain goods from its tax (most notably prescription drugs – which the GET also exempts – and also food and utilities, with some states also exempting clothing). While this may be considered beneficial for the minimum wage worker purchasing macaroni and cheese, in practice it also applies to the high income individual purchasing beef tenderloin. That also is the case for the lower income family cooling a 1,000 square foot home and the higher income family doing the same for their 5,000 square foot mansion. In this respect, Hawaii may be more aligned with tax policy 'best practices' by keeping a broad base (and relatively lower rate) and providing targeted tax credits for those in need of assistance.

The advantage of this broad base is that the tax is less susceptible to business cycle volatility. While the GET exhibited some diminished performance during the Great Recession, it has generally been a stable source of revenue, with its share of state revenue showing little year-to-year variation.

Most of the tax policy discussions for general consumption taxes focus on the following key concerns, primarily related to the erosion of the consumption tax base:

- **What we consume is changing** – while tangible goods were long the staple of consumption, today's economy is more focused on intangible goods and services. The following chart demonstrates that national change in consumption:

Figure 6: Percent of Personal Consumption: Goods and Services

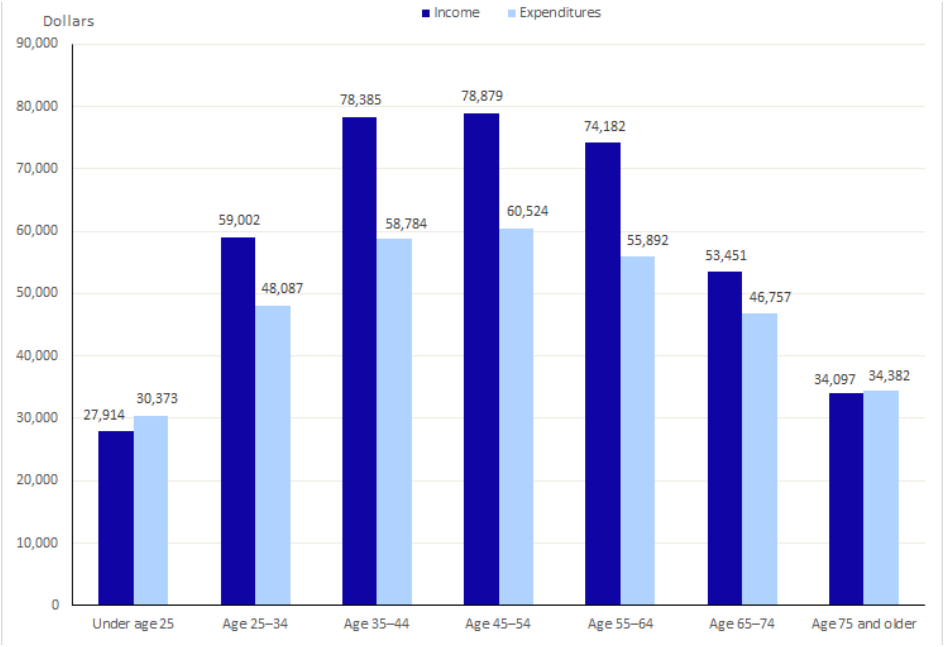


Source: Bureau of Economic Analysis, Macquarie Research, November 2015

- **What we tax is changing** – legislatures have often carved out exemptions for certain activities that are no longer subject to the consumption tax. Not surprisingly, these are often areas of significant (or emerging) activity.

- **Who consumes is changing** – the population as a whole is getting older, and older consumers consume less than their younger counterparts.[14]

Figure 7: Income and Expenditures by Age of Reference Person, 2013



Source: U.S Bureau of Labor Statistics

- **How we purchase our consumption is changing** – traditional retail transactions are increasingly performed electronically. According to the U.S Department of Commerce, the estimate of U.S retail e-commerce sales for the first quarter of 2017, adjusted for seasonal variation, but not for price changes, was $105.7 billion. During that quarter, e-commerce sales accounted for 8.4 percent of total sales.[15] This level of sales is expected to grow in the years to come.

Individual Income Tax
FY2016: $1,246,672,000 (29.2 percent of General Fund revenue)

Overview
Hawaii's second largest revenue generating tax, it is levied on individual (or those filing jointly) income. Taxpayers may claim a standard deduction, with the amount subject to marital status and the presence of dependents – currently $4,000 for married filing joint or surviving spouse with dependent child, $2,000 for single or married filing single and $2,920 for head of household. The personal exemption amount is $1,040 per qualified exemption. Hawaii generally follows the federal definitions for determining taxable income, but it has its own exemptions, tax credits and tax rates. **Among exemptions, a major difference from the federal individual income tax is Hawaii's treatment of public pension income, which is entirely exempt from state income tax.**

[14] Bureau of Labor Statistics, "Consumer Expenditures Vary by Age," December 2015, accessed electronically at https://www.bls.gov/opub/btn/volume-4/consumer-expenditures-vary-by-age.htm
[15] U.S. Department of Commerce, Quarterly Retail E-Commerce Sales, 1st Quarter 2017, May 16, 2017.

Hawaii has made numerous changes to key features of its individual income, particularly in the years around and after The Great Recession. These changes have related to the number of brackets, rates, exemptions and credits.

In recent years, the number of state tax brackets and rates has varied considerably. Hawaii has 12 tax brackets based upon single/joint income with a corresponding specific rate levied for each income bracket, which is shown in Table 5.

Hawaii enacted significant changes to its individual income tax in 2009, as part of an overall revenue package designed to mitigate the impacts from The Great Recession. The income tax increase was retroactive to January 1, 2009, and expired on December 31, 2015.

The broadest individual income tax increase was an increase on higher-income earners. The legislation added three income tax brackets on top of the current nine, at rates of 9 percent on income over $150,000 ($300,000 for joint filers), 10 percent on income over $175,000 ($350,000 for joint filers), and 11 percent on income over $200,000 ($400,000 for joint filers). When enacted, Hawaii had both the highest top individual income tax rate but also the most tax brackets of any state.

The following details the 12 tax brackets and rates established in 2009. It is notable that the Hawaii rates rise relatively quickly, with the 5.5 percent rate applying at $4,801 of taxable income.

Table 5: Hawaii Individual Income Tax Bracket (Current)

	Rate	Description/Overview	Receiving
Individual Income Tax	1.40%	On the first $2,400 of taxable income.	*State General Fund and State Election Campaign Fund*
	3.20%	On taxable income between $2,401 and $4,800.	
	5.50%	On taxable income between $4,801 and $9,600.	
	6.40%	On taxable income between $9,601 and $14,400.	
	6.80%	On taxable income between $14,401 and $19,200.	
	7.20%	On taxable income of $19,201 and $24,000.	
	7.60%	On taxable income of $24,001 and $36,000.	
	7.90%	On taxable income of $36,001 and $48,000.	
	8.25%	On taxable income of $48,001 and $150,000.	
	9.00%	On taxable income of $150,001 and $175,000.	
	10.00%	On taxable income of $175,001 and $200,000.	
	11.00%	On taxable income of $200,001 and above.	

While there was significant discussion about maintaining the temporary tax rates during the deliberations of the 2012 TRC, the 2009 legislation was allowed to sunset on December 31, 2015. As a result, **for tax years beginning on January 1, 2016, Hawaii's top tax bracket applied to taxable income of over $48,000 and was taxed at a rate of 8.25 percent.**

In 2017, the Legislature enacted and the Governor approved a return to the additional brackets and rates first approved in 2009. HB 209, effective for tax years beginning on January 1, 2018, is projected to raise an additional $51 million in tax revenue. **As part of the same bill, a State Earned Income Tax Credit**

(EITC) was created, which will be equal to 20 percent of the Federal EITC. Unlike the federal credit, the State EITC will not be refundable and is projected to reduce State revenues by approximately $17 million.

With the return of the top three marginal income tax brackets with the 2017 legislation, Hawaii again has 12 tax brackets. This is the largest number of brackets of any state with an individual income tax bracket. The following table provides a breakdown of the number of brackets by states:

Brackets	States
1	8
2	1
3	4
4	7
5	4
6	6
7	4
8	2
9	3
10	1
12	1

Missouri is the state with the next largest number of brackets (10). It is notable that 8 states have a flat individual income tax, and 9 states have no broad based individual income tax (although two states, New Hampshire and Tennessee, tax dividends and interest income). Based on the current numbers, the average state with an IIT has between 4 and 5 brackets.

While there were a variety of other changes to the individual income tax in the Great Recession years, there had been few changes since the 2012 TRC. Those few included:

- Act 256 (2013), Effective for tax years beginning on January 1, 2013, removed charitable deductions from the limits on itemized deductions that were imposed by Act 97 in 2011, SLH 2011.
- Act 120 (2015) provided a tax credit for converting cesspools to a septic system or for connecting to a wastewater system, from July 1, 2015 to December 31, 2020.
- Act 223 (2015) increased the food/excise tax credit, but eliminated the tax credit for single taxpayers with federal adjusted gross income (AGI) of $30,000 or more, or other taxpayers with federal AGI of $50,000 or more. The Act applies to tax years 2016 and 2017, and is repealed on December 31, 2017.
- Act 230 (2016) allows taxpayers engaged in medical marijuana businesses to deduct business expenses and claim tax credits on their income taxes. Act 230 is effective for tax years beginning after December 31, 2015.
- Act 235 (2016) amends the income tax credit for dependent care expenses by increasing the amount that certain taxpayers may claim for the dependent care expenses. Act 235 is effective for taxable years beginning after December 31, 2015.
- Act 258, (2016) provides a new tax credit for organic food production. The tax credit applies to taxable years beginning after December 31, 2016 and is repealed December 31, 2021.

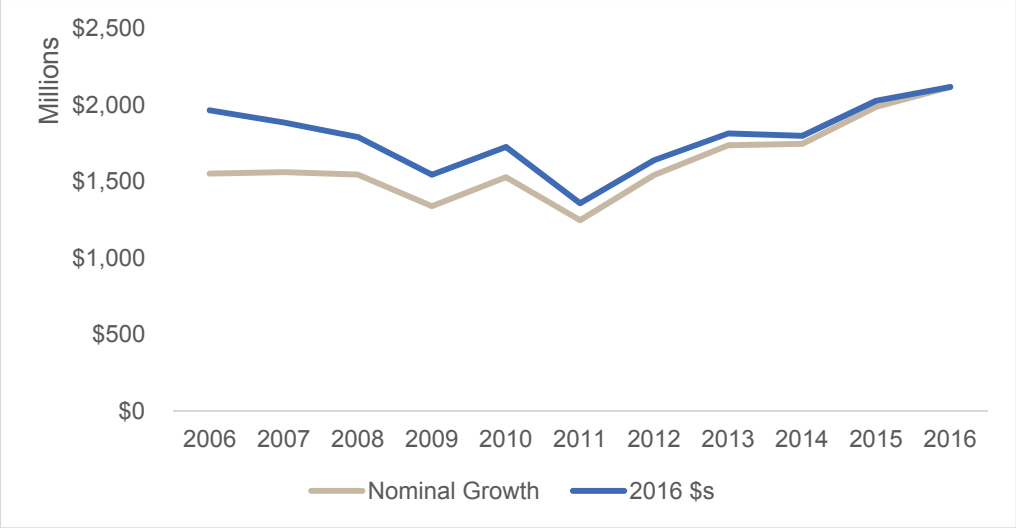
Recent Experience

From FY2007 to FY2011, the State's individual income tax receipts declined in all years except for FY 2010. The largest decline occurred in FY 2011, when it was 18.4 percent lower than in FY 2010. Much of this decline was due to a delayed payment in tax refunds, which were withheld in the last half of FY 2010 and paid

out in July of 2010 (the first month of FY 2011) because of budget difficulties associated with the Great Recession. During the five-year period, the average annual growth rate was -4.6 percent.

In the years from FY2012 to FY2016, the individual income tax has performed better – partly because of the increases in the rates for those in the higher income brackets. The following details the performance over the entirety of the period from FY2006 to FY2016.

Figure 8: Individual Income Tax (General Fund Revenue) 2006-2016 (millions)[16]



Source: Department of Taxation Annual Report, 2016

Projected Outlook
The Council on Revenues projects that individual income tax revenue will grow by approximately 4.3 percent in each of the years of its projections.

Transient Accommodations Tax (TAT)

FY 2016: $233.8 million (3.8 percent of General Fund revenue)

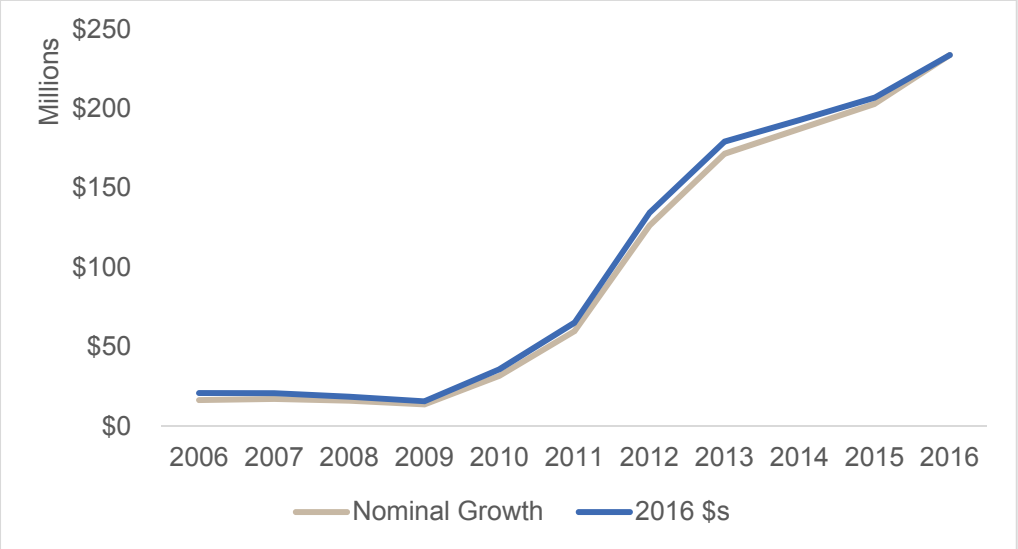
Overview
After actions taken in the 2017 special legislative session, the tax is now 10.25 percent and is levied on hotel rooms, apartments, suites and other rental/transient properties occupied for less than 180 consecutive days.[17] The TAT is a significant source of revenue for the State – and one that has provided differing amounts to the General Fund and other funds over this time period. For example, total collections in FY 2016 were $446.8 million, which is distributed to the General Fund as well as the Counties, Convention Center Enterprise Special Fund and the Turtle Bay Easement Fund. Much of this tax is exported to tourists and other visitors to the State.

[16] Inflation per US Department of Labor, Bureau of Labor Statistics – Honolulu CPI-U, 2007-2016.
[17] The 10.25 percent rate is a recent development. During the August 2017 special legislative session, the rate was increased from 9.25 percent to 10.25 percent to help fund the rail project on Oahu. Governor Ige signed the bill into law in September 2016.

Recent Experience

TAT revenue dedicated to the General Fund was relatively flat in the period from FY 2007 until FY 2011, which reflected a downturn in tourism and the effects of the Great Recession. Beginning in FY2011, the TAT has exhibited steady General Fund increases. Much of this reflects legislative changes (both in the rate and how it is allocated) and also a stronger tourism market in general.

Figure 9: Transient Accommodations Tax (General Fund Revenue) 2006-2016 (millions)[18]



Source: Department of Taxation Annual Report, 2016

Legislative Actions

Given its tourism and visitors base, it is not surprising that the TAT has been the subject of significant scrutiny and change over the years. Some major changes pre-dated the 2012 TRC report. For example, prior to 2009, the State's TAT base rate was 7.25 percent, and there was a complex formula for allocating TAT revenue to multiple sources.[19]

- Act 61 (2009) temporarily increased the transient accommodations tax rate for FY 2010 through FY 2015. The legislation added an additional 1 percent to the rate from July 1, 2009 through June 30, 2010, and 2.0 percent from July 1, 2010 through June 30, 2015. As a result of these changes, the TAT rate was 9.25 percent through the end of FY 2015. The additional 1 percent and 2 percent transient accommodations tax collections were deposited into the General Fund, while the distribution of the existing 7.25 percent transient accommodations tax was unchanged. This had the effect of increasing the General Fund portion of TAT and also increasing revenue deposited into the General

[18] Inflation per US Department of Labor, Bureau of Labor Statistics – Honolulu CPI-U, 2007-2016.

[19] According to the 2008-2009 Department of Taxation State of Hawaii Annual Report, the allocation for FY2009 was 44.8% to the counties; 17.3% to the Convention Center Enterprise Special Fund, provided that the revenues in excess of $33.0 million in any calendar year are deposited into the General Fund; 34.2% to the Tourism Special Fund, provided that, of the first $1.0 million, 90.0% is transferred to the State Parks Special Fund, and 10.0% into the Special Land and Development Fund, and further that 0.5% of the 34.2% is transferred to a sub-account in the Tourism Special Fund to fund a safety and security budget, and additional amounts are transferred into the Tourism Emergency Trust Fund, as needed, to maintain a fund balance of $5.0 million; and 3.7% to the General Fund. In FY 2009, only $13.6 million was deposited into the General Fund; a decrease of $2.4 million or 14.9% from FY 2008.

Fund. This helps to explain the revenue increases from this source beginning in FY 2010 and FY 2011.

- Act 103 (2011) temporarily limited the distribution from the TAT to counties and the tourism special fund to a combined total of $162 million. Previously, counties and the tourism special fund received 79 percent of the TAT at the 7.25 percent rate. The Act sunsetted on June 30, 2015. Once again, this had the effect of increasing the State portion of TAT revenues (and, of course, reducing the transfer to the Counties).
- Act 161 (2013) made the 'temporary' TAT rate of 9.25 percent permanent. It also made permanent the caps on allocations of the TAT for each fiscal year as follows: $82.0 million to the Tourism Special Fund, $93.0 million to the counties, and $33.0 million to the Convention Center Enterprise Special Fund. The Act also eliminated the $10 daily TAT on each transient accommodation furnished on a complimentary basis that was imposed by Act 103, (2011). Act 161 took effect July 1, 2013.
- Act 81 (2014) reduced allocations of the TAT to the Convention Center Enterprise Special Fund from $33.0 million to $26.5 million annually and allocated $3.0 million to the Turtle Bay Easement Special Fund. However, the new allocations mandated by the Act were not made in FY 2015, owing to the pending status of the Turtle Bay purchase.
- Act 174 (2014) reversed some of the earlier course and increased allocations of the TAT to the counties from $93.0 million to $103.0 million per year for fiscal years 2015 and 2016.
- Act 93 (2015) raised the tax on resort time share vacation units from 7.25 percent to 8.25 percent in calendar year (CY) 2016, and to 9.25 percent in CY 2017 and thereafter.
- Act 117 (2015) allocates $3.0 million of the TAT annually to the Special Land Development Fund, starting in FY 2017.
- Act 121 (2015) allocates $1.5 million of the TAT to the Turtle Bay Easement Special Fund, replacing the $3.0 million annual allocation made by Act 81 (2014).
- Act 223 (2016) extends the TAT allocation of $103.0 million to the counties to FY 2017.

Given the Legislature's extensive involvement in TAT revenue decisions, this may continue to be a source of year-to-year funding decisions. While funding allocation decisions do not necessarily impact on revenue performance, some levels of tax rate and base continuity are generally positively associated with overall system performance. As a recent paper noted, "stability is one of the three fundamentals for policymakers to consider when trying to design and implement a good tax system, alongside simplicity and certainty … they are the three key benchmarks that taxpayers can use to assess the effectiveness of government in maintaining and improving that system."[20]

Projected Outlook

The Council on Revenue forecasts that TAT revenue will grow by approximately 11 percent in FY2018, by 6 percent in FY2019 and FY2020, and then by 5 percent through FY2023. This is, of course, very strong growth, and does not include the additional growth that will occur because of the recently enacted rate increase. There are a number of underlying risks associated with this level of growth, including an economic downturn (which is probably more likely than not to occur during the forecast period) and changes to U.S policy related to travel, particularly by commercial air travel.

[20] "Foundations for a Sound Tax System: Simplicity, Certainty and Stability," the Association of Chartered Certified Accountants, June 2015, accessed electronically at http://www.accaglobal.com/content/dam/acca/global/PDF-technical/tax-publications/ea-tax-fundamentals.pdf

Insurance Premiums Tax
FY2016: $153.2 million (2.5 percent of General Fund revenue)

Overview
The Insurance Premiums Tax is levied on insurance companies (underwriters) based on premiums written in the State. Insurance companies pay the tax in lieu of other taxes (except for property taxes and taxes on purchase, use or ownership of tangible personal property). The tax varies depending on the type of policy, as shown in the following table. For qualifying insurers, there is a 1.0 percent tax credit to help offset the costs of regulatory oversight.

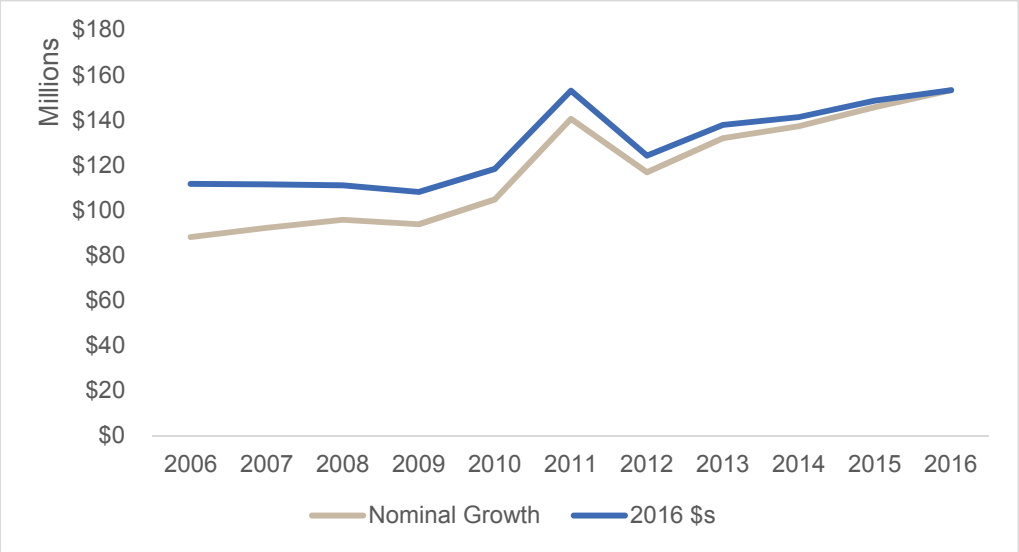
Table 6: Hawaii Insurance Premiums Tax Description

	Rate	Description/Overview	Receiving Fund
Insurance Premiums Tax ***In lieu of General Excise and Net Income Taxes***	2.75%	Life insurance	*State General Fund*
	4.265%	Casualty and all other insurance	
	4.265% of risk premium	Real property title insurance	
	4.68%	Surplus Lines	
	0.8775% of gross underwriting profits	Ocean marine insurance	
Captive Insurance Premiums			
	0.25%	on $0 to $25 million of gross	*Insurance Administrative Fund*
	0.15%	on more than $25 million to $50 million of gross premiums;	
	0.05%	on more than $50 million of gross premiums;	
	0.00%	on premiums more than $250	
Insurance Fees		Rates vary	*50% of increases to the State General Fund until FY2015*

Legislative Actions
Act 59 (2010) temporarily increased certain insurance fees and specified that the increased fees be deposited equally into the compliance resolution fund and the General Fund as an insurance license and service tax. The temporary increases expired on June 30, 2014. The insurance fees were determined to be non-tax revenues and are not included in the calculations of General Fund tax revenues (and, of course, Insurance Premium tax revenues).

Recent Experience
The tax has generally exhibited a gradual increase, although its share of General Fund revenues has declined since the 2012 TRC report (when it was 3.2 percent). The significant FY 2011 growth reflected a one-time $25 million revenue increase by insurance premium tax payments being received monthly instead of quarterly. The following year saw a return to what would have been a normal trajectory for this revenue source.

Figure 10: Tax on Insurance Premiums (General Fund Revenue) 2006-2016 (millions)[21]



Source: Department of Taxation Annual Report, 2016

Projected Outlook

The Council on Revenue projects Insurance Premium Tax revenue to grow by approximately 3.2 percent a year during the forecast period. This is in line with prior year increases for this revenue source. Insurance premium taxes are something of a counter-cyclical revenue source, as the demand for insurance does not significantly change based on short-term economic conditions.

Public Service Company Tax

FY2016: $152.8 million (2.5 percent of total General Fund tax revenue)

Overview

In lieu of paying the GET, public service companies (public utility businesses) pay a tax on gross income for the preceding calendar year. The tax varies, and only the first 4.0 percent goes to the State, with the rest distributed to counties that provide a real property tax exemption for property used by the public utility in its business. However, for a carrier of passengers by land between points on a scheduled route, the entire tax (5.35 percent of gross income) goes to the State General Fund.

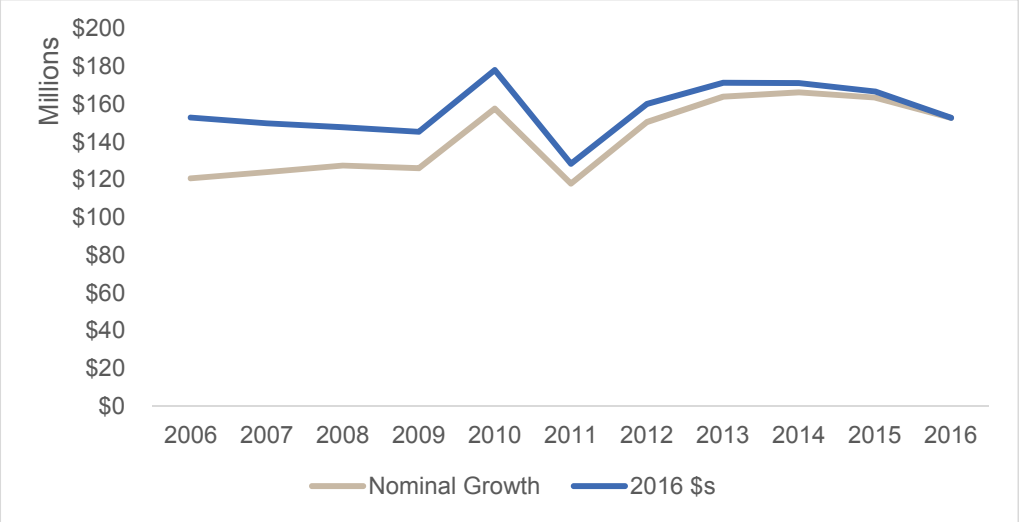
Table 7: Hawaii Public Service Companies Tax Description

	Rate	Description/Overview	Receiving Fund
Public Service Companies Tax	5.885% - 8.2%	On public utility gross income at graduated rates based on ratio of net to gross income.	*State General Fund and county general funds. (for revenues generated from a rate greater than 4% from utilities that are not taxed under the respective county real property tax). Land carriers tax is entirely deposited into the State General Fund.*
	5.35%	Land carriers (public transportation)	

[21] Inflation per US Department of Labor, Bureau of Labor Statistics – Honolulu CPI-U, 2007-2016.

Recent Experience
Revenue from the Public Service Companies Tax has been somewhat erratic over the years, with little discernable trend in collections. In some instances, changes in fuel prices can change the tax collections (since it is based on gross income and utility costs may increase with increases in major inputs).

Figure 11: Public Service Companies Tax (General Fund Revenue) 2006-2016 (millions)[22]



Source: Department of Taxation Annual Report, 2016

Projected Outlook
The Council on Revenues projects that Public Service Company Tax revenues will grow by approximately 3.4 percent in the years they estimate.

General Fund Revenue from Excise Taxes

While a sales or general excise tax is applied to a broad category of goods and services, an excise tax applies to a specific good or service. It is generally considered a tax on consumption, and in many cases it is charged to the manufacturer, supplier or wholesaler prior to sale and reflected in the overall price for providing a good or service. The specific excise tax can be a fixed unit cost (such as so many cents per gallon of motor fuel or per pack of cigarettes) or taxed on an ad valorem (percent of value) basis, such as 10.25 percent of the furnishing of a room, apartment or suite customarily occupied by a transient for less than 180 consecutive days (which is the case for Hawaii's TAT).

There are differing rationales for excise taxes. Some excise taxes are referred to as 'sin taxes' because they apply to activities that may create negative externalities. Taxes on cigarettes and tobacco products or alcohol are examples. In some cases, the additional excise tax (on top of a general excise or sales tax) is justified as a way to reduce consumption or pay for social costs associated with the use of the products or services. In other cases, excise taxes are dedicated to specific purposes and may be justified as a form of 'user fee' – fuel taxes that are dedicated to the construction and maintenance of roads and bridges are an example of this type of excise tax.

[22] Inflation per US Department of Labor, Bureau of Labor Statistics – Honolulu CPI-U, 2007-2016.

Nationally, the most prominent excise taxes are those on cigarettes and tobacco products, alcohol and motor fuels. Besides these taxes, which are all applied by the State of Hawaii, the TAT is a very prominent form of excise tax. Other examples from around the U.S include:

- Amusement Tax;
- Car Rental Tax;
- Fireworks Tax;
- Hotel/Motel (TAT) Tax;
- Marijuana (medicinal and/or recreational) Tax;
- Restaurant Meal Tax;
- Sugared Beverage/Junk Food Tax.

While the following two excise taxes do not meet the $100 million threshold, they are longstanding taxes with a history of changes in rates as revenue-raising measures – both in Hawaii and in other states. Besides the excise taxes on cigarettes and tobacco products and alcohol, the other major excise tax that is applied in Hawaii, motor fuel taxes, are not included, as their revenue is not (and cannot) be dedicated to the General Fund.

Cigarette and Tobacco Tax

FY 2016: $83.7 million (1.4 percent of General Fund revenue)

Overview

Hawaii levies an excise tax on the sale or use of tobacco products and on each cigarette sold, used or possessed. Aside from cigarettes and little cigars, the State levies the tobacco tax on 70 percent of the wholesale price of tobacco products (other than large cigars) and 50 percent of the wholesale price of large cigars. Cigarette and tobacco wholesalers and dealers are required to affix stamps to individual cigarette packages as proof of payment of tax.

The following details the taxes and how they are applied:

Table 8: Hawaii Tobacco Tax Description

<table>
<tr><th></th><th>Rate</th><th>Description/Overview</th><th>Receiving Fund</th></tr>
<tr><td rowspan="5">Tobacco Tax</td><td>$0.16</td><td>per cigarette ($3.20/pack)</td><td rowspan="3">Through June 30, 2013:
State General Fund ($0.12), Cancer Research Fund ($0.02), Trauma System Fund ($0.0075), Emergency Medical Service Fund ($0.005) and Community Health Center Fund ($0.0075).

As of July 1, 2013:
State General Fund ($0.10), Cancer Research Fund ($0.02), Trauma System Fund ($0.015), Community Health Center Fund ($0.0125, Emergency Medical Services Special Fund ($0.0125)</td></tr>
<tr><td>50%</td><td>on wholesale price for cigars</td></tr>
<tr><td>70%</td><td>on wholesale price for all other tobacco products</td></tr>
<tr><td>1.70%</td><td>on denominated value of tax stamp</td><td rowspan="2">State cigarette tax stamp enforcement special fund and State cigarette tax stamp administrative special fund.</td></tr>
<tr><td>0.40%</td><td>discount on value of required cigarette tax stamps</td></tr>
</table>

Recent Experience

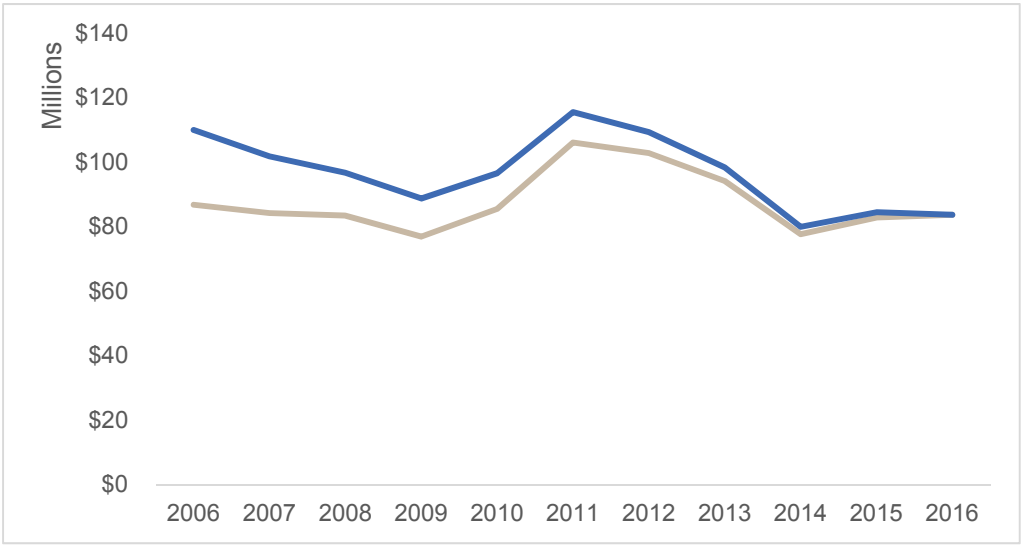
Hawaii increased the per-cigarette tax in all but one year from 2002 through 2011. The State's cigarette tax revenue registered double-digit percentage increases in all but one fiscal year from FY 2007 through FY 2011 (FY 2009 saw 3.4 percent growth). At the same time, the General Fund revenue portion declined in both FY 2008 and FY 2009 before increasing by 11.1 percent in FY 2010 and 24.1 percent in FY 2011.

During that five-year period, annual General Fund cigarette and tobacco-related tax revenue grew from $84.2 million to $106.1 million, a 26.0 percent increase. The strongest growth, 24.1 percent, occurred in FY 2011 when the tax rate increased by 2 cents per cigarette. This resulted in a General Fund revenue increase of $20.6 million.

Since the high collection mark in FY2011, cigarette and tobacco tax revenue has generally declined, to a low of $121.7 million in FY2014, with a slight rebound to $125.1 million in FY2016. It should be noted that the difference between overall tax revenue and revenue dedicated to the General Fund is because of transfers to a variety of other health-related funds before the balance is deposited into the General Fund. In recent years, the Legislature has also transferred a slightly larger share of overall revenues to these other funds, which makes the General Fund revenue decline appear slightly larger than it actually is.

The decline in this tax revenue source in the years since the high-water mark in FY2011 is at least somewhat mitigated by the reduced consumption brought about because of the use of higher cigarette tax rates. Most research associated with increases in the tax on cigarette and tobacco products has shown some resulting decrease in consumption (although some may also be the result of smuggling and black markets that evade the State tax).

Figure 12: Cigarette and Tobacco Tax (General Fund Revenue) 2006-2016 (millions)[23]



Source: Department of Taxation Annual Report, 2016

Legislative Actions

In FY 2007, FY 2008 and FY 2009, the State increased its per-cigarette tax effective September 30 of each year. The tax per cigarette increased by 1 cent in each year – going from 7 cents per cigarette (as of September 29, 2006) to 10 cents (as of September 30, 2008). The rate increased to 13 cents on July 1, 2009, 15 cents on July 1, 2010 and 16 cents beginning July 1, 2011.

Act 238 (2015) changed some of the allocations of the tax to other funds (including reductions in the allocation to the Trauma System Special Fund and increases to the Community Health Centers Special Fund and the Emergency Medical Services Special Fund.

[23] Inflation per US Department of Labor, Bureau of Labor Statistics – Honolulu CPI-U, 2007-2016.

Projected Outlook
The Council on Revenues projects that Cigarette and Tobacco Tax revenue will grow by 2.2 percent per year in the covered period. In general, most consumption and revenue trends around the country are seeing little increase or declines in this revenue source.

Liquor Tax
FY 2016: $50.6 million (0.8 percent of total revenue)

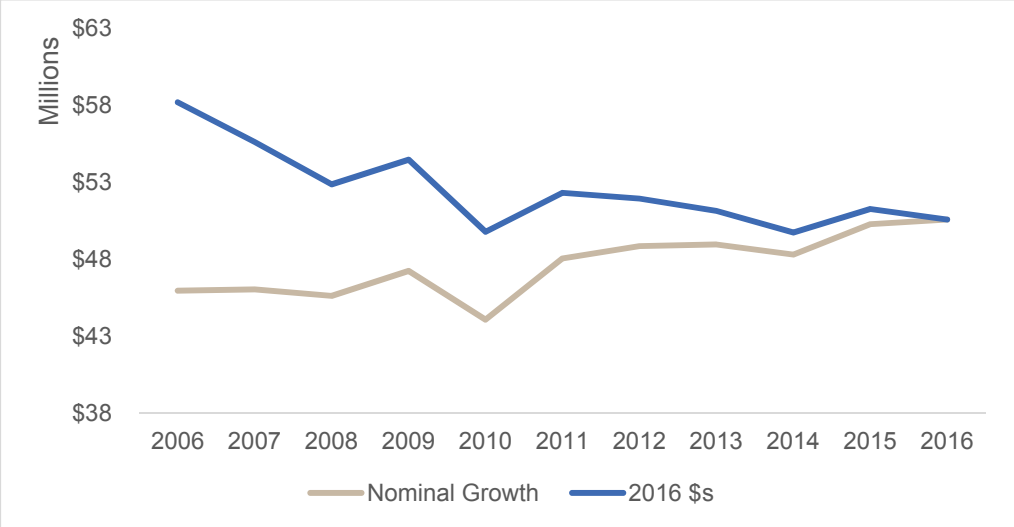
Overview
Hawaii levies a gallonage tax upon dealers and others who sell and/or use liquor. As with all states that apply a gallonage tax, the rates differ for wine, distilled spirits, sparkling wine, still wine, cooler beverages, non-draft beer and draft beer. These are detailed in the following table:

Table 9: Hawaii Liquor Tax Description

	Rate	Description/Overview	Receiving Fund
Liquor Tax (per gallon)	$5.98	distilled spirits	*State General Fund*
	$2.12	sparkling wines	
	$1.38	still wines	
	$0.85	cooler beverages	
	$0.93	non-draft beer	
	$0.54	draft beer	

Recent Experience
Liquor tax revenue has been relatively flat for the entire period from FY2006 to FY2016, with collections slightly up or down throughout the period, primarily within the range of $45 to $50 million. The following details that performance:

Figure 13: Liquor Tax (General Fund Revenue) 2006-2016 (millions)[24]



Source: Department of Taxation Annual Report, 2016

[24] Inflation per US Department of Labor, Bureau of Labor Statistics – Honolulu CPI-U, 2007-2016.

Projected Outlook

The Council on Revenues projects that Liquor Tax revenue will grow by 0.9 percent a year during the forecast period. Given the slow growth rates over the last decade, this seems about right for a long-range forecast.

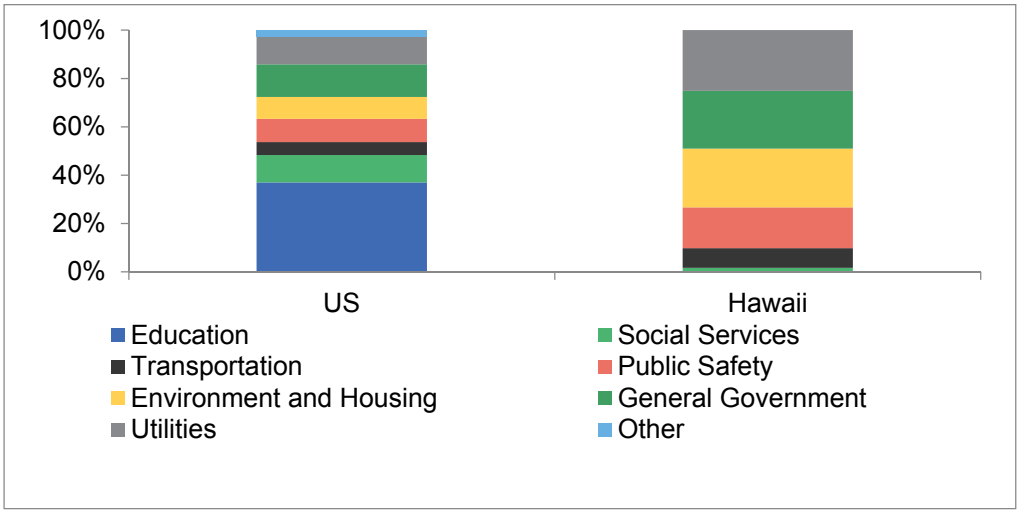
Relationship of State and Local Revenues

To get a balanced understanding of a state's tax structure and its tax burden, it is generally necessary to also consider its local tax structure and tax burden. It should also be taken into consideration that local governments are creatures of the state, and their powers and duties are mostly determined and subsequently modified by the State.

A unique characteristic of Hawaii's governmental structure is the lack of municipal governments – all local government is administered at the county level.[25] The only incorporated area in the State is a consolidated city-county, Honolulu, which governs the entire island of Oahu. County Executives are referred to as mayors; the Mayors of Hawaii, Honolulu, Kaua'i and Maui are all elected in nonpartisan races.

In addition to the dearth of municipal governments, **Hawaii is the only state where the public school system operates under a single system administered and funded solely by the State.** Nationally, the largest local government expenditure is to support K-12 education. For all U.S local governments, direct expenditures for education averaged 37.0 percent in 2014, compared to less than 1.0 percent of local government spending in Hawaii, as shown in the figure below.

Figure 14: U.S and Hawaii Local Government Spending by Function, 2014



Source: US Census Bureau, 2014 Annual Surveys of State and Local Government Finances

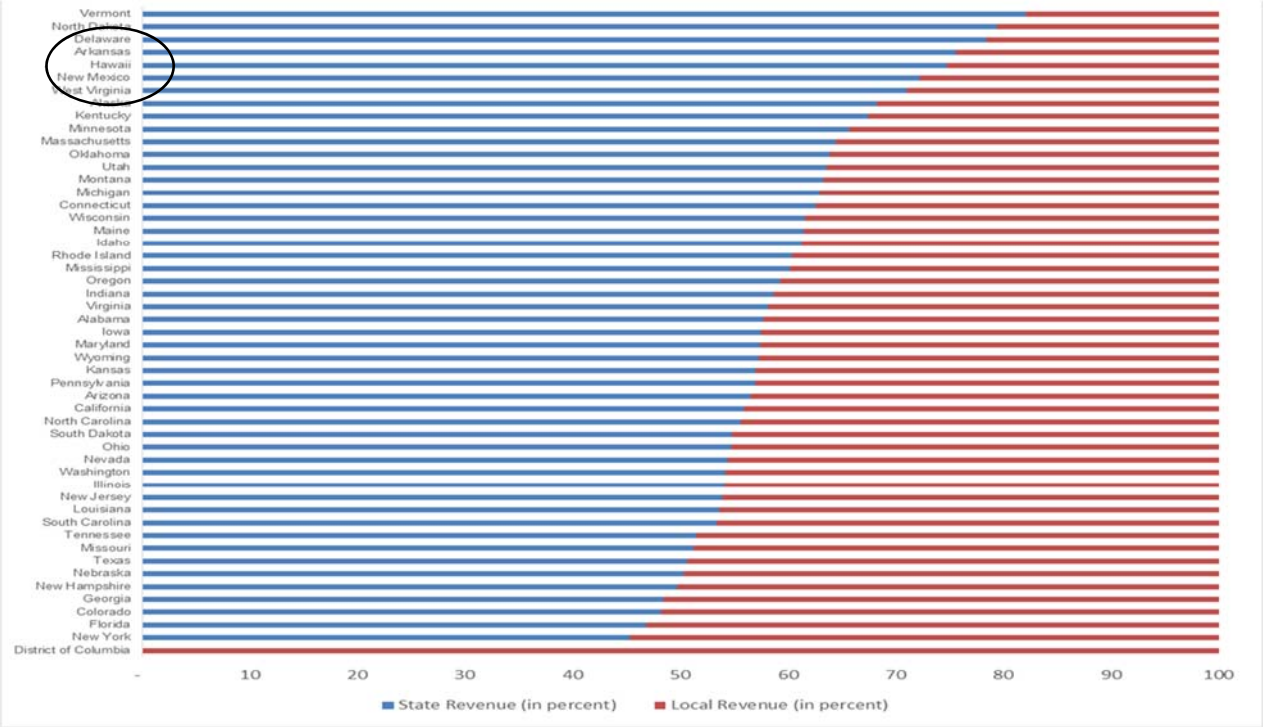
[25] Conversely, Connecticut and Rhode Island have no county forms of government.

Hawaii state government provides far more revenue to support the K-12 education function than any other state; nationally, 46.7 percent of K-12 programming revenue is derived from state sources. In Hawaii, state education funding represents 87.3 percent of total education funding.[26]

Among local governments in the U.S, the primary source of revenue is the property tax. **On average, property taxes comprise 72.5 percent of own-source tax revenue for all U.S local governments;** that percentage is similar to Hawaii local governments, where property taxes comprise 67.2 percent of own-source tax revenue.[27]

As a result, the revenue sources split between state and local government is decidedly tilted to the state for Hawaii. The following figure shows the share by state between state and local revenue:

Figure 15: 2014 State and Local Own Source Revenue



Source: U.S. Census Bureau, Census of Governments

With a diminished need to fund a primary local government service, property tax collections in Hawaii are lower than for the nation as a whole. The following table lists median residential property taxes and property taxes as a percentage of median home value for Hawaii and its most populous counties:

Table 10: Median Property Taxes and Taxes as a Percentage of Median Home Values

	U.S	Hawaii County	Honolulu County	Maui County
Median Property Tax	$2,424	$1,019	$1,658	$970
% of Home Value	1.23%	0.32%	0.29%	0.19%

Source: 2011-2015 American Community Survey 5-Year Estimates

[26] US Census Bureau, Public Education Finances: 2014
[27] US Census Bureau, 2014 Annual Surveys of State and Local Government Finances

Additionally, a 2017 Lincoln Institute of Land Policy and Minnesota Center for Fiscal Excellence (MCFE) study of property taxes in all 50 states **confirmed Hawaii's relatively low property taxes.**[28] The analysis compared 2016 urban city residential property tax bills for the largest city in each state (as well as Aurora, Illinois; Buffalo, New York; and Washington DC) for homes valued at $150,000 and $300,000 as well as the median valued home. Of the 53 cities surveyed, Honolulu had the second-lowest property tax for homes valued at $150,000, the lowest property tax for homes valued at $300,000, and the lowest property taxes for the median valued home.[29]

Table 11: Urban Cities with Residential Tax Ratings in Top Five or Bottom Five (for $150,000 and $300,000 Valued Homes)

City	State	$150,000		$300,000	
		Tax	Rank (of 53)	Tax	Rank (of 53)
Bridgeport	CT	$6,060	1	$12,120	1
Detroit	MI	$5,964	2	$11,929	2
Aurora	IL	$5,210	3	$11,106	3
Newark	NJ	$4,342	4	$8,683	4
Milwaukee	WI	$4,193	5	$8,599	5
Denver	CO	$994	49	$1,988	50
Birmingham	AL	$990	50	$2,032	48
Washington	DC	$650	51	$1,897	51
Honolulu	**HI**	**$242**	**52**	**$765**	**53**
Boston	MA	$175	53	$1,746	52

Source: Lincoln Institute of Land Policy/Minnesota Center for Fiscal Excellence

Of course, it should also be noted that while property taxes as a percentage of median home values are low, the actual home values in Hawaii are high. For example, a commonly cited measure of construction costs, done by Rider Levett Bucknall, placed Honolulu as having the highest per square foot residential building costs among a group of 12 major urban metropolitan areas.[30]

Commercial property taxes are also low in relation to other comparable cities. The Lincoln Institute/MCFE study found that of 53 urban cities, Honolulu ranked 52nd in each of three value cohorts ($100,000, $1.0 million and $25.0 million) for commercial property taxes for businesses.

Table 12: Urban Cities with Commercial Tax Rankings in Top Five or Bottom Five

City	State	$100,000		$1,000,000		$25,000,000	
		Tax	Rank (of 53)	Tax	Rank (of 53)	Tax	Rank (of 53)
Detroit	MI	$5,057	1	$50,574	1	$1,264,360	1
New York City	NY	$4,760	2	$47,597	2	$1,189,931	2
Chicago	IL	$4,632	3	$46,323	3	$1,158,087	3
Providence	RI	$4,376	4	$43,575	4	$1,093,931	5

[28] 50-State Property Tax Comparison Study – Lincoln Institute of Land Policy/Minnesota Center for Fiscal Excellence, 2017.
[29] Ibid., p. 18.

[30]"North America Quarterly Construction Cost Report, First Quarter, 2017," Rider Levett Bucknall, p.4. The surveyed markets were Boston, Chicago, Denver, Honolulu, Las Vegas, Los Angeles, New York, Phoenix, Portland, San Francisco, Seattle and Washington DC.

City	State	$100,000		$1,000,000		$25,000,000	
		Tax	Rank (of 53)	Tax	Rank (of 53)	Tax	Rank (of 53)
Bridgeport	CT	$4,098	5	$40,978	7	$1,024,462	7
Wilmington	DE	$1,320	49	$13,199	49	$329,984	49
Virginia Beach	VA	$1,173	50	$11,726	50	$293,155	50
Seattle	WA	$1,136	51	$11,358	51	$283,947	51
Honolulu	**HI**	**$1,089**	**52**	**$10,892**	**52**	**$272,304**	**52**
Cheyenne	WY	$831	53	$8,309	53	$207,719	53

Source: Lincoln Institute of Land Policy/Minnesota Center for Fiscal Excellence

Finally, this low ranking relative to other urban cities is also observed for industrial property taxes. As shown in the table below, Honolulu ranked 52nd of 53 cities surveyed for industrial property taxpayers at $100,000, $1.0 million and $25.0 million levels.

Table 13: Urban Cities with Industrial Tax Rankings in Top Five or Bottom Five

City	State	$100,000		$1,000,000		$25,000,000	
		Tax	Rank (of 53)	Tax	Rank (of 53)	Tax	Rank (of 53)
Columbia	SC	$7,943	1	$79,434	1	$1,985,861	1
Memphis	TN	$5,439	2	$54,390	3	$1,359,750	3
Jackson	MS	$5,364	3	$53,640	4	$1,341,000	4
Houston	TX	$5,141	4	$51,413	5	$1,285,325	5
Indianapolis	IN	$4,814	5	$48,137	6	$1,203,424	6
Cheyenne	WY	$1,337	49	$13,375	50	$334,374	50
Philadelphia	PA	$1,327	50	$22,473	39	$609,345	37
Wilmington	DE	$1,320	51	$13,199	51	$329,984	51
Honolulu	**HI**	**$1,194**	**52**	**$11,937**	**52**	**$298,437**	**52**
Virginia Beach	VA	$1,025	53	$10,246	53	$256,155	53

Source: Lincoln Institute of Land Policy/Minnesota Center for Fiscal Excellence

This is an important consideration for discussions of state taxes and tax burdens. Hawaii's tax structure should be viewed in the context of the state and local structure and burden. These comparisons tend to mitigate what might otherwise be seen as a high state tax burden.

This should also be considered in the context of other taxes where the State may choose to share revenue with local governments, in particular, the Transient Accommodations Tax (TAT). This has been subject to change over time, and it is worthy of discussion and analysis as to how this tax does (or should) fit into the overall state and local government revenue picture.

Primary Revenue Structure Components and Comparison to Other States

As has been noted, Hawaii is as unique among the 50 states as any. Its island status, relative isolation, valued tourist destination and historically strategic location all provide it specific attributes that are not found in many other U.S. states. Of course, some of these attributes can, under certain circumstances, also work against the State.

These characteristics make it very difficult to determine logical comparison states. In many benchmarking exercises, the first set of comparators is based on contiguous states. This makes sense, as there is often 'border competition' and the possibility of attracting new residents or businesses based on proximity. This is generally not the case for Hawaii.

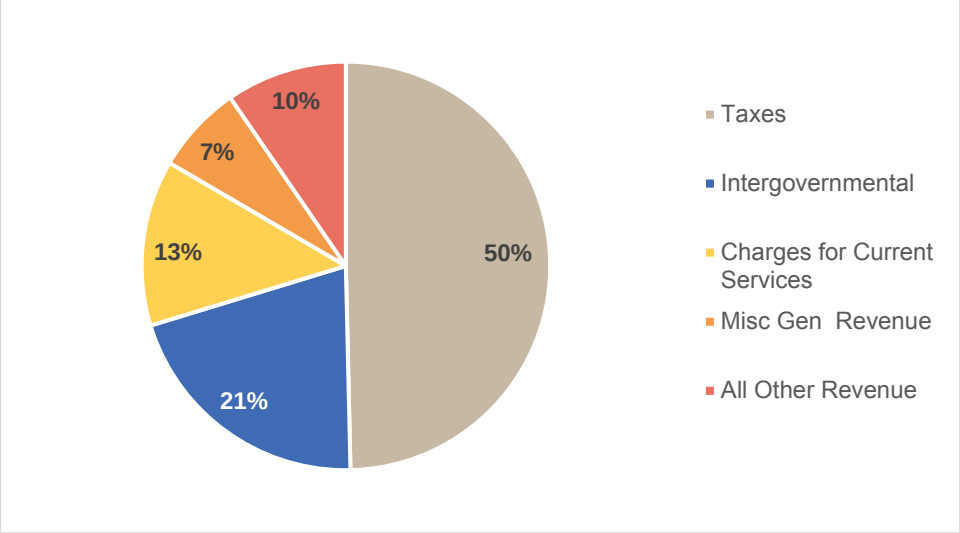
In some benchmarking exercises, key businesses and industries may be useful for comparison, as how the tax structure impacts on these may be insightful. In the case of Hawaii, other states with significant tourism industries may be useful, however states like Florida and California have much more broad-based economies, which makes the comparisons difficult.

From the project team's perspective, it is as useful to observe how structures are used in general (or in relevant specific instances) as opposed to focusing on one or two 'close to perfect twins' among the states.

There are a variety of characteristics of Hawaii's revenue structure that also set it apart from most states. The method for funding K-12 education (and its spin-off effect of reducing local property tax burdens) has already been noted. There are other aspects of Hawaii's revenue structure that will be compared and contrasted with other peer benchmark states.

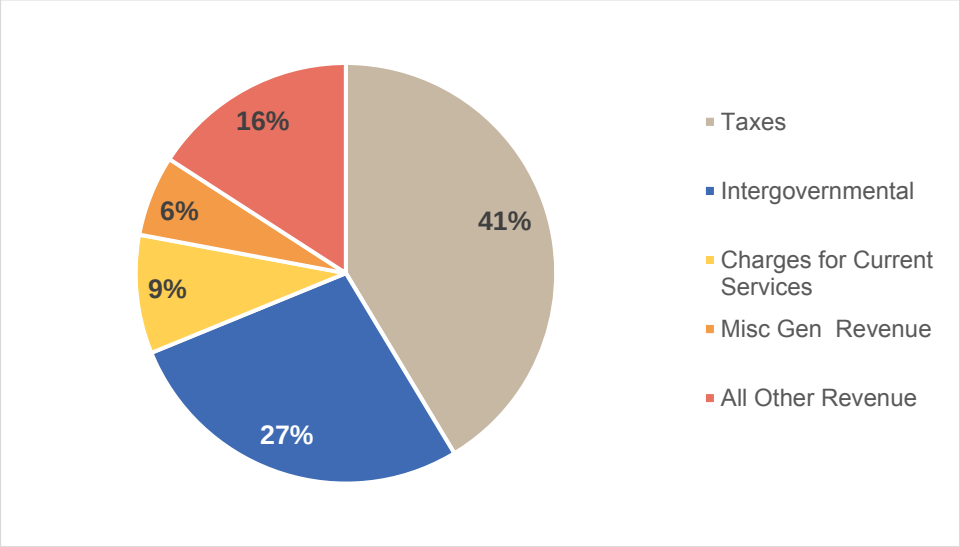
As the following pie charts show, Hawaii relies more on taxes for its revenue and less on intergovernmental transfers (which would primarily be payments from the federal government). Part of this would be Hawaii's higher than average per capita personal income, which reduces the federal share for programs like Medicaid.

Figure 16: Hawaii Revenue Sources, 2015



Source: U.S Census 2015 Annual Survey of State Government Finances

Figure 17: Revenue Sources, All States, 2015



Source: U.S Census 2015 Annual Survey of State Government Finances

Among the taxes, Hawaii relies much more on sales/gross receipts and excise taxes than the U.S states as a whole. This makes sense, as the lack of cross-border competition works in the State's favor – there are few opportunities to escape Hawaii excise taxes in comparison to the situation that exists in many of the continental U.S states. In fact, the 2012 report noted that both Alaska and Hawaii were on the high end of some key excise taxes – in particular, alcohol, cigarette and tobacco and motor fuel taxes.

By contrast, Hawaii collects a relatively smaller share of its revenue from income taxes, where both individual and corporate income taxes lag the percentage for all states. Hawaii also collects no revenue at the State level from property taxes (and is constrained from doing so by the State Constitution). While this is not a major source of funding for states, there are states with some reliance on it – often through taxes on personal (as opposed to real) property.

Of course, relative share of taxes does not delve into questions related to the actual tax rates and tax base that form the basis for tax collection. In these areas, Hawaii is on the high side for several taxes. The Federation of Tax Administrators (FTA) maintains information on state tax rates and base for a variety of taxes. The following table is from the FTA (unless otherwise noted) and provides information on Hawaii's standing as of January 1, 2017 (with the highest state tax ranked first, the second highest second, etc.) among the states that impose the tax.

Tax	Hawaii Tax Rate	Rank Among States	Comments
General excise or sales	4.0 percent	40th (tied)[31]	For comparison purposes, Hawaii's GET is classified as a general excise or sales tax.[32]
Gasoline	0.185 per gallon	44th[33]	Does not include county taxes, which vary from an additional 0.088 a gallon (Hawaii) to 0.23 (Maui).
Cigarette	$3.20 per pack	5th	
Alcohol – distilled spirits	$5.98 per gallon	7th	17 states control wholesale and/or retail sales and apply a separate mark-up, which is generally higher than Hawaii's gallonage tax.
Alcohol – wine	$1.38 per gallon	9th	3 states only sell through state stores and apply a separate mark-up, which his generally higher than Hawaii's gallonage tax.
Alcohol – beer	$0.93 per gallon	2nd	Only Alaska has a higher tax. Most (but not all) states also apply sales tax (or GET for Hawaii).

It is also notable that Hawaii's top individual income tax rate (as of the changes in the 2017 legislative session), 11 percent, will be higher than the top individual income tax rates in every state but California with an individual income tax. California has three brackets with higher rates: 11.3 percent (single filers with marginal income over $322,499 and joint filers with marginal income over $644,998), 12.3 percent (single filers with marginal income over $537,498 and joint filers with marginal income over $1,000,000) and 13.3 percent (single filers with marginal income over $1,000,000 and joint filers with marginal income over $1,074,996).

State Taxes Performance

The report to the 2012 TRC detailed some difficult years for state budgets and state revenue performance. The Great Recession had a profound impact on most state budgets, with significant fall-off in revenue collections among its key sources – primarily income taxes but also consumption taxes. As a result, many states had to resort to multiple tax increases from various sources, and this was the case for Hawaii as well.

While the states as a whole (and Hawaii as well) have largely recovered (in terms of revenue collection) from the Great Recession, that recovery was slow and uneven. The following table, culled from reports from the National Conference of State Legislatures (NCSL) and the National Association of State Budget Officers (NASBO), provides a look at how states have collectively responded during the period since the 2012 TRC report. State responses have been far from uniform, and the five year period has seen ebbs and flows for different revenue sources and states or regions. A prominent recent example are oil and gas producing states,

[31] This information is from a recent report from the Tax Foundation, "State and Local Sales Tax Rates, Midyear 2017," Fiscal Fact No. 553, July 2017. Several states have a 4.0 percent rate – Alabama, Georgia, Hawaii, New York and Wyoming.

[32] A strong case can be made that Hawaii's 4.0 GET rate is effectively higher when compared to state sales tax rates, because Hawaii applies the tax on multiple activities that get built into the price of finished goods and services (and then also subject to the GET). It is likely that the GET effective rate is in the range of 5 percent.

[33] Compiled by the US Energy Information Agency as of February 2017.

which, during this time period, experienced strong revenue growth during oil's run-up to $120 a barrel – only to experience severe budget shocks as oil dropped to $30 a barrel.

Year	Net Change, Tax Policy Actions	Comments
2013	$1.3 billion net reduction in taxes, which is a change of 0.2 percent, possible because of strong general fund revenue growth: 5.3 percent above FY 2012 levels. Much of the increase attributed to pushing income into tax year 2012 to avoid anticipated increases in federal tax rates in 2013.	Individual income tax cuts of $1,892 million for FY2014; Motor fuel tax cuts of $532 million, but several states (Maryland, Massachusetts, Vermont, Wyoming raised these taxes to fund transportation efforts. Sales and use tax increases of a net $720 million, driven by a handful of states – Virginia increased sales taxes by nearly $1.3 billion (to fund transportation), Maine increased its general sales tax rate, and Minnesota and Ohio expanded the sales tax base. Arizona and Kansas lowered their sales tax rate. At least 13 states reported 'tax reform' efforts.
2014	$3.1 billion net reduction in taxes, which is a change of 0.4 percent.	Four states (Illinois, Indiana, Minnesota and Ohio) reduced net taxes by more than 1 percent. The largest single net tax decrease, $1.8 billion, occurred in Illinois as a result of temporary income tax increases that expired. Personal income taxes experienced the largest decrease of the tax categories, at about $3 billion (including Illinois). States also collectively reduced corporate income (-$1,150 million) and sales taxes (-$420 million). Five states (Delaware, Michigan, New Hampshire, Pennsylvania and Vermont) reported a net increase of more than 1 percent. Forty-one states made no significant net tax change. The collective increase in taxes was primarily health care taxes as a result of Michigan's reinstatement of a 6 percent tax on Medicaid managed care organizations. Less interest in 'tax reform' efforts, with only six states reporting major tax reform.

Year	Net Change, Tax Policy Actions	Comments
2015	Minimal net change, with a net decrease of $324 million, which is a zero percent change when compared to the previous year's collections.	"State tax changes in 2015 were all over the board. Unlike the past three years when lawmakers embraced major tax reduction packages, this year saw net increases in most tax categories with reductions only in personal and corporate income taxes. However, the reductions were big enough to offset all other categories for a slight net tax cut across all the reporting states." (NCSL) Tax increases targeted motor fuel to help with transportation costs and tobacco – and more states included e-cigarettes in the tax base. Twelve states reported net tax increases of more than 1 percent (Alabama, Connecticut, Georgia, Idaho, Iowa, Kansas, Louisiana, Nevada, South Dakota, Vermont, Virginia and Washington). The largest net increase was in Connecticut ($806 million) through a comprehensive package that included increases in income, tobacco and health provider taxes and expanding the sales tax base. The largest categories for net tax increases were motor fuel ($1,120 million) and tobacco ($548 million). Seven states reported a net tax decrease of more than 1 percent (Florida, Indiana, Maine, North Dakota, Ohio, Rhode Island and Texas). Texas reported the largest decrease, primarily the result of lower business franchise taxes. Personal income taxes had the largest decrease of all tax categories, at nearly $2 billion, primarily the result of Ohio's phased- in rate reduction. Corporate income taxes were also reduced by a net of $514.6 million.
2016	"Continuing the same trend as in 2015, this year saw net reductions in personal and corporate income taxes and increases across most other tax categories." (NCSL) There was a net $2.3 billion revenue increase across all reporting states (0.3 percent of the prior year's tax collections)	Across the nation, the trend of multi-year reductions in individual and corporate income taxes continued. Tax increases included multiple state increases in motor fuel taxes to fund transportation projects and substantial sales tax increases in two states, as well as increased health care provider taxes to offset insurance costs and tax increases on many tobacco products. Six states (Louisiana, New Jersey, Oklahoma, Pennsylvania, South Dakota and West Virginia) reported net tax increases of more than 1 percent. Louisiana and South Dakota had the largest increases by raising the sales tax rate. Louisiana raised $1.5 billion in new revenue, an increase of 16.4 percent. Five states (Georgia, Indiana, Mississippi, New Mexico and Wisconsin) reduced net taxes by more than 1 percent. Indiana reported the largest tax decrease (a net reduction of 2.3 percent), as the result of phasing in individual and corporate income tax reductions that were enacted during the 2013 legislative session.

There is significant concern, particularly among budget and revenue professionals, that states may be experiencing something of an inflection point as it relates to revenue estimates. **Multiple states have experienced shortfalls in actual revenue collections compared to estimates.** As NASO reported in its recent fiscal survey of the states: "Governors' budgets for fiscal 2018 are extra cautious as states contend with slow revenue growth, limited budget flexibility and substantial federal uncertainty. Under executive budget proposals, state general fund spending would increase just 1 percent in fiscal 2018 compared to current estimated spending levels – the smallest increase recommended by governors since fiscal 2010, when states were in the depths of the Great Recession."[34]

Some key findings from the report include:

- States experienced sluggish general fund revenue growth in fiscal 2017 of 2.4 percent, with 33 states reporting collections below budget projections.
- At least 23 states have already made net mid-year budget cuts totaling $4.9 billion in fiscal 2017.
- State general fund spending would increase just 1 percent under governors' fiscal 2018 budgets, while general fund revenues are projected to grow 3.1 percent.
- Governors' proposed tax and fee changes would result in a net increase of $3.7 billion.

Summary

The following are key points to consider relating to state and local revenue structures, both for Hawaii and other U.S states:

General Characteristics

- The basis for taxation is primarily wealth (property tax), consumption (general sales and excise taxes) or income (income taxes).
- Prior to the 20th century, both state and local revenue structures were centered on property taxes.
- In the 20th century, states diversified their structures, moving away from property taxes and instituting sales and income taxes. Local governments have also (to a lesser extent) reduced their reliance on property taxes, although they remain the largest source of local tax revenue.
- Hawaii would have been the first state to enact an income tax (in 1901), were it a state at that time.

[34] National Association of State Budget Officers, Spring 2017 Fiscal survey.

Hawaii Characteristics

- Hawaii state government primarily relies on the GET (52 percent of General Fund revenue) and the IIT (34 percent). No other source provides more than 4 percent (TAT at 3.8 percent).

- While sometimes compared to state sales taxes, the GET is actually a business privilege tax assessed on nearly all business activities, which makes it a much broader based tax than a general sales tax. This tends to make it a stable source of revenue.

- Because it is assessed against so much business activity, there is more pyramiding that occurs compared to State sales tax structures. Pyramiding occurs when inputs into a finished good or service are taxed at multiple points in the process.

- The Hawaii IIT is a progressive tax, and the highest of its 12 marginal tax bracket is the second highest among U.S. states. The 12 brackets is the most of any state, and Hawaii's lower brackets are closely spaced, meaning average income earners move fairly quickly to higher marginal tax rates than in most states.

- Hawaii has a broad array of excise taxes that are similar to those in other states. Because of Hawaii's unique island location, issues of cross-border competition are less of a concern than in most states, and excise tax rates tend to be higher than average as a result.

Relationship of State and Local Revenues

- It is generally necessary to study combined state and local revenue structures, because there is wide variation in how funding for key local government service funding responsibility is allocated. These are generally state government decisions, as local tax structures generally require state approval for the collection of specific taxes or changes to tax rates or the tax base.

- Hawaii is unique in funding nearly all of K-12 education expenses at the state level. K-12 education is, in nearly every state, the largest expenditure category for local tax revenue, which is primarily property taxes.

- The vast majority of Hawaii state and local revenue is raised at the state level, and Hawaii local property taxes are generally low compared to other states.

State Taxes Performance

- States are dealing with a variety of issues that impact on state tax performance. In particular, erosion of state sales tax bases (because of economic, demographic and tax collection issues) has been a major concern.

- State tax structures have also proven to be more volatile than in the past, primarily because of an increased reliance on progressive income tax structures, which are susceptible to revenue swings related to the business cycle.

- Corporate income taxes have become a smaller component of state revenue structures, and this trend is not likely to be reversed in coming years.

- There is concern that, at the current time, state revenue structures are at something of an inflection point, and sluggish growth is often forecast by individual states. A report by NASBO noted that states experienced below average revenue growth (2.4 percent) in fiscal year 2017, with 33 states reporting collections below official projections.

Tax Burden

Overview

It is generally understood that different taxes impact on individual taxpayers in different ways. At the core of the tax burden discussion is an understanding that paying taxes (while necessary for ordered society) reduces the ability of taxpayers to put those same dollars to other productive use. Tax burden analysis seeks to quantify how much and what percentage of (otherwise disposable) income is directed away from taxpayers (via the tax code).

Research over the years suggests that this impact will vary depending on a variety of factors: income, age, education, geographic location and household make-up are just a few of these factors. As policymakers have looked to shape tax policy that makes sense for the overall economy and its taxpayers, they have used tax burden analysis as one tool to examine policy impacts at the national, state and local level.

Tax burden is an important consideration for the two tax principles identified as key for analysis by the Tax Review Commission:

- Equity (how the tax burden is allocated amongst taxpayers, including those at differing income levels);
- Efficiency (how the tax burden may impact on marketplace decisions by individuals and businesses).

There are several methodologies that have been developed to examine and report on tax burden. Because this is a complex subject, it is understandable that it has been approached from a variety of angles. For Hawaii, the project team has chosen an approach that it believes aligns with some key aspects of the State's tax structure and those who ultimately pay Hawaii taxes.

The approach used for this report uses a representative family and, via assumptions about typical household expenditures and taxes at various income levels, determines the estimated tax burden for that family within five income cohorts. There are other methods that have been used for tax burden analysis, and the discussion will highlight them, discuss strengths and weaknesses, and provide some further commentary on Hawaii's relative position related to those alternate approaches.

Finally, the analysis will also take into consideration how much of the overall State tax collections are paid by nonresidents. This is an important consideration, because it may ameliorate some of the calculations of burden on residents: if aggregate calculations of tax collections are used that do not consider these nonresident tax payments, it creates a misperception of the amount of taxes (and burden) borne by residents. The analysis will also seek to provide an updated estimate of the impact of taxes borne by tourists to Hawaii.

Current Structure Tax Burden

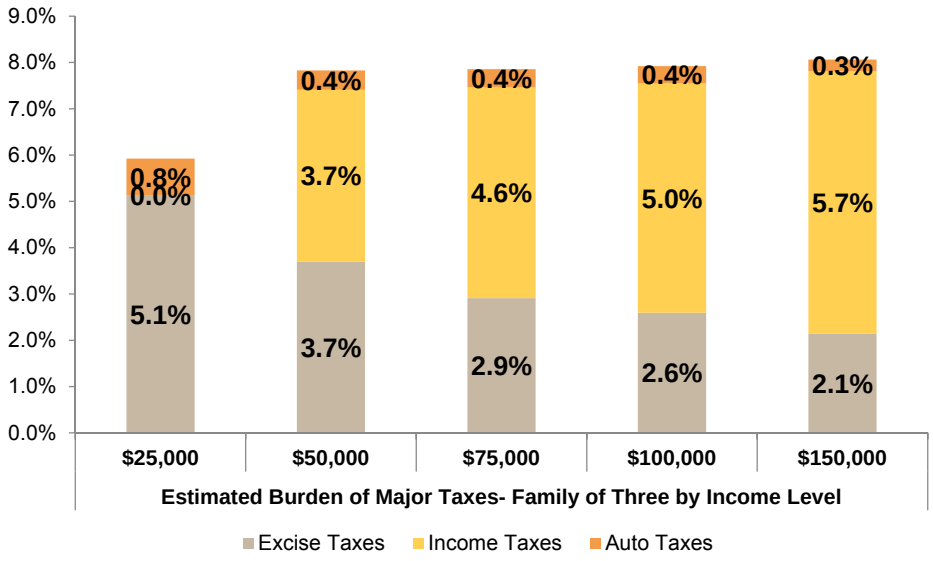
Taxes imposed by the State have varying impacts by class of taxpayer. To chart these impacts, the project team constructed a tax burden model loosely based on the District of Columbia's annual tax burden assessment.[35] The model assesses the 2015 tax burden for a hypothetical married couple with a young child

[35] The most recent version of the annual assessment, which includes a discussion of its methodology can be accessed on the District of Columbia Office of the Chief Financial Officers website at https://cfo.dc.gov/sites/default/files/dc/sites/ocfo/publication/attachments/2015%2051City%20Tax%20Burden%20Study%20Final.pdf

living in Honolulu.[36] The estimated burden for this family represents the sum of all property, auto, consumption (sales/excise), and income taxes, which compose the vast majority of all taxes directly paid by a typical household. Burdens from state excise, auto, and income taxes are also shown separately to examine the particular effects of state-levied taxes levied statewide.

The following chart shows the estimated tax burden for this hypothetical family of three at five income levels. Results show that Hawaii's tax system is only progressive between low income and middle-income households. A family making $25,000 pays approximately 6.0 percent of its income in Hawaii taxes. Families making $50,000 up to $150,000[37] pay approximately the same rate of 8.0 percent, with only mild escalation as incomes rise.

Figure 18: State Tax Burden as a % of Income



Source: PFM analysis of Census, BLS and DOTAX data

[36]While this analysis concentrates on the burden for an individual family, a comparative assessment of tax burden on the overall state economy can be found in the 'Components and Comparison to Other States' Burden' section on page 51.
[37] PFM also explored showing tax burdens at higher levels (above $150,000). Limitations from a lack of reported data on consumer expenditures and property taxes at these very high-income levels made estimates for very high-income households not a viable option.

Table 14: Estimated Burden of Major State Taxes - Family of Three by Income Level

	$25,000	$50,000	$75,000	$100,000	$150,000
Consumption Taxes	**$1,281**	**$1,847**	**$2,184**	**$2,598**	**$3,219**
% of Income	5.12%	3.69%	2.91%	2.60%	2.15%
Property Taxes	**$0**	**$0**	**$0**	**$0**	**$0**
% of Income	0.00%	0.00%	0.00%	0.00%	0.00%
Income Taxes	**$0**	**$1,858**	**$3,413**	**$4,951**	**$8,499**
% of Income	0.00%	3.72%	4.55%	4.95%	5.67%
Auto Taxes	**$200**	**$210**	**$295**	**$372**	**$375**
% of Income	0.80%	0.42%	0.39%	0.37%	0.25%
Total Tax Burden	**$1,481**	**$3,915**	**$5,892**	**$7,921**	**$12,094**
Tax Burden as % of Income	**5.9%**	**7.8%**	**7.9%**	**7.9%**	**8.1%**

Source: PFM analysis of Census, BLS and DOTAX data

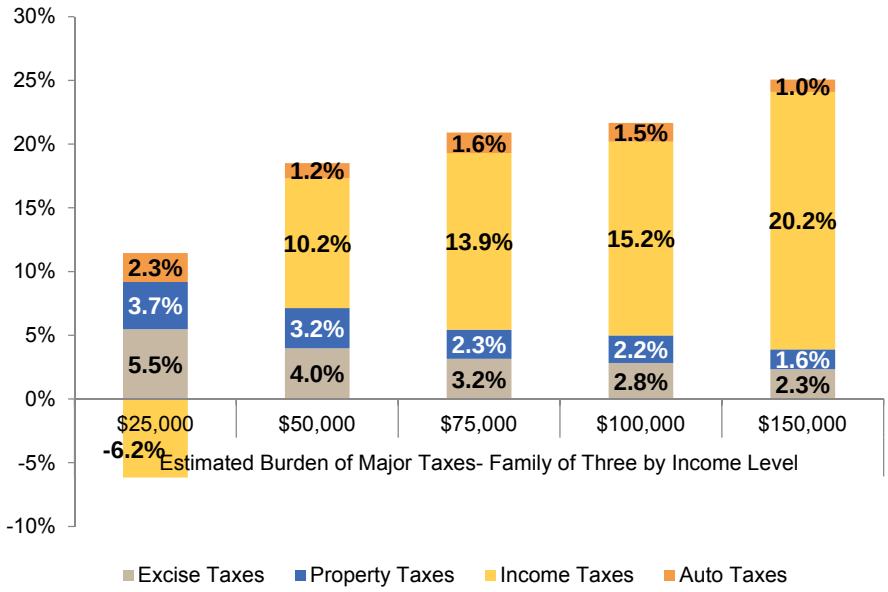
The GET is by far the most regressive of Hawaii's taxes, consuming 5.0 percent of income for the $25,000 household but 2.2 percent for the $150,000 household. This is partially offset by the food individual income tax credit, which was recently made permanent. The State auto registration, weight, and gas taxes are also regressive, taking two times the share of income from $25,000 households than those making $50,000 or more.

By contrast, the state individual income tax is progressive. The percent of income paid in individual income tax steadily rises as incomes increase, from 3.7 percent at $50,000 to 5.7 percent at $150,000. The recently enacted State Earned Income Tax Credit (EITC) effectively eliminates income taxes for the $25,000 income household, which will significantly reduce the burden for these households and reduce taxes portion of these households' income by 1.8 percent. Without the state EITC, state taxes would account for 7.7 percent of income for the $25,000 income household, a rate on par with that of higher income households.[38]

Considering the total tax burden including all state, local, and federal taxes, the tax structure is progressive for the hypothetical family – primarily due to the progressive federal tax structure. The $25,000 income family pays roughly 5.3 percent of its income in taxes, compared to 25.1 percent for the $150,000 income family. The federal refundable EITC offsets much of the regressivity of the tax system, while the progressive structure of both state and federal income taxation contributes to the progressivity of the combined tax system. Property and auto taxes are very regressive, with the tax burden steadily falling as incomes increase.

[38] It should be noted that the State EITC is not refundable, so the credit can only be used to offset State individual income tax obligation. In this respect, it is less useful for reducing tax burden (and system regressivity than, for example, the refundable food/excise tax credit).

Figure 19: Total Tax Burden as % of Income



Source: PFM analysis of Census, BLS and DOTAX data

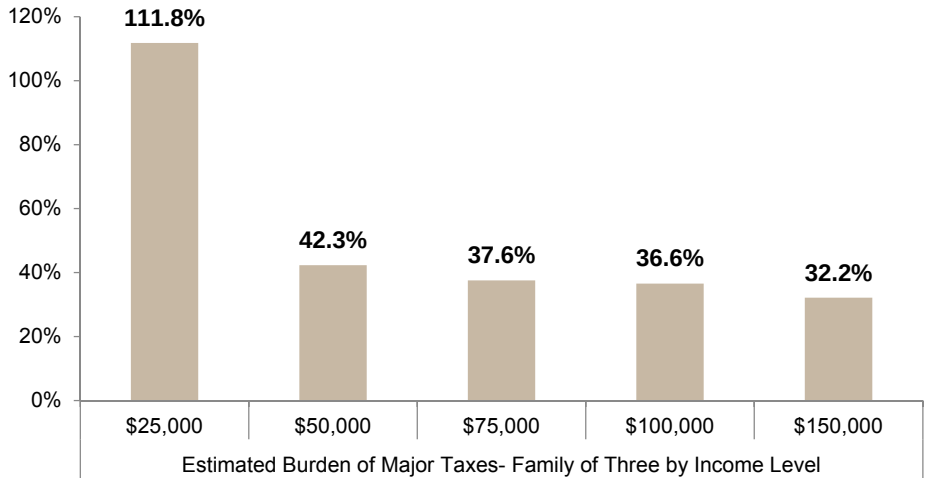
Table 15: Estimated Burden of All Major Taxes - Family of Three by Income Level

	$25,000	$50,000	$75,000	$100,000	$150,000
Consumption Taxes	**$1,367**	**$1,990**	**$2,365**	**$2,829**	**$3,511**
% of Income	5.47%	3.98%	3.15%	2.83%	2.34%
Property Taxes	**$926**	**$1,578**	**$1,710**	**$2,156**	**$2,329**
% of Income	3.70%	3.16%	2.28%	2.16%	1.55%
Income Taxes	**-$1,540**	**$5,090**	**$10,402**	**$15,207**	**$30,301**
% of Income	-6.16%	10.18%	13.87%	15.21%	20.20%
Auto Taxes	**$571**	**$595**	**$1,203**	**$1,462**	**$1,445**
% of Income	2.28%	1.19%	1.60%	1.46%	0.96%
Total Tax Burden	**$1,325**	**$9,254**	**$15,680**	**$21,654**	**$37,585**
Tax Burden as % of Income	**5.3%**	**18.5%**	**20.9%**	**21.7%**	**25.1%**

Source: PFM analysis of Census, BLS and DOTAX data

Hawaii taxes account for a larger share of all taxes at lower incomes than higher incomes. These taxes represent 112 percent of total taxes paid by the $25,000 family. The percentage above 100 percent is offset by $1,540 in refundable federal EITC. Beyond the $25,000 income level, Hawaii's share of total taxes steady declines, from 42.3 percent at $50,000 to 32.2 percent at $150,000. The State's tax structure makes the overall tax structure less progressive than it would otherwise be. This is because the federal tax structure is highly progressive, much more progressive than any state tax system. Although Hawaii's State tax system itself is just mildly progressive, these state taxes – as well as the very regressive county property taxes – offset some of the strong progressivity of the federal system.

Figure 20: State Share of Total Tax Burden



Source: PFM analysis of Census, BLS and DOTAX data

Exported Tax Revenue

A key factor for the discussion of Hawaii taxes is that a significant share are borne by nonresidents of Hawaii. As one of the nation's leading tourism destinations, every year Hawaii attracts over 8.9 million visitors that spend $15.6 billion within the State economy.[39] Hawaii is also home to a large number of military personnel from other states that spend money within the state. Much of this spending activity is captured by the State's GET, TAT, liquor tax, gas tax, rental vehicle surcharge tax, corporate net income tax, and other taxes. County property taxes are also exported to out-of-state visitors that use vacation rental or seasonally-occupied housing.

Several studies have produced varying estimates on the level of tax exporting to nonresidents in Hawaii. The variation stems from differences in assumptions, calculation methodologies, and the period of study. Across these studies, taxpaying nonresidents are generally split into four categories: the federal government (whose military presence produces substantial spending subject to GET), residents, visitors, and non-resident property and business owners.

The following tables illustrate the differing calculations of the GET and total tax exported by taxpayer category from previous studies:

[39]Hawaii Tourism Authority. "Hawaii Tourism Industry Set[s] New Records in 2016: $15.6 billion in visitor spending; 8.9 Million Arrivals." January 30, 2017. http://www.hawaiitourismauthority.org/default/assets/File/research/monthly-visitors/December%202016%20final%203.pdf

Table 16: General Excise Tax Burden by Taxpayer Type

Study	Residents/ State and Local Gov't	Federal Gov't	Tourists (A)	Nonresident Business and Property Owners (B)	All Nonresidents (A + B)
Miklius, Moncor, and Leung (1988)	66.4%	1.8%	21.9%	9.8%	31.7%
Bowen and Leung (1989)	66.7%	2.3%	25.0%	6.0%	31.0%
2006 DOTAX Study	62.1%	6.3%	--	--	31.6%
PFM (2017)	--	--	19.0%	--	--
Study Average	**65.1%**	**3.5%**	**22.0%**	**7.9%**	**31.5%**

Source: PFM analysis

Table 17: Total State and Local Tax Burden by Taxpayer Type

Study	Residents/ State and Local Gov't	Federal Gov't	Tourists (A)	Nonresident Bus. and Prop. Owners (B)	All Nonresidents (A + B)
Miklius, Moncor, and Leung (1988)	67.5%	7.2%	16.1%	9.3%	25.4%
Bowen and Leung (1989)	67.9%	2.3%	22.0%	7.8%	29.8%
2006 DOTAX Study	68.5%	9.6%	--	--	21.9%
Study Average	**67.9%**	**6.4%**	**19.1%**	**8.5%**	**25.7%**

Source: PFM analysis

Visitors shoulder a significant portion of the tax burden in Hawaii. A 1988 TRC study by Miklius, Moncor, and Leung put the visitor share of the GET at **22 percent** and 16 percent of all state and local taxes.[40] A 1989 study by Bowen and Leung estimated that tourism accounted for 17 percent of final sales in Hawaii and that tourists pay **25 percent** of the GET. Altogether, the study found that nonresidents accounted for 32 percent of all major Hawaii taxes including corporate net income, property, fuel, tobacco, and liquor taxes. The corporate net income and liquor taxes were most heavily borne by visitors at 23 and 40 percent respectively.[41] A 2006 Department of Taxation report prepared for the TRC put the non-federal, nonresident GET share at **32 percent**, the property tax share at 22 percent, the transient accommodations tax share at 64 percent, and the overall tax burden share at roughly 22 percent. However this figure is not strictly comparable to previous estimates, because it includes nonresident property and business owners.[42]

To supplement this research with findings from more recent data, the project team performed a new calculation of the tourist GET burden using Hawaii Tourism Authority (HTA) data and GET collection data from the Council on Revenues. Here, the project team adopted a different methodology than typically employed by other studies. Instead of relying on macroeconomic data to calculate the implied amount of taxes paid by visitors, the project team calculated the visitor share based on HTA statistics on visitor days and air visitor[43] personal daily spending and actual GET collections for 2004-2016. It is estimated that tourists (excluding non-resident owners and the

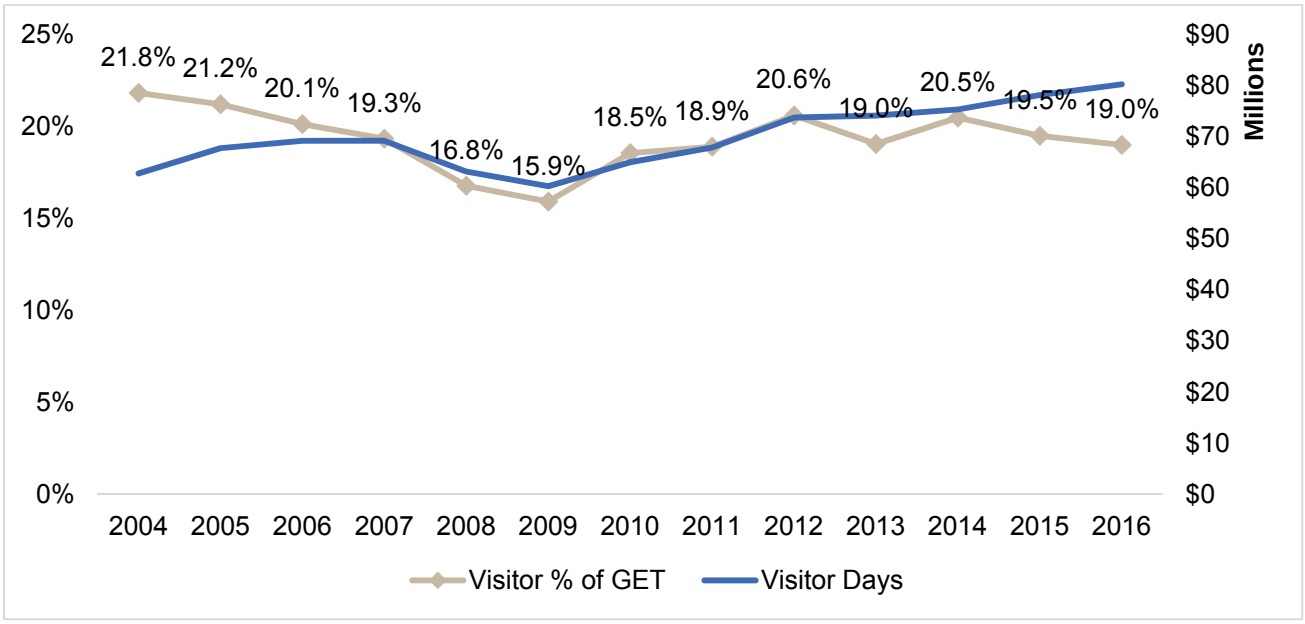
[40] Miklius, Walter, James E. T. Moncur, and PingSun Leung, "Distribution of State and Local Tax Burden by Income Class," in Hawaii Tax Review Commission, Working Papers and Consultant Studies, vol. 2, Honolulu: State of Hawaii, Department of Taxation, 1989, pp. 7-19.
[41] Bowen, R. L., & Leung, P. (1989). Tax pyramiding and tax exporting in Hawaii: an input-output analysis.
[42] "Tax Research and Planning Office, Hawaii State Department of Taxation. "Study on the Progressive or Regressive Nature of Hawaii's Taxes." http://files.hawaii.gov/tax/stats/trc/docs2007/Final_Report-Appendix_D.pdf
[43] These visitors account for 99 percent of all visitors.

federal government) on average account for **19.3 percent**[44] of state General Excise Tax collections (excluding the Oahu surcharge), a slightly lower figure than many previous estimates, but closer to the figures from the Miklius, Moncor, and Leung and Bowen and Leung studies.[45] Roughly 19 cents of every GET dollar comes from tourists.

Using the same methodology, the project team also studied the change in visitors' share of the GET over time. In 2004, visitors accounted for 21.8 percent of GET collections, which declined steadily to 15.9 percent by the onset of the Great Recession. After 2009, the visitor share began to rise with the economic recovery, reaching its highest level since 2005 by 2012. Since 2012, the share has fluctuated around an average of **20 percent**, although the share has consistently declined since 2014. The overall 12-year average for the visitor's GET share is just over **19 percent**.

The visitor share of the GET seems to be most closely aligned with the number of visitor days over the long term, although recent years have shown a slight divergence between the trends. These results suggest that visitors' share of the GET does not remain flat over time. Instead, it varies in line with the number of visitor days, which is itself impacted by the business cycle. This suggests that over the long term as tourism to Hawaii increases, so will the visitors' share of GET collections. However this also means that visitor GET share estimates at different points in time are not strictly comparable, because they reflect different levels of tourist visits to Hawaii.

Figure 21: Visitor % of GET vs. Total Visitor Days

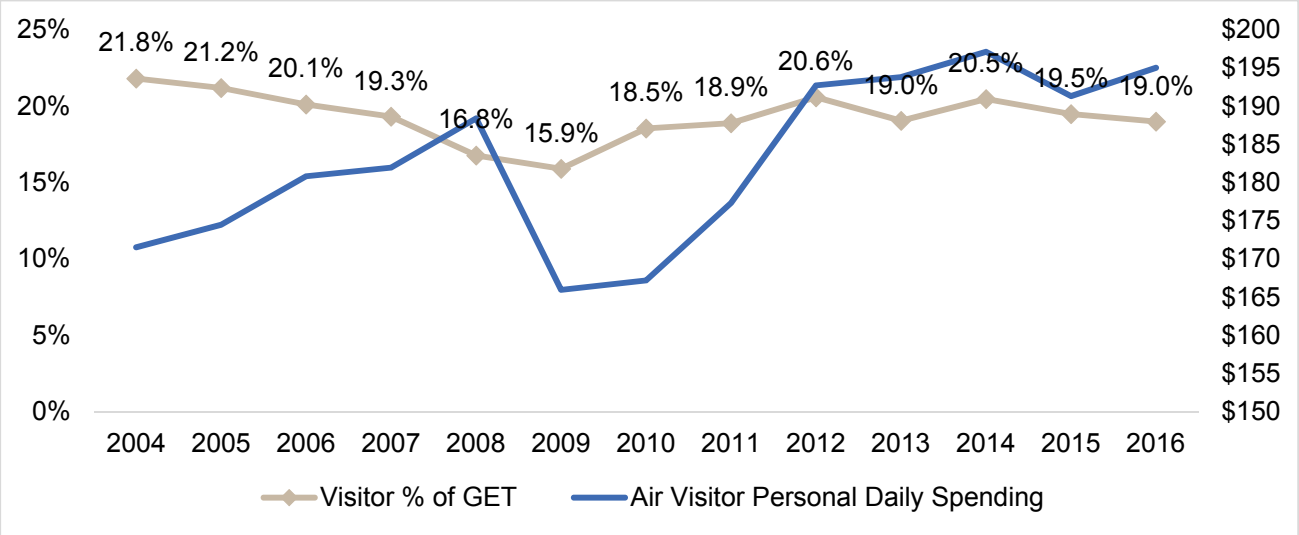


Source: PFM analysis of Hawaii Tourism Authority and DOTAX data

[44] 2004-2016 average.

[45] This share was calculated by calculating total visitor expenditures for Oahu and the rest of Hawaii from Hawaii Tourism Authority data. Next, the TAT and GET imbedded within these expenditures were backed out. The GET was removed by using 4.71% for Oahu and 4.17% for the rest of Oahu, the rates commonly charged by businesses to consumers to recoup the GET. These rates take pyramiding into account by adding an additional 0.17 percent (outside Honolulu) and 0.22 percent (Honolulu) to the statutory rate. The TAT was removed using 7.25%, 8.25%, or 9.25% of tourist lodging expenditures, the various rates that were effect from 2004 through 2016. These expenditures less paid GET and TAT were added together then multiplied by the 4.17% effective state GET rate to estimate State GET paid by visitors. This was divided by actual GET collections in 2016 to compute a visitor share of 19 percent. Although visitor expenditures reported by the HTA likely include some smaller taxes, tips, and gratuities not subject to GET, HTA data on the distribution of spending suggest these amounts are not large enough to significantly bias the estimates.

Figure 22: Visitor % of GET vs. Personal Daily Spending



Source: PFM analysis of Hawaii Tourism Authority and DOTAX data

Considering the non-tourist share of taxes, Miklius, Moncor, and Leung estimated the federal GET share at 1.8 percent and the total state and local tax share at 7.2 percent. However, the 2006 Department of Taxation study report put the federal share at 6.3 percent of GET and 9.6 percent of all taxes. Miklius, Moncor, and Leung's study estimates the nonresident business and property owner GET share at 9.8 percent and the overall state and local tax share at 9.3 percent. Bowen and Leung's study put the nonresident business and property owner GET share at 6.0 percent and the overall state and local tax share at 7.8 percent.

To summarize, previous studies suggest that visitors' share of the GET is somewhere between 19 and 25 percent. The federal share lies somewhere between 1.8 percent and 6.3 percent while nonresident property and business owners likely pay between 6.0 and 9.8 percent of the total tax. Residents shoulder between 62.1 and 66.7 percent of the GET burden. In terms of all state and local taxes, studies suggest the visitor burden lies between 16.1 and 22.0 percent, while the federal burden lies between 2.3 and 9.6 percent. Nonresident business and property owners likely pay between 7.8 and 9.3 percent, while residents pay between 67.5 and 68.5 percent. Although the breakouts by nonresident taxpayer vary**, studies consistently show that Hawaii residents pay just over two-thirds of all state and local taxes.**

Components and Comparison to Other States' Burden

Additional insights on Hawaii's tax burden can be gained from comparing it to that of other states. Generally, high level state tax burden estimates differ from household assessments, because they focus on tax collections' share of overall statewide income. Hawaii has one of the highest marginal income tax rates for upper income taxpayers in the nation, and one of the most broad-based consumption taxes in the GET. In addition, Hawaii's economy is unusually dependent on tourism when compared to other states, and visitors account for a relatively large share of paid taxes. For some tax burden studies, this will inflate measures of burden based on ratios of total taxes paid to resident incomes or the number of residents.

For this reason, Hawaii is often in the top rank of states on high-level per capita and tax-to-income ratios. Including taxes paid by tourists in aggregate measures of resident tax burden is a major weakness of many tax

burden studies. Resident burden is consistently overstated since the numerator includes taxes paid by everyone but the denominator is limited to residents or their incomes. Hawaii is not the only state that exports a significant share of its tax burden (and for a variety of reasons). For example, there are cities (such as New York City, Philadelphia, Chicago, etc.) where the daytime working population increases dramatically with commuters from other states. These commuters pay a variety of taxes (including general sales and excise taxes) that may not be considered in these aggregate analyses. Likewise, other tourist destination states, such as Florida and California, also export revenue to visitors – although it is unclear if any of these states reach the same level of exporting as Hawaii. Even with these caveats, it is still important to measure tax burden on the overall state economy and not only on a particular household.

2014 data from the FTA shows that Hawaii state and local taxes per capita are the ninth highest in the nation, at $5,708 per resident. As a percentage of personal income, Hawaii taxes are the fifth highest in the nation, at 12.9 percent.

Table 18: FTA - State and Local Taxes per Capita and as % of Personal Income, 2014

	State and Local Taxes Per Capita			Taxes % of Personal Income	
	Taxes ($ million)	Per Capita	Rank	% of Personal Income	Rank
North Dakota	7,212	9,753	1	17.9	1
New York	166,087	8,411	3	15.5	2
District of Columbia	6,378	9,680	2	14.8	3
Alaska	5,568	7,558	4	14.7	4
Hawaii	**8,103**	**5,708**	**9**	**12.9**	**5**
Vermont	3,473	5,543	12	12.1	6
Maine	6,395	4,808	17	12.1	7
Minnesota	30,781	5,640	10	12.0	8
Illinois	70,821	5,498	13	11.8	9
New Jersey	57,638	6,448	6	11.7	10

Source: Federation of Tax Administrators 2014 State Tax Revenue Tax Burden Comparison - U.S Census Bureau 2014 Population Estimates

A similar 2012 analysis from the Tax Foundation found that Hawaii had the 14th highest state and local tax burden as a percentage of state income (10.2 percent) and the 15th highest state and local tax burden per capita ($4,576). However when considering paid state taxes alone, Hawaii ranks 11th in the nation at $3,480 per resident. The Hawaii tax burden is one of the highest in the nation as a share of *all* incomes.

Table 19: Tax Foundation - State and Local Taxes per Capita and as % of Personal Income, 2012

State	State-Local Tax Burden as a Percent of State Income	Rank	State-Local Tax Burden per Capita	Rank	Taxes Paid to Own State per Capita	Rank
New York	12.7%	1	$6,993	3	$5,588	1
Connecticut	12.6%	2	$7,869	1	$5,516	2
New Jersey	12.2%	3	$6,926	4	$4,876	4
Wisconsin	11.0%	4	$4,734	12	$3,602	10
Illinois	11.0%	5	$5,235	8	$4,015	8
California	11.0%	6	$5,237	7	$4,126	7

State	State-Local Tax Burden as a Percent of State Income	Rank	State-Local Tax Burden per Capita	Rank	Taxes Paid to Own State per Capita	Rank
Maryland	10.9%	7	$5,920	5	$4,387	5
Minnesota	10.8%	8	$5,185	9	$3,980	9
Rhode Island	10.8%	9	$4,998	10	$3,476	12
DC	10.6%	10	$7,541	2	$5,231	3
Oregon	10.3%	10	$4,095	23	$3,063	18
Vermont	10.3%	11	$4,557	16	$3,129	17
Massachusetts	10.3%	12	$5,872	6	$4,220	6
Maine	10.2%	13	$3,997	25	$2,895	22
Hawaii	**10.2%**	**14**	**$4,576**	**15**	**$3,480**	**11**

Source: Tax Foundation, FY2012 State-Local Tax Burdens by State

Yet when considering individual households, a different tax burden picture emerges. Nationally, Hawaii's (Honolulu's) middle class individual taxpayers have relatively low tax burdens.[46] As previously noted, for tax burden comparison purposes at the household level, the project team has used data from an annual study conducted by the Chief Financial Officer for Washington DC. This study compares the tax burden for the District of Columbia and each of the largest cities in all 50 states. The study is useful because it provides a national point of comparison of state and local taxes. It should be noted that unlike many other tax burden studies, the DC study does not measure the burden from taxes paid by nonresidents, only taxes paid by a hypothetical resident household. Moreover, it does not measure tax incidence, only the estimated dollar value of taxes paid by a household and taxes' percentage of that household's income.

According to Washington DC's annual tax rate and tax burden study,[47] Honolulu households with incomes above $50,000 have low property tax burdens relative to most other large cities in the U.S. Households with incomes between $50,000 and $150,000 (the highest income cohort included in the study) on average have tax burdens between 6.1 and 7.5 percent of income – ranking in the lowest 20 percent nationwide, as shown in the following table.

Table 20: Honolulu, Hawaii National Tax Burden Ranking, 2015

	Taxes					Tax Burden	
Income Level	Sales	Income	Property	Auto	Total	Percent	Rank (of 51)
$50,000	$823	$1,293	$692	$251	**$3,059**	6.1%	46
$75,000	$1,105	$2,443	$1,178	$434	**$5,160**	6.9%	43
$100,000	$1,354	$3,758	$1,664	$555	**$7,331**	7.3%	41
$150,000	$1,653	$6,437	$2,636	$537	**$11,263**	7.5%	40

Source: Washington DC Tax Rates and Tax Burdens 2015

Hawaii's low property taxes are a major reason for the state's low tax burden on low and middle-income families. Compared to other states, property taxes in Hawaii are also relatively low. Hawaii has the 19th lowest median

[46] In the study, tax burden attributed to property tax is higher for those at $25,000 than other households because it is calculated off an assumed rent for a 3-person family rather than off the assumed assessed value of a home. The median rent in Hawaii is approximately 56 percent above the national average, resulting in higher assumed property taxes paid through rent. However, property taxes in Hawaii are relatively low – the median paid residential property tax in Hawaii was over 1/3 below the national average in 2015. Therefore, the project team believes a 20 percent of rent assumption is highly inflated, and therefore that income cohort is not included in this analysis.
[47] Washington DC Tax Rates and Tax Burdens 2015 – A Nationwide Comparison. Issued December 2016.

property taxes and the lowest property taxes in the nation when measured against home values.[48] When measured against homeowner incomes, the property tax burden in Hawaii is the 6th lowest of any state.

Table 21: Hawaii Property Taxes, 2015

	Median Property Taxes Paid	Property Tax to Home Value Ratio	Median Property Taxes to Homeowner Median Income Ratio
Performance	$1,482	0.3%	1.6%
Rank	19th lowest	Lowest	6th lowest

Source: U.S Census Bureau, American Community Survey 1-Year Estimates

Washington DC's annual tax rate and tax burden study also included data on effective tax rates at five levels of income. The project team used this data to compute the average increase in the effective tax rates between income gains of $25,000 for families making between of $25,000[49] and $100,000. This functions as a measure of the progressivity of a tax structure. Honolulu ties for eleventh most progressive in the nation, meaning Hawaii's tax structure is very progressive when compared to most other states. Honolulu is also 11th in the nation when the analysis is expanded to include tax rate increases from $100,000 to $150,000.

Table 22: Tax Burden Progressivity, Largest City in Each State, 2015

Largest City	Avg. Effective Tax Rate Increase, $25,000 Income Gain, $25k - $100k	Rank
Burlington, VT	4.9%	1
Bridgeport, CT	2.4%	2
Milwaukee, WI	1.3%	3
Baltimore, MD	1.3%	3
Newark, NJ	1.1%	5
Detroit, MI	1.0%	6
Minneapolis, MN	0.8%	7
Des Moines, IA	0.7%	8
Boise, ID	0.6%	9
Omaha, NE	0.5%	10
Honolulu, HI	**0.5%**	**11**
Oklahoma City, OK	0.5%	11
Albuquerque, NM	0.4%	13
Columbus, OH	0.2%	14
Billings, MT	0.1%	15

[48] Home values in Hawaii are amongst the highest in the nation, therefore low property tax rates do not always translate to small property tax bills.

[49] PFM's effective tax rate for $25,000 households used instead of the DC study estimate due to concerns over its property tax share of rent assumptions.

In sum, **Hawaii's State tax system is mildly progressive.** This results mainly from the state's highly progressive individual income tax, partially offset by the very regressive GET. Although the progressivity of Hawaii's system is modest, it is significantly more progressive than other states. In the aggregate, wealthier households tend to pay higher effective tax rates in Hawaii than is the norm in the rest of the country.

Summary

It is important to distinguish between the relative tax burden of key components and of the structure as a whole. In this respect, Hawaii's tax burden has some widely divergent components. The following provides key points related to the State and local tax burden.

Current Structure

- The GET is a regressive tax, which consumes 5.0 percent of income for a household with $25,000 income but only 2.2 percent for a household with $150,000 of income. This is partially offset by the food IIT refundable credit, which was recently made permanent.
- The IIT tax is a progressive tax, where the percent of income paid steadily rises as incomes increase – from 3.7 percent at $50,000 to 5.7 percent at $150,000. The recently-enacted EITC effectively eliminates IIT for the $25,000 income households.
- The property tax is regressive, with the tax burden rising as incomes increase. It is notable, however, that actual property taxes paid in Hawaii are lower than in nearly all other states, which reduces their impact.
- When combining federal, state and local taxes paid in Hawaii, the structure is progressive at each income level. However, the federal IIT is highly progressive and contributes to the overall progressivity of the system.

Exported Tax Revenue

Not all tax revenue is borne by Hawaii resident taxpayers. In fact, given the importance of tourism (and, to a lesser extent, federal non-resident employees), Hawaii likely exports more of its tax burden than nearly any other state. This replaces some of the burden for Hawaii resident taxpayers. Multiple studies have identified the share of Hawaii major taxes. The following identifies estimates of that exported burden:

- Share of GET estimates have varied from 31.0 to 31.7 percent.
- The PFM study estimates that the tourists' share of GET is 19.0 percent.
- Total state and local tax burden by non-residents has varied from 21.9 to 29.8 percent.
- Although the breakouts vary, studies consistently show that Hawaii residents pay just over two-thirds of all state and local taxes.

Components and Comparisons to Other States' Burden

As discussed in the overview, high level state tax burden estimates differ from household assessments because they focus on tax collections' share of overall statewide income. Some also only focus on state tax collections, and, given Hawaii's unique characteristics, these generally inflate these rankings. Given those caveats, the following identify Hawaii rankings in other tax burden comparisons:

- FTA 2014 data indicate that Hawaii state and local taxes per capita are the ninth highest in the nation. As a percentage of personal income, Hawaii taxes are the fifth highest in the nation.

- An analysis by the Tax Foundation (2012) found that Hawaii had the 14th highest state and local tax burden as a percentage of state income and 15th highest state and local tax burden per capita.

- Using the individual households approach, Honolulu's middle class individual taxpayers have relatively low tax burdens and particularly low property tax burdens (among the lowest in the U.S. among comparison cities).

- Using the individual households approach and effective tax rates, Honolulu has the 11th most progressive tax structure in the nation.

Tax Regressivity

Overview

The discussion of tax burden is important for determining the progressive and regressive features of a tax structure as well as its overall standing. As discussed in the chapter on Tax Burden, the overall Hawaii State tax structure is mildly progressive using the household income approach to determining tax burden. At the same time, individual features of the tax structure (which was also discussed in the Tax Burden chapter) can be regressive and may have greater impacts on certain taxpayers than other tax components.

Introduction

The TRC directed PFM to consider opportunities to make the Hawaii tax structure less regressive. As a starting point, it is important to discuss how tax structures are characterized and what it means for a state tax structure to be considered regressive.

Regressivity is a key tax equity (and tax construction) issue, and it is closely linked with the previous discussion of tax burden. Tax structures and/or individual taxes are often described as being progressive, regressive or proportional. A progressive tax is one that takes a larger percentage of income from high income groups than from low income groups. A proportional tax is one that takes the same percentage of income from all income groups. A regressive tax is one that takes a larger percentage of income from low income groups than from high income groups.

In fact, very few (perhaps no) taxes are designed to impose rates that increase as income decreases (which would mean there are no purely regressive taxes on their face). In practice, however, various taxes are regressive, because a greater proportion of a lower income individual's income is dedicated to paying the tax, even though individuals pay the same tax rate. For example, it is generally accepted that lower income individuals spend a greater percentage of their income on the tangible goods and services that are subject to a general sales tax. As a result, that type of tax is generally considered to be a regressive tax (although the extent of that regressivity is subject to some debate). It is also notable that an overall tax structure can be progressive while some of its components are regressive – which is generally the case for Hawaii.

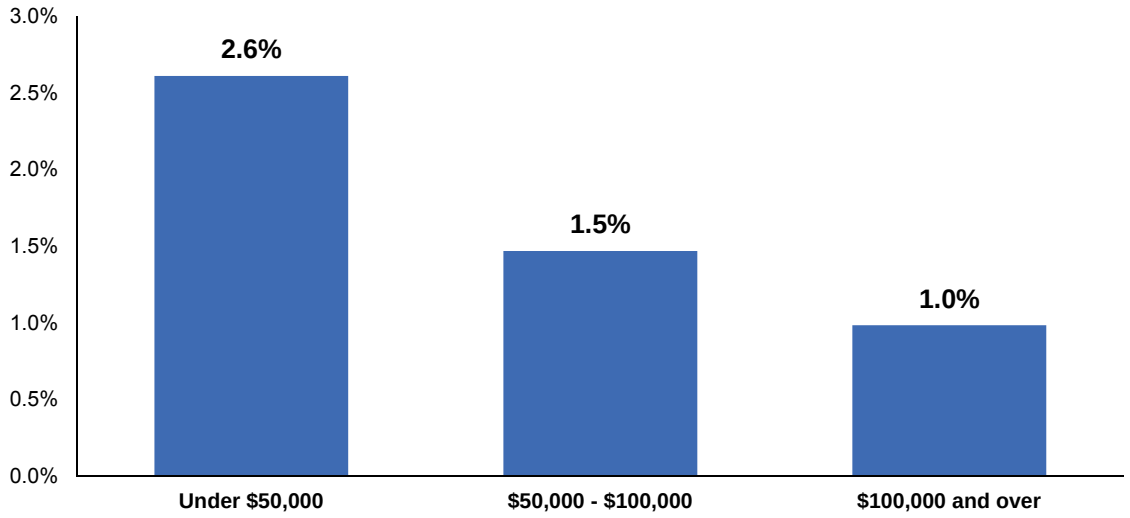
State tax structures are often viewed in combination with local taxes. This helps for "apples to apples" comparison purposes, as States have made differing determinations of how certain services (such as K-12 education) will be provided and who (state or local governments and taxes) will pay for them. Hawaii is notable in that it is the only state that assumes nearly all the costs of K-12 education at the state level. In other states, this is generally more of a shared state and local funding responsibility.

Current Measures of Regressivity

Given the distribution of tax burden, it is important to consider the overall regressivity of Hawaii's major taxes in terms of percentage of income and share of overall tax collections. Hawaii's largest tax revenue source, the GET, is highly regressive. The percentage of income going to the GET steadily declines as incomes rise. Honolulu households making less than $50,000 pay roughly three cents per dollar earned in excise taxes, while

those making $100,000 or more pay only one cent on the dollar. This is largely because lower income households spend more of their income on consumption expenditures subject to the GET.[50]

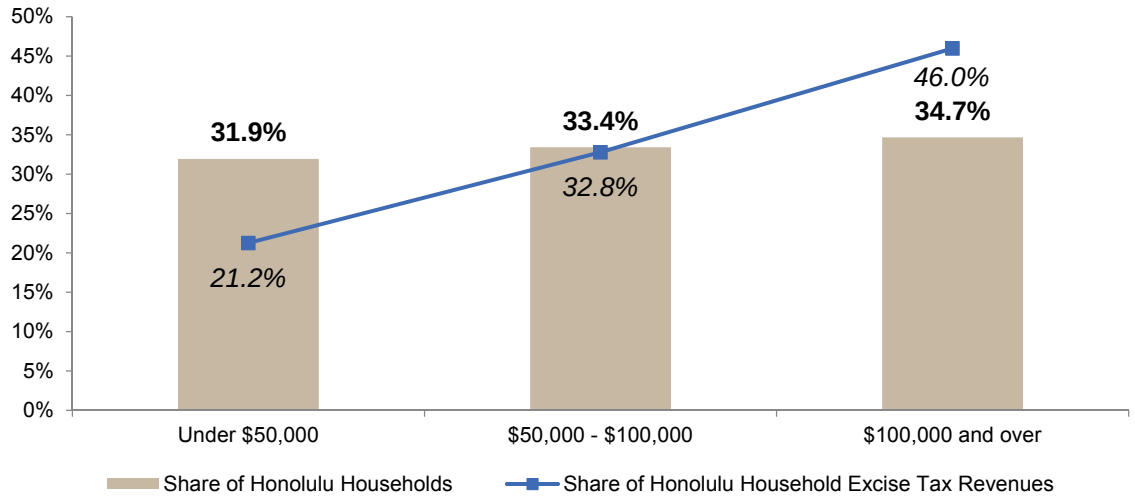
Figure 23: Ratio of General Excise Taxes Paid to Household Income by Income Range, 2014



Sources: Hawaii Department of Business, Economic Development & Tourism. Honolulu Consumer Spending: 2013-2014. April 2016; U.S Bureau of Labor Statistics, 2015 Consumer Expenditure Survey. August 2016; U.S Census Bureau, American Community Survey 2014 1 Year Estimates.

However, in the aggregate, upper income taxpayers pay a disproportionate share of general excise taxes. Honolulu households making under $50,000; between $50,000 and $100,000; and $100,000 and over have nearly equal shares of Honolulu households – yet those making $100,000 or more shoulder about 46 percent of the burden. This is because these households tend to spend more money in the aggregate on goods and services subject to the GET.

Figure 24: Share of Honolulu Households & Total Excise Tax Revenues by Income Range, 2013-2014



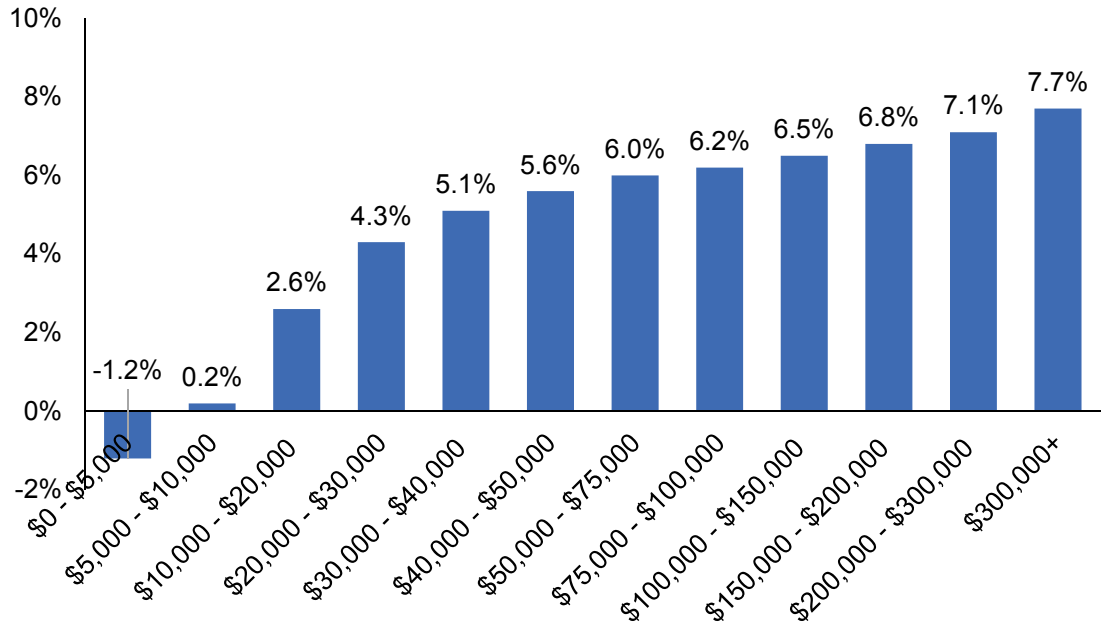
Sources: Hawaii Department of Business, Economic Development & Tourism. Honolulu Consumer Spending: 2013-2014. April 2016; U.S Bureau of Labor Statistics, 2015 Consumer Expenditure Survey. August 2016; U.S Census Bureau, American Community Survey 2014 1 Year Estimates.

A previous study showed that when viewed over a typical taxpayer's lifecycle, Hawaii's general excise tax structure appears less regressive, with the tax burden only declining modestly as the taxpayer's income rises over the course of his or her lifetime.[51] This occurs because middle-aged adults tend to spend less on consumption than young adults and senior citizens, as they save for retirement. **Thus, while the GET is very regressive across all households, its effects are different for single taxpayers, since consumption patterns vary over their lifetimes.**

Hawaii's second largest tax revenue source, the individual income tax, is broadly progressive. It is progressive at every increase along the income distribution, even between the lowest income ranges. The most significant marginal increases in effective tax rates occur between $0 and $40,000. Between $40,000 and $200,000, marginal increases are consistent but modest. A more significant rise in the effective tax rate occurs between $300,000 and $300,000 and more. Households making over $300,000 and filing as a head of household pay 11 cents on the marginal dollar, one of the nation's highest marginal tax rates for upper income earners. The very wealthy pay at a significantly higher effective rate than other taxpayers.

[51]William Fox (2006). Hawaii's General Excise Tax: Should the Base be Changed? Tax Review Commission 2005-2007.

Figure 25: Effective Hawaii Income Tax Rate by Adjusted Gross Income Range, 2014

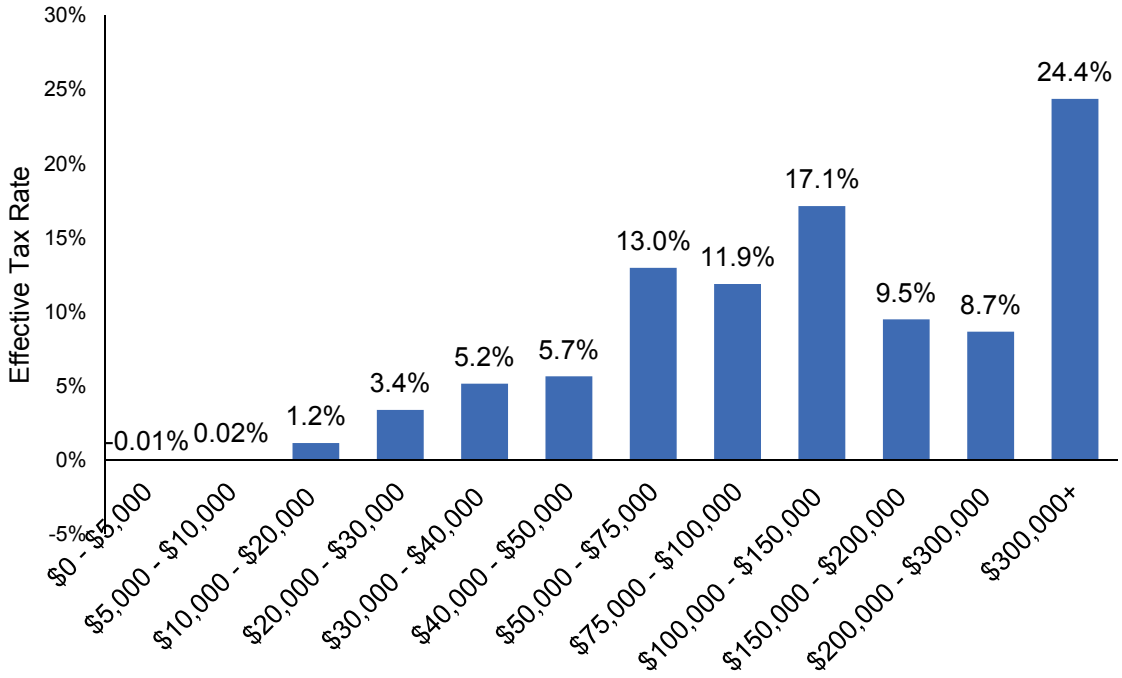


Source: Hawaii Department of Taxation, Hawaii Income Tax Statistics Tax Year 2014

Upper income households bear a disproportionate share of the Hawaii income tax burden. Households making over $100,000 pay approximately 60 percent of all Hawaii income taxes. There is a notable dip at $150,000 through $300,000. Those at the $150,000-$200,000 and $200-$300K brackets are a relatively small share of filers at 3.8 percent of returns combined, which contributed to the drop. The share jumps at $300,000 because the marginal rate jumps to 11 percent for a head of household making more than $300,000. Since high income Hawaii residents account for a disproportionate share of statewide personal income and pay at the highest rate, the share of taxes paid by these filers is quite high relative to their number.

Those making $300,000 and over pay nearly a quarter of all taxes, despite accounting for only 1.4 percent of all taxpayers. Middle income taxpayers ($50,000 - $100,000) pay about another quarter. Lower income households shoulder a relatively small percentage of the burden at about 10 percent. Since the brackets for individual income taxation are fixed, the effective tax rate paid by lower-income households will gradually increase as the value of the dollar declines over time.

Figure 26: Share of Total Resident Hawaii Income Tax Liability by Adjusted Gross Income Range, 2014

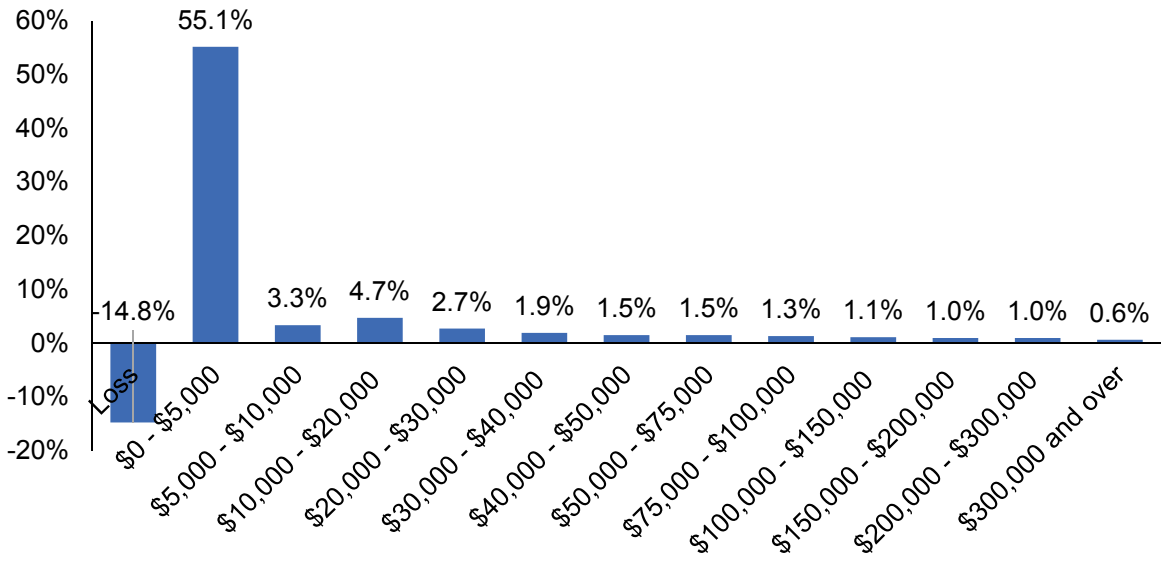


Source: Hawaii Department of Taxation, Hawaii Income Tax Statistics Tax Year 2014

Although levied only by county governments, property taxes are a significant component of taxes paid by Hawaii families. As a percentage of income, property taxes in Hawaii are regressive. The ratio of taxes to income steadily declines as incomes rise. Although comprising a very small segment of the population, homeowners making below $5,000 pay an especially large portion of their incomes in property taxes, a function of their extremely low incomes making even low property taxes exceptionally burdensome.[52]

[52]Data derived from a random sample of 3,016 property tax-reporting Hawaii households from the 2015 American Community Survey 2015 Public Use Microdata Sample (PUMS).

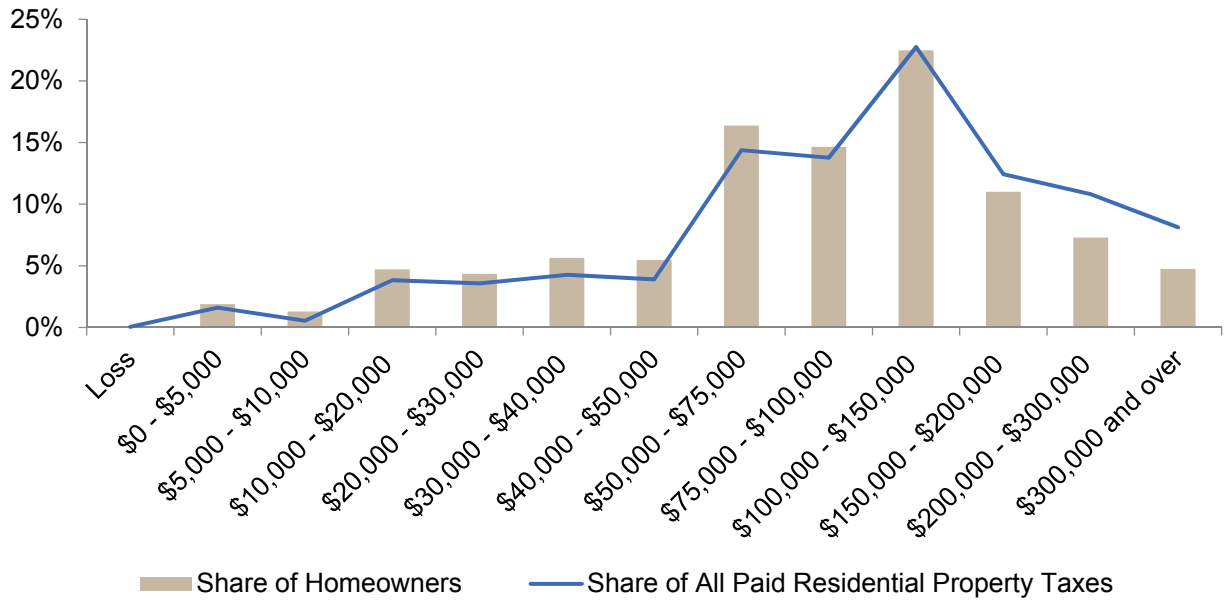
Figure 27: Paid Property Taxes as a Percentage of Homeowner Income by Income Range, 2015



Source: U.S Census Bureau, American Community Survey 2015 Public Use Microdata Sample (PUMS)

Middle and upper income homeowners shoulder the vast majority of the residential property tax burden. Homeowners making over $50,000 account for 82.3 percent of all residential property taxes. The share of the property tax burden closely mirrors the share of homeowners by income range. No particular income class bears a disproportionate burden relative to its share of homeowners.

Figure 28: Share of Homeowners and All Paid Residential Property Taxes by Income Range, 2015



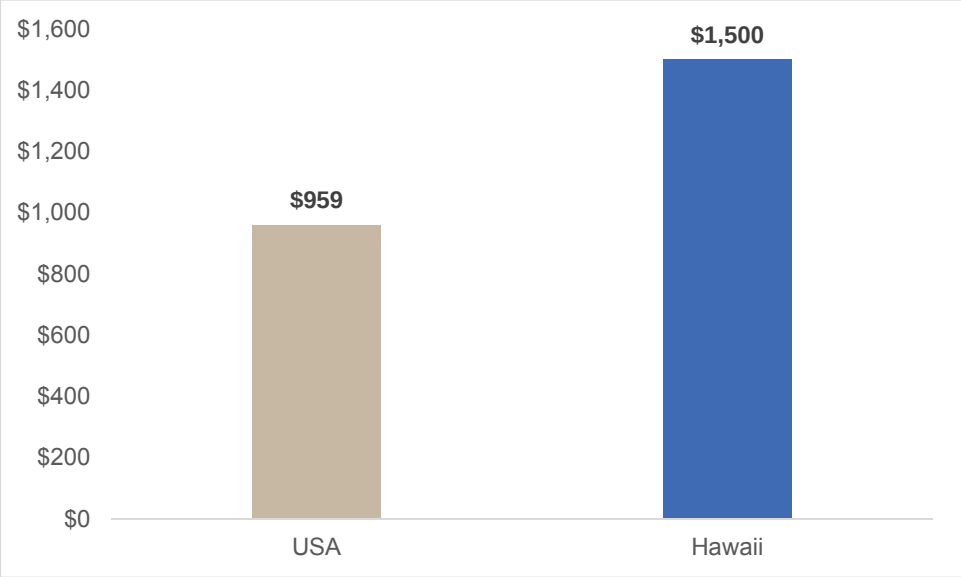
Source: U.S Census Bureau, American Community Survey 2015 Public Use Microdata Sample (PUMS)

Renter Affordability in Hawaii

Property taxes are generally considered to be a component of overall residential housing costs for home owners. However, affordability issues related to rental housing should also be considered. Rental housing in Hawaii is very expensive. Hawaii's median gross rent (including utilities and housing subsidies) at $1,500 is over 56 percent above the national median. The State's median gross rent to household income ratio, a measure of general rent affordability, is over three percentage points above the U.S average. These higher rents also do not translate into more spacious housing. The average number of rooms per rental housing unit is over 8 percent lower in Hawaii than the national average.

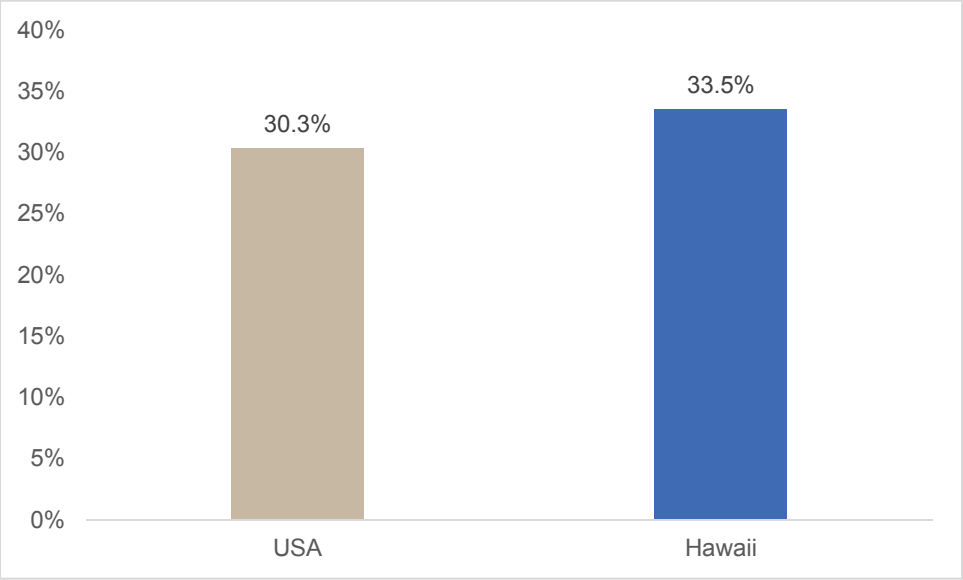
Renter housing affordability is a particularly severe challenge in Hawaii. Yet, for low-income households, the challenges are even worse. Nearly nine in ten renter households making less than $20,000 are rent cost-burdened, paying 30 percent or more of income in gross rent. Although this is slightly lower than the national average, Hawaii has a larger share of such households with severe rent burdens (50 percent or more of income) than is the national norm. Low income households are exceptionally burdened by the cost of rental housing in Hawaii. Although the Hawaii tax credit for low-income renters, limited to $50 per exemption, helps reduce this burden, the severity of the problem suggests additional tax help may be needed to offset an unusually severe rent affordability problem.

Figure 29: Median Gross Rent, 2015



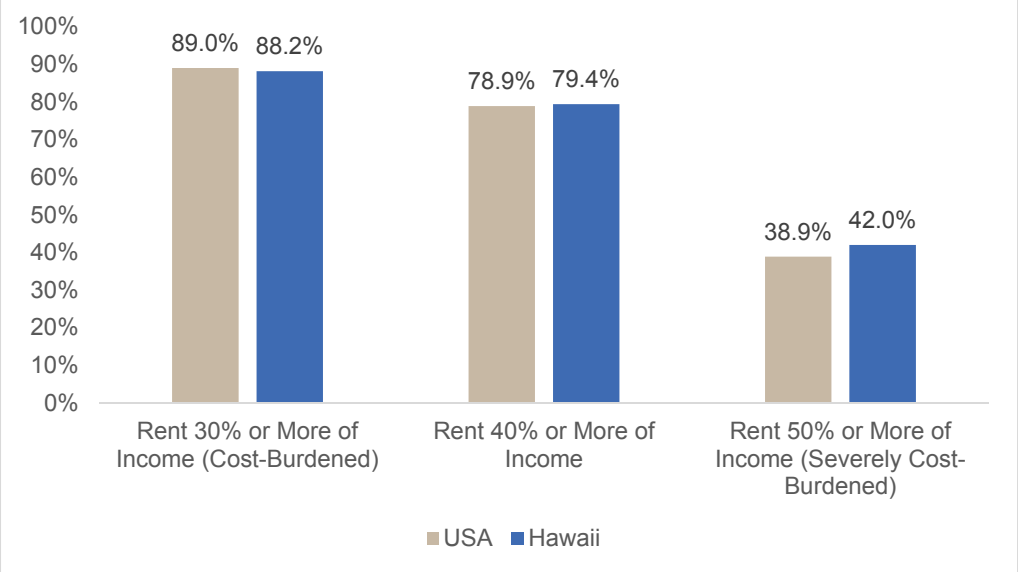
Source: U.S Census Bureau, 2015 American Community Survey 1-Year Estimates

Figure 30: Median Gross Rent as a % of HH Income, 2015



Source: U.S Census Bureau, 2015 American Community Survey 1-Year Estimates

Figure 31: % Rent Cost Burdened, Renter Households Making <$20,000, 2015



Source: U.S Census Bureau, 2015 American Community Survey 1-Year Estimates

Strategies to Reduce Regressivity

As discussed in the Tax Burden chapter, certain types of taxes tend to be regressive, and some are not. Since regressivity generally occurs when lower income individuals pay a larger portion of their income in taxes than those with higher incomes, taxes on 'necessities' (such as food, clothing, shelter, prescription drugs, utilities) have a strong likelihood of being regressive. Many state sales taxes exempt these items based on necessity arguments – as a way of being less regressive. The counter argument is that this type of broad-based exemption applies to high end purchases as well as necessities. While bread, milk and hamburger may be exempt, so are foie gras, beef tenderloin and caviar. Broad-based exemptions also reduce the overall revenue raising ability of these taxes and may make them more volatile – another case where tax policy principles may collide (equity versus adequacy and stability).

At the other end of the spectrum of consumption taxes, excise taxes on what could be considered 'luxuries' would reduce overall system regressivity. In some states, items like personal aircraft, yachts, high dollar value jewelry, etc., are subject to this type of tax.

Excise taxes are the tax type with a fair amount of 'grey area' related to regressivity. Some excise taxes (such as on motor fuel) could be characterized as applying to necessities (or at least close to it in many areas and professions). On the other hand, other items where excise taxes apply (such as cigarettes and alcohol) are not necessities. In fact, one of the justification for these 'sin taxes' is the possibility that the taxes might reduce consumption (or at least provide revenue to help remedy some of the social ills that may result). There is some evidence that this may be the case for some consumers – for example, teen smokers have been shown to be more price sensitive, and teen smoking rates have declined with higher tax rates.

At the other end of the spectrum, income taxes have a strong propensity for being a less regressive form of tax. If, for example, the only tax assessed was an income tax, even a flat tax (where each taxpayer paid the same percentage of their income as tax) would not be regressive. In most states, a progressive income tax is applied as a way of ameliorating the negative effects of other (more regressive) taxes. A progressive income tax can also be augmented with refundable credits that specifically replace some of the tax burden for specific types of lower income taxpayers (such as Hawaii's food or renters' credit).

Based on these discussions, the following strategies could help reduce (or at least not increase) regressivity:

- Provide deductions or credits that will primarily benefit lower income individuals;
- Focus excise tax increases on non-essential items;
- Focus tax increases on areas where there is significant exportability of the tax burden.

The discussion of regressivity provides a foundation for understanding how the current system operates in relationship to differing types of taxpayers. Specific opportunities to make the system less regressive will be discussed within the revenue alternatives analysis, particularly as it relates to opportunities to combine differing tax choices. As previously discussed, tax policy considerations often collide, and methods to both collect additional revenue and reduce system regressivity can be difficult to achieve.

Summary

- Tax structures (and individual taxes) are often described as progressive (taking a larger percentage of income from high income groups than from low income groups), proportional (taking the same percentage of income from all income groups) or regressive (taking a larger percentage of income from low income groups). Some taxes may be regressive but still part of an overall progressive tax structure – and vice-versa.

- State and local taxes are often discussed in tandem, as tax and expenditure relationships vary from state to state.

Current Measures of Regressivity

- The GET is highly regressive – the percentage of income going to the GET steadily declines as incomes rise. Honolulu households making less than $50,000 pay roughly three cents per dollar earned in excise taxes, while those making $100,000 or more pay only one cent on the dollar.

- The IIT is broadly progressive – at every increase along the income distribution. Households making over $300,000 and filing as head of household pay 11 cents on the marginal dollar, one of the nation's highest marginal tax rates for upper income earners.

- Property taxes are very regressive at the lowest income levels.

- Renter affordability is a concern, with a higher percentage of cost burdened renter households than the nation as a whole.

Strategies to Reduce Regressivity

For the State, the following strategies could help reduce (or at least not increase) regressivity:

- Provide deductions or credits that will primarily benefit lower income individuals;

- Focus excise tax increases on non-essential items;

- Focus tax increases on areas where there is significant exportability of the tax burden.

Possible Revenue Changes

Overview

There are a variety of important tax principles, and one that is of particular concern for those who rely on government provided services is adequacy. The 2012 TRC PFM study spent considerable time and effort discussing tax adequacy (whether the existing revenue structure was able to generate the revenue necessary to meet identified expenditure needs and obligations). The 2017 TRC also sought input on this issue, and the goal of raising sufficient revenue to fund the annual required contribution to the Employer-Union Benefits Trust Fund (Trust Fund) was determined to be one measure of tax adequacy. This is a useful measure, because the funding to the Trust Fund has been determined to be a statutory requirement (unlike some of the spending needs identified in the 2012 report, which could be considered options rather than requirements for additional spending).

Employer Benefits Trust Fund

By way of background on the additional resources for the Trust Fund, in July 2013, Act 268 was signed into law. In addition to establishing the EUTF Task Force to examine further steps to address unfunded liability, the law requires the State to pay additional amounts toward reducing the unfunded liability until 2019, when 100 percent of the annual required contribution must be paid. Commencing in 2019, GET revenues will be used to fund any difference between the annual required contribution (ARC) and the payment made by the State.[53]

The State's 2017-2019 Executive Biennium Budget[54] includes contributions of $297 million in 2018 and $375 million in 2019 and 2020 in order to satisfy the requirements of Act 268, as shown in the table below. According to the most recent actuarial valuation (July 1, 2015), the additional cost of prefunding in 2021 will be $354 million, decreasing to $333 million by 2023.

It should be noted that the figures cited below are based on 30-year estimates, and even a small change can have significant effects on the State's obligations. The two factors with the largest impact on contribution amounts are lifespan of the retirees and rate of return on investment. For example, on July 1, 2017, the assumed rate of return on investment of the Hawaii Employees' Retirement System (ERS) was lowered from 7.5 percent to 7.0 percent due to anticipated market conditions – an adjustment that increased the pension plan's funding shortfall by $2 billion. Additionally, life expectancy assumptions were updated to reflect that ERS members are living longer in retirement – a change that increased the shortfall by $1.5 billion.[55]

Table 23: EUTF Retiree Health Care Plan Annual Required Contribution Attributable to Act 268 Prefunding Requirement (in millions)

	2018	2019	2020	2021	2022	2023
Act268/13 Prefunding Requirement	$297.1	$375.2	$375.2	$354.3	$340.8	$332.5

Source: 2018-2020 figures per 2017-2019 State of Hawaii Budget; 2021-2023 figures per July 1, 2015 Actuarial Valuation

This level of contribution relates to the increased costs associated with retiree health care benefits. The costs associated with public employee pensions are separate and distinct and not included in this table. In fact, they are addressed in the following section.

[53] State of Hawaii 2016 CAFR
[54] Per 2017-2019 Pension and Other Post-Employment Benefits Liability Table (Budget Appendix 6)
[55] Honolulu Star-Advertiser, "Nest Egg Shortfall Tops $12 Billion." January 10, 2017.

Hawaii Employees' Retirement System

The Hawaii Employees' Retiree System (ERS) provides retirement, disability, survivor, and other benefits to more than 120,000 members. Its membership is comprised of retirees, beneficiaries, inactive vested members and active public employees working for the State & Counties of Hawaii.

As noted in the 2012 study provided to the Commission by PFM, there have been funding concerns related to the ERS, and the 2012 study recommended additional resources to improve the overall funding of the system. The State has undertaken several specific actions to improve the overall position of the ERS. Most notable was a series of actions taken in 2011.

Those changes increased employee contributions, reduced pension benefits, increased age and service requirements and reduced cost-of-living adjustments. A significant change was to establish a new tier for state employees, teachers and public safety officers hired after June 30, 2012. Members of the new tier received reduced benefits, a reduced cost of living adjustment, make greater contributions and are required to work longer to become eligible to receive full retirement benefits.

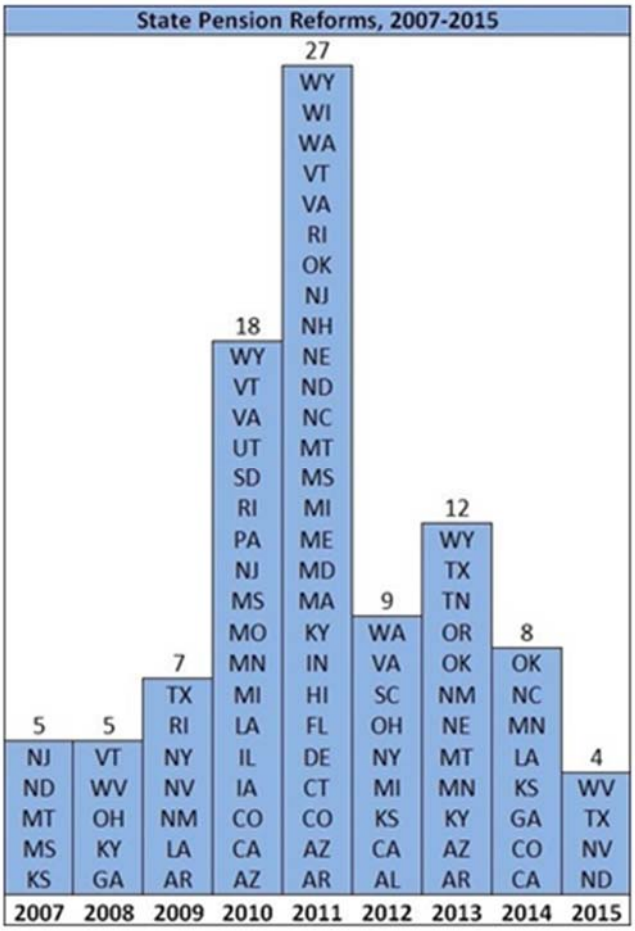
While the biggest changes were made for new hires, there were also changes made for employer contributions, phased in over several years. Initial savings for the reforms totaled approximately $440 million from FY2012 through FY2016.

The following provides additional detail on the changes for new hires:[56]

- Increased the age needed to qualify for normal retirement – must reach age 55 within 25 years of service or age 60 with 10 years;
- Increased the employee contribution from 7.8 percent of salary to 9.8 percent for general employees and teachers, and from 12.2 percent to 14.2 percent for public safety employees;
- Increase the statutory employer contribution rates, from 15 percent to 17 percent for general employees and teachers, and from 19.7 percent to 25.0 percent for public safety worker, phased in over several years;
- Lengthened the period used to calculate the final average salary, from 3 to 5 years;
- Increased the vesting period, from 5 to 10 years;
- Reduced the retirement multiplier (which is used to calculate retirement benefit based on final average salary and years of service), from 2.0 percent to 1.75 percent;
- Reduced the annual cost-of-living adjustment (COLA) from 2.0 percent to 1.5 percent;
- Reduced the interest rate on accumulated contributions, from 4 percent to 2 percent.

Hawaii was not alone in enacting significant changes to its pension system. Since the Great Recession, nearly every state passed meaningful reform to its pension plans. In fact, Hawaii made its changes at the point in time where states as a whole were making adjustments. The following figure shows that 2011 was the 'high water mark' for state pension reforms from 2007 to 2015.

[56] "Effects of Pension Plan Changes on Retirement Security, Center for State and Local Government Excellence and National Association of State Retirement Administrators, April 2014; Appendix, "Significant Reforms to State Retirement Systems, National Association of State Retirement Administrators, June 2016.



Each year, the ERS obtains an actuarial evaluation. The latest valuation, done by Gabriel Roeder Smith and Company (GRS) was issued on January 9, 2017 and provided a valuation as of June 30, 2016, the end of FY2016. At that time, GRS determined that the funding period to pay off the unfunded actuarial accrued liability (UAAL) of the system was 66 years. Hawaii Revised Statutes 88-122(e)(1) provides that the employee contribution rates are subject to adjustment when the funding period is in excess of 30 years.[57]

It is notable that the ERS had also undertaken some administrative actions that led to the growing UAAL for the system. Effective July 1, 2017, ERS lowered its assumed rate of return to 7.0 percent, from 7.55 percent. It had been scheduled to go to 7.5 percent on July 1, 2017 as part of a plan approved several years ago to incrementally lower the pension fund's assumed rate of return over three years.[58]

[57] Gabriel Roeder Smith and Company, "Employees' Retirement System of the State of Hawaii, Report to Board of Trustees on the 91st Annual Actuarial Valuation, for the Year Ending June 30, 2016," January 9, 2017.
[58] "Hawaii Employees lowers assumed rate of return to 7%," Pensions and Investments Online, December 19, 2016, accessed electronically at http://www.pionline.com/article/20161219/ONLINE/161219853/hawaii-employees-lowers-assumed-rate-of-return-to-7

This mirrors actions being taken across the country to lower assumed rates of return. Some of this action has been spurred by the major credit rating agencies. For example, in June 2017, Fitch Ratings Agency lowered its assumed rate of return for public pension systems from 7 percent to 6 percent.[59]

Even in the midst of concerns about State pension obligations, Moody's Investors Services upgraded the State credit rating to Aa1 from Aa2 (in September 2016). At the time, Moody's noted that "the upgrade reflects the State's positive economic and revenue trends, the restoration and maintenance of sizable reserves, and proactive measures to improve the funding of its pension and OPEB liabilities."

Both Moody's and Standard and Poor's reiterated this perspective when rating the State's 2017 general obligation bonds. Moody's assigned the $800 million issuance an Aa1 and a stable outlook, noting that "the State is also planning to phase in higher pension contributions in response to an increase in the estimated pension liability."[60] Standard and Poor's assigned the issuance a AA+/Stable rating. Standard and Poor's delved into the issues around ERS funding in more depth, noting the reductions in the system's actuarial assumed rate of return as well as revisions to mortality expectations in light of its experience study. Standard and Poor's also noted that "In our opinion, the successful adoption and implementation of the increased contribution rate is vital to the State's long-term financial capacity and is essential to maintain its credit quality."[61]

Governor Ige had already introduced legislative bill 936 to raise contribution rates before the Standard and Poor's report, and ultimately the Legislature enacted Act 17/2017, which contained the Governor's recommendations. Part III of the Act increases employer contributions by the State and counties, phased in over the next four years beginning with FY2018. The Act requires:

- Employer contributions will increase for Police/Fire categories from the current 25 percent of payroll to 41 percent of payroll;
- Employer contributions will increase for all other employee categories from the 17 percent of payroll to 24 percent of payroll.

Based on their analysis, Standard and Poor's estimated that pension costs as a percentage of budgetary general fund expenditures is estimated at 10.3 for FY2017 and is expected to increase to about 11.3 percent in FY2018 as a result of the increased contribution rates. Standard and Poor's also estimated that pension costs could increase to about 13.5 percent by FY2021.

According to calculations based on the increased employer shares attributed to the General Fund, total estimate employees and compensation, the following are the additional dollar amounts needed to fund the additional employer share by fiscal year:

Fiscal Year	Additional General Fund Expenditure
2018	$74 million
2019	$169 million
2020	$136 million
2021	$31 million
2022	$32 million

[59] "Fitch lowers investment return assumptions for public pension plan liabilities," Pensions and Investments Online, June 1, 2017. Accessed electronically at http://www.pionline.com/article/20170601/ONLINE/170609995/fitch-lowers-investment-return-assumptions-for-public-pension-plan-liabilities

[60] "State of Hawaii, New Issue – Moody's Assigns Aa1 to $860 million Hawaii GO bonds; outlook stable," Credit Opinion, Moody's Investors Service, April 19, 2017.

[61] "Hawaii; Appropriations; General Obligation," Standard and Poor's, April 28, 2017.

Within the context of a growing General Fund budget, these increases may be managed within existing revenue growth – although that will, of course, depend on how the economy performs (and what needs may be encountered in other expenditure growth areas). Within the context of an estimated $7.4 billion General fund budget in FY2018 and $7.5 billion in FY2019, there certainly are opportunities to build this level of additional employer contribution into expenditure decisions. On the other hand, should additional revenues be sought, there are sufficient options provided within this chapter to do so. In general, however, the project team's review of the additional funding requirements, overall revenue performance, status of State reserve funds and credit rating agency's perspective on the State's overall health lead the project team to believe that the State can meet these new levels of employer match within expected existing resources.

Tax Policy Principles

The 2012 TRC report discussed a number of common tax policy principles that helped guide that report's analysis and recommendations. The background discussion around identifying relevant tax policy principles is still important but has not materially changed since 2012 so will not be restated in its entirety.
The following are the general tax principles/standards from the 2012 report:

1. **The system should minimize interference by taxes in market decisions**
2. **The system should be reliable, stable, and sufficient**
3. **The system should be simple, allow for compliance, and ease of administration**
4. **The system should be equitable**
5. **The system should have a balanced variety of sources/broad base**

It is notable that the enacting legislation related to the Tax Review Commission identifies that its deliberations should be guided by such "standards as equity and efficiency." Given this direction, the following provides additional explanation around these concepts for application to this study and report. Principles for continued consideration will focus on issues of fairness, stability, economic competitiveness and ease of administration. The following discusses these key considerations.

Fairness

A good tax system should distribute the tax burden across taxpayers in a manner that is consistent with the accepted norms of fairness and equity. These norms typically define fairness according to the relationship between the amount of taxes paid (or borne) by taxpayers and their respective abilities to pay the tax, or to the benefits received by them from government programs. Three widely-accepted norms of fairness are:

- **Vertical Equity.** This concept requires that the amount of tax paid by taxpayers with different income levels should reflect their respective abilities to pay the tax. Specifically, taxes paid as a percentage of income should not unduly burden taxpayers with limited ability to pay the tax. Some would view this principle as satisfied by a proportional tax burden, where taxes paid are the same percentage of income for taxpayers at all income levels. Others believe that the principle requires that taxes paid as a percentage of income should be higher for taxpayers with more income than those with less income (a progressive tax burden).

- **Horizontal Equity.** According to this concept, taxpayers with similar abilities to pay a tax should pay comparable amounts of the tax. More generally, the principle of horizontal equity enjoins the government from levying taxes that have arbitrary and peculiar distributions of tax burdens across

taxpayers or from levying dissimilar tax burdens on taxpayers that are not justified by differences in their ability to pay or by distinctions in the benefits they receive from government programs.

Stability

A good tax system is expected to generate sufficient revenue to pay for established public services without the need for continuous or drastic changes in tax rates or in the tax base. Stability also reflects a structure that can withstand economic and other shocks without encountering dramatic swings in revenue collections.

Economic Competitiveness

A good tax system should not distort economic decisions. Distortions cause a measurable loss in the economic value of production and consumption, which increases the tax burden on the resident taxpayers.

Simplicity/Ease of Administration

Individuals should be able to readily understand and comply with their obligations as a taxpayer. The rules, record-keeping and computation requirements should be simple enough that the tax system can be administered at low cost by the tax collection agency without imposing an undue compliance burden on the taxpayer.

Trade-offs with Policy Goals

It is a basic fact of taxation that there is no perfect tax. As a result, governments often tailor a tax (or a broader tax structure) to ameliorate some of its more problematic features. For example, most states that have an individual income tax have adopted a progressive rate structure.[62] This reflects the fact that there is general agreement that most (if not all) state general consumption and excise taxes are regressive; creating a progressive rate structure for the individual income tax helps to mitigate some of the system regressivity. Likewise, many broad-based general sales taxes will exempt from tax certain goods and services that are considered necessities, including food, utilities, prescription drugs, health care services and clothing.

While the general principles of taxation are logical – and mostly non-controversial – these general tax principles will sometimes conflict, and it will be necessary to weigh the costs and benefits of adhering to the principles. For example, the converse of the example of exceptions for certain purchases is that a broad sales tax that taxes goods and services that are perceived to be necessary (rather than optional) purchases will promote revenue adequacy and stability but have a negative impact on vertical equity. As another example, some taxes exhibit a trade-off between revenue adequacy and volatility or stability. Over the years, the personal income tax has exhibited significant volatility based on the business cycle and other variables. At the same time, in strong growth periods they have out-performed other revenue sources in terms of levels of growth and "bounce back."

In general, these trade-offs suggest the need for the use of several forms of taxation to off-set specific impacts or defects in a particular tax. This type of complementary approach is considered a taxation "best practice." Often this approach means a combination of taxes on different types of economic activity or outcomes. As has

[62] According to the FTA, 7 states have a single bracket and a broad-based individual income tax (Colorado, Illinois, Indiana, Massachusetts, Michigan, North Carolina, Pennsylvania and Utah). Of the remaining 34 states, the number of brackets ranges from a low of 2 (Kansas) to a high of 10 (Missouri). The FTA survey was prior to Hawaii's 2017 change that increased its number of brackets to 12.

been previously noted, taxes generally are imposed on wealth (such as a property tax), income (such as an income tax) or consumption (such as a general sales or excise tax). A balanced structure seeks to combine these approaches. In tax parlance, this sort of a balanced approach is sometimes referred to as a 'three legged stool.'

From this set of principles, the discussion of regressivity can be seen as one that touches on whether the system is equitable. The following builds on that discussion.

Revenue Alternatives

In general, there are four ways to raise additional tax revenue:

1. **Create a new tax**
2. **Expand the base of an existing tax**
3. **Increase the rate of an existing tax**
4. **Increase taxpayer compliance with an existing tax**

There are advantages and disadvantages to each approach. **Creating a new tax** can mean an exceptional (and often unanticipated) burden for some, particularly when that tax would be paid by a narrow class of taxpayers. When that tax affects a basic household spending activity (as opposed to a luxury activity), it can increase regressivity by disproportionately expanding the burden on lower income households. For example, a new tax on sugary beverages would expand the tax burden on lower income households, since spending on those beverages takes up a larger share of their incomes.

Expanding the base of an existing tax subjects a new activity to taxation that was previously untaxed. To the extent that activity is commonly undertaken by a particular class of taxpayer, expanding the base can significantly raise the burden on that class. Moreover, if that activity consumed a large share income for lower income households, regressivity can also be adversely affected. For example, subjecting public transportation fares to the GET would have a disproportionate effect on lower income households, increasing regressivity, since these households tend to rely most on this form of transport.

Increasing the rate of an existing tax can exacerbate the progressivity or regressivity of the tax structure, depending on whether it disproportionately affects lower income or higher income taxpayers. The impact on tax burden is a function of the size of the rate increases, and rate increases on taxes paid mainly by particular types of taxpayers can produce a sizable increase in their share of tax collections. For example, an increase in the TAT should increase tourists' share of the overall tax burden, while reducing residents' share.

The final approach (**increased compliance**) has the benefit of not imposing an additional tax or increasing an existing tax's base. Since this approach merely boosts collections, it has only a minimal impact of tax burden and regressivity. On the other hand, compliance rates on most major taxes are already relatively high (and further increases can be costly from an administrative perspective). As a result, tax policy changes usually focus on the first three alternatives. However, because regressivity is an important factor in this analysis, opportunities to increase compliance will also be considered.

Current Structure and Characteristics

It is helpful to recall some of the key attributes of the current Hawaii tax structure and system in the context of possible changes to it. The following are key points that were identified in the Current Revenue Structure chapter of the report:

- Among the taxes, Hawaii relies much more on sales/gross receipts and excise taxes than the U.S. states as a whole;

- Hawaii state government primarily relies on the GET (52 percent of General Fund revenue) and the IIT (34 percent). No other source provides more than 4 percent (TAT at 3.8 percent).

- While sometimes compared to state sales taxes, the GET is actually a business privilege tax assessed on nearly all business activities, which makes it a much broader based tax than a general sales tax. This tends to make it a stable source of revenue.

- Because it is assessed against so much business activity, there is more pyramiding that occurs compared to State sales tax structures. Pyramiding occurs when inputs into a finished good or service are taxed at multiple points in the process.

- The Hawaii IIT is a progressive tax, and the highest of its 12 marginal tax bracket is the second highest among U.S. states. The 12 brackets is the most of any state, and Hawaii's lower brackets are closely spaced, meaning average income earners move fairly quickly to higher marginal tax rates than in most states.

- Hawaii has a broad array of excise taxes that are similar to those in other states. Because of Hawaii's unique island location, issues of cross-border competition are less of a concern than in most states, and excise tax rates tend to be higher than average as a result.

Revenue Strategies/Approaches

The following revenue strategies take into consideration the tax policy principles described above. These strategies are presented by tax type, exploring both the pros and cons of various alternatives. Where possible, the project team provides estimates or research related to the potential financial impact of the strategies discussed.

Excise Tax Alternatives

Excise taxes represent an important component of the overall revenue structure for Hawaii. In 2016, the FTA reported that 16.0 percent of Hawaii's total state tax revenue was from excise taxes. Hawaii ranked just above the U.S state median of 15.7 percent.[63]

Excise tax increases have been a common revenue-raising method for Hawaii and the states as a whole. For example, the cigarette tax has been a fairly constant area of tax rate increases over the past two decades. It is notable that since the year 2000, 48 states and the District of Columbia have passed 135 state cigarette tax increases.[64] Hawaii has been a part of that trend as well – in fact, the State has been on the leading edge of cigarette and tobacco tax increases, as the following table shows:

[63] FTA 2016 State Tax Collection by Source (Percentage of Total) based upon US Census Bureau data.
[64] Campaign for Tobacco-free Kids, "Cigarette Tax Increases by State by Year 2000-2017," accessed electronically at http://www.tobaccofreekids.org/research/factsheets/pdf/0275.pdf

Year	Increase Per Pack	New Tax Per Pack
2002	$0.20	$1.20
2003	$0.10	$1.30
2004	$0.10	$1.40
2006	$0.20	$1.60
2007	$0.20	$1.80
2008	$0.20	$2.00
2009	$0.60	$2.60
2010	$0.40	$3.00
2011	$0.20	$3.20
Total	**$2.20**	

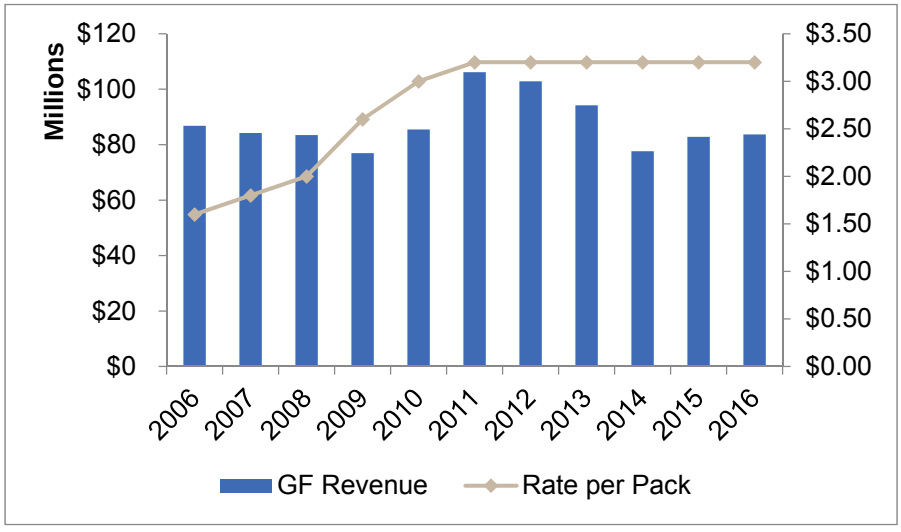
The following are selected excise tax revenue alternatives.

Alternative 1: Increase Cigarette and Tobacco Tax Rates

The State of Hawaii levies an excise tax on the sale or use of tobacco products and on each cigarette sold, used or possessed. Aside from cigarettes and little cigars, the State levies the tobacco tax on 70 percent of the wholesale price of tobacco products (other than large cigars) and 50 percent of the wholesale price of large cigars. Cigarette and tobacco wholesalers and dealers are required to affix stamps to individual cigarette packages as proof of payment of tax.

At $3.20 per pack, Hawaii currently has the fifth highest per-pack cigarette tax among states – trailing only New York ($4.35), Connecticut ($3.90), Rhode Island ($3.75) and Massachusetts ($3.51). At $0.16 per cigarette ($3.20 per pack for a standard 20 cigarette pack), the State's tax is double the U.S median ($0.08 per cigarette). As noted in the prior table, from 2002 to 2011, Hawaii increased the cigarette excise tax in every year but one – but the rate has remained the same since.

Figure 32: Hawaii Cigarette Tax Rates and General Fund Revenues, 2006-2016



General Fund cigarette tax revenues declined each year until 2015, when they rebounded slightly. General fund revenues are expected to increase at a compound annual growth rate of 3.2 percent between 2017 and 2023. The projected increases align with the general research that suggests cigarette demand is somewhat inelastic – which is logical given the addictive nature of smoking. Additionally, there is no cross-border competition among states to sell significant volumes of cigarettes. Consumers in Hawaii cannot readily travel to buy cigarettes in bulk to avoid taxes in their home

state. Further, a portion of cigarette tax burden is exported, as visitors purchase cigarettes for consumption during their stay in the State. A moderate increase in the cigarette tax will likely result in increased revenue for the State without a significant reduction in sales.

Assuming no change in consumer behavior, it is expected that increasing the cigarette tax rate to $4.00 per pack would result in additional revenues totaling between $20 million and $24 million annually, as shown in Table 24. Even applying a 10 percent discount would bring revenue into the range of $20 million annually during the period of the revenue estimates.

Table 24: Estimated General Fund Impact (millions)[65]

	2018	2019	2020	2021	2022	2023
Baseline - Cigarette & Tobacco Tax	$87.5	$90.6	$93.5	$96.7	$100.0	$103.5
Estimate Attributable to Cigarettes[66]	$81.0	$84.0	$86.6	$89.6	$92.7	$95.9
Projection at $4.00/Pack	$101.3	$104.9	$108.3	$112.0	$115.8	$119.8
Estimated Impact	**$20.3**	**$21.0**	**$21.7**	**$22.4**	**$23.2**	**$24.0**

Impact on Tax Burden and Regressivity

This excise tax is currently applied in all 50 states and is generally considered regressive but also a 'user tax' that has been shown to decrease consumption, particularly among younger smokers. Hawaii has a history of raising this tax on a regular basis for a very good reason. Cross-border impacts are limited and raising the tax helps recoup medical treatment costs incurred by the State from smoking activity. Since cigarette and tobacco purchases consume only a very small portion of household incomes (0.5 percent overall), the tax burden impact would be limited. Yet increasing the cigarette/tobacco tax is likely to make the tax structure slightly more regressive. Lower income households spend significantly more on these products as a percentage of income than higher income households. For example, households making $25,000 on average spend about 1.3 percent of income on these products, a percentage that steadily declines to 0.2 percent at the $150,000 income level. This measure would disproportionately impact lower income households, but may produce public health benefits by discouraging smoking.

Pros	Cons
▪ Exports a share of the tax burden ▪ Cigarette demand is somewhat inelastic – especially with no cross-border competition ▪ Relatively easy administration and collection ▪ Cigarette tax increases have proven to be politically more palatable than other tax increases, as smokers are a minority of the population	▪ Considered regressive ▪ Hawaii already among highest tax rates among the 50 states ▪ Other states have begun to see and forecast declines in cigarette tax revenues as a result of tax increases leading to higher prices[68] ▪ Higher prices increase incentives to evade the tax via black market or illegal Internet purchases

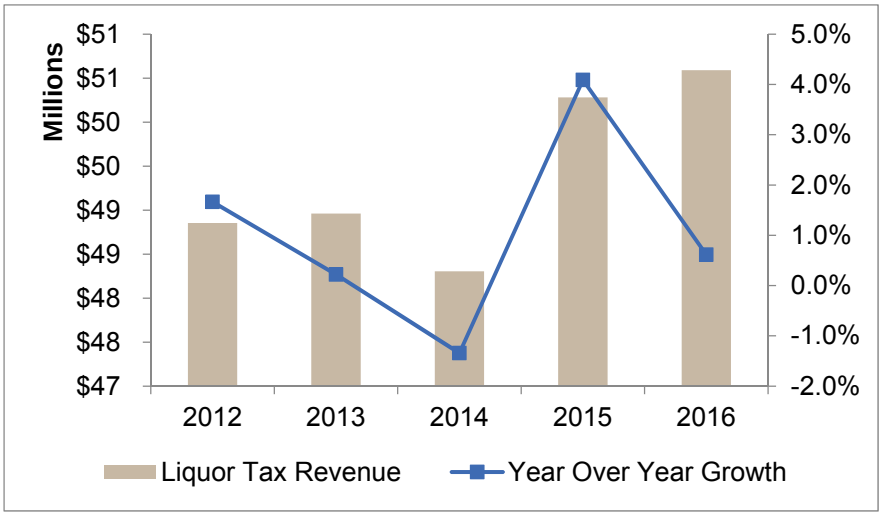
[65] Estimates based on Council on Revenues' May 30, 2017 General Fund forecast.
[66] According to data from the Department of Taxation's monthly collection reports, nearly 93 percent of total cigarette and tobacco tax General Fund revenues are attributable to the sale of cigarettes.
[68] In November 2016, California votes approved a $2 per pack increase in cigarette taxes. California cigarette sales have declined significantly as a result – 56 percent year-over-year in the two months following the increase.

Pros	Cons
▪ Evidence that tax increases reduce purchase of cigarettes by youth and low income individuals[67]	

Alternative 2: Increase Gallonage Taxes on Beer, Wine and Distilled Spirits

Hawaii levies a gallonage tax upon dealers and others who sell and/or use liquor. Varying gallonage tax rates apply to wine, distilled spirits, sparkling wine, still wine, cooler beverages, non-draft beer and draft beer.

Figure 33: General Fund Liquor Tax Revenue, 2012-2016



Hawaii currently has the third highest gallonage tax on beer ($0.93; draft beer is taxed at $0.54), the tenth highest gallonage tax on wine ($1.38; sparkling wine is taxed at $2.12 and wine coolers are taxed at $0.85) and the seventh highest gallonage tax on spirits ($5.98).[69]

Despite a decline in 2014, liquor tax revenues have generally increased year over year, ending the five-year period with approximately $1.7 million in growth. Future revenues are projected to increase modestly, growing by a compound annual growth rate of 0.8 percent between 2017 and 2023.

A 10 percent across-the-board increase in the tax rates would likely lead to some drop-off in consumption of alcohol, resulting in revenue growth of less than 10 percent. Studies have shown a correlation between increased taxation of alcohol and decreased consumption at the aggregate population level. An increase in the tax rate would help to discourage young people from drinking in Hawaii, as data indicate that young people are more responsive to changes in price (and taxation) than adults. However, there is an argument that can be made that the decline in consumption in other jurisdictions is mostly a change in where purchases are made, as several studies of high tax states suggest cross-border competition. Other studies suggest chain-weighting – that if the taxes on one portion of alcoholic beverages (such as distilled spirits) are raised but not another (such as beer), price-sensitive consumers will substitute for the power-priced product. If taxes are raised for each segment, this effect can be minimized.

[67] A 2014 study by the Center on Budget and Policy Priorities states that the Congressional Budget Office summarized existing research and found that a 10 percent increase in cigarette prices will lead people under the age of 18 to reduce their smoking by 5-15 percent. The study also notes that people with incomes below the median reduce their cigarette consumption by four times more than people with incomes above the median in response to cigarette price increases. Center on Budget and Policy Priorities – Higher Tobacco Taxes Can Improve Health and Raise Revenue. March 19, 2014. Available at https://www.cbpp.org/research/higher-tobacco-taxes-can-improve-health-and-raise-revenue

[69] Federation of Tax Administrators, January 2017.

Overall, this is a revenue alternative with positive health benefits but a minimal financial impact – generating a maximum of approximately $5 million annually.

Table 25: Estimated General Fund Impact (millions)[70]

	2018	2019	2020	2021	2022	2023
Baseline Projection	$51.51	$51.97	$52.38	$52.80	$53.22	$53.64
Projection at 10% Increase	$56.66	$57.16	$57.61	$58.08	$58.54	$59.01
Estimated Impact	**$5.15**	**$5.20**	**$5.24**	**$5.28**	**$5.32**	**$5.36**
% Increase	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%

Impact on Tax Burden and Regressivity

The tax is considered regressive but also a 'user tax' that has been shown to decrease consumption. Similar to the cigarette/tobacco tax, increasing this tax would also contribute to regressivity and have a disproportionate impact on low income households. It would not produce a significant increase in tax burden since beer and wine purchases only account for less than two percent of household expenditures and consume less than one percent of household incomes. However since lower income households spend a greater percentage of their income on these beverages (0.84 percent for $25,000 households vs. 0.79 percent for $150,000 households), this measure would harm these households the most, but possibly also promote public health by discouraging excessive alcohol consumption.

Pros	Cons
▪ A portion of the tax burden is exported ▪ Relatively easy administration and collection ▪ Tourism consumption likely to help alleviate some level of destruction of sales from in-state residents ▪ Alcohol is relatively inelastic and a tax increase is unlikely to yield a comparable decline in consumption ▪ Alcohol taxes have proven to be politically more palatable that general increases to broad-based taxes such as sales or income taxes	▪ Considered regressive ▪ Low monetary impact ▪ Already among the top gallonage tax rates ▪ Efforts to increase the alcohol tax rate were met with opposition in 2011

Alternative 3: Restore the Surcharge on Rental Cars

Hawaii levies a rental motor vehicle and tour vehicle surcharge tax, paid via a daily rate for rental vehicles and on a monthly basis for tour vehicles. Lessors pay the tax for rental cars and tour vehicle operators pay the tax on vans and buses.

Currently, the rate for rental vehicles is $3.00 per day; revenues are deposited into the State Highway Fund. Until July 2012, there was a temporary surcharge of $4.50 per day that was deposited into the General Fund.

[70] Estimates based on Council on Revenues' May 30, 2017 General Fund forecast.

Tour vehicles with between 8 and 25 seats are taxed at $15 per month, while vehicles with 26 or more seats are taxed at $65 per month.

As of March 2015, more than 40 states levied a charge on rental cars, either by imposing an additional tax, daily fee, or both. Only 5 states impose a flat daily fee: New Jersey ($5/day), Hawaii ($3/day), Colorado and Florida (both $2/day), and West Virginia ($1-$1.50/day).

Of states with rental fees that are strictly a percentage of the total rental cost, Maryland's is highest at 11.5 percent, while Alabama's is lowest at 1.5 percent. The median tax rate is 5.9 percent while the average is 6.1 percent.

The DBEDT's 2015 Data Book found that the cheapest daily rental rate in Hawaii was $38 in 2015, ranking 29th among the largest cities in each state.[71] Assuming this rate grows at inflation, and that the average vacation to Hawaii lasts 10 days,[72] at $3 per day, visitors in 2017 are paying 7.6 percent of the base price of the car rental. The following table illustrates this with an example for demonstrative purposes only.

Daily rental fee:	$3
Average trip duration:	10 days
Average daily rental cost:	$39.54
Cost for 10 days:	$395.35
Rental fee for 10 days:	$30
Rental fee as % of rental cost: 7.6%	

Given this example, Hawaii's tax structure is likely comparable to yet slightly higher than the median and average for states imposing the tax at a percentage of the total rental cost.

Following the expiration of the temporary surcharge in 2012, revenues have been relatively flat, increasing at a compound annual growth rate of 1.7 percent. The Council on Revenues' May 2017 forecast projects that vehicle rental revenues will increase by 0.5 percent annually, totaling $57 million by 2023. While vehicle rentals are directly associated with tourism trends, the increasing popularity of ride-sharing services like Uber and Lyft are lessening the demand for rentals. According to a May 2017 article by Travel Weekly, 50 percent of corporate travel buyers reported an increase in ride-sharing services between October and April, while 28 percent of those buyers reported a drop in traditional car rentals.[73]

If Hawaii were to reinstate a surcharge directed toward the General Fund, as it did until July 2012, most of the revenue associated with the tax would likely be generated from non-resident rentals. The estimated impact of the measure would be approximately $18 million annually, although, for the reasons already identified, it is unlikely to be a revenue source that exhibits much future growth.

[71] Table 14.18 Top 50 Car Rental Destination Rates in the US, 2015. The prices displayed in the table reflect the average daily rate for the cheapest available rental car in each destination during the period spanning October 1, 2014 through September 30, 2015.
[72] JLL, Hawaii's Home and Vacation Rental Market: Impact and Outlook. Prepared for the Hawaii Tourism Authority. December 29, 2016.
[73] Travel Weekly. "Analysts: Ride-Hailing Putting a Dent in Car Rental Revenue." May 16, 2017. Available at http://www.travelweekly.com/Travel-News/Car-Rental-News/Analysts-Ride-hailing-putting-dent-car-rental-revenue-Uber.

Table 26: Estimated General Fund Impact (millions)[74]

	2018	2019	2020	2021	2022	2023
Baseline Projection	$55.4	$55.7	$56.0	$56.3	$56.5	$56.8
Projection at $4.00/Day	$73.9	$74.3	$74.6	$75.0	$75.4	$75.8
Estimated Impact	**$18.5**	**$18.6**	**$18.7**	**$18.8**	**$18.8**	**$18.9**

Impact on Tax Burden and Regressivity

Restoring this tax to its former level would reduce the tax revenue burden on residents and broaden the tax base. An increase in the car rental tax would disproportionately affect nonresident visitors, therefore the impact on residents would likely be minimal. Spending on vehicle rental, leases, licenses, and other charges is also quite limited at around 0.9 percent of income, therefore the tax burden impact would be negligible. Since spending on these items as a percentage of income steadily declines with incomes beyond $50,000, this measure would make the tax system slightly more regressive.

Pros	Cons
▪ Exports tax burden to tourists ▪ Some studies suggest demand for rental vehicles is somewhat inelastic ▪ Many top tourist destination states have higher rental car tax rates ▪ Ease of administration ▪ Provides a way, other than through the gas tax, to recover costs of using the state's roads	▪ While a large amount of tax would be exported, residents would also experience tax increase if renting vehicle ▪ Some studies suggest demand for rental vehicles is somewhat elastic

Alternative 4: Institute a Tax on Sugary Beverages

Perhaps the most controversial 'new' tax is one that is now or will soon be in place in many of the country's largest cities and counties. Current cities and counties with this form of tax are shown in Table 27.

Table 27: Sugary Beverage Taxes by City/County as of July 2017

City/County	Effective Date	Tax Per Ounce
Boulder, CO	July 1, 2017	$0.02
Seattle, WA	January 1, 2018	$0.0175
Philadelphia, PA	January 1, 2017	$0.015
Cook County, IL	Pending court challenge	$0.01
Berkeley, CA	March 1, 2015	$0.01
Albany, CA	April 1, 2017	$0.01
Oakland, CA	July 1, 2017	$0.01
San Francisco, CA	January 1, 2018	$0.01

This tax is applied on sugar-sweetened beverages and is meant to improve health and raise revenue. This tax is usually imposed by the ounce of product and ranges from one to two cents per ounce.

Because this is a relatively new tax, few examples currently exist to gauge the amount of revenue that can be raised through implementation.

[74] Estimates based on Council on Revenues' May 30, 2017 General Fund forecast.

However, by way of comparison, Philadelphia (which is similar in population size to Hawaii) generated $39.3 million in its first six months of operation.[75]

The City of Philadelphia experience has not been entirely positive and provides some guidance on how to create and implement the tax. First, it is not surprising that there has been significant resistance from the soda industry to the tax. There have been claims of significant consumer resistance, including shopping outside of the City for the beverages and other consumer purchases as well. There is at least local evidence of job losses associated with the changes in economic activity. PepsiCo announced it would lay off 80 to 100 Philadelphia-area employees as a direct result of lower sales following implementation of the tax, and a grocery franchise is laying off as many as 300 workers.[76]

One feature of the Philadelphia tax is that it applies to no calorie diet sodas as well as those with sugar. This relates to the fact that the tax was advocated as a revenue raising measure foremost, to pay for pre-K programs in the City. This likely mixes the usual message on health benefits from the tax.

It is notable that many of the negative impacts are more likely to materialize with a local tax, where consumers can avoid the tax by making their purchases outside the city limits. Those opportunities within Hawaii would be far fewer. Further, while there may well be consumption changes, the evidence in other locations suggests that if there is a reduction in the purchase of sugared beverages, consumers are likely to switch to other beverages (such as those without sugar) as to abstain from making beverage purchases. Of course, this would still reduce revenues – but probably not significantly cut into economic activity.

Additionally, the UCONN Rudd Center for Food Policy and Obesity created a 'Revenue Calculator for Sugary Drink Taxes' that estimates potential annual revenues from excise taxes on sugary drinks. The tool is intended to provide a rough estimate and starting point to project the revenue from a tax on sugary drinks, and to illustrate how various assumptions affect the projections.[77] The Center estimates that, at $0.015 per ounce in line with Philadelphia, a sugary beverage tax in Hawaii could generate more than $50 million annually. The projection considers the price elasticity of various beverage types (for instance, that the sale of carbonated soft drinks would be more impacted than ready-to-drink coffee or energy drinks).

The Center's estimate assumes 100 percent compliance; however, to account for the likely occurrence of non-compliance by some distributors, the project team has applied a discount rate of 10 percent to the revenues, bringing the 2018 estimate to just under $50 million.

Table 28: Projected Sugary Beverage Tax Revenues, 2018

	2018	
Sugary Drink Type	Gallons Sold	Annual Tax Revenues
Carbonated Soft Drinks	10,697,048	$20,538,332
Fruit Drinks	3,733,164	$7,167,675
Sports Drinks	4,018,599	$7,715,710

[75] Philadelphia Business Journal – "With June Revenue In, Philadelphia's Soda Tax Falls Just Short of FY17 Projection." (July 24, 2017). Available at https://www.bizjournals.com/philadelphia/news/2017/07/24/philly-soda-tax-pbt-june-17-revenue.html
[76] New York Post – Philly's Soda Tax is Crushing the City's Beverage Business. March 7, 2017. Available at http://nypost.com/2017/03/05/phillys-soda-tax-is-crushing-the-citys-beverage-business/
[77] The Revenue Calculator for Sugary Drink Taxes is available at http://www.uconnruddcenter.org/revenue-calculator-for-sugary-drink-taxes

Sugary Drink Type	2018	
	Gallons Sold	Annual Tax Revenues
Ready-to-Drink Tea	3,975,156	$7,632,300
Energy Drinks	4,343,387	$8,339,302
Enhanced Water	492,242	$945,104
Ready-to-Drink Coffee	980,764	$1,883,066
Total	**28,240,360**	**$54,221,489**
With 10% Noncompliance Adjustment		***$48,799,340***

Source: UCONN Rudd Center for Food Policy and Obesity

There are strong arguments in favor of the tax. Where there is still debate about its health effects, the theory behind taxing products with unhealthy outcomes is generally accepted (and applied in Hawaii, for example, to cigarettes and other tobacco products as well as alcohol). Recent research has shown that sugary beverage taxes effectively reduce consumption. After Berkeley, California instituted a tax in 2015, sales of sugary drinks fell almost 10 percent, while sales of water and other unsweetened beverages rose over the same period.[78]

Table 29: Estimated General Fund Impact (millions)[79]

	2018	2019	2020	2021	2022	2023
Projected Revenue at $0.015 per Ounce	$48.8	$49.9	$51.2	$52.5	$53.9	$55.4

Impact on Tax Burden and Regressivity

The tax is considered regressive but may have health benefits, which is currently hotly debated. The sugary beverage tax would likely have a limited impact on consumers since nonalcoholic beverages account for 0.7 percent of household expenditures and consume only 0.5 percent of household incomes. However, it is a much greater share of expenditures and consumes a greater share of income for lower income households than higher income households. Imposing this tax would contribute to the regressivity of the tax system, but may have some public health benefits.

Pros	Cons
▪ Portion of tax burden exported to tourists ▪ Potential health benefits ▪ Not subject to cross-border competition	▪ Considered regressive ▪ Strong anti-tax lobby

Alternative 5: Tax Medical Marijuana

While medical marijuana has been legal in Hawaii since 2000, there were no dispensaries in the state – instead, patients and caregivers had to grow their own plants.

[78] PLOS Medicine – Changes in Prices, Sales, Consumer Spending and Beverage Consumption One Year After a Tax on Sugar-Sweetened Beverages in Berkeley, California, US: A Before and After Study (April 2017).
[79] Estimates based on UCONN Rudd Center for Food Policy and Obesity projections, 2017-2020.

In 2015, the Hawaii legislature passed into law Act 241, which created the Medical Marijuana Dispensary Program and established a process to allow for state-licensed sales and regulatory oversight. As of the date of this report, the state has eight licensed entities. The first business is expected to open this summer. Despite this progress, the State is in the process of determining how to tax the dispensaries, which will significantly impact the amount of revenue raised.

It is assumed that Hawaii will impose some level of tax on the marijuana. The Department of Health estimated that the 8 licensees could be paying approximately $400,000 in taxes each month if all the dispensaries are open and selling the maximum amount of marijuana per patient.[80] This assumes sales will total $10 million.

The estimated impact of taxing dispensary sales at 15 percent (in alignment with California and Colorado rates) instead of 4 percent is $13 million.[81]

DOH monthly tax revenue estimate, 4 percent rate:	$400,000
Annual tax revenue estimate, 4 percent rate:	$4,800,000
Annual tax revenue estimate, 15 percent rate:	$18,000,000
Additional revenue at 15 percent rate:	**$13,200,000**

North American marijuana sales are projected to increase at a compound annual growth rate of 25 percent annually until 2021. While high, this estimation is in line with actual state experience. Colorado, Washington and Oregon all saw sales increase by more than 50 percent between 2015 and 2016.[82] Using a 25 percent year over year growth assumption, it is estimated that the State could generate an additional $40 million in revenues annually by 2023.

Table 30: Estimated General Fund Impact (millions)[83]

	2018	2019	2020	2021	2022	2023
Estimated Impact	$13.2	$16.5	$20.6	$25.8	$32.2	$40.3

Impact on Tax Burden and Regressivity

It is difficult to determine the tax burden and regressivity impact since there is a lack of reliable data on medical marijuana expenditures in Hawaii. However, Department of Health data show there were approximately 13,021 valid medical marijuana patients in 2016, only 0.9 percent of the population. Therefore this tax would only affect a very small proportion of households. If spending patterns by income level follow that of all prescription drugs, the tax would have a greater impact on lower income households and contribute slightly to the regressivity of the tax system.

Pros	Cons
▪ Significant source of potential revenue	▪ Considered somewhat regressive

[80] State of Reform. "Medical Marijuana Dispensaries Face Continued Delays, Challenges." June 2, 2017. Available at http://stateofreform.com/featured/2017/06/medical-marijuana-dispensaries-face-continued-delays-challenges/
[81] Of course, actual revenues depend on sales and the tax treatment adopted by the State.
[82] Forbes, "Marijuana Sales Totaled $6.7 Billion in 2016." January 3, 2017. Available at https://www.forbes.com/sites/debraborchardt/2017/01/03/marijuana-sales-totaled-6-7-billion-in-2016/#4ccd121675e3
[83] Estimates based on Hawaii Department of Health estimated 2017 revenue for 8 licensees selling the maximum amount of marijuana per patient.

Alternative 6: Institute a Carbon Tax

In 2007, Act 234, the Global Warming Solutions Act of 2007, became law. It mandates that statewide greenhouse gas (GHG) emissions be reduced to 1990 levels by 2020. Hawaii is not alone in its commitment to reduce emissions – as of September 2016, 20 states and Washington DC have GHG emissions targets.[84]

One way states are considering reducing emissions is through the implementation of a carbon tax. In fact, the U.S Energy Information Administration (EIA) found that if the country had set a carbon tax of $25 per ton in 2015 and increased it by 5 percent each year, CO2 emissions would have fallen to 32 percent below 2005 levels by 2030.[85]

A carbon tax is a fee imposed on the burning of carbon-based fuels (coal, oil and gas). It belongs to a group of taxes referred to as Pigovian taxes. These are taxes targeted at activities that generate negative externalities that are not factored into the market price of the final goods or services. The tax is intended to correct an inefficient market outcome, either by the tax equaling the social cost or reducing the activity associated with the negative externalities. The tax can take varying shapes and forms, which impact on the tax base, rate, and point of taxation.[86]

For a carbon tax, the point of taxation is important, as it determines who would be required to monitor and report emissions and make payments. For example, a state could impose the tax on fuel producers, distributors, or the facilities and consumers that combust them. At the state level, the point of taxation could be the point of existing Federal Environmental Protection Agency (EPA) data collection for stationary sources. For example, power plants, refineries, and a wide range of industrial facilities must report their GHG emissions to EPA each year. EPA makes this data publicly available and any state can use this information to identify potential taxable emissions and estimate their potential revenues under different assumptions about which facilities would be subject to the tax.

Likewise, the methods for collection of existing state fuel excise taxes could be used for carbon tax collection. Hawaii, (as with all states) already taxes liquid transportation fuels, and others tax other uses of liquid fuels – for example, Virginia imposes a tax on natural gas consumption. With a state carbon tax, the existing state taxing authorities would calculate the per-unit tax for each fuel based on the carbon content of that fuel. For example, a carbon tax of $25 per ton of CO2 would convert to about $1 per thousand cubic feet of natural gas. It would add about 24 cents per gallon to the price of gasoline and about 28 cents per gallon to the price of diesel fuel.

In order to implement a carbon tax, the State would have identify which sources and sectors will be subject to the tax. For example, for carbon in fossil fuels, this means choosing whether to tax carbon in fuels in electric power production (mainly coal and natural gas), transportation fuels (primarily petroleum products), fuels used in homes and commercial buildings for heating and cooling, and/or fuels used in industrial processes.

[84] Center for Climate and Energy Solutions – Greenhouse Gas Emissions Targets (September 2016). Available at https://www.c2es.org/us-states-regions/policy-maps/emissions-targets
[85] US EIA – Further Sensitivity Analysis of Hypothetical Policies to Limit Energy-Related Carbon Dioxide Emissions. July 18, 2013. Available at https://www.eia.gov/outlooks/aeo/supplement/co2/.
[86] Brookings Institution Climate and Energy Economics Project, Adele C. Morris, Yoram Bauman and David Bookbinder, "State Level Carbon Taxes: Options and Opportunities for Policymakers," July 28, 2016. Available at https://www.brookings.edu/wp-content/uploads/2016/07/State-level-carbon-taxes-Options-and-opportunities-for-policymakers.pdf

As of the date of this report, no state has instituted this form of tax. However, five states (Washington, Massachusetts, Rhode Island, Connecticut and Vermont) have introduced legislation.

A recent notable attempt to enact a state-level carbon tax was in the State of Washington, where a voter initiative to institute a carbon tax was defeated. The measure would have instituted a gradually increasing carbon tax starting at $15 per metric ton of CO2 on fossil fuels sold or consumed in the state. The plan was designed to be revenue neutral and came with a one percentage point reduction in the state sales tax and rebates for lower-income residents. The initiative put before the voters divided environmental and social justice groups, some of whom believed it did not dedicate enough additional resources to climate change efforts and others who noted its impact on lower-income individuals. They were joined (in an unlikely alliance) by the oil and gas industry to defeat the proposal.

As for why other states have not instituted a tax, the reasons vary. They include the fact that it is a new tax (there are always some concerns about how it will operate in practice and possible unintended consequences). Second, it will tax raw materials and products that have already been subject to tax (such as motor fuels). Third, there are some issues of interstate commerce related to taxing fuels that are simply passing through the state (although this is less of an issue in Hawaii than probably every other state). Finally, there is general disinterest in many states with raising any sort of tax – let alone a new tax with the potential of raising substantial revenue.

A July 2016 report by the Brookings Institution[87] estimated that **the State of Hawaii could generate more than $360 million annually in carbon tax revenues.** To arrive at this figure, the study used 2013 state-level data on per capita energy-related carbon dioxide emissions, as well as 2013 combustion data for electric power and industrial. The revenue estimates assume a tax rate of $20 per metric ton of CO_2, higher than the Washington proposal.

This estimate is based on high-level assumptions, and actual revenues would depend significantly upon actual activity, the rate at which the tax was imposed, and the method of imposing the tax. Additionally, because no other state has implemented a carbon tax, the project team cannot use other state experience to form future estimates. Therefore, the project team has not supplied annual estimates through 2023.

Table 31: Estimated Impact of Carbon Tax, State of Hawaii

Per capita energy related CO2 emissions in 2013	2013 Electronic Power Fossil Combustion CO2	2013 Industrial Fossil Fuel Combustion	Total including transport	Total potential revenue, assuming 2013 emissions and tax rate of $20/ton CO2	Total carbon tax potential revenue as a share of state GDP in 2013
metric tons CO2/person	MMTCO2	MMTCO2	MMTCO2	$ millions	%
12.9	6.8	1.5	18.3	**$365**	0.49%

Source: Brookings Institution State-Level Carbon Taxes, 2016

Impact on Tax Burden and Regressivity

The carbon tax would likely affect the cost of energy, transportation, and goods produced in Hawaii. Because the tax would affect a very significant portion of consumer expenditures, the tax burden impacts are expected to be quite significant. Existing studies have shown that the carbon tax would be regressive since lower income

[87] Brookings Institution; State-Level Carbon Taxes: Options and Opportunities for Policymakers (July 28, 2016)

households spend a greater percentage of their incomes on energy. Those making $25,000 spend 5.3 percent of their income on electricity, natural gas, and heating fuels, a percentage that declines to only 2.5 percent at an income level of $150,000. Given the scale of spending on energy goods by lower income households, a carbon tax would make Hawaii's tax system significantly more regressive. However, the revenue gains from such a broad-based tax could be substantial.

Pros	Cons
▪ Positive environmental impacts ▪ Conforms with principle of efficient tax policy ▪ Little administrative burden ▪ Federal regulations a potential "action forcing event" ▪ Relatively stable revenue source	▪ Potentially regressive ▪ No existing "lessons learned" from other states ▪ Potentially a hard sell politically ▪ Revenue declines over time

Alternative 7: Institute Vapor/e-Cigarette Tax

Vapor products, also known as electronic cigarettes, have grown steadily in popularity over the past 10 years – due in part to their reputation as a less harmful alternative to traditional cigarettes. According to the CDC, as of 2014, there were more than 9 million e-cigarette users in the U.S.[88]

Despite their increase in popularity, determining the appropriate tax treatment is still challenging for states. Because there are a wide variety of approaches to excise tax policy, each of the 7 states (and Washington DC) that has levied taxes on vapor products has implemented a different method, described below:[89]

Based on percentage of purchase price (ad valorem tax):

- California: State Board of Equalization is directed to adopt regulations implementing tax on electronic cigarettes equivalent to the Cigarette Distribution Tax of $1.00 per cigarette.
- District of Columbia: Vapor products taxed at rate equal to tax imposed on cigarette packs, expressed as percentage of average wholesale price.
- Minnesota: Tax of 95 percent of wholesale price imposed on tobacco products, including e-cigarettes.
- Pennsylvania: Electronic cigarettes taxed at rate of 40 percent of purchase price charged to the retailer.

Based on milliliters of consumable product (unit tax):

- Kansas: Privilege tax for sale or dealing of electronic cigarettes at the rate of $0.20 per milliliter or consumable material.
- Louisiana: Vapor products and electronic cigarettes taxed at $0.05 per milliliter of consumable nicotine liquid solution or other material containing nicotine that is depleted as a vapor product is used.
- North Carolina: Vapor products taxed at rate of $0.05 per milliliter of consumable product.
- West Virginia: E-cigarette liquid taxed at rate of $0.075 per milliliter.

[88] Centers for Disease Control and Prevention – Electronic Cigarette Use Among Adults: United States, 2014. Available at https://www.cdc.gov/nchs/data/databriefs/db217.pdf
[89] Public Health Law Center – US E-Cigarette Regulation: A 50-State Review (March 2017). Available at http://www.publichealthlawcenter.org/sites/default/files/E-Cigarette-Legal-Landscape-50-State-Review-March-2017.pdf

An additional 20 states have contemplated legislation, signaling that this revenue source is becoming a more politically palatable one, especially as states look to new revenues sources to support increasing costs.

Despite the increase in e-cigarette popularity, market data (and past performance in other locations that have vape taxes) suggest that the revenue raised by taxation is small, as it still does not have the market share of traditional tobacco products. However, it is likely that this revenue source would continue to grow over time.

In Minnesota, e-cigarettes and e-juice have been subject to the tobacco tax since 2012 – and generated $5.6 million in 2014. The following example estimates the potential impact of implementing a similar measure in Hawaii.

Hawaii accounts for approximately 0.3 percent of all regular cigarette packs sold in the U.S in 2015.[90] Applying that consumption percentage to the estimated $3.7 billion U.S e-cigarette market yields approximately $10.9 million in e-cigarette sales in Hawaii. Applying a 40 percent tax avoidance factor lowers Hawaii's taxable e-cigarette sales to $6.5 million. At an average cost of $2.50 per millimeter, approximately 2.6 million millimeters of taxable e-liquid are sold in Hawaii each year.

Assuming the average wholesale price for 1 milliliter of e-liquid is $1.80 (72 percent of the average retail price of $2.50), applying a 95 percent tax on the wholesale price of the 2.6 million milliliters sold would generate $1.71 in tax revenue per milliliter, or **$4.5 million annually.** It is estimated that the global electronic cigarette industry will exhibit a growth of 22.36 percent (CAGR) from 2015 to 2025.[91] Given this projected growth, it is estimated that revenues could reach more than $12 million by 2023.

Table 32: Estimated General Fund Impact (millions)[92]

	2018	2019	2020	2021	2022	2023
Projected Revenue at 95% of Wholesale	$4.5	$5.5	$6.7	$8.2	$10.0	$12.3

Impact on Tax Burden and Regressivity

Similar to the cigarette tax increase, the tax burden impact on a typical household would be small, however the tax would be regressive, affecting lower income households disproportionately.

Pros	Cons
▪ Sin taxes are generally a palatable form of taxation ▪ Tax gaining popularity nationally	▪ Low monetary impact ▪ Not much existing state experience

Alternative 8: Increase the GET Rate to 4.5 Percent

For the 2012 TRC, the project team recommended a 0.5 percent increase in the GET. This was motivated by the size of projected budget deficits and the charge of the 2012 TRC to recommend revenue measures that could achieve structural balance. While not included in the alternatives for discussion in the High Level Findings

[90] Campaign for Tobacco Free Kids – State Cigarette Annual Pack Sales and Revenues, 2015. Available at https://www.tobaccofreekids.org/research/factsheets/pdf/0099.pdf
[91] BIS Research, Electronic Cigarette and Vaporizer Market Research Reports (2016). Available at https://bisresearch.com/industry-report/electronic-cigarette-market-size-forecast.html
[92] Estimates based on 2015 pack sales and revenues.

memo to the 2017 TRC, discussion between the Commission and the project team at a subsequent Commission meeting led to a request to at least include this option within the report.

As discussed previously, GET is imposed on most activities, goods and services at a rate of 4.0 percent (wholesaling, wholesale services, producing and sugar processing and pineapple canning are taxed at 0.5 percent; insurance commission are taxed at 0.15 percent). Approximately 96 percent of all GET revenues are generated at this 4.0 percent rate.[93] Increasing the rate on applicable goods and services to 4.5 percent would result in additional revenues of more than $400 million annually.

As has been noted, the GET benefits from a very broad base, which has allowed the State to maintain a relatively low rate (in comparison to other state general consumption taxes). It also means that a moderate increase can raise a significant amount of revenue, as shown in the following table.

Table 33: Estimated General Fund Impact (millions)[94]

	2018	2019	2020	2021	2022	2023
Baseline GET Projection	$3,460	$3,580	$3,696	$3,828	$3,960	$4,106
Applicable Baseline	$3,322	$3,437	$3,549	$3,676	$3,803	$3,942
Additional Revenue @ 4.5%	**$415**	**$430**	**$444**	**$459**	**$475**	**$493**

Impact on Tax Burden and Regressivity

Of course, for reasons already discussed, this change would have a significant negative impact on tax burden and regressivity for lower income taxpayers. Some of that impact can be lessened by the use of refundable individual income tax credits, such as the Food/Excise Tax Credit. For example, the analysis from the 2012 TRC report noted that (based on estimates of consumption at that time via the Consumer Expenditure Survey), a family of four with an AGI of $20,000 would currently receive an IIT Food/Excise Tax Credit of $180. Using income shares for similar families around the country, a family with income before taxes of $25,000 would spend approximately 13.7 percent of their income on food. This would equate to approximately $3,425 – and the 4.0 percent GET would total $137.216. If the GET were increased to 4.5 percent, the total GET devoted to food for the family of $25,000 would be $154. Of course, there are other expenditures subject to the GET that impact lower income individuals to a greater extent than higher income taxpayers. However, the combination of the higher tax credit and IIT exempted income could help reduce the impact of any GET rate increase.

Pros	Cons
▪ Raises a lot of revenue with a small percentage increase ▪ An increase would still leave Hawaii on the low end of rates for States with broad-based consumption taxes	▪ Regressive form of tax that will increase the tax burden – disproportionately – on lower income individuals

[93] Department of Taxation calendar years 2015 and 2016 data

[94] Estimates based on Council on Revenues' May 30, 2017 General Fund forecast.

Transient Accommodations Tax Alternatives

It should be understood that the State dedicates a significant amount of public resources to providing services for nonresident visitors to Hawaii. This includes helping ensure public safety, the construction and maintenance of infrastructure (like highways and bridges) and helping ensure public health and human services. The State relies on a variety of taxes on non-residents to help provide those services, and the TAT is arguably the largest state revenue source that is primarily focused on collections from nonresidents.

The TAT is levied on hotels rooms, apartments, suites and other rental/transient properties occupied for less than 180 consecutive days. The tax is an important part of the overall revenue structure, as it exports a significant share of the overall tax burden to visitors.

Alternative 9: Increase the TAT and TOT Rates

State general fund revenue from the TAT totaled $234 million in 2016 and accounted for 3.3 percent of General Fund revenue. Legislation enacted in 2009 temporarily increased the rate from 7.25 to 8.25 percent through June 30, 2010 and then to 9.25 percent. The legislation was set to expire on June 30, 2015, but the increased rate was made permanent in 2013 in advance of the sunset date.

Relative to other states, Hawaii's tax on hotel stays (13.25 percent) ranks third, trailing Connecticut (15.0 percent) and Maine (13.5 percent). However, as a top U.S tourist destination and island state, the comparison of hotel rates on the mainland is not particularly relevant to Hawaii. While business and industry conference coordinators will argue that the industry is price conscious, the lure of Hawaii is strong, and the State is already something of an outlier compared to other locations.

A full list of hotel/motel and sales tax rates by state can be found in **Appendix C.**

Table 34: States Ranked by Total Ad Valorem Tax Rates on Lodging Accommodations, 2015

Rank	State	Sales Tax Rate	Lodging Tax Rate	Total Rate
1	Connecticut	6.35%	8.65%	**15.00%**
2	Maine	5.50%	8.00%	**13.50%**
3	**Hawaii**[95]	**4.00%**	**9.25%**	**13.25%**
4	Rhode Island	7.00%	6.00%	**13.00%**
5	New Jersey[96]	7.00%	5.00%	**12.00%**

Source: HVS 2016 Lodging Tax Report

In April 2017, House legislators proposed increasing the TAT rate to 12 percent for the next 10 years to generate funding for the Honolulu rail project. The legislature recessed in May 2017 without resolving the rail funding issue but announced it would hold a special session to find a solution. In July 2017, Governor Ige voiced support for increasing the rate by 1 percent, to 10.25 percent. In fact, during the recently concluded special legislative session, the TAT was raised to 10.25 percent. The new revenue was dedicated to the Honolulu rail project.

[95] Additional 0.5 percent state sales tax in Oahu.
[96] New Jersey State Occupancy Fee is imposed at a rate of 1 percent in cities that also impose local taxes or fees on hotel/motel occupancies.

The following analysis assumed the base rate would be 9.25 percent. It is the project team's belief that it would be difficult to impose a further increase to generate additional revenue.

The TAT would be expected to increase at a compound annual growth rate of 6.4 percent between 2017 and 2023, reaching $362 million by 2023.[97] Increasing the rate to 10.0 percent would represent a rate increase of 8.1 percent. Assuming the increase to 10.0 percent would not impact consumer behavior, an additional $23 million could be generated in 2018, growing to $29 million by 2023, as shown in Table 35.

Table 35: Estimated General Fund Impact (millions)[98]

	2018	2019	2020	2021	2022	2023
Baseline Revenue Projection	$277.6	$294.8	$311.8	$328.6	$345.1	$361.6
Projected Revenue at 10%	$300.1	$318.7	$337.1	$355.3	$373.0	$390.9
Initiative Impact	**$22.5**	**$23.9**	**$25.3**	**$26.6**	**$28.0**	**$29.3**
% Increase	8.1%	8.1%	8.1%	8.1%	8.1%	8.1%

Impact on Tax Burden and Regressivity

This measure would further export the tax burden to nonresidents and reduce the share of taxes paid by residents. Increasing the TAT would increase tax revenues from tourists without a significant burden on residents.

The bulk of transient accommodation taxes are borne by tourists therefore the tax burden impact on residents would likely be limited. Temporary lodging only consumes about 1 percent of household income and 1.3 percent of household expenditures therefore an increase would not significantly burden the typical Hawaii household. While temporary lodging consumes a higher share of income at an income of $25,000 than $50,000, beyond $50,000, temporary lodging expenditures steadily rise as a percentage of income. Therefore this measure would likely contribute to the progressivity of the tax system.

Pros	Cons
▪ Exports tax burden to tourists ▪ Because an island state, not subject to cross-border competition	▪ Increase already being considered for rail project; if adopted, additional increase would be unfeasible

Alternative 10: Begin Collecting TAT on Resort Fees

Resort fees are per-room, per-night, mandatory fees charged by some hotels that are separate from the room rate. According to the hotel industry, the purpose of the fees is to provide hotel customers with certain hotel services, such as internet access, parking and use of the hotel's health club. According to a January 2017 Federal Trade Commission report,[99] consumers paid resort fees estimated at about $2 billion in 2015, an increase of 35 percent over the previous year.

[97] Per Council on Revenues May 30, 2017 projection.
[98] Estimates based on Council on Revenues' May 30, 2017 General Fund forecast.
[99] Federal Trade Commission Bureau of Economics – Economic Analysis of Hotel Resort Fees (January 2017).

As of October 2016, 107 hotels and resorts in Hawaii charged resort fees. As shown in Table 36, these hotels offer a total of more than 35,000 rooms and impose resort fees that average $23 per room per night. Of the islands, Oahu has the highest occupancy rate (84 percent), while Hawaii has the lowest (69 percent).

Table 36: Summary of Hawaii Hotels Charging Resort Fees

Island	Total # of Hotels	Total # of Rooms	Occupancy Rate	Avg. Daily Resort Fee
Oahu	49	18,116	84.2%	$22.49
Maui	30	8,930	75.9%	$23.93
Kauai	16	3,595	72.6%	$24.63
Hawaii	12	4,372	68.8%	$23.09
Total	**107**	**35,013**	**75.4%**	**$23.28**

Sources: list of hotels per x; resort fee rates and room totals per hotels.com; occupancy rates per HTA Hawaii Tourism Facts

Using the available hotel/room data and occupancy rates, hotels charging resort fees statewide have more than 10 million nightly stays per year, resulting in more than $270 million in room fees. Applying TAT to these fees could result in more than $25 million in annual tax revenue for the State.

Table 37: Estimated Foregone TAT Revenue, 2017

Island	Rooms Booked/Year	Total Room Fees	Potential TAT Revenue
Oahu	5,567,590	$153,582,294	$14,206,362
Maui	2,473,923	$60,963,707	$6,035,602
Kauai	952,639	$34,917,065	$2,358,762
Hawaii	1,097,897	$21,748,947	$2,861,909
Total	**10,092,049**	**$271,212,013**	**$25,462,635**

Assuming hotel rates increase at an inflationary rate and market behavior does not change, the implementation of resort fees could generate an estimated $26 million in 2018, increasing to $29 million by 2023.

These findings align with those of a study conducted by Travel Hawaii in December 2015. In it, researchers determined that the 105 Hawaii hotels charging resort fees were expected to collect around $271 million in 2015 from guests.[100]

These projections were based on the project team's understanding that resort fees were not currently subject to TAT; however, discussions with the Department of Taxation lead the team to believe that it is already being enforced. To the extent that it is true, it will have minimal financial impact. Assuming increased compliance results in a 10 percent increase in resort fee revenue, the State would gain an additional $2-3 million annually.

It is possible that this and other revenue alternatives dealing with accommodations taxes would benefit from greater stakeholder education and dialogue. While it is impossible to determine the possible increased revenue that might result, there likely would be some increase and some greater compliance generated.

[100] Travel Hawaii, Study of Resort Fees at Hawaii Hotels. December 2015. Available at http://travel-hawaii.com/hawaii-resort-fee-study.html

Table 38: Estimated General Fund Impact (millions)[101]

	2018	2019	2020	2021	2022	2023
Estimated Potential Revenue	$26.0	$26.4	$27.0	$27.6	$28.1	$28.7
10% Increase	$2.6	$2.6	$2.7	$2.8	$2.8	$2.9

Impact on Tax Burden and Regressivity

This measure would further export the tax burden to nonresidents and reduce the share of taxes paid by residents. Subjecting these charges to the TAT would boost revenues from tourists.

The bulk of transient accommodation taxes are borne by tourists therefore the tax burden impact on residents would likely be limited. Temporary lodging only consumes about 1 percent of household income and 1.3 percent of household expenditures therefore an increase would not significantly burden the typical Hawaii household. While temporary lodging consumes a higher share of income at an income of $25,000 than $50,000, beyond $50,000, temporary lodging expenditures steadily rise as a percentage of income. Therefore this measure would likely contribute to the progressivity of the tax system.

Pros	Cons
▪ Resort fees are often perceived as unfair to consumers ▪ The fees are already a subject of scrutiny by the FTC	▪ Tourism industry resistance

Alternative 11: Begin Imposing TAT on Alternative Accommodation Rentals

Hawaii's timeshare occupancy tax is imposed on the occupants of timeshare vacation units. The rate was 7.25 percent prior to December 31, 2015; 8.25 percent between January 1, 2016 and December 31, 2016, and is 9.25 percent effective January 1, 2017 and thereafter. Like the TAT, the tax is an attractive alternative, as it exports tax burden to tourists rather than residents.

One key group of rentals gaining popularity is alternative accommodations such as Airbnb and HomeAway. According to a December 2016 study commissioned by the Hawaii Tourism Authority (HTA)[102], consumer demand for alternative accommodations is growing. The study found that the share of visitors staying in a "rental house" increased from 4.6 percent in 2010 to 7.4 percent in 2015, and 38 percent of visitors said they expect their use of home/vacation rentals to increase in the future.

Many other state and local governments have enacted laws to tax these rentals. As of the date of this report, Airbnb (probably the largest operator in this category) collects and remits taxes to 24 states and Washington, DC. While the State does technically impose TAT on rental through online hosting, there is likely room for improved compliance. Tax forms do not require taxpayers to disclose if a renter used an online service to rent a property, and Get data are broken down by "Hotel Rentals" and "All Other Rentals," but the distinction is based on whether the rental was subject to TAT. As a result, the current process of verifying compliance is a manual one. It should be noted that Hawaii's situation is not due to lack of interest or intent, and the taxation of

[101] Estimates based on October 2016 hotel room data.
[102] JLL – Hawaii's Home and Vacation Rental Market: Impact and Outlook (December 2016).

alternative accommodation companies has been a topic of discussion in the legislature and at large for the past several years.

In 2016, Governor Ige vetoed a bill that would have allowed these companies to act as tax brokers on behalf of the State but noted that he was in favor of the bill's intent. He asked lawmakers to keep the issue alive with an intent to propose changes.

In 2017, Airbnb formally supported two similar bills.[103] The company estimated that allowing it to act as a broker could generate $100 million in tax revenue for the State.[104] The 2016 JLL report commissioned by the HTA had similar findings. It estimated that, based on housing unit data and visitor and resident survey data, that collecting TAT revenue on Airbnb and other alternative accommodation stays would generate $136 million in 2018, growing to $173 million by 2023. Using trend analysis, PFM projects that revenues would reach more than $200 million by 2023.

It is understood that the State is collecting some amount of revenue from online rentals. However, imputing compliance by comparing Hawaii Tourism Authority data to Department of Taxation data is a challenge, as the Department's TAT collection totals include timeshare occupancy tax as well as tax from timeshare rentals subject to TAT. Therefore, the estimates discussed above and displayed below are optimistic and assume full compliance with the proposed changes.

Table 39: Estimated Impact of Collecting TAT on Alternative Accommodations[105]

	2018	2019	2020	2021	2022	2023
Hawaii Housing Units	534,587	535,656	536,727	537,801	538,876	539,954
% of Residents Participating	10.3%	10.9%	11.5%	12.0%	12.7%	13.5%
Physical Stock	55,300	58,400	61,500	64,700	68,700	73,000
Estimated Occupancy Rate	43%	43%	43%	43%	43%	43%
Total Occupied Nights (millions)	8.6	9.1	9.5	10.0	10.6	11.2
Median Nightly Rate	$180	$186	$191	$197	$203	$209
Total Revenue (millions)	$1,467	$1,597	$1,732	$1,875	$2,035	$2,208
Projected TAT Revenue (millions)	**$135.7**	**$147.7**	**$160.2**	**$173.4**	**$188.3**	**$204.2**

Source: JLL report: Hawaii's Home and Vacation Rental Market: Impact and Outlook (December 2016).

As with the alternatives dealing with resort fees, this is also an area where a public education campaign with stakeholders may yield some benefits related to compliance and additional revenue. While this additional revenue cannot be estimated, it is likely that it will provide additional revenue over time.

Impact on Tax Burden and Regressivity

This measure would further export the tax burden to nonresidents and reduce the share of taxes paid by residents. The bulk of transient accommodation taxes are borne by tourists therefore the tax burden impact on residents would likely be limited. Temporary lodging only consumes about 1 percent of household income and 1.3 percent of household expenditures therefore an increase would not significantly burden the typical Hawaii household. While temporary lodging consumes a higher share of income at an income of $25,000 than $50,000,

[103] HB 1471 and SB 1087.
[104] https://www.bizjournals.com/pacific/news/2017/02/20/airbnb-tries-again-on-hawaii-tax-broker-bills.html.
[105] 2018-2021 estimates per JLL report; 2022 and 2023 estimates based on trend analysis.

beyond $50,000, temporary lodging expenditures steadily rise as a percentage of income. Therefore this measure would likely contribute to the progressivity of the tax system.

Pros	Cons
▪ Exports tax burden to tourists ▪ Airbnb supportive ▪ Already an area of interest for the legislature ▪ Significant source of revenue	▪ Potential for noncompliance ▪ Prior attempts vetoed by Governor ▪ Some argue taxation would legitimize illegal vacation rentals

Income Tax Alternatives

Alternative 12: Move to a Single 9 Percent Corporate Net Income Tax Rate

Corporate income taxes, levied in 44 states, are one of the smallest sources of state and local tax revenues. New Hampshire depends most heavily on the corporate income tax (9.4 percent of total tax collections) due to the lack of an individual income tax (except on interest and dividends) or a sales tax. At the other end of the spectrum, Nevada, Ohio, South Dakota, Texas, Washington, and Wyoming do not levy a corporate income tax, though four of these states (Nevada, Ohio, Texas, and Washington) levy a handful gross receipts tax instead. Some of these states will still show a small amount of corporate income tax revenue due to taxes on corporate net income of special types of corporations (like financial institutions). At 1.6 percent reliance on corporate income taxes, Hawaii ranks 44th.[106] Part of the reason that Hawaii's net income tax is not as considerable in terms of revenue collection as in other states is that the GET is a significant tax on corporations – more so than sales taxes in most other states.

Additionally, the rates imposed on corporations vary from state to state. **A full list of corporate income tax rates by state can be found in Appendix D.**

Currently, the State of Hawaii taxes the income of corporations at a series of marginal rates ranging from 4.4 percent to 6.4 percent:

- Income up to $25,000 taxed at 4.4 percent
- Income over $25,000 up to $100,000 taxed at 5.4 percent, less $250
- Income over $100,000 taxed at 6.4 percent, less $1,250

According to Hawaii Department of Taxation (DoTax) data[107], C- and S-corporation taxable income is highly volatile, increasing from $2.3 billion in 2010 to nearly $5 billion in 2014, and then decreasing to $3.6 billion one year later. Though the State uses a tiered tax structure, aggregate corporate net profits (inclusive of capital gains) are taxed at an average of between 5.0 and 5.8 percent. The amount that is deposited to the General Fund is net of refunds and also includes payments with returns.

[106] Tax Foundation – To What Extent Does Your State Rely on Corporate Income Taxes? April 19, 2017. Available at https://taxfoundation.org/corporate-income-taxes-percent-collections/
[107] Per DoTax C- and S-Corporation Income Tax Statistics, 2010-2015 (Forms N30 and N35).

Table 40: Corporate Taxable Income and Tax Liability, 2010-2015 (millions)

	2010	2011	2012	2013	2014	2015
Net Profits	$2,357	$2,444	$1,909	$3,813	$4,999	$3,640
Gross Tax Liability	$124	$127	$111	$217	$249	$205
Aggregate Tax Rate	5.2%	5.2%	5.8%	5.7%	5.0%	5.6%

Source: Hawaii DoTax C- and S-Corporation Income Tax Statistics, 2010-2015 (Forms N30 and N35)

The Council on Revenues projects that total corporate income tax collections (which includes taxes on corporate net gains) will increase by a compound annual growth rate of 12.5 percent between 2018 and 2023. Given this projection, it is estimated that transitioning to a single 9 percent corporate net income tax rate would yield an estimated $100-$200 million annually, as shown in the following table.

Table 41: Estimated General Fund Revenues (millions)[108]

	2018	2019	2020	2021	2022	2023
Total Taxable Corporate Income (a)	$5,797	$6,371	$9,748	$9,905	$10,332	$10,455
Gross Tax Liability (a)	$315	$346	$529	$538	$561	$567
Refunds (b)	$159	$174	$267	$271	$283	$286
Corp Tax Revenues, Current Structure	**$156**	**$171**	**$262**	**$267**	**$278**	**$281**
Gross Tax Liability at 9% Rate	$522	$573	$877	$891	$930	$941
Refunds	$263	$289	$442	$449	$469	$474
Corp Tax Revenues, Proposed	**$259**	**$284**	**$435**	**$442**	**$461**	**$467**
Value of Revenue Initiative	**$103**	**$113**	**$173**	**$175**	**$183**	**$185**

Impact on Tax Burden and Regressivity

There is no consensus on whether an increase in this tax would make a tax structure more progressive. Some argue raising the corporate net income tax would reduce the capital income received by higher income households and therefore contribute to progressivity.[109] Others argue corporate income tax increases are regressive because they reduce worker wages paid by corporations.[110] Given existing research, it is likely there would be some adverse effect on worker wages and some reducing effect on capital incomes, although the magnitude of these effects is still up for debate. Given the diffuse and indirect effects of the corporate income tax on household income streams, the specific tax burden and regressivity impacts of an increase remain uncertain.

Pros	Cons
▪ Relative to other states, current rates are low	▪ Federal corporate tax treatment could drive business activity ▪ Corporate net income taxes a relatively volatile revenue source

[108] Estimates based on 2015 DOTAX data
[109] Tax Policy Center of the Urban Institute and Brookings Institution. "Briefing Book: A citizen's guide to the fascinating (though often complex) elements of the federal Tax System." http://www.taxpolicycenter.org/briefing-book/are-federal-taxes-progressive
[110] Laurence Kotlikoff. "Is the Corporate Income Tax Regressive?" National Center for Policy Analysis. http://www.ncpa.org/pdfs/st336.pdf

Alternative 13: Increase Corporate Net Income Taxes by 50 Percent

Alternatively, the State could retain the tiered structure, but apply an across the board increase in the tax rates imposed on corporations. Increasing total corporate net income taxes, inclusive of net capital gains taxes, would result in more than $40 million in additional revenues in 2018, growing to $75 million by 2023.[111]

Table 42: Estimated General Fund Impact (millions)[112]

	2018	2019	2020	2021	2022	2023
Baseline Revenue Projection	$83.3	$91.6	$140.1	$142.4	$148.5	$150.3
Revenue Projection at 50% Increase	$125.0	$137.3	$210.1	$213.5	$222.7	$225.4
Estimated Impact	**$41.7**	**$45.8**	**$70.0**	**$71.2**	**$74.2**	**$75.1**

Impact on Tax Burden and Regressivity

There is no consensus on whether an increase in this tax would make a tax structure more progressive. Some argue raising the corporate net income tax would reduce the capital income received by higher income households and therefore contribute to progressivity.[113] Others argue corporate income tax increases are regressive because they reduce worker wages paid by corporations.[114] Given existing research, it is likely there would be some adverse effect on worker wages and some reducing effect on capital incomes, although the magnitude of these effects is still up for debate. Given the diffuse and indirect effects of the corporate income tax on household income streams, the specific tax burden and regressivity impacts of an increase remain uncertain.

Pros	Cons
▪ Relative to other states, current rates are low	▪ Federal tax changes could drive business activity ▪ Corporate net income taxes a relatively volatile revenue source

Alternative 14: Increase Corporate Net Capital Gains Rate to 5 Percent

Currently, the State taxes corporate net capital gains at a rate of 4 percent. It is estimated that corporate net gains tax revenues account for 31 percent of all Corporate Income Tax revenues deposited into the General Fund. Increasing the rate imposed on corporate net gains to 5 percent would result in additional revenues totaling between $6 and $12 million annual between 2018 and 2023, as shown in the table below.

Of course, corporate gains taxes are contingent upon corporate activity and decision-making, which is highly sensitive to both economic trends and tax policies (including at the federal level). Capital gains are often associated with roller coaster revenue and therefore, additional revenues resulting from this initiative are difficult to anticipate.

[111] Estimate assumes no change in corporate business activity resulting from tax increase.
[112] Estimates based on Council on Revenues' May 30, 2017 General Fund forecast.
[113] Tax Policy Center of the Urban Institute and Brookings Institution. "Briefing Book: A citizen's guide to the fascinating (though often complex) elements of the federal Tax System." http://www.taxpolicycenter.org/briefing-book/are-federal-taxes-progressive
[114] Laurence Kotlikoff. "Is the Corporate Income Tax Regressive?" National Center for Policy Analysis. http://www.ncpa.org/pdfs/st336.pdf

Table 43: Estimated General Fund Impact (millions)

	2018	2019	2020	2021	2022	2023
Total General Fund Corporate Income Tax	$83.3	$91.6	$140.1	$142.4	$148.5	$150.3
Amount Attributable to Corporate Net Gains	$25.8	$28.3	$43.4	$44.1	$46.0	$46.5
Value of Increasing Net Gains Rate to 5%	**$6.4**	**$7.1**	**$10.8**	**$11.0**	**$11.5**	**$11.6**

Impact on Tax Burden and Regressivity

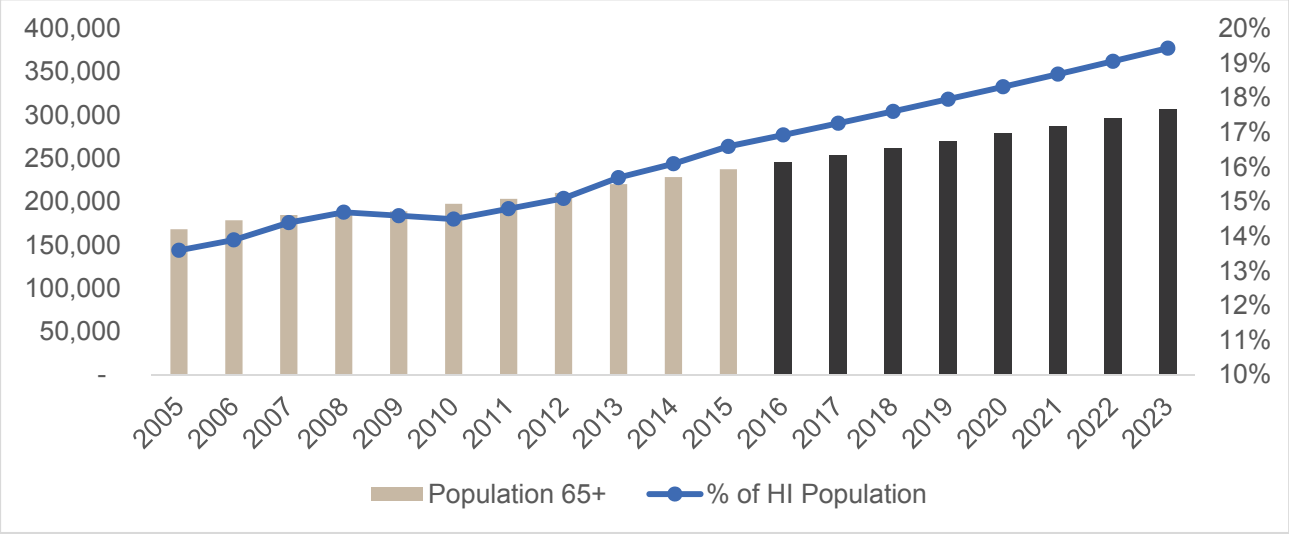
This measure would boost revenues without a significant direct impact on residents. Similar to the corporate income tax, it is unclear whether this would contribute to the regressivity of the tax structure, given the questionable impacts on worker wages and shareholder compensation.

Pros	Cons
▪	▪ Volatile revenue source

Alternative 15: Reduce the Pension Exemption in the IIT

The number of retirees in Hawaii is growing. The percentage of Hawaii's population aged 65 and older was 16.6 percent in 2015 and is projected to increase to 19.4 percent by 2023. Between 2006 and 2015, the population aged 65 and older grew by 3.2 percent annually, while the total population in the state grew by just 1.2 percent.

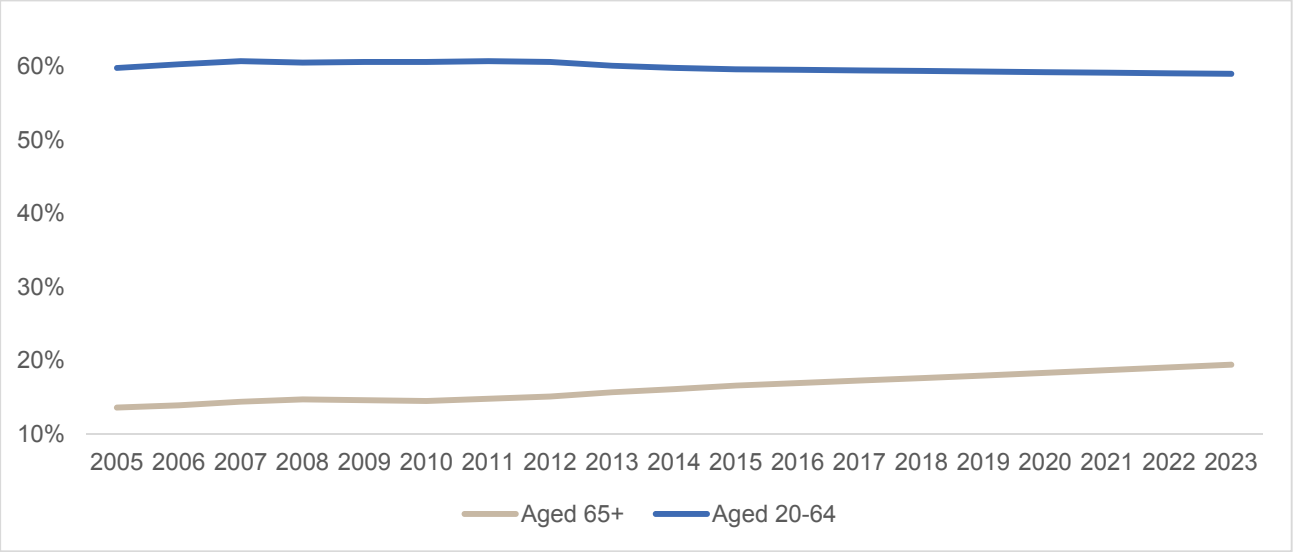
Figure 34: Hawaii Population Aged 65+



Source: American Community Survey 1-Year Estimates, 2005-2015

Additionally, the portion of the population considered working age (20-64) is stagnant, decreasing by a compound annual growth rate of 0.1 percent.

Figure 35: Percentage of Hawaii Population Aged 65+ and 20-64



Source: American Community Survey 1-Year Estimates, 2005-2015

As Hawaii's population ages, pension and social security income becomes a larger component of overall income. To maintain a sufficient base of individual income tax revenues, it is increasingly necessary to include at least some portion of that income in the tax base.

There is a wide variety of approaches to taxation or exemption of pension income among the states, and this variation extends to types of pensions. Many states treat private pensions differently than state and local, federal civilian and military pension. In general, public pension income is more likely to be excluded, while private pension income is more likely to be taxed.[115] Hawaii is one of ten states – along with Alabama, Illinois, Kansas, Louisiana, Mississippi, New Hampshire, New York, Pennsylvania and Tennessee – that provide full exemption for public pension income. On the other hand, there are 7 states that provide no public or private pension exemption (California, Minnesota, New Mexico, North Dakota, Rhode Island, Utah and Vermont). Between these extremes, the majority of states exempt only a portion of pension income. A full list of state treatment of pension income can be found in **Appendix E**.

By eliminating or substantially reducing tax exemptions for federal and state pension income, Hawaii could realize a significant increase in General Fund revenue. According to the Department of Taxation, federally taxable pension income not taxed by Hawaii for tax year 2009 was $2.4 billion. Additionally, total tax expenditures related to employer-provided pensions were approximately $156 million in TY 2009. These accounted for 98.8 percent of all income not deductible for federal income taxes.[116]

The value of this measure in 2014 would have been $38 million. To estimate annual revenues in subsequent years, the team applied actual and Council on Revenues-project annual individual income tax growth. The project team estimates that eliminating the pension exemption over $25,000 would generate between $45 million and $65 million annually.

[115] A commonly cited source for state tax exclusion for pension and retirement income is 'Individual Income Tax Provisions in the States,' Wisconsin Legislative Fiscal Bureau, January 2017. A table from this report, which lists all states with an individual income tax and their treatment of pension income, is included in the appendices.
[116] Table 2 – Tax Expenditures in Hawaii's Net Income Taxes, "Tax Expenditures in Hawaii," Hawaii Department of Taxation, February 2012.

It was noted during discussion with the TRC that providing the $25,000 exemption was not consistent with treatment of private pension income and 401k and similar plan distributions (which are entirely taxable). This is correct, and if the TRC wished to subject all pension income to state tax, it would materially increase the additional revenue. On the other hand, there has been strong political opposition to any taxation of public pensions, and the project team views the $25,000 exclusion as an accommodation for those with more modest public pensions.

Table 44: Estimated General Fund Impact (millions)[117]

	2018	2019	2020	2021	2022	2023
Value of Exemption Elimination Over $25,000	$47.8	$48.1	$52.6	$55.9	$59.5	$63.2

Impact on Tax Burden and Regressivity

The remaining exemption would apply per person, meaning a married person household could use two exemptions. Most states provide for some taxation of pension income; with the provision to exempt the first $25,000 of pension income. Eliminating the exemption for pensions over $25,000 is a means to increase revenues while sparing lower income individuals. This proposal would only affect a minority of retirees. Based on 2015 Census Bureau micro data, only 43 percent of Hawaii households with retirement income receive pension income over $25,000. 57 percent of pensioner households do not. For the typical retiree household with pension income exceeding $25,000, this would translate into an additional **$1,197 per year** in income taxes.[118]

Eliminating this feature would also make the tax structure more progressive by subjecting pension income above $25,000 to Hawaii's progressive income tax rates. This would shift more of the tax burden to higher income pensioner households, which could see a sizable increase in their tax burden. Maintaining the exemption up to $25,000 preserves the safety net for older Hawaii residents while taxing a portion of pension income above that to cover the most basic living expenses.

Pros	Cons
▪ Can be tailored in a progressive structure, with various rates based on certain income levels ▪ Provides a broader and more stable tax base ▪ May improve horizontal equity ▪ Widely practiced among other states	▪ At odds with general belief that those on fixed income are less able to deal with additional costs, including taxes ▪ May violate a form of 'social compact' between public employees and government ▪ If enacted on prospective pension filers, would not see benefits for many years ▪ Potentially subject to litigation

Alternative 16: Eliminate Exemption for Foreign Pension Income over $25,000

According to Census Bureau data, 49 percent of Hawaii residents aged 65 and older were born outside of the state. Using 50 percent as a proxy, eliminating the exemption for foreign pension income over $25,000 could reasonably generate an estimated $20-30 million annually for the State.

[117] Estimates based on Tax Year 2014 Hawaii Income Patterns.
[118] Based on the average income for households with retirement income above $25,000 ($50,711) and an effective tax rate of 4.7%, the total effective rate for the $50,000 to $75,000 income range.

Table 45: Estimated General Fund Impact (millions)[119]

	2018	2019	2020	2021	2022	2023
Elimination All Pension Income	$47.8	$48.1	$52.6	$55.9	$59.5	$63.2
Eliminating Foreign Pension Income (49%)	**$23.9**	**$24.1**	**$26.3**	**$28.0**	**$29.8**	**$31.6**

Impact on Tax Burden and Regressivity

All of the points regarding elimination of the exemption above $25,000 discussed above also apply to elimination of the exemption for foreign pension income. In addition, this measure would minimize the burden on native-born pensioners.

Pros	Cons
▪ Considered a progressive measure	▪ Potentially subject to litigation

Alternative 17: Implement a Personal Income Tax Rate Recapture

This measure would implement a top-rate recapture mechanism for high income taxpayers. In this approach, for taxpayers with income above a certain level ($100,000 in this analysis for purposes of demonstration), the benefit of lower brackets would be phased out, and when income reaches $150,000, the taxpayer would pay the top rate on the first dollar of income. This would be a highly progressive feature.

Connecticut, New York and Nebraska implement this method, using the methodologies described in the table below.

Connecticut[120]
- **Joint Filers:** $180 per $10,000 of AGI over $400,000; an additional $100 for each $10,000 above $1,000,000 AGI. **Maximum total recapture amount is $6,300.** - **Single Filers:** $90 per $5,000 of AGI over $200,000; an additional $50 for each $5,000 above $500,000 AGI. **Maximum total recapture amount is $3,150.** - **Head of Household Filers**: $140 per $8,000 of AGI over $320,000; maximum recapture $4,200; an additional $80 for each $8,000 above $800,000 AGI. **Maximum total recapture amount is $4,920.**
New York[121]
- **Joint Filers:** 8.82% rate recapture for incomes $2,190,900 and above. - **Single Filers:** 8.82% rate recapture for incomes $1,120,350 and above. - **Head of Household Filers:** 8.82% rate recapture for incomes $1,655,650 and above. This measure, which impacts 45,000 taxpayers (half of whom are nonresidents), is expected to raise $3.4 billion in 2018.

[119] Estimates based on Tax Year 2014 Hawaii Income Patterns and 2015 Census Bureau residency data.
[120] State of Connecticut Department of Revenue Services – 2015 Legislative Changes Affecting Income Tax Withholding and the Income Tax.
[121] https://www.tax.ny.gov/pdf/current_forms/it/it201i_nys_tax_computation_wkshts.pdf

Nebraska[122]
- Joint Filers: 0.438% of AGI above $311,300 but not over $372,500; $268.06 + 0.333% of the excess over $372,500 but not over $678,600; $1,287.37 + 0.183% of the excess over $678,600 but not over $903,100; $1,698.21 if AGI is over $903,100. **Maximum recapture amount is $1,698.21.**
- Married, Filing Separately: 0.438% of AGI above $155,650 but not over $186,250; $134.03 + 0.333% of the excess over $186,250 but not over $339,350; $643.85 + 0.183% of the excess over $339,350 but not over $451,500; $849.18 if AGI is over $451,550. **Maximum recapture amount is $849.18.**
- **Single Filers:** 0.438% of AGI above $259,400 but not over $290,000; $134.03 + 0.333% of the excess over $290,000 but not over $443,100; $643.85 + 0.183% of the excess over $443,100 but not over $555,300; $849.18 if AGI is over $555,300. **Maximum recapture amount is $849.18.**
- Head of Household Filers: 0.438% of AGI above $285,350 but not over $342,450; $250.10 + 0.333% of the excess over $342,450 but not over $579,250; $1,038.64 + 0.183% of the excess over $579,250 but not over $724,150; $1,303.81 if AGI is over $724,150. **Maximum recapture amount is $1,303.81.**

To estimate the impact of this option, the project team calculated the number and percent of resident tax returns in 2014 that were above the $100,000 threshold. In total, 78,215 returns (comprising 15 percent of all returns) met this threshold. The aggregate adjusted gross income (AGI) for these filers was $16.3 billion, equal to 50 percent of the state's aggregate AGI across all income levels.

Table 46: Selected Data from Resident Tax Returns by AGI Class & Filing Type, $100,000+, 2014

	Number of Returns			Hawaii AGI (thousands)		
	Single	Joint	H/H	Single	Joint	H/H
$100,000 - $150,000	7,216	36,108	2,056	$850,963	$4,386,645	$242,483
$150,000 - $200,000	1,806	14,219	386	$307,615	$2,429,287	$65,418
$200,000 - $300,000	1,248	7,913	234	$298,471	$1,881,613	$55,827
$300,000 and over	1,121	5,699	209	$900,403	$4,698,164	$133,286
Total, $100,000+	**11,391**	**63,939**	**2,885**	**$2,357,452**	**$13,395,709**	**$497,014**

Source: Hawaii Individual Income Tax Patterns, 2014

Of this amount, $13.9 billion was considered taxable income, resulting in a tax liability of $1.1 billion (60 percent of statewide liability). At the taxpayer level, average taxable income ranges from $93,000 (head of household at the $100,000-$150,000 range) to more than $750,000 (single filer at the $300,000+ range). The resulting average tax liability ranges from $6,000 to $70,000. The table below displays the average taxable income and tax liability by income level and filing type in 2014.

Table 47: Average Taxable Income and Tax Liability by AGI Class & Filing Type, $100,000+, 2014

	Avg Taxable Income, 2014			Avg Tax Liability, 2014		
	Single	Joint	H/H	Single	Joint	H/H
$100,000 - $150,000	$103,929	$94,932	$93,091	$7,771	$6,355	$6,544
$150,000 - $200,000	$155,174	$137,519	$149,606	$11,943	$9,813	$11,109
$200,000 - $300,000	$221,959	$212,345	$216,201	$18,135	$15,900	$16,543
$300,000 and over	$752,332	$749,108	$603,794	$70,548	$64,108	$54,014

Source: Hawaii Individual Income Tax Patterns, 2014

[122] http://www.revenue.nebraska.gov/tax/16forms/f_1040n_booklet.pdf

The project team used Census ACS Housing Unit PUMS data for 2014 to generate cohort estimates of average income and percent of total incomes in the $100,000-$150,000 range.

The team then estimated the average tax liability for filer type under the current tax system and under the proposed tax system; the difference between the two is the average increase in taxpayer liability. These average increases were added to the actual average tax liability from the DoTax data and multiplied by the actual number of filers. The difference between these new aggregate tax liability figures and the existing aggregate liability is equal to the estimated revenue impact of the proposed revenue initiative.

Phasing in the rate recapture between $100,000 and $150,000 could be designed to subject those with income between $100,000 and $100,000 to 20 percent of the recapture, $110,000-$120,000 to 40 percent, $120,000-$130,000 to 60 percent, $130,000-$140,000 to 80 percent, and $140,000-$150,000 to 100 percent.

Using this methodology, the project team estimates that the impact of the initiative in 2014 (the last year for which detailed DoTax data is available) would have been $161 million. Using actual (2015 and 2016) and Council on Revenues-projected (2017-2023) annual individual income tax increases, it is estimated that the initiative could generate upwards of $200 million annually.

These estimates are significant but reasonable, given that filers making over $100,000 account for approximately half of all taxable income. Based on these assumptions, the proposal would raise the effective tax rate for $100,000+ filers by an average of 1 percent of income.

It should be noted that this option involves the combined effect of individual taxpayer liability calculation, which vary widely; therefore, the projection is a rough estimate for demonstrative purposes.

Table 48: Income Tax Rate Recapture Estimated 2017 Impact

	Increased Tax Liability (thousands)		
	Single	Joint	H/H
$100,000 - $150,000	$2,651	$30,063	$1,347
$150,000 - $200,000	$3,653	$21,783	$476
$200,000 - $300,000	$7,838	$12,805	$680
$300,000 and over	$13,686	$63,884	$2,592
Total, $100,000+	**$27,828**	**$128,534**	**$5,095**
Total, All Filing Types			**$161,457**

Table 49: Estimated General Fund Impact (millions)[123]

	2018	2019	2020	2021	2022	2023
Estimated Impact	$203.2	$213.3	$223.8	$237.9	$253.0	$268.8

Impact on Tax Burden and Regressivity

This would be a highly progressive feature and would greatly enhance the progressivity of the tax structure. The tax burden impact is potentially very significant on higher income taxpayers (depending on the design of the recapture), however these taxpayers do have a much greater ability to pay than lower income residents of Hawaii.

[123] Estimates based on Tax Year 2014 Hawaii Income Patterns.

Pros	Cons
▪ Considered a highly progressive feature	▪ A significant additional increase in the effective tax rate that begins (at least in the example) at a relatively low level of income.

Property Tax Alternatives

Alternative 18: Eliminate the Deduction for Property Taxes Paid

Under the U.S tax code, any state, local or foreign taxes on real property levied for the general public welfare are deductible. Most states use federal adjusted gross income as the starting point for state IIT purposes, but others do not. Among these states are Colorado, Minnesota, Oregon and South Carolina.

Hawaii is unique among the states in its full support for K-12 education, which in most states is a shared state-local responsibility, with the local funding primarily supported by property taxes. Nationally, 40 percent of total local direct general expenditures were in support of elementary and secondary education in 2014.[124] Given this, the State of Hawaii is making a significant funding commitment to local schools.

Hawaii's state and local property tax revenues are equal to 0.3 percent of national state and local totals.[125] Applying this share to the tax year 2014 U.S total real estate tax deductions ($181 billion)[126] results in an estimate of aggregate Hawaii real estate taxes of $540 million. The project team then applied the effective tax rate for all Hawaii individual income taxpayers (5.5 percent before credits, based on adjusted gross income)[127] to this figure to estimate that the value of the initiative would be approximately $30-$40 million annually. It should, of course, be noted that actual revenues are based on individual taxpayer tax liability calculations.

Elimination of the real estate tax deduction would effectively increase the property tax burden by removing the deduction against income taxes. To the extent the property tax is regressive, this would increase regressivity. However, for individuals with no state income tax liability (or who do not itemize), there would be no additional tax implications from this change. As a result, it would likely be a progressive feature.

Table 50: Estimated General Fund Impact ($ millions)[128]

	2018	2019	2020	2021	2022	2023
Estimated Impact	$31.0	$32.5	$34.1	$36.3	$38.6	$41.0

Impact on Tax Burden and Regressivity

Removing the reduction would increase the share of taxes paid by higher income Hawaii residents, since lower income Hawaii residents more commonly take the standard deduction. For individuals with no state income tax liability (or who do not itemize), there would be no additional tax implications from this change. Removing the real estate tax deduction would disproportionately affect higher income earners, yet it would make Hawaii's income tax structure slightly less progressive at higher levels of income. The differences between effective tax

[124] US Census, Survey of State and Local Government Finance, 2014.
[125] Census Survey of State and Local Governments, 2014
[126] IRS Table 2.1. Returns with Itemized Deductions, Tax Year 2014 (Filing Year 2015)
[127] As shown in Table A-6 of Hawaii Income Patterns, 2014
[128] Estimates based on Tax Year 2014 real estate data

rates at higher levels of income would decline under this option. With the deduction removed, those making $50,000 would pay a higher effective tax rate than those making $75,000. This is because the deduction heavily favors middle income taxpayers, which through this measure, deduct a much greater share of income from taxation than higher income taxpayers. Although the nominal impacts rise with income, in percentage of income terms, removing the deduction would have the largest impact on middle income taxpayers making $50,000 (0.21% of income) and the smallest impact on upper middle-income households earning $150,000 (0.13%). Households making $25,000 would be largely unaffected. This proposal would shift much of the tax burden share away from the lowest income households.

Pros	Cons
▪ Some aspects progressive ▪ Helps reduce disparity by increasing state tax burden for property taxpayers	▪ Some aspects regressive

Alternative 19: Shift Certain K-12 Education Expenses to Property Taxes to Lower State Costs

Because the State Constitution prohibits a state property tax, the only mechanism to increase the use of this tax (and thus reduce the use of other major taxes) would be to shift expenditures from the State to local governments. As mentioned previously, Hawaii is the only state that fully assumes the operational costs of K-12 education at the state level. Under this initiative, the State could select specific expenditures to shift. As an example, it could shift the DOE's Public Libraries general fund operating costs to property taxes and reduce General Fund expenses by approximately $35 million annually. Alternatively, shifting the DOE's School Support Program budget (which includes food services; services and supplies related to construction, operation and maintenance of grounds and facilities; and student transportation services) would free up $191 million in the State's General Fund per year.

Impact on Tax Burden and Regressivity

Any shift to property tax from more progressive taxes (such as the income tax) would be regressive – however, it would be possible to ameliorate some of these impacts through expanding refundable credits such as the GET/renter's credit. The exact tax burden impacts would depend on the magnitude of expenditures shifted to county governments.

Pros	Cons
▪ Most other states already share funding responsibility with local governments	▪ Potentially regressive ▪ Rail funding complicating local finances

Compliance Alternatives

Compliance initiatives are important, because they can increase voluntary compliance and create greater confidence in the system by those taxpayers (who are the vast majority of Hawaii taxpayers) who pay their taxes in full and on time.

The State has undertaken compliance initiatives in the past and continues to implement changes that are focused on increasing collections, particularly for cash-based enterprises. For example, Act 134 (2009), the Cash Economy Enforcement Act committed additional resources over time to the Department of Taxation to raise additional revenue owed to the State. The primary focus of the Act was the creation of a Special

Enforcement Section, including civil investigators and support staff. The Department of Taxation is required, as part of the Act, to provide regular reports to the Legislature related to the resources committed to implementing the Act and the additional revenues raised as a result of the Act.

The most recent report, for the period from July 1, 2015 to June 30, 2016, identified revenue collected in the last three years from the Act as $805,776 in FY2014; $1,619,235 in FY2015; and $3,505,618 in FY2016. These represent a significant upward trajectory in revenue collections.

A major current initiative that should assist with overall system compliance is the Department of Taxation's Tax System Modernization (TSM) Program. This is a collection of initiatives that will upgrade and replace existing tax systems, many of which are past their useful life and do not allow for sharing and use of disparate data sets. Some features of the program have already gone live, including online mechanisms for some tax collection and reporting.

There have been concerns raised with the implementation of parts of the project, and, in fact, these concerns led to the Legislature, earlier this year, suspending funding for some of the project.

The State hired, as part of the project, a vendor, AdvanTech LLC, to perform independent Verification and Validation (IV&V) services for the TSM Program. As part of their services to the State, AdvanTech performs periodic assessments to help identify strengths, weaknesses, issues and risks related to the implementation of the Program and to make recommendations for improving the implementation process.

The most recent (of five) IV&V reports issued by AdvanTech was submitted in May 2017. The report identifies a number of issues and risks, including taxpayer difficulty registering for components of the website, some user discomfort and Department concerns about rushed training and testing.

The legislature has also directed the State Auditor to conduct an audit of the TSM Program using a third party auditing firm. More recently, the Department is going to roll out new changes to an 'enhanced online experience' related to Hawaii Tax Online (part of the TSM Program). This will be rolled out after August 14, 2017.

It is notable that states across the country are experiencing shortfalls in tax collections versus estimates. While it is possible (and not in this case dissimilar from other major system rollouts) that some revenue loss is being experienced during roll-out, it is also likely that this will be a short-term obstacle – and most of that outstanding revenue will eventually be collected.

Given the fact that there is another firm doing IV&V and the State Auditor will be engaging another party to do an audit of the system, it was not cost beneficial for this project team to spend significant project resources on its own look. As a result, no specific estimate could be developed as to possible impacts from the TSM Program.

There are notable instances across the country where taxpayer compliance can be a significant issue for the amount of tax revenue that can be generated. There are taxes where 'black markets' are fostered because of taxes owed on specific products, such as cigarettes. More recently, concerns about payment of sales and use taxes owed because of online purchases has become a prominent issue for States – and also for Hawaii as it relates to the GET.

Alternative 20: Expand Efforts to Incent E-Commerce Collection of GET

Economic nexus is an area with significant legislative action across the country, although the constitutionality of some recently enacted state laws is being challenged in several state and federal court cases.

Typically, an online retailer only has to collect sales tax in states where they have a physical presence, such as a storefront or a distribution center. This loophole is a potentially costly one for states – and Hawaii is no exception. According to the National Conference of State Legislatures, the State had an estimated $60 million in uncollected sales and use tax from electronic business to business and business to customer sales in 2012.[129]

Across the country, states are adopting new methods so that businesses will have nexus in their state sufficient to require them to collect sales (or in the case of Hawaii, GET) tax. Effective July 1, 2017 the Colorado Department of Revenue began enforcing notice and reporting requirements for retailers with at least $100,000 in annual sales that make sales into Colorado but do not collect Colorado state sales tax. These non-collecting retailers are required to collect the purchaser's name, billing and shipping address, and the dollar amount of each purchase – this information is then reported by the retailer to the Department on an annual basis. Additionally, at the time of purchase, retailers must provide a transaction notice to Colorado customers informing them that the Colorado state sales tax has not been paid, and the customer may have an obligation to the state. The non-collecting retailers must provide an annual customer notification by January 31 of the following year for Colorado customers with at least $500 in purchases in a calendar year.[130]

The Hawaii legislature recently proposed several measures aimed at increasing e-commerce taxation and compliance.[131]

- **SB620** and companion bill **HB345** seek to expand the State's definition of nexus. An out-of-state company making at least $100,000 in sales annually must collect and remit Hawaii tax if it engages in activities with the object of gain or economic benefit (direct or indirect), without regard to having a physical presence in the State.

- **HB398** is similar to the Colorado reporting measure, in that it imposes a use tax notification requirement on all non-collecting out-of-state sellers making sales of tangible personal property in Hawaii. Purchasers must be informed annual that the State requires a use tax return to be filed and use tax to be paid on certain purchases. Sellers must also provide the dates and amounts of the purchases, the category of the purchase, and whether the purchase is exempt or taxable in Hawaii (if known).

- **HB1413** (the Simplified Sellers Use Tax Remittance Act) encourages voluntary collection by non-collecting remote retailers. The Act is modeled on Alabama's Simplified Seller Use Tax Act and allows eligible out-of-state sellers to collect, report and remit a simplified sellers use tax at a rate of 4 percent, instead of the GET. Collection of the simplified tax would relieve the seller of any additional GET; additionally, a 2 percent discount on the properly collected tax would be offered to businesses that collect and remit the tax due in a proper and timely manner.

[129] National Conference of State Legislatures: Collecting E-Commerce Taxes (11/14/14). Available at http://www.ncsl.org/research/fiscal-policy/collecting-ecommerce-taxes-an-interactive-map.aspx
[130] CCH Tax Group – "Colorado Sales and Use Tax: Notice and Reporting Requirements for Retailers Became Effective July 1, 2017." July 5, 2017. Available at http://news.cchgroup.com/2017/07/05/colorado-sales-use-tax-notice-reporting-requirements-retailers-became-effective-july-1-2017/
[131] Avalara. "Hawaii Lawmakers Push to Increase Remote Sales Tax Collections." February 10, 2017. Available at http://www.taxrates.com/blog/2017/02/10/hawaii-lawmakers-push-to-increase-remote-sales-tax-collections/. As of the data of this report, all bills are still under consideration by the legislature.

On April 1, 2017, Amazon (which accounts for 43 percent of U.S online retail sales[132]) began collecting sales tax on purchases in Hawaii, Idaho, Maine and New Mexico – the last four states where it wasn't doing so. Four other states – Delaware, Montana, New Hampshire and Oregon – have no sales tax, while Alaska doesn't have a statewide tax, but does have municipal sales taxes.

The amount of revenue the State can expect to gain as a result of increased e-commerce collections is a subject of much debate, and various estimates exist:[133]

- A 2012 study found that total online sales in Hawaii could generate $110 million, with Amazon's contribution estimated at about $11 million.
- A 2016 DEBDT consumer survey of 2013-2014 household online spending found that taxing online sales would result in $15 million in GET revenue.
- As mentioned above, **SB620** and companion bill **HB345 aim to** require businesses with no physical presence in the state but do more than $100,000 in sales to collect GET. It is estimated that this measure would generate an additional $15 million annually.

Of course, imposing the tax with no threshold would result in additional revenue for the State. In 2014, Hawaii's sales tax revenues were equal to approximately 1 percent of the U.S total.[134] Amazon's U.S net sales were $64 billion. Given this, it can be estimated that net sales in Hawaii were $595 million. At an estimated 4.5 percent GET rate, Amazon will collect an estimated $27 million annually on behalf of the state. Total tax collections, inclusive of the Amazon total, are projected to be $62 million. Given this, it can be estimated that the tax revenue the State could gain through increased collection of taxes related to e-commerce is $35 million.

Impact on Tax Burden and Regressivity

Taxation of e-commerce/online tax would affect a broad array of consumer expenditures but would have limited effect on the tax burden given the scale of household online spending. According to a 2016 DBEDT Consumer Expenditure Survey, the average Honolulu household making less than $50,000 spends $314 per year on online purchases. Those making between $50,000 and $100,000 pay $727, which those making $150,000 or more $1,118 or more. These represent only 0.8 percent, 1.2 percent, and 1.3 percent of overall household spending, respectively. Yet spending as a share of income steadily declines as income rises. Given that, this measure would likely contribute to the regressivity of the tax system, with a more substantial impact on lower income households.

Pros	Cons
▪ Does not require a new tax	▪ Challenging to administer

The State is in the process of implementing a data warehouse; in other states, this has provided opportunities to improve compliance and collect additional revenue. These include:

[132] Business Insider – "Amazon Accounts for 43 Percent of US Online Retail Sales." February 3, 2017. Available at http://www.businessinsider.com/amazon-accounts-for-43-of-us-online-retail-sales-2017-2
[133] All estimates per Honolulu Star-Advertiser, "Parcels from Amazon Increase Ahead of Tax Collection." March 31, 2017. Available at https://www.pressreader.com/usa/honolulu-star-advertiser/20170331/281487866190816
[134] US Census Bureau 2014 Annual Surveys of State and Local Government Finances

Alternative 21: Develop Tax Gap Systems to Identify Under-payment and Non-payment of Taxes

Several states have increased revenue collections through use of sophisticated software connected with a fully functional data warehouse:[135]

- The Iowa Department of Revenue implemented an enterprise data warehouse system to enhance efficiencies and boost taxpayer compliance. The effort produces $14 million annually.
- The Ohio Department of Revenue implemented an enterprise data warehouse with modules aimed at business intelligence, analytical case management and reporting. This strategy has collected $70 million over 3 years.
- The Texas Comptroller of Public Accounts implemented its Advanced Database System employing data from multiple sources, advanced data analytical capabilities, and faster querying and reporting. The initiative triggered $1.2 billion in additional revenue collections over 13 years.

Alternative 22: Additional Audit Programs

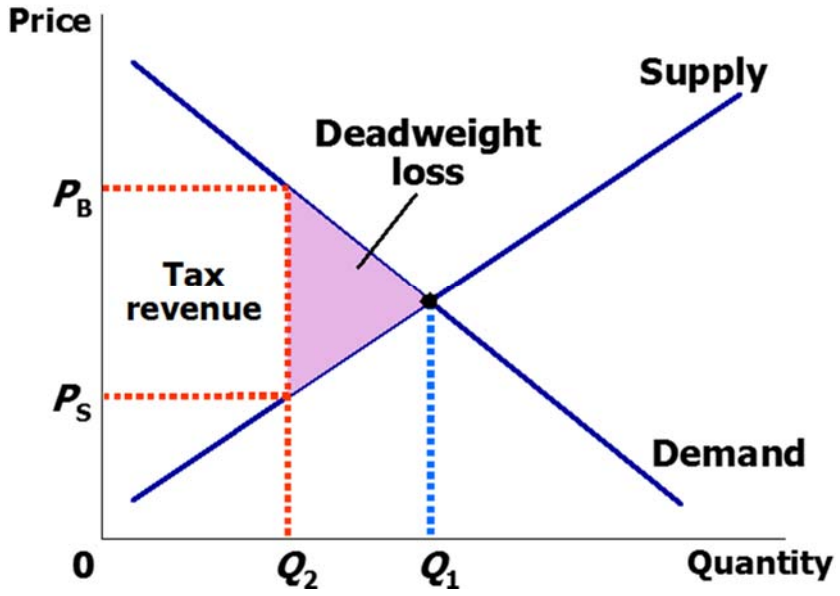
Most studies suggest that additional audit staff is cost effective, both in finding additional tax revenue and in spurring additional voluntary compliance.[136]

- The Missouri Department of Revenue improved its various operating systems to focus on accurate reporting, better case management and more effective audit targeting. Over seven years the strategy has netted 500,000 discovery leads and $375 million in additional revenue.
- The New Jersey Division of Taxation implemented an enterprise data warehouse and an enhanced tax compliance system to boost compliance and generate more useful audit leads. The effort has generated $350 million in revenue over 6 years.

Economic Impacts

There is general agreement among economists that taxes have a dampening effect on an overall economy. This is logical, as taxes increase costs of consumption or reduce disposable income that could benefit individuals or businesses. Basic principles of supply and demand show that the increased cost of goods and services because of added tax will generally reduce the amount of goods or services that are purchased and consumed. This dampening effect, known as the 'deadweight loss' from taxation is demonstrated in the following diagram:

[135] Bloomberg BNA. State Tax Directors Focus on Fraud, Economic Substance and Closing Tax Gap. March 13, 2014. Available at https://www.bna.com/state-tax-directors-n17179882909/
[136] Ibid.



The question of 'who pays' for the deadweight loss is a good one, and it largely depends on the elasticity of demand for the specific good or service being taxed. Where demand is relatively elastic (meaning the amount consumed is highly dependent on the price, the seller may bear more of the burden; while if the demand is relatively inelastic (meaning the amount consumed is not as dependent on price), the purchaser is likely to bear more of the burden.

Determining the economic impacts of tax changes is an inexact science, and there are a variety of factors to consider, which may vary depending on the performance of the economy as a whole – and specific industries within it – at different points in time. It will also depend on demographic and socio-economic factors, federal and international factors and a wide range of other exogenous variables.

Given the complexity of the issues to consider, the following analysis touches on some of the key topics to consider and weighs those factors in relationship to broad categories of taxes. Issues where a specific tax within a category may have specific impacts will also be addressed.

Taxes on Consumption versus Income

One of the notable areas of discussion and debate in taxation concerns the question of the economic impact of consumption versus income taxes. This is far from a settled topic, and the following presents both sides of the argument.

Those who argue that income taxes are preferred to taxes on consumption generally make the following points:

- It better aligns with ability to pay;
- In most states, it is a progressive system and thus more equitable, which means that those with more income are paying a larger percentage of their income as taxes (although specific features, like deductions, exemptions and credits can alter this);

- Its use by the federal government provides some compliance opportunities.

Those who argue that consumption taxes are preferred generally make the following points:

- Income tax creates market distortions, because it tax savings, which reduces capital that can be used for investment and economic opportunity;
- Taxing income (in a progressive system) reduces the incentive to work more/for higher wages;
- It is fair to base taxes on what is consumed, which ensures that all pay taxes (although regressivity is an issue).

In fact, most states combine income and consumption taxes, in part to balance out concerns of each other. As noted in the discussion of tax burden, the Hawaii major income and consumption taxes create a sort of balance, with the GET having a larger effect on lower income taxpayers and the IIT having a larger effect on higher income taxpayers.

There are also considerations about how each performs at differing points in the business cycle. In recent years, individual income tax structures at the state level have demonstrated increasing volatility, with large gains during the peaks of the business cycle but significant declines around the downturn. By contrast, consumption taxes tend to have fewer 'peaks and valleys' – particularly when they have a broad base. While many states exempt food, prescription drugs and (less frequently) clothing and utilities from tax, Hawaii only exempts prescription drugs off these four from the GET. This helps to maintain collections but can also be seen as a regressive feature of the tax.

Of late, there has tended to be a move among states toward a more consumption-based tax structure.[137] Some of this trend may be political, and it is not uniform. In fact, as state revenues enter periods of weaker collections, some of these trends have changed in the past.

Business Taxes

While some commentators focus on corporate income taxes as the benchmark for business taxes, that is too narrow a measure of the taxes paid by business. In Hawaii, it has already been noted that the GET is different than most state sales taxes, as it is a form of business gross receipts tax that covers a wide range of goods and services, including many business-to-business activities. Businesses also pay property taxes and some excise taxes (such as motor fuel).

According to an annual study by the Council on State Taxation (COST), in FY2015, for the nation as a whole, business tax revenue accounted for 44.1 percent of all state and local tax revenue. That study (which is done annually, with the latest released in December 2016) determined that the business share has been within one percentage point of 45 percent since FY2003.[138] According to that survey, Hawaii faired very well in changes in business taxes between FY2014 and FY2015, being fifth lowest, with a percentage decrease in business taxes of 0.9 percent. Hawaii's business taxes under their calculations totaled $3.7 billion.

[137] Joe Eleniewski, Doug Nagode and James P. Trebby, ""Trends in State Taxation: Consumption Tax Versus Income Tax," Deloitte, Winter 2014.
[138] "Total State and Local Business Taxes: State-by-state estimates for fiscal year 2015," Council on State Taxation, December 2016, accessed electronically at http://cost.org/WorkArea/DownloadAsset.aspx?id=94697

The Tax Foundation also does an annual state business tax climate index. It provides an overall rank as well as ranks for corporate tax, individual income tax, sales tax, unemployment tax and property tax. Based on its formula, for the 2017 rankings, Hawaii placed 26th. The following provides its ranking for each category (lower is better):[139]

Overall Rank	Corporate Tax	Individual Income Tax	Sales Tax (GET)	Unemployment Insurance Tax	Property Tax
26	11	31	23	24	17

In its comments on 'notable ranking changes in this year's index' they note that the expiration of the temporary individual income tax increases resulted in the elimination of the top three individual income tax brackets and the lowering of the top marginal rate from 11.0 to 8.25 percent. They indicate that these changes moved the state from 37th to 31st on the individual income tax rankings and from 30th to 26th overall. Given that these rates have now been put back into effect, it is likely that the State's ranking on this composite index will again go down.

Property Taxes

As has been pointed out through the report, Hawaii's property tax system is unique among the states, and its property tax burden under nearly any measure or study is among the lowest. The tax burden analysis done by the District of Columbia found Honolulu property taxes to be among the lowest on most measures among the largest cities in each of the 50 states. Another commonly cited comparison, by the Lincoln Institute of Land Policy and the Minnesota Center for Fiscal Excellence, reached similar findings. In its annual 50-State Property Tax Comparison Study (for taxes paid in 2016), it found that Honolulu had the lowest effective property tax rate (calculated as tax bill as a percent of property value) on a median valued home in the country. It found that the commercial properties effective tax rate was the third lowest and industrial property the second lowest.[140]

Property taxes are an important consideration for many types of businesses and, in some areas of the country, can be an impediment to economic activity. However, it is unlikely that any of the changes contemplated here will have a material impact on economic activity as a whole.

General Excise Taxes

It is often noted that broad-based consumption taxes are preferred by the general public to other major taxes (such as income and property taxes), because the tax is paid in a series of nearly ubiquitous small transactions throughout the year. This generally supports the belief that small changes in these taxes will not have a material impact on collections and consumption. At the same time, even small increases can, on large purchases, change either the decision to consume or how to purchase a good or service. Even on small purchases, there is only so much disposable income, and as broad tax rates go up, some other consumption will likely have to go down.

Many studies of sales taxes have found that a one percent increase in the rate can result in a 1-5 percent reduction in generated revenue as a percent of tax. Not all of this is necessarily reduced consumption, as some relates to cross border (or e-commerce) competition for purchases.

[139] Jared Walczak, Scott Drenkard and Joseph Henchman, "2017 State Business Tax Climate Index," Tax Foundation, 2017.
[140] "50-State Property Tax Comparison Study, for taxes paid in 2016," Lincoln Institute of Land Policy and the Minnesota Center for Fiscal Excellence, May 2017.

Excise Taxes

Excise taxes are often the 'overlooked' area of taxation in terms of economic impact. While general consumption taxes often have a broad base and a narrow rate, excise taxes are in many respects their mirror image: the base is limited to a specific good or service, and, as a result, the rate is often considerably higher. The prime example of this are cigarette and tobacco taxes. These taxes have been increasing rapidly for over a decade – in nearly every state and region of the country (even tobacco growing states).

The State of Hawaii is a good example. Hawaii's current tax rate is $3.20 per pack of cigarettes. According to one national website that surveys cigarette prices, a pack of Marlboro Red (which is the nation's largest selling brand, according to the Centers for Disease Control) in Hawaii currently sells for approximately $2.80 a pack – meaning the tax is well over 100 percent of the retail price. By contrast, the State's GET is a fraction of that.

As previously noted, taxes increase the cost of purchasing a good or service and will (depending on the elasticity of demand) reduce the amount that is purchased and consumed. Given the significant increase in cost because of some excise taxes, this must be factored into the economic impact of excise tax increases.

Tax Competitiveness

There is a long-standing debate as to how taxes impact on overall economic activity – particularly around location decisions by business and individuals. The spectrum of (learned) opinion runs from the perspective that taxes have little or no impact on these decisions, to it having significant impact. The following details the arguments and at least some of the support for those viewpoints:

- **Tax Changes Have Not Been Shown to Significantly Impact Growth.** Three prominent economists, building on past research, found that "the effects of state tax policy on economic growth, entrepreneurship, and employment remain controversial. Using a framework that in prior research generated significant, negative, and robust effects of taxes on growth, we find that neither tax revenues nor top income tax rates bear stable relationships to economic growth or employment across states and over time. While the rate of firm formation is negatively affected by top income tax rates, the effects are small in economic terms."[141]

- **Tax Changes Have Some Impact on Location Decisions, but they are Generally Outweighed by Other Factors.** There are more important considerations for business location, including readily available skilled workforce, transportation and logistics. Taxes are still a small component of overall business costs.[142]

- **The Impact of Taxes Varies Depending on Locations and Points in Time and May or May Not be Significant.** A variety of studies have explored the differing impacts of taxes based on specific surrounding events and circumstances. For example, one study found that the effects of taxation on growth are highly non-linear. Marginal increases in tax rates have a small growth impact when tax rates are low or moderate. When tax rates are high, further tax hikes have a large, negative impact on growth performance.[143] Another study compared effects of changes in taxation during the decades of the

[141] William G. Gale, Aaron Krupkin, and Kim Rueben, "The Relationship Between Taxes and Growth at the State Level: New Evidence," National Tax Journal, December 2015, accessed electronically at https://www.urban.org/sites/default/files/publication/79601/2000711-The-Relationship-Between-Taxes-and-Growth-at-the-State-Level-New-Evidence.pdf
[142] "State and Local Business Taxes are Not Significant Determinants of Growth," gradingthestates.org, accessed electronically at https://www.gradingstates.org/the-problem-with-tax-cutting-as-economic-policy/state-and-local-business-taxes-are-not-significant-determinants-of-growth/?print=pdf
[143] Nir Jaimovich and Sergio Rebelo, "Non-linear Tax Effects on Growth," National Bureau of Economic Research, October 2012.

1970s and 1980s and found that while there was substantial connection between state and local fiscal policy and employment and personal income in the1970s, that relationship did not exist in the 1980s.[144]

- **There is Evidence of Location Decisions within Regions for both Businesses and Individuals.** One study examined how differences in state income tax rates, as well as other state and local taxes and public service expenditures, influence the choice of state of residence for households moving into multistate metropolitan statistical areas (MSA). After controlling for other factors believed to affect household location, it found that differences in state income tax rates have a statistically significant impact on the probability a household locates in the low tax state within an MSA.[145] Another recent study, concerning high income 'star scientist' location decisions determined that there were 'large stable' changes in personal and business tax differentials across states based on differing tax rates. These estimated effects of personal and corporate taxes on star scientists' migration patterns suggest that, on the margin, taxes matter.[146]

- **Taxes Matter and Have Always Mattered.** This perspective is underscored by a meta-review by Richard Vedder that has appeared in multiple locations discussing government growth and taxes.[147]

As with many public policy discussions and debates, it is likely that the 'truth of the matter' lies somewhat within each of these perspectives. It is possible to have some agreement with many of the studies, which are generally not mutually exclusive. It will be necessary to analyze specific alternatives in consideration of the unique characteristics (or shared similarities) with other states.

Market Efficiency

Markets do not always act efficiently, and the market price of products may not consider some of the external negative impacts of the production of a particular good or services. A class of taxes, known as Pigovian taxes, seek to correct for this inefficiency. Generally, these taxes are to be set to recover the negative externalities associated with the activity, although this may be hard to exactly determine.

Examples of Pigovian taxes are carbon taxes, which seek to account for pollution generated by manufacturing or other activities that consume carbon-based fuels; cigarette taxes, which seek to recoup the social costs incurred because of smoking; or rental car taxes, which seek to account for the costs of congestion. While taxes are often viewed as barriers to efficiency, they may also assist in creating more efficient markets.

Tax Issues Specific to Hawaii

While it is mentioned to the point of repetitiveness, Hawaii's relatively isolated location compared to the mainland states is a significant factor in discussing its tax structure. Most notably, the issues around cross border competition that surround discussions of consumption taxes are dramatically mitigated. The evidence is clear – from studies of multiple goods and services and multiple border cities – that tax rates will factor into decisions about where to consume for many people.[148] Those decisions and concerns are largely absent for

[144] Robert Carroll and Michael Wasylenko, "Do State Business Climates Matter: Evidence of a Structural Change," National Tax Journal, March 1994.
[145] Ken Stanford and William Hoyt, "Is the Grass Greener on the Other Side of the River: The Choice of Where to Work and Where to Live for Movers," November 2007.
[146] Enrico Moretti and Daniel J. Wilson, "The Effect of State Taxes on the Geographical Location of Top Earners: Evidence from Star Scientists," American Economic Review 2017.
[147] Richard Vedder, "Grinding to a Halt: Ohio's Tax Policy and its Impact on Growth," Buckeye Institute for Public Policy Solutions, 2002.
[148] See for example Walsh, M. and J. Jones (1988) "More Evidence on the 'Border Tax' Effect: the Case of West Virginia," National Tax Journal, Vol. 14, pp. 362-374; F. Steb Hipple, "Retail Sales and Sales Tax Losses from Tennessee to Virginia in the Tri-states Metropolitan Area 1996 and 2003," State of Tennessee Tax Structure Study Commission, November 6, 2003; Rossitza Wooster and

Hawaii. Yes, it is possible that some visitors will 'stock up' on cigarettes or other items before coming to Hawaii, but in general, that tax avoidance will be small.

The same, of course, can be noted about studies that find border or regional competition for 'star scientists' or businesses. In some locations, the choice of a state or city with a widely different tax base may be the decision to move across the street (situations that exist in both Bristol Tennessee and Bristol Virginia and Kansas City Missouri and Kansas City Kansas), a decision to locate to or from Hawaii from another state is a much more impactful decision – in terms of time and effort. Given that many businesses locate in a particular area to be close to customers, a resource base or for logistical reasons, it is also likely that Hawaii will be far less impacted by regional competition issues than nearly any other state.

Hawaii is also unique in other respects. It is by far the most diverse state in the country, with the smallest percent of population that describes itself as Caucasian, the largest percentage that is Asian, the largest percentage that describes as Hawaiian or Pacific Islander, and the largest percentage that describes as of one or more races.[149]

Hawaii also has an industry and employment structure that is quite different from many other states. For example, the largest sector for employment and wages is government – federal, state and local combined. At the other end of the spectrum, manufacturing is a relatively small component. While the tourism industry is a large employer, it is not as large for overall wages, which suggests that average wages lag other sectors. The following identifies the key sectors for Hawaii, both in terms of percentage of total employment and total wages.[150]

Sector	Employment %	Total Wages %
Government	19.3	23.6
Accommodations and Services	16.1	10.6
Retail Trade	11.1	7.2
Health Care and Social Services	10.5	11.5
Administrative and Waste Services	7.9	5.6
Construction	5.4	8.2
Transportation and Warehousing	4.2	4.5
Other Services	4.0	2.8
Professional and Technical Services	3.8	5.7
Wholesale Trade	2.8	3.4
Finance and Insurance	2.4	3.5
Manufacturing	2.2	2.0
Educational Services	2.1	1.8
Real Estate, Rentals and Leasing	1.9	2.0
Arts, Entertainment and Recreation	1.8	1.1
All Others	3.8	6.5

Joshua Lehner, "Reexamining the Border Tax Effect: A Case Study of Washington State" September 2008; Patrick Fleenor, "How Excise Tax Differentials Affect Interstate Smuggling and Cross-Border Sales of Cigarettes in the United States," The Tax Foundation, Background Paper No. 26, October 1998; Mark D. Manuszak and Charles C. Maul, "How Far For a Buck? Tax Differences and the Location of Retail Gasoline Activity in Southeast Chicagoland," January 26, 2009.

149 The Kaiser Familly Foundation, Population Characteristics by Race and Ethnicity, accessed electronically at https://www.kff.org/other/state-indicator/distribution-by-raceethnicity/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D

150 State of Hawaii Data Book, Table 12.28, Employment and Wages by NAICS Industry, 2015

This table also demonstrates the fact that the tourism industry is wide-ranging and includes at least parts of the Accommodations and Services, Real Estate, Rentals and Leasing and Arts, Entertainment and Recreation sectors. Of course, these sectors combined have a larger percentage of employment than wages, which is a factor in terms of economic performance for the State.

Hawaii Tax Considerations

Based on the preceding, the project team would note the following about the considerations of tax economic consequences:

1. It is important to consider Hawaii's unique factors relating to location;

2. The tourism industry is important for employment and exporting tax burden but does not, on average, contribute to growing wages for the State;

3. Specific issues are likely more important than generalities for economic impact;

4. All taxes have a dampening effect on economic activity, and if additional revenue has to be raised, this is the trade-off;

5. Some taxes may contribute to market efficiency.

Based on these, the following are comments related to specific tax categories:

- **GET mirrors the trend of increasing use of consumption taxes.** While the GET is broader than traditional state sales taxes and creates some pyramiding effects, it is a stable revenue source, and its regressive nature has been ameliorated with the individual income tax. Given the continued dedication of a portion to the Oahu rail project, it is difficult to see an additional increase in the near future, but it remains the most viable option of the existing major taxes for a small increase that will likely not significantly impact on economic activity.

- **The individual income tax has recently been increased, and it would be difficult to do so again without some negative consequences.** It is a useful counterpoint to the GET in terms of progressivity, but it is also amongst the highest top rates in the country, and the rates accelerate at relatively low income levels. The use of additional refundable credits or an increase in the standard deduction would benefit lower-income residents and likely return a portion of the foregone revenue as additional GET and excise tax receipts.

- **Excise taxes are a case-by-case determination.** The dedication of additional TAT to the rail project is reasonable, but it also puts the State at the high end (and in double digits) for similar accommodations taxes in other states. Other excise taxes, however, are more incidental – including cigarettes, alcohol, rental cars, etc. Given the portion exported and the fact that they have some positive effect on reducing use or consumption (particularly related to cigarettes), they appear on balance to be worth considering and should not lead to significant reductions in consumption.

- **Suggested new taxes can also improve market efficiency.** A tax on sugary beverages falls into the category of existing excise taxes that may help reduce consumption with positive externalities. The carbon tax has the potential to be a broad-based tax with significant positive environmental impacts.

While there may be concerns about regressivity, some may spur behavior changes (such as increased use of public transportation or alternative generation of electricity) that will, in the long run, reduce the magnitude of the tax. As with other taxes, it can be structured to provide other credits or exemptions to deal with impacts on lower income residents.

- **Property taxes are extremely low compared to other states.** While some of this relates to high market value, even amongst other expensive markets, Hawaii is consistently at the bottom of these rankings. It makes sense to look for ways to rebalance the system to offset some of the higher burdens of other taxes. Given the extremely low rates relative to other locations, these should not be generally burdensome to the State economy.

Summary

Taxation Principles

When discussing tax alternatives, it is important to develop a form of taxonomy for assessing and weighing them individually and as part of a collective tax structure. In analyzing these alternatives, some specific principles have been relied upon as guideposts. These include:

1. **The system should minimize interference by taxes in market decisions**
2. **The system should be reliable, stable, and sufficient**
3. **The system should be simple, allow for compliance, and ease of administration**
4. **The system should be equitable**
5. **The system should have a balanced variety of sources/broad base**

While these are all useful policy goals, their relative importance will vary based on a number of factors. A tax cannot be viewed in a vacuum, and the same applies to any particular tax principle. Of these five, the last, related to a balanced variety of sources and bases, is a pragmatic approach to tax policy but may also collide with other more 'principled' approaches to taxation. As have been noted, a broad tax base may create a reliable structure that, because of regressivity issues for consumption taxes, is not particularly equitable.

Revenue Approaches

In general, there are four ways to raise additional tax revenue. Each has advantages and disadvantages that require specific analysis:

1. **Create a new tax**
2. **Expand the base of an existing tax**
3. **Increase the rate of an existing tax**
4. **Increase taxpayer compliance with an existing tax**

Each of these strategies can be applied to different types of taxes based on consumption, income or wealth. The following identify the key types of taxes and alternatives.

- **Miscellaneous Excise Taxes.**
  1. Increase cigarette and tobacco tax rates.
  2. Increase alcohol gallonage tax rates
  3. Restore the surcharge on rental cars
  4. Institute a tax on sugary beverages
  5. Tax medical marijuana
  6. Institute a carbon tax
  7. Institute a vapor/e-cigarette tax

- **Transient Accommodation Taxes.** These are also technically excise taxes, but given the variations (and their importance as an exporting tax burden source) they are presented separately.
  8. Increase TAT and TOT rates
  9. Collect TAT o resort fees
  10. Impose TAT on alternative accommodation rentals

- **GET.**
  11. Increase the GET rate by 0.5 percent

- **Income Taxes**
  12. Move to a single 9 percent corporate net income tax rate
  13. Increase corporate net income taxes by 50 percent
  14. Increase corporate net capital gains rate to 5 percent
  15. Reduce the IIT pension exemption to $25,000
  16. Reduce the IIT foreign pension exemption to $25,000
  17. Implement an IIT rate recapture for taxpayers in the top bracket

- **Property Taxes**
  18. Eliminate the IIT deduction for property taxes paid (could be considered an income tax change)
  19. Shift certain K-12 education expenses to property taxes

- **Compliance Alternatives**
  20. Expand efforts to incent e-commerce collection of the GET
  21. Develop a tax gap program
  22. Develop additional audit programs and staff

It is notable that some of the alternatives analyzed for the 2012 TRC report were not considered (or recommended) for this study. In those instances, it was the project team's belief that circumstances had changed or other specific considerations made them less attractive than last time.

It should also be understood that some of the draft analysis was modified (primarily related to the TAT) based on actions taken by the Legislature and Governor in late August and September related to additional funding for the rail project on Oahu.

Economic Impacts

It is generally understood that all taxes will have a dampening effect on economic activity. While there is significant discussion and debate about what is the better form of tax and/or tax structure related to the economy, there is little general agreement.

In fact, it is likely that there is some truth to multiple perspectives related to the impact of taxation on the economy, and it will vary by industry, by location and over time. There are some unique characteristics of Hawaii – particularly its location away from the mainland states – that make parts of the discussion around state competition moot.

In general, the taxes that were considered by the project team were done so with a view on overall competitiveness. It is unlikely that any single tax alternative will have a dramatic impact on the economy as a whole, although isolated impacts will always be felt. In the long run, maintaining a balanced structure as a whole will likely be in the State's economic best interest.

Observations and Optimal Revenue Alternatives

The preceding discussion has identified some key funding challenges facing the State in coming years. In fact, the project team was specifically charged with studying the funding needs associated with retiree health care and pension obligations and providing revenue alternatives related to closing any potential funding gaps. Within the Possible Revenue Alternatives chapter, several alternatives are analyzed that, in the project team's opinion, are less suitable choices than others. As a result, this chapter provides the project team's suggestion for optimal revenue alternatives, should the Commission choose to recommend additional changes to the tax structure that raise revenue.

The project team has also identified issues related to changes in federal funding, the economy in general (or some of its component parts, such as tourism), and a general slowdown in state revenue collections across the U.S. These are all reasons for the State to consider possible augmentations to its current revenue structure.

At the same time, the project team – based on its experience in state government and as subject matter experts - believes that there is an additional 'case for change' related to multiple areas of the State revenue structure. This follows not only from the discussion about challenges facing the State, but also related to opportunities to create a more balanced and equitable tax structure and, in some instances, advance other tax and economic policy considerations. The following provide key observations related to this study for the 2017 TRC. While the project team provides some guidance on choices, they should be understood to be 'best options' for the State policymakers to consider should they seek a revenue solution for any of the issues identified within the report.

Future Concerns Related to Revenue Sufficiency

While the current study did not go to the lengths of the 2012 TRC study to determine whether future revenue would be sufficient to cover on-going expenses, it is likely that, based on current forecasts and likely events, the State will have to generate additional revenue to meet its ongoing requirements related to fully funding the annual required contributions to the Employer-Union Benefits Trust Fund. The existing estimated prefunding requirement for 2019, the year in which Act 268 (2013) requires full funding, is $375.2 million. While the State has made progress in working down this funding requirement, it is difficult to construct a logical set of circumstances where that level of funding can be attained without a new source (or sources) of revenue or significant reductions in current levels of spending. Of course, spending reductions are beyond the scope of this study.

The following existing conditions, both in Hawaii and among the states (and their relationship with the federal government) all suggest that states are more likely to be confronting additional revenue needs than finding ways to spend (or cut taxes) because of unexpected revenue gains. These conditions include:

- **Length of the Current Business Cycle.** The current expansion phase of the business cycle began more than 8 years ago. The average expansion cycle in modern history (1945 to 2009) has been 58.4 months.[151] While economic forecasters are not generally predicting an impending recession, it is only a matter of time before there is another contraction. When that occurs, it will be even more difficult for the State to meet this obligation.

- **Likely Reductions in Federal Support.** The current administration's budget and policy recommendations are unlikely to make it easier for state governments to balance their budgets – let

[151] National Bureau of Economic Research, "US Business Cycle Expansions and Contractions." Available at http://www.nber.org/cycles/US_Business_Cycle_Expansions_and_Contractions_20120423.pdf

alone identify existing revenue to dedicate to additional long-term needs. Proposed health care changes (particularly cuts in funding for Medicaid) would put significant pressure on the states to maintain current levels of service. Other actions, including travel and other restrictions, are also likely to create problems for key Hawaii industries, including tourism.

- **Long-term Budget Concerns.** The General Accountability Office (GAO) maintains a model of U.S. state and local governments. Its most recent update to that model, in December 2016, indicated that the state and local government sector continues to face fiscal challenges which contribute to the nation's overall fiscal challenges. GAO's simulations suggest that the sector could continue to face a gap between revenue and spending during the next 44 years. The simulation assumes that the tax structure is unchanged in the future and that the provision of real government services per capita remains relatively constant.

- **Forecast Moderate State Growth Rates.** While Hawaii has experienced moderate growth over the past five years, current Council on Revenues forecasts suggest this level of growth will continue (but need increase significantly) in the years of their prediction. That level of growth will not provide sufficient funding to make a new funding commitment of the size necessary to meet the requirement of Act 268.

Given this set of circumstances, it makes sense for the TRC to consider options and opportunities to expand State revenues. At the same time, it is also an opportune time to seek to not only expand revenue but do so in a way that aligns with good tax policy. The project team will, where appropriate, explain the rationale for alternatives to create new revenue in relationship with changes that advance other public policy interests as well.

Framework for Weighing Alternatives

During its work on this and the 2012 TRC report, the project team considered dozens of alternative approaches to raising revenue. In the end, many were rejected – both early in the process and later, after considerable research and analysis. In general, the approach for determining the options that would become optimal alternatives consisted of determining their adherence to important tax or public policy considerations and gauging their potential to raise (and continue to generate) state revenue.

Jean Baptiste-Colbert famously noted that "the art of taxation consists in so plucking the goose as to procure the largest quantity of feathers with the least possible amount of hissing." Besides adherence to tax and public policy principles (and raising revenue), some consideration is also given to those tax policy issues that cannot attract sufficient public support to become viable policies. In that respect, one recommendation from 2012, increasing the rate of the GET, is not recommended by the project team. While this rate increase would generate significant revenue (some of which could be used to offset regressive effects on lower-income Hawaii residents), the general belief of policymakers and other key stakeholders is that the current (relatively) low rate is advantageous to the State. Given that it also generally aligns with the oft-quoted tax policy preference for a tax with a broad base and a low rate, the project team acknowledges that this change is something of a non-starter.

Hawaii state statute suggests that the TRC pay attention to the principles of equity and efficiency in its deliberations. The current TRC's interest in identifying the existing tax burden, determining how much of the current taxes is exported to non-residents and identifying ways to reduce system regressivity suggests that equity is, indeed, an important consideration. Where possible, the project team has used these principles in its determination of what tax changes to recommend. At the same time, the need for additional revenue also

makes this analysis tricky – as most every tax will have some negative impacts – the 'deadweight loss' associated with taxation aligns with the concept that there is no such thing as a perfect tax.

Tax Structure Optimal Alternatives

Methods to Reduce Regressivity in Certain Taxes

Multiple sources have identified Hawaii's tax structure as regressive – a key equity concern. In particular, the broad reach of the GET is an area of concern. While the GET is a cornerstone of the current (and envisioned) tax structure, there are opportunities to reduce some of its regressive features, particularly by changes to the IIT. The following would address regressive aspects of the two largest sources of General Fund revenue.

- **Increase the Standard Deduction for IIT to $7,500 for single filers, $15,000 for married and $10,950 for head of household filers.** The State's IIT brackets begin at 1.4 percent on the first $2,400 of taxable income but rise quickly at fairly low levels of taxable income. For example, a single filer will pay a tax of 6.8 percent for taxable income over $14,400 – an amount of income that is below the federal poverty level. For low income IIT filers (who do not typically itemize deductions), the standard deduction can be used to offset tax liability – while higher income filers will typically itemize anyway. These changes would move the State's current standard deduction, which is in the lower range of all states, to among the leaders among all states, about equal with New York and trailing Connecticut and Wisconsin. It is notable that many other states with progressive individual income taxes do not reach a similar tax rate until much higher income levels. These include:

    - Arkansas, 6.9 percent at $35,101
    - California, 6.0 percent at $30,000
    - Connecticut, 6.9 percent at $200,001
    - Delaware, 6.6 percent at $60,001
    - Iowa, 6.8 percent at $31,461
    - Nebraska, 6.84 percent at $29,831
    - New Jersey, 6.37 percent at $75,001
    - New York, 6.85 percent at $215,401
    - Vermont, 6.8 percent at $37,951
    - West Virginia, 6.5 percent at $60,001

  This would address several policy issues. First, it helps address issues of vertical equity. Second, it ameliorates any concerns that eliminating the deduction for property taxes will negatively impact lower income individuals. Finally, it is one method for addressing concerns about the regressive nature of the GET. Using the PFM model, it is estimated that the first year reduction in revenue associated with this increased standard deduction would be $61.0 million.

- **Double the refundable Food/Excise Tax IIT credit. T**he application of the GET to food has both positive and negative impacts. On the positive side, it helps to broaden the tax base and makes it more reliable during economic downturns. On the negative side, it makes the tax structure more regressive, as lower income cohorts generally spend a greater share of their income on food than higher income cohorts.

  Hawaii currently provides a refundable IIT credit based on income, ranging from $35 per qualified exemption for those with AGI of $40,000 to $50,000 to $110 for those with AGI under $5,000. The following is the current credit at various income levels:

Adjusted Gross Income	Tax Credit per Qualified Exemption
Under $5,000	$110
$5,000 under $10,000	$100
$10,000 under $15,000	$85
$15,000 under $20,000	$70
$20,000 under $30,000	$55
$30,000 under $40,000	$45
$40,000 under $50,000	$35
$50,000 and over	$0

As an example, a qualified family of four with an AGI of $20,000 would currently receive an IIT credit of $220. It is notable that, using income shares for similar families around the country, a family with income before taxes of $25,000 would spend approximately 13.7 percent of their income on food. This would equate to approximately $3,425 – and the 4.0 percent GET would total $137.216.

In tax year 2014, residents claimed a total of $27.7 million in refundable Food/Excise Tax IIT credits.[152] Because the credit is associated with low income, the project team used the number of residents below the poverty level as a proxy for future credits paid. Between 2010 and 2015, the number of Hawaii residents living in poverty decreased by a CAGR of 2.1 percent.[153] Therefore, it is estimated that doubling the amount of the credit would result in an additional reduction in revenues equal to $25 million in 2018, decreasing to $23 million by 2023.

Methods to Export a Share of the Tax Burden to Non-residents

Given its destination location and home to thousands of federal civilian and military personnel, the State has an opportunity to export a significant portion of its tax burden. The following optimal alternatives address this approach.

- **Increase cigarette and tobacco tax rates (Alternative 1).** The State's cigarette tax is already among the highest rates in the country. According to the FTA, Hawaii's rate, at $3.20 per pack, is the fifth highest among the 50 states. Hawaii has a history of raising this tax on a regular basis, and the basis for doing so is understandable. First, Hawaii's island location makes it relatively immune from issues of cross-border competition – those who wish to smoke cigarettes in the State have fewer options than in other states for obtaining lower priced cigarettes. Second, there is a logical basis for increased tax rates for cigarettes. While the tax rate is high, the calculations of the negative societal impacts from cigarette smoking suggest that tax increases are justified. According to the Center for Disease Control (CDC), the health and other societal costs associated with consumption of a pack of cigarettes sold in Hawaii is $10.81, while state and federal taxes per pack total $4.21. Finally, raising the tax has the added benefit of generally reducing smoking for key target populations, such as children. The CDC argues that increasing the price of cigarettes reduces demand and reduces cigarette use in the United States overall, particularly among youths and young adults.

  It has generally been concluded that the cigarette tax is a regressive tax. At the same time, research suggests that higher taxes also encourage lower income individuals to stop smoking – which has a large

[152] Department of Taxation, Tax Credits Claimed by Hawaii Taxpayers, Tax Year 2014.
[153] US Census Bureau American Community Survey 1-Year Estimates

health and economic benefit in the long run. In general, increases in this and other excise taxes also help to maintain a sufficiently broad tax base that also exports a share of that burden to non-residents.

- **Increase gallonage taxes on beer, wine and distilled spirits (Alternative 2).** Current taxes for beer, wine and distilled spirits are generally among the higher state taxes in the nation. The current tax on beer, $0.93 a gallon, is the second highest among the states, trailing only Alaska and well above the median rate of $0.20. The tax on distilled spirits, $5.98 a gallon, is seventh highest among the 31 states that impose a gallonage tax – and well above the median of $3.75 a gallon. Finally, the tax on wine, $1.38 a gallon, is the eighth highest of the 48 states that impose a gallonage tax – again, well above the median of $0.72 a gallon.

  While these tax rates are comparatively high, similar arguments can be made for a moderate increase in these taxes as for the cigarette and tobacco tax: there are health and other positive externalities associated with reduced consumption, and there is little real risk of cross border competition. In this respect, it is notable that the one state that has a higher excise tax on all three categories (beer, wine and distilled spirits) is Alaska – the other U.S. state with little concern for cross border competition.

  During discussions with the Department of Taxation, their regression analysis suggests a connection between performance of the leisure and hospitality industry and General Fund revenue performance from these excise taxes; this suggests that a significant portion of the tax is exported.

  Among other tax principles, while it is often argued that these excise taxes are generally regressive, the BLS purchasing shares data does not support this. According to that data, alcohol purchases for all consumers totaled 0.9 percent of income; at the lower income levels the share of income devoted to alcohol purchases was actually lower (between 0.6 and 0.7 percent at income levels between $5,000 and $29,999), while levels above $30,000 were generally in the range of 0.8 to 0.9 percent.

  The analysis built into the model's alternate revenue structure scenario would increase each of these taxes by approximately 15 percent.

- **Restore the surcharge on rental cars (Alternative 3).** As with the TAT, the State has raised this tax in the past to assist in closing budget gaps. In 2011, the State increased the rental motor vehicle surcharge tax from $3.00 per day to $7.50 per day from July 1, 2011 to June 30, 2012. The Legislation deposited a portion of the surcharge ($4.50 per day) in the State's General Fund and suspended the rental motor vehicle customer facility charges for the period of July 1, 2011 to June 30, 2012.

  The temporary $7.50 per day surcharge expired on June 30, 2012 and reverted to the $3.00 per day surcharge. The FY 2012 additional surcharge provided a one-year revenue increase of approximately $61 million to the State's General Fund.

  As with the TAT, it is evident that a considerable portion of this excise tax is exported. Restoring the tax to previous levels will also broaden the excise tax base. As with the TAT, there is also a case to be made that the State (and consumers) have experience with the tax – in line with the concept that 'an old tax is a good tax.'

Methods to Improve Economic Efficiency

While not specifically identified by the current TRC in the charge for this study, economic efficiency is an important system characteristic, and the statute that created the Tax Review Commission specifically identifies efficiency and equity as standard for analyzing the Hawaii tax structure. The following two recommended alternatives *may* further system regressivity, but the project team believes their advantages outweigh these concerns.

First, both are new forms of taxes with significant revenue-raising potential. Given the State's need to identify methods to fund ongoing commitments, they are worth consideration. Second, they both create mechanisms to further positive economic and/or social outcomes. Finally, some of the regressive effects from the taxes may be ameliorated by other changes in the tax structure or, more significantly, changes in behavior that will ultimately benefit the State.

- **Institute a Tax on Sugary Beverages (Alternative 4).** There is little doubt that obesity is a major public health concern in the U.S. Sugared non-alcoholic beverages (primarily soda but also other sweetened drinks) have been identified as a significant source of 'empty calories' that create a variety of negative health outcomes or risks.

  There have been past attempts – including in various states about a decade ago – to use a tax on sugared beverages as a way of addressing these concerns. It is notable that some states with food exemptions from their general sales tax separate out candy as taxable, based on similar considerations and concerns.

  More recently, a number of local governments have instituted this form of tax, generally at a rate of between one and two cents per ounce. While the taxes have proved controversial, they have provided an opportunity to observe the tax in action and generate studies on its efficacy. It is notable that one study, from its use in Berkeley, California, found positive outcomes in terms of individuals choosing non-sugared beverages – so that overall purchases didn't change, but what consumers purchased did. Of course, this can lead to a reduction in the tax revenue, but the health outcomes would likely still be positive.

  From the project team's perspective, the tax should be structured to emphasize the positive health outcomes. Philadelphia primarily structured its similar tax as a revenue raising method – as a result, they tax no calorie soft drinks, which certainly creates mixed messages.

  There have been reports of negative impacts in some cities related to cross-border competition. These issues are far less likely to be a major concern for Hawaii. Of course, some of the revenue raised will also be exported.

  The project team did not recommend this tax in 2012. However, the experience with administration and implementation of the tax – and some studies on its impact – lead the project team to conclude that the tax is now worth consideration as an optimal revenue alternative. While the tax is considered regressive, sugared beverages are far from a necessity. There are (and probably will be even greater) options to avoid the tax by purchasing other non-taxed beverages. These options will also generally help improve health outcomes.

- **Institute a Carbon Tax (Alternative 6).** The State of Hawaii is rightly proud – and, from a tourism standpoint – concerned that it maintain its natural beauty and a healthy environment. The State has exhibited national leadership in this area for many years, as evidenced by its passage a decade ago of the Global Warming Solutions Act of 2007.

A current 'market failure' is the inability to factor in the negative impacts to the environment from a variety of activities, particularly the burning of fossil fuels in manufacturing, transportation and other activities (including heating and cooling homes and businesses). The carbon tax is one mechanism to correct that current imbalance.

Because the current economy is very dependent on carbon-based fuels, the tax has the potential to raise significant revenue. Of course, it can be structured in ways to vary that revenue effect. At the same time, the ultimate goal of the tax would be to either change behavior or provide a mechanism to recoup the costs associated with the activities that are harming the environment.

A carbon tax has been proposed in a number of states but, to date, not enacted in any of them. However, in many respects, Hawaii is the perfect state to be 'first in the nation' in enacting this tax. First, it does not face some of the concerns about cross-border effects (and inter-state commerce transportation issues) that have complicated its possible implementation and application in other states. Second, Hawaii's dedication to maintaining its natural resources is long-standing and evident in a variety of areas. This complements those efforts.

There is no doubt that some of its application (such as increasing prices for motor fuels) would have regressive impacts – and, unlike the sugared beverages tax, some of these activities would be considered essential. Other aspects of a carbon tax, however, would have broader tax (and societal) impacts that would be shared by business and industry. From the project team's perspective, this is a balancing decision where the positive impacts on efficiency (and the opportunity to raise needed revenue from a new revenue source) outweigh the negative effects.

Changes to Improve System Administration and Collection

In the long run, improved technology, processes and reporting can help increase compliance and advance data-driven policy outcomes. Further, many states are developing legislative strategies to induce greater voluntary collection of general sales taxes that could be used to do the same for the GET. The following can assist in advancing those efforts.

- **Develop tax gap systems to identify under-payment and non-payment of taxes (Alternative 21).** Many states have implemented sophisticated data warehouse systems that assist with identifying non-filers of tax returns and non-payers of taxes. These systems are often augmented with business intelligence software and servers. In many instances, vendors are willing to negotiate performance-based solutions, where the newly generated tax revenue is used to pay for the system. As an example, the State of Iowa entered into a three year partnership with a vendor to design, develop and implement a data warehouse solution in November 1999 and realized the first revenues from the program five months later. Within four years, the program had generated over $71 million in new revenue. It appears that this type of initiative is contemplated once the current tax system implementation is completed.

  In general, these approaches align with tax policy best practices – they seek to collect taxes that are rightly due to the State. Taxpayers who make the effort to pay the taxes they are lawfully required to pay should be supportive of these efforts. This can also build confidence in the system and, as compliance increases, heighten the awareness of non-compliant taxpayers that the State is likely to find them and seek payment and penalties.

- **Expand Efforts to Incent E-Commerce Collection of GET (Alternative 20).** Many states are aggressively pursuing methods to establish legal nexus (often through the standard known as economic nexus) or otherwise incent e-commerce providers without a physical presence in Hawaii to collect GET on Internet-based transactions with Hawaii residents. Efforts to establish legal 'economic nexus' usually focus on a dollar value of sales and/or transactions into the State as requiring the collection and remittance of general sales tax. The States of Alabama (which is enforcing its standard administratively) and South Dakota (which passed a law to establish its standard) are prominent in this effort. Alabama collected $39.1 million in FY 2017 as a result of its program. South Dakota's law was immediately challenged in court (as has been the case in other states as well) and has been suspended until the legal challenge has been resolved. It is notable that South Dakota (a state without an income tax) has a particular interest in overturning Quill, and its legislation has been focused on being the test case to do so.

  Perhaps the more promising approach is that undertaken by Colorado (and mimicked by other states). Rather than seeking to compel collection, Colorado focuses on requiring reporting for those selling into the State. The expectation is that the reporting requirements (to both the State and the purchaser) to the e-tailer would prove more burdensome than simply collecting the tax. The advantage of this approach is that it has already survived state and federal court challenges (with the U.S Supreme Court declining to review it).

  The revenue potential is real – and the updated estimates from the NCSL are reflected. While there are real costs associated with administering these changes, the continued growth of this economic activity warrants action. While the project team did not recommend this in 2012, there has been sufficient activity among other states for the team to believe it now meets a cost-benefit analysis.

Methods to Expand the Tax Base

Expanding the base upon which taxes are applied helps to keep actual tax rates lower. This is important, because low rates generally have less impact on consumer choices and market efficiency. In some situations, base broadening may also support greater horizontal and vertical equity. The following tax changes are recommended and built into the model's 'reformed tax structure scenario.'

- **Reduce the Pension Exemption in the IIT (Alternative 15).** As discussed in the previous chapter, tax treatment of pension income varies widely among the states. It ranges from states that fully exempt to those that fully tax all pension income – with a wide variety of methods between these polar opposites.

  As a starting point, Hawaii breaks with the federal definition of taxable income as it relates to both pension and social security income. The federal government taxes all or a portion of pension or annuity payments from a qualified employer retirement plan.204 [154] While the State may tax some portion of the payments from a qualified private employer retirement plan, it does not tax pension benefits from public pension systems, including all federal, state/local or out-of-state government pensions.[155] Given the aging of the Hawaii population, it is reasonable to assume that the value of this exemption will grow in coming years. While the dollar value of the exemption of this income grows, the State's obligations to fund the benefits of its public employee retirement system will also grow.

[154] See IRS Tax Topics, Topic 410, Pensions and Annuities, at http://www.irs.gov/taxtopics/tc410.html
[155] A list of state treatment of pension and retirement income is found in the Appendices.

Given that the current tax system entirely exempts this pension income from taxation (regardless of the amount per year), taxing these public pensions (and allowing for a $25,000 exception for lower-income Hawaii residents), will improve overall regressivity. At the same time, a case can be made that the income generating potential of retirees is more limited than others pre-retirement age.

- **Eliminate the Deduction for Property Taxes Paid (Alternative 18).** Under the U.S tax code, any state, local, or foreign taxes on real property levied for the general public welfare are deductible. Most states that use federal adjusted gross income as the starting point for state IIT purposes conform to federal law. However, there are states that do not. Among these states are Minnesota, Nebraska, Wisconsin and, to a limited extent, New Jersey.

  Hawaii is unique among the states in its full state support for K-12 education, which in most states is a shared state-local responsibility, with the local funding primarily supported by property taxes. Given that K-12 funding is on average the largest expenditure category for local governments in the U.S, the State is making an extraordinary funding commitment to local schools.

  In Hawaii, because the General Fund supports local K-12 school budgets, education expenditures do not have to be calculated when determining property tax rates. In essence, those who pay taxes that go into the General Fund are subsidizing property taxpayers by this funding approach. It can be argued that this is an equity issue, as property owners are receiving a benefit that they would not receive in any other state.

  As with the recommendations to the 2012 TRC, the project team believes that eliminating this deduction is a rational revenue approach. By any measure of property tax rates, those in Hawaii are the lowest or among the lowest for every class of property.

- **Tax Medical Marijuana (Alternative 5).** Legal marijuana (for both medical and recreational use) consumption is becoming a more prevalent activity among U.S. states. It is an activity that shares many of the characteristics of other consumption subject to an excise tax. From the project team's perspective, this is a base-broadening tax on consumption. While it is not a particularly large revenue source at the current time, should the State choose to legalize recreational marijuana use, it will be important to have a tax structure in place (and an understanding of the implementation and administration issues associated with it). For that reason, it is a good time to apply this tax – even though it will have minimal revenue impact, at least in the short-term.

- **Institute a Vapor/e-Cigarette Tax (Alternative 7).** As with marijuana, this is an emerging area of consumption. Much of the activity around these products is associated with a switch in consumption from cigarettes and other tobacco products. Given that switch, it makes sense for the State to create an excise tax for this form of consumption as a form of replacement for those who switch from other tobacco products to these. As with medical marijuana, the revenue impact in the short-term is minimal, but it helps to act as a method for 'propping up' cigarette and tobacco tax revenues. As with cigarettes and tobacco products, the tax is likely a regressive one, although this consumption is certainly not a necessity.

Less Desirable Alternatives

In several instances, the project team believes an analyzed tax change would be suboptimal. The following identify these and provide a brief rationale for the decision:

- **Increase the TAT and TOT Rates (Alternative 9).** A special legislative session concerning continued funding for the rail project on Oahu was held in late August, and a plan was approved and signed by Governor Ige on September 5, 2017. That plan raises the statewide TAT by 1 percent for the next 13 years. Given the fact that the increase is nearly equal to the alternative proposed by the project team, it is unlikely that the legislature will again increase the TAT until the impact of the rail-related increase is known.
- **Corporate rate structure changes (Alternatives 12-14).** The TRC has independently commissioned a study on corporate income tax by a notable expert on this subject, Dr. Donald Rousslang. Given his experience and expertise in this area, the project team defers to his study and recommendations.
- **Eliminate the Exemption for Foreign Pension Income Over $25,000 (Alternative 16).** The project team prefers to treat similar types of pensions similarly for state tax purposes. There are also issues with getting solid data on the share of current public pensions that would be classified as 'foreign pensions.'
- **Implement a Personal Income Tax Rate Recapture (Alternative 17).** While this has the potential to raise significant new revenue, it would create very high effective tax rates at income levels that are out of balance with all other state individual income tax structures.
- **Make the State Earned Income Tax Credit a refundable credit.** Given that the creation of the credit was enacted late in the project – and that the Legislature chose not to make it a refundable credit – the project team chose not to recommend immediate changes to the program. Some concerns over the administrative costs have been raised with other state EITCs, and this issue would be better addressed after some state experience with the existing program.
- **Shift Certain K-12 Education Expenses to Property Taxes to Lower States Costs (Alternative 19).** Hawaii as a State has made a significant commitment to assuming the costs of K-12 education at the state level. While this would move Hawaii more to the national model, using tax policy to drive education policy is probably not the correct model for changing either system.
- **Additional Audit Programs (Alternative 22).** While other states have been successful with increasing Audit staff and efforts, the current collection system modernization should be completed before the State initiates new activity in this area.

Based on the optimal revenue alternatives, the following is a rough estimate of possible additional (or reduced) revenue in the first full year (based on current revenue estimates for FY2017) of implementation. Results will, of course, vary, depending on timing and issues of statutory construction.

Optimal Alternatives Fiscal Impact (FY2018)

Optimal Alternative		Estimated Additional Revenue (millions)	Recommended Revenue (millions)
1	Increase the Cigarette and Tobacco Tax Rates	$20.3	$20.3
2	Increase Gallonage Taxes on Beer, Wine and Distilled Spirits	$5.2	$5.2

Optimal Alternative		Estimated Additional Revenue (millions)	Recommended Revenue (millions)
3	Restore the Surcharge on Rental Cars	$18.5	$18.5
4	Institute a Tax on Sugary Beverages	$48.8	$48.8
5	Tax Medical Marijuana	$13.2	$13.2
6	Institute a Carbon Tax	$365.0	$365.0
7	Institute a Vapor/e-Cigarette Tax	$4.5	$4.5
8	Increase the GET Rate	$415.0	
9	Increase the TAT and TOT Rates	$22.5	
10	Begin Collecting TAT on Resort Fees	$2.6	$2.6
11	Begin Imposing TAT on Alternative Accommodation Rentals	$135.7	$135.7
12	Move to a Single 9 Percent Corporate Net Income Tax Rate	$103.0	
13	Increase Corporate Net Income Taxes by 50 Percent	$41.7	
14	Increase Corporate Net Capital Gains Rate to 5 Percent	$6.4	
15	Reduce the Pension Exemption in the IIT	$47.8	$47.8
16	Eliminate Exemption for Foreign Pension Income Over $25,000	$23.9	
17	Implement a Personal Income Tax Rate Recapture	$203.2	
	Increase the Standard Deduction for IIT to $7,500 for single filers, $15,000 for married and $10,950 for head of household filers	-$61.0	-$61.0
	Double the refundable Food/Excise Tax IIT credit	-$25.0	-$25.0
18	Eliminate the Deduction for Property Taxes Paid	$31.0	$31.0
19	Shift Certain K-12 Education Expenses to Property Taxes to Lower State Costs	TBD	
20	Expand Efforts to Incent E-Commerce Collection of GET	$35.0	$35.0
21	Develop Tax Gap Systems to Identify Under-payment and Non-payment of Taxes	TBD	
22	Additional Audit Programs	TBD	
		TOTAL	**$641.6**

Summary

Jean Baptiste-Colbert, the former Finance Minister of France, famously noted that "the art of taxation consists in so plucking the goose as to procure the largest quantity of feathers with the least possible amount of hissing." While this is a pragmatic approach to determining tax policy, the Hawaii Legislature has provided additional concepts that the TRC is to weigh, including principles of equity and efficiency. Throughout the analysis, the project team has sought to weigh the principled and the practical in the analysis and discussion.

It should be noted and understood that there is no perfect tax: every tax will have some negative impact on the overall economy and consumption. Given that part of the charge provided to the project team was to identify alternatives to raise additional revenue, it should be accepted that these will come at a cost.

Tax Structure Optimal Alternatives

- **Methods to Expand the Tax Base**
  1. Reduce the IIT pension exemption to $25,000
  2. Eliminate the deduction for property taxes paid
  3. Tax medical marijuana
  4. Institute a vapor/e-cigarette tax

- **Methods to Reduce Tax System Regressivity**
  5. Increase the IIT standard deduction
  6. Double the refundable food/excise tax credit

- **Methods to Export a Share of the Tax Burden to Non-residents**
  7. Increase cigarette and tobacco tax rates
  8. Increase gallonage taxes on alcohol
  9. Expand the taxation of alternative accommodations
  10. Restore the surcharge on rental vehicles

- **Methods to Improve Economic Efficiency**
  11. Institute a tax on sugary beverages (also expands the tax base)
  12. Institute a carbon tax (also expands the tax base)

- **Changes to Improve System Administration and Collection**
  13. Develop tax gap systems to identify under-payment/non-payment of taxes
  14. Expand efforts to incent collection of GET on e-commerce sales

Appendices

Appendix A: List of Interviews, Discussion Groups and Presentation Groups

Agency/Affiliation	Interviewee(s)
Council on Revenues	Kurt Kawafuchi Jack Suyderhoud Marilyn Niwao John Roberts
Department of Budget and Finance	Wes Machida Neal Miyahira Laurel Johnston Sharon Kotaka
Department of Business, Economic Development and Tourism	Dr. Eugene Tian Dr. Joseph Roos
Department of Taxation	Ted Shiraishi Titin Sakata Donald Rousslang Seth Colby Joshua Lee
Hawaii Appleseed Center	Nicole Woo
Hawaii Chamber of Commerce	Reg Baker
Hawaii House of Representatives	Rep. Isaac Choy Rep. Scott Saiki Rep. Sylvia Luke
Hawaii Senate	Sen. J. Kalani English Sen. Ronald Kouchi
Hawaii Tax Foundation	Tom Yamachika
Hawaii Tourism Authority	George Szigeti Randy Baldemor Daniel Nahoopi Charlene Chan
Tax Review Commission	Colleen Takamura, Chair Vaughn Cook, Vice Chair Ray Blouin Nalani Kaina John Knox Dawn Lippert Billy Pieper Randy Iwase (prior TRC)
University of Hawaii	James Mak (Retired)
University of Hawaii Board of Regents	Randy Moore

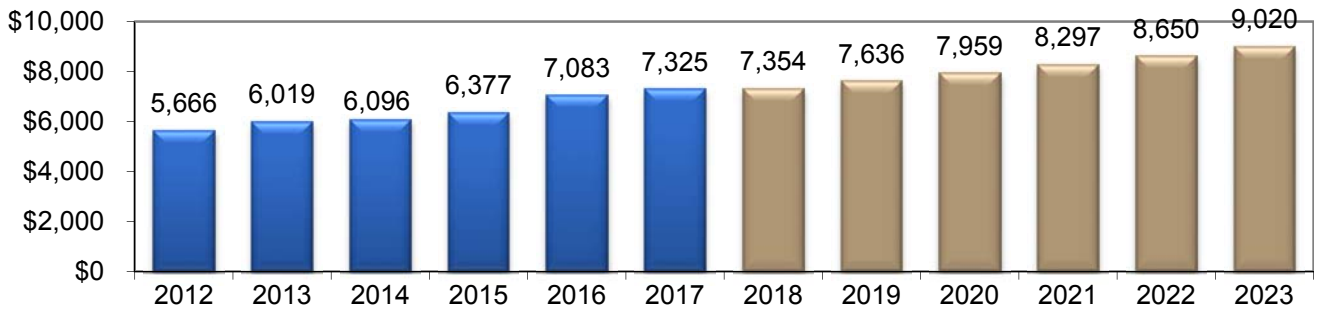
Appendix B: Revenue Growth Rates and Model Outputs

Table B1: Model Growth Rates

Growth Rate Name	2017	2018	2019	2020	2021	2022	2023
General Excise and Use Tax	3.87%	3.89%	3.47%	3.24%	3.57%	3.46%	3.66%
Individual Income Tax	-0.45%	4.27%	4.93%	4.94%	6.29%	6.36%	6.24%
Corporate Income Tax	2.11%	-12.31%	9.91%	53.01%	1.61%	4.31%	1.20%
Public Service Company Tax	3.19%	3.37%	3.47%	3.34%	3.36%	3.37%	3.37%
Tax on Insurance Premiums	2.42%	3.25%	2.38%	2.50%	3.09%	3.12%	3.22%
Cigarette and Tobacco Tax	2.35%	2.15%	3.59%	3.19%	3.44%	3.40%	3.46%
Liquor Tax	0.90%	0.90%	0.90%	0.79%	0.80%	0.80%	0.80%
Tax on Banks and Other Financial Corps.	75.06%	15.00%	-21.90%	-15.08%	-1.68%	-10.09%	-20.00%
Inheritance and Estate Tax	1.74%	1.84%	1.89%	1.82%	1.83%	1.84%	1.84%
Conveyance Tax	3.31%	5.32%	5.56%	8.37%	12.43%	11.53%	10.98%
Miscellaneous Taxes	0.87%	-0.04%	-0.05%	-0.05%	-0.04%	-0.05%	-0.05%
Transient Accommodations Tax	6.83%	11.15%	6.21%	5.75%	5.40%	5.00%	4.79%
Licenses & Permits	4.85%	-1.16%	-1.46%	0.00%	0.00%	0.00%	0.00%
Revenues from Use of Money and Property	-3.54%	13.30%	-10.50%	-5.55%	-6.13%	-7.01%	-7.97%
Federal	-23.75%	-2.28%	-2.86%	-3.21%	-3.71%	-0.45%	0.00%
Revenues from Other Agencies	-37.24%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Charges for Current Services	6.97%	-24.67%	3.34%	2.14%	2.53%	2.46%	2.85%
Fines, Forfeits & Penalties	45.83%	-1.40%	0.98%	-0.97%	0.98%	-0.97%	0.98%
Repayment of Loans & Advances	353.49%	-9.88%	13.38%	5.59%	5.62%	5.63%	5.64%
Non-Revenue Receipts	13.68%	-27.31%	1.63%	1.63%	1.63%	1.64%	1.65%
Judiciary	2.65%	1.44%	1.78%	1.54%	1.55%	1.56%	1.56%

Source: COR Forecast as of May 30, 2017

Table B2: Baseline General Fund Revenue Projection (in millions)



Appendix C: Hotel/Motel and Sales Tax Rates by State, 2015

Rank	State	Sales Tax Rate	Lodging Tax Rate	Total Rate
1	Connecticut	6.35%	8.65%	**15.00%**
2	Maine	5.50%	8.00%	**13.50%**
3	**Hawaii**	**4.00%**	**9.25%**	**13.25%**
4	Rhode Island	7.00%	6.00%	**13.00%**
5	New Jersey	7.00%	5.00%	**12.00%**
6	New Hampshire		9.00%	**9.00%**
6	Vermont	6.00%	3.00%	**9.00%**
8	Delaware		8.00%	**8.00%**
8	Idaho	6.00%	2.00%	**8.00%**
10	Indiana	7.00%		**7.00%**
10	Mississippi	7.00%		**7.00%**
10	Montana		7.00%	**7.00%**
10	Tennessee	7.00%		**7.00%**
14	Kentucky	6.00%	1.00%	**7.00%**
14	South Carolina	6.00%	1.00%	**7.00%**
16	Minnesota	6.88%		**6.88%**
17	Arkansas	6.50%		**6.50%**
17	Nebraska	5.50%	1.00%	**6.50%**
17	Washington	6.50%		**6.50%**
20	Kansas	6.15%		**6.15%**
21	Florida	6.00%		**6.00%**
21	Illinois		6.00%	**6.00%**
21	Maryland	6.00%		**6.00%**
21	Michigan	6.00%		**6.00%**
21	Pennsylvania	6.00%		**6.00%**
21	Texas		6.00%	**6.00%**
21	West Virginia	6.00%		**6.00%**
28	Ohio	5.75%		**5.75%**
29	Massachusetts		5.70%	**5.70%**
30	Arizona		5.50%	**5.50%**
30	South Dakota	4.00%	1.50%	**5.50%**
32	New Mexico	5.13%		**5.13%**
33	Iowa	5.00%		**5.00%**
33	North Dakota	5.00%		**5.00%**
33	Wisconsin	5.00%		**5.00%**
36	North Carolina	4.75%		**4.75%**
37	Utah	4.70%		**4.70%**
38	Oklahoma	4.50%		**4.50%**
39	Virginia	4.30%		**4.30%**
40	Missouri	4.23%		**4.23%**
41	Alabama		4.00%	**4.00%**

Rank	State	Sales Tax Rate	Lodging Tax Rate	Total Rate
41	Georgia	4.00%		**4.00%**
41	Louisiana	4.00%		**4.00%**
41	New York	4.00%		**4.00%**
41	Wyoming	4.00%		**4.00%**
46	Colorado	2.90%		**2.90%**
47	Oregon		1.00%	**1.00%**
48	Alaska			**0.00%**
48	California			**0.00%**
48	Nevada			**0.00%**

Source: 2016 HVS Lodging Tax Report

Appendix D: Corporate Income Tax Rates and Brackets by State, 2017

State	Rates	Brackets
Alabama	6.50%	$0
Alaska	0.00%	$0
	2.00%	$25,000
	3.00%	$49,000
	4.00%	$74,000
	5.00%	$99,000
	6.00%	$124,000
	7.00%	$148,000
	8.00%	$173,000
	9.00%	$198,000
	9.40%	$222,000
Arizona	4.90%	$0
Arkansas	1.00%	$0
	2.00%	$3,000
	3.00%	$6,000
	5.00%	$11,000
	6.00%	$25,000
	6.50%	$100,000
California	8.84%	$0
Colorado	4.63%	$0
Connecticut	9.00%	$0
Delaware	8.70%	$0
Florida	5.50%	$0
Georgia	6.00%	$0
Hawaii	4.40%	$0
	5.40%	$25,000
	6.40%	$100,000
Idaho	7.40%	$0
Illinois	7.75%	$0
Indiana	6.25%	$0

State	Rates	Brackets
Iowa	6.00%	$0
	8.00%	$25,000
	10.00%	$100,000
	12.00%	$12,000
Kansas	4.00%	$0
	7.00%	$50,000
Kentucky	4.00%	$0
	5.00%	$50,000
	6.00%	$100,000
Louisiana	4.00%	$0
	5.00%	$25,000
	6.00%	$50,000
	7.00%	$100,000
	8.00%	$200,000
Maine	3.50%	$0
	7.93%	$25,000
	8.33%	$75,000
	8.93%	$250,000
Maryland	8.25%	$0
Massachusetts	8.00%	$0
Michigan	6.00%	$0
Minnesota	9.80%	$0
Mississippi	3.00%	$0
	4.00%	$5,000
	5.00%	$10,000
Missouri	6.25%	$0
Montana	6.75%	$0
Nebraska	5.58%	$0
	7.81%	$100,000
Nevada		

State	Rates	Brackets
New Hampshire	8.20%	$0
New Jersey	9.00%	$100,000
New Mexico	4.80%	$0
	6.20%	$500,000
New York	6.50%	$0
North Carolina	3.00%	$0
North Dakota	1.41%	$0
	3.55%	$25,000
	4.31%	$50,000
Ohio		
Oklahoma	6.00%	$0
Oregon	6.60%	$0
	7.60%	$1,000,000
Pennsylvania	9.99%	$0
Rhode Island	7.00%	$0
South Carolina	5.00%	$0
South Dakota	None	
Tennessee	6.50%	$0
Texas		
Utah	5.00%	$0
Vermont	6.00%	$0
	7.00%	$10,000
	8.50%	$25,000
Virginia	6.00%	$0
Washington		
West Virginia	6.50%	$0
Wisconsin	7.90%	$0
Wyoming	None	
DC	9.00%	$0

Source: Tax Foundation – State Corporate Income Tax Rates and Brackets

Appendix E: State Treatment of Pension Income, Tax Year 2015

State	Private	State & Local	Federal Civilian	Military
Alabama	State calculation	Most exempt	Exempt	Exempt
Alaska				
Arizona	None	$2,500	$2,500	$2,500
Arkansas	$6,000	$6,000	$6,000	$6,000
California	None	None	None	None
Colorado	$20,000/$24,000	$20,000/$24,000	$20,000/$24,000	$20,000/$24,000
Connecticut	None	None/10% Exempt	None	Exempt
Delaware	$2,000/$12,500	$2,000/$12,500	$2,000/$12,500	$2,000/$12,500
District of Columbia	None	None	None	None
Florida				
Georgia	$65,000/$35,000	$65,000/$35,000	$65,000/$35,000	$65,000/$35,000
Hawaii	**State calculation**	**Exempt**	**Exempt**	**Exempt**
Idaho	None	$31,956/$47,934	$31,956/$47,934	$31,956/$47,934
Illinois	State calculation	Exempt	Exempt	Exempt
Indiana	None	None	$8,000	$5,000
Iowa	$6,000	$6,000	$6,000	Exempt
Kansas	None	Some exempt	Exempt	Exempt
Kentucky	$41,110	$41,110/Exempt	$41,110/Exempt	$41,110/Exempt
Louisiana	$6,000	$6,000/Exempt	Exempt	Exempt
Maine	$10,000	$10,000	$10,000	$10,000
Maryland	$29,200	$29,200	$29,200	$29,200
Massachusetts	None	Exempt	Exempt	Exempt
Michigan	$20,000/$49,811	$20,000/$49,811	$20,000/$49,811	Exempt
Minnesota	None	None	None	None
Mississippi	Exempt	Exempt	Exempt	Exempt
Missouri	$6,000	$36,976	$36,976	90% exempt
Montana	$3,980	$3,980	$3,980	$3,980
Nebraska	None	None	None	State calculation
Nevada				
New Hampshire	Exempt	Exempt	Exempt	Exempt
New Jersey	$15,000	$15,000	$15,000	Exempt
New Mexico	None	None	None	None
New York	$20,000	Exempt	Exempt	Exempt
North Carolina	None	Some exempt	Some exempt	Some exempt
North Dakota	None	None	None	None
Ohio	$200 credit	$200 credit	$200 credit	Exempt
Oklahoma	$10,000	$10,000	$10,000	$10,000/75%

State	Private	State & Local	Federal Civilian	Military
Oregon	9% credit	9% credit	9% credit/pre-1991 exempt	9% credit/pre-1991 exempt
Pennsylvania	Exempt	Exempt	Exempt	Exempt
Rhode Island	None	None	None	None
South Carolina	$3,000/$10,000	$3,000/$10,000	$3,000/$10,000	$3,000/$10,000
South Dakota				
Tennessee	Exempt	Exempt	Exempt	Exempt
Texas				
Utah	None	None	None	None
Vermont	None	None	None	None
Virginia	None	None	None	Most taxable
Washington				
West Virginia	None	$2,000/Exempt	$2,000	$22,000
Wisconsin	$5,000	State calculation	State calculation	Exempt
Wyoming				

Source: Wisconsin Legislative Fiscal Bureau (January 2017)