

INDEPENDENT FISCAL OFFICE

FY 2023-24

Budget
Hearing

MARCH
2023

SENATE APPROPRIATIONS COMMITTEE



INDEPENDENT FISCAL OFFICE

March 20, 2023

Dear Chairmen and Members of the Senate Appropriations Committee:

Thank you for the opportunity to submit materials in advance of the budget hearing for the Independent Fiscal Office (IFO). The *2023-2024 Governor's Executive Budget* proposes an appropriation of \$2.34 million for the office, the same amount appropriated for the current year.

In addition to questions about the IFO's budget, past hearings have included discussions regarding Pennsylvania's economic outlook, labor market, revenue collections, demographics, long-term fiscal outlook and natural gas trends. This submission includes data, tables and graphs that have been requested in prior budget hearings. We trust they will be helpful as you consider the FY 2023-24 budget proposal.

Functions of the IFO include the preparation of monthly reports on the state economy and revenue collections, periodic revenue estimates, publication of performance-based budgeting and tax credit evaluation reports, coordinating analyses and issuing actuarial notes for legislation that proposes changes to public employee pension or retirement plans, cost analyses of approved collective bargaining agreements, dynamic modeling, and special reports and research briefs on various budget and economic topics.

Questions regarding this packet can be submitted to contact@ifo.state.pa.us.

Sincerely,

A handwritten signature in blue ink that reads "Matthew J. Knittel".

Matthew J. Knittel
Director, Independent Fiscal Office

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Independent Fiscal Office – Overview

The office was created by Act 120 of 2010 and enters its eleventh year of operation. The office currently employs 11 staff: 1 director, 1 manager and 9 analysts. The FY 2023-24 Executive Budget proposes an appropriation of \$2.34 million for the office. That amount includes \$200,000 of dedicated funding for work related to pension analysis.

Mission Statement

The Independent Fiscal Office (IFO) provides revenue projections for use in the state budget process along with impartial and timely analysis of fiscal, economic and budgetary issues to assist Commonwealth residents and the General Assembly in their evaluation of policy decisions. In that capacity, the IFO does not support or oppose any policy it analyzes, and will disclose the methodologies, data sources and assumptions used in published reports and estimates.

Role in the Budget Process

The statute that created the IFO specifies several dates that the office is required to provide budget-related information to policymakers. They are as follows:

- November 15** Prepare an assessment of the state’s fiscal condition for the current fiscal year and subsequent five fiscal years by taking account of the state economy, demographics, revenues and expenditures.
- January 31** Convene a revenue conference with the chairs of the Appropriations Committees, the Secretary of the Budget and the Secretary of Revenue to discuss economic trends and revenue performance.
- May 20** Provide an initial revenue estimate for the upcoming fiscal year.
- June 20** Provide a final revenue estimate for the upcoming fiscal year.

Other Responsibilities

Office resources are also used for the following purposes: (1) coordinate and facilitate actuarial analysis of proposed changes to the pension systems, (2) provide a cost analysis of approved collective bargaining agreements, (3) provide an economic analysis of any revenue proposals included in the Executive Budget, (4) publish performance-based budgeting reports for executive agencies, (5) publish tax credit review reports, (6) dynamic modeling and (7) at the request of members of the General Assembly, provide economic, revenue or fiscal analysis to the extent that staff resources are available for that purpose.

Independent Fiscal Office – Expenditures

Independent Fiscal Office Expenditures			
	Actual 21-22	Projected 22-23	Proposed 23-24
<u>Personnel</u>			
Salaries	\$1,173,000	\$1,141,000	\$1,251,000
Benefits	613,000	520,000	545,000
Retirement	353,000	357,000	380,000
Employer Taxes	<u>97,000</u>	<u>95,000</u>	<u>105,000</u>
Subtotal	2,236,000	2,113,000	2,281,000
<u>Operating</u>			
Office Operations and Supplies	\$11,000	\$13,000	\$15,340
Computers, Networks and Software	48,000	32,000	34,000
Data Acquisition and Analysis	12,000	12,000	12,500
REMI Model	156,000	34,000	38,000
Publications and Research Materials	42,000	45,200	49,720
Parking	34,000	35,900	37,000
Other	<u>6,000</u>	<u>15,000</u>	<u>15,000</u>
Subtotal	309,000	187,100	201,560
Contracted Actuarial Analysis	<u>48,000</u>	<u>100,000</u>	<u>100,000</u>
Total Expenditures	\$2,593,000	\$2,400,100	\$2,582,560
Appropriated / Proposed	2,343,000	2,343,000	2,343,000
Available	-250,000	-57,100	-239,560

Executive Budget Financial Statement

Executive Budget Financial Statement								
	General Fund (\$ millions)						Growth Rates	
	22-23	23-24	24-25	25-26	26-27	27-28	23-24	24-28
Carryforward Balance (prior year)	\$5,541	\$7,858	\$5,638	\$3,009	\$188	\$0	--	--
Net Revenues (includes policy)	43,429	42,177	42,838	43,718	44,858	45,766	-2.9%	2.1%
Expenditures (includes policy)	41,112	44,397	45,467	46,538	47,370	48,288	8.0%	2.1%
Current Year Surplus/Deficit	2,317	-2,220	-2,630	-2,820	-2,511	-2,522	--	--
Budget Stabilization Fund (year end)	5,117	5,271	5,429	5,592	3,401	943	--	--
Addendum								
New Transfer: Sales, Liquor, Tobacco Tax	0	1,017	1,090	1,163	1,236	1,310	--	6.5%
Net Revenues plus New Transfer	43,927	44,247	45,034	46,006	47,196	48,155	0.7%	2.1%
Est. Spending Shift to Public Safety Fund	0	936	1,027	1,127	1,226	1,316	--	8.9%
Expenditures plus Proposed Shift	41,112	45,333	46,495	47,665	48,596	49,604	10.3%	2.3%
<u>Expenditure Detail</u>								
Human Services	16,373	19,073	19,723	20,328	20,787	21,308	16.5%	2.8%
Education	16,628	17,555	17,957	18,317	18,654	19,006	5.6%	2.0%
Corrections	2,732	2,892	2,888	2,891	2,884	2,884	5.9%	-0.1%
Treasury	1,181	1,256	1,311	1,413	1,443	1,484	6.3%	4.2%
All Other	<u>4,197</u>	<u>3,621</u>	<u>3,589</u>	<u>3,590</u>	<u>3,602</u>	<u>3,607</u>	<u>-13.7%</u>	<u>-0.1%</u>
Total Expenditures	41,112	44,397	45,467	46,538	47,370	48,288	8.0%	2.1%
<p>Note: Net revenues include refunds and prior-year lapses. Column 24-28 is the compound average growth rate from FY 23-24 to FY 27-28. Shift to Public Safety and Protection Fund equal to new General Fund transfer less amount needed to equal total projected funding and assumes other funding sources are flat. Assumes Budget Stabilization Fund accrues 3% interest per annum.</p> <p>Source: FY 2023-24 Executive Budget.</p>								

Economics – Inflation and Labor Market

	CPI-U Weight	2021			2022			2023
		Feb	Jun	Oct	Feb	Jun	Oct	Feb
All Items	100.0%	1.0%	4.9%	5.6%	7.3%	8.8%	7.8%	6.9%
Grocery	7.6%	-0.4%	-1.0%	3.9%	10.1%	13.1%	16.6%	13.3%
Dining Out	4.7%	3.7%	3.4%	3.3%	5.5%	5.4%	7.8%	7.2%
Rent of Residence	5.5%	1.3%	2.3%	2.3%	4.2%	5.1%	7.1%	8.3%
Owner Equivalent Rent	30.6%	1.2%	0.8%	1.2%	4.6%	5.7%	7.2%	7.6%
All Durable Goods	9.1%	7.8%	23.3%	22.1%	20.4%	5.4%	2.7%	0.7%
Furniture-Appliance	5.4%	8.5%	11.0%	11.6%	6.1%	5.0%	3.9%	9.3%
Used Vehicles	1.5%	8.8%	45.3%	27.2%	42.7%	8.0%	2.1%	-13.6%
New Vehicles	2.7%	2.7%	18.7%	24.2%	22.2%	10.2%	5.5%	5.7%
Medical Care	7.8%	4.0%	2.8%	0.8%	-0.2%	4.1%	6.4%	4.9%
All Energy	6.9%	3.9%	19.8%	24.4%	24.4%	46.0%	22.2%	6.6%
Household Energy	4.2%	-0.3%	5.5%	11.5%	18.2%	35.9%	31.3%	15.5%
Gasoline	2.7%	9.6%	40.0%	41.0%	31.6%	59.3%	11.1%	-5.2%

Note: Text in bold blue denotes peaks.
Source: U.S. Bureau of Labor Statistics.

	Number or Rate				Change from Jan 2020		
	Jan 20	Jan 21	Jan 22	Jan 23	2021	2022	2023
Labor Force (000s)	6,575	6,497	6,440	6,492	-78	-134	-83
Employed (000s)	6,276	6,012	6,151	6,211	-264	-125	-65
Unemployed (000s)	299	485	289	281	186	-10	-18
Unemployment Rate	4.5	7.5	4.5	4.3	2.9	-0.1	-0.2
Labor Force Participation Rate	63.1	62.0	61.4	61.9	-1.1	-1.7	-1.2
Employment / Population Ratio	59.8	56.7	58.1	59.2	-3.1	-1.7	-0.6

Note: Data are seasonally adjusted. Jobs data measures number of residents employed and includes self-employed individuals.
Source: Household Survey, U.S. Bureau of Labor Statistics.

Payroll Employment: Pre- vs Post-Pandemic

	Jan 2020	Jan 2023	Change	
			Number	Percent
Total Payroll Employment (000s)	5,996	5,987	-9	-0.2%
Construction	245	248	4	1.5
Manufacturing	569	564	-5	-0.8
Retail and Wholesale Trade	815	816	1	0.1
Transportation and Warehouse	287	322	36	12.4
Finance and Real Estate	332	337	5	1.6
Professional and Technical	364	394	30	8.4
Administration and Waste Manage	302	299	-3	-1.0
Education (excludes local SDs)	229	228	-1	-0.6
Healthcare-Social Assistance	1,066	1,051	-15	-1.4
Arts and Entertainment	85	77	-8	-9.5
Accommodation and Food Service	466	435	-31	-6.7
Other Services	260	251	-9	-3.5
All Government (includes local SDs)	708	678	-31	-4.3
All Other	271	289	18	6.5
Subsector Detail				
Nursing and Residential Care	202	175	-27	-13.5
Full Service Restaurants	195	176	-19	-9.9
Employment Services	179	169	-11	-6.0
Warehouse and Storage	98	129	32	32.7
Management of Companies	133	147	14	10.6
Courier and Messengers	41	46	5	10.9

Note: Data are not seasonally adjusted. Excludes self-employed.
Source: U.S. Bureau of Labor Statistics.

Economics – Pandemic Relief Programs End

Federal and State Pandemic Relief Programs End					
	2020	2021	2022	2023	Total
Payments to Individuals or Businesses					
State Unemployment Compensation	\$5.2	\$0.8	--	--	\$6.0
Federal Pandemic Unemployment Comp (FPUC)	16.2	8.8	\$0.1	\$0.0	25.1
Pandemic Unemployment Assistance (PUA)	7.0	4.1	0.0	0.0	11.2
LWA and UC Extensions	3.1	3.2	0.0	0.0	6.3
SNAP Emergency Allotments	0.9	1.8	2.1	0.4	5.2
P-EBT Benefits	0.4	1.6	0.6	0.2	2.7
Economic Impact Payments	11.2	22.1	0.8	0.0	34.1
Expanded Child Tax Credit	--	3.4	0.7	0.0	4.1
Employee Retention Credit	--	1.0	2.2	0.0	3.2
Sick-Family Leave Credit (Self-Employed only)	--	0.0	0.4	0.0	0.4
Higher Child/Dependent Care Credit	--	0.0	0.5	0.0	0.5
Emergency Rental Assistance	--	0.6	0.6	0.4	1.6
Paycheck Protection Program (PPP)	<u>20.7</u>	<u>10.0</u>	<u>0.0</u>	<u>0.0</u>	30.7
Total	64.8	57.3	8.0	1.0	131.1
Other Federal Programs					
Direct State Support	\$5.9	\$20.2	\$0.2	\$0.0	\$26.3
Direct Local Support	2.6	8.2	0.1	0.0	10.9
Other Support	<u>6.9</u>	<u>3.0</u>	<u>0.0</u>	<u>0.0</u>	9.8
Total	15.3	31.4	0.3	0.1	47.0
<p>Note: Figures in dollar billions. State support does not include federal funds associated with the temporary increase (January 1, 2020 until December 31, 2023) in the Federal Medical Assistance Percentage (FMAP) used to reimburse states for Medicaid program costs. Figures do not include savings associated with the federal student loan repayment moratorium in place since April 2020, with an estimated value of \$465 to \$750 million per month.</p>					

Demographics – Short- and Long-Term Outlook

Pennsylvania Short-Term Demographics							
Age Cohort	Population (000s)			Population Change		Percent Change	
	2019	2022	2025	'19 to '22	'22 to '25	'19 to '22	'22 to '25
0-19	3,068	2,989	2,916	-79	-73	-2.6%	-2.4%
20-64	7,570	7,439	7,311	-131	-128	-1.7	-1.7
65-79	1,784	1,950	2,108	166	157	9.3	8.1
80+	<u>579</u>	<u>586</u>	<u>626</u>	<u>8</u>	<u>39</u>	<u>1.3</u>	<u>6.7</u>
Total	13,001	12,965	12,960	-36	-4	-0.3	0.0

Note: Detail may not sum to total due to rounding.

Sources: Projections by the IFO using data from the U.S. Census Bureau and U.S. CDC.

Pennsylvania Long-Term Demographics							
Age Cohort	Population (000s)			Population Change		Percent Change	
	2020	2025	2030	'20 to '25	'25 to '30	'20 to '25	'25 to '30
0-19	3,044	2,916	2,790	-128	-126	-4.2%	-4.3%
20-64	7,528	7,311	7,136	-217	-175	-2.9	-2.4
65-79	1,839	2,108	2,208	269	100	14.6	4.7
80+	<u>578</u>	<u>626</u>	<u>762</u>	<u>48</u>	<u>136</u>	<u>8.3</u>	<u>21.7</u>
Total	12,990	12,960	12,897	-29	-63	-0.2	-0.5

Note: Detail may not sum to total due to rounding. Data are from the IFO's *Pennsylvania Demographic Outlook* (October 2022).

Sources: The 2020 data are from the U.S. Census Bureau 2021 Population Estimates. 2025 and 2030 are projections by the IFO using data from the U.S. Census Bureau and U.S. CDC.

Demographics – Population Gains

Population Gains from April 1, 2020 to July 1, 2022							
	Births Less Deaths		Net Migration		Total Population Change		
	# (000s)	% Pop.	# (000s)	% Pop.	# (000s)	% Pop.	Rank
Top 10 (Total Population Gains as a Share of April 1, 2020 Population)							
Idaho	10.3	0.6%	91.2	5.0%	99.9	5.4%	1
Montana	-2.7	-0.2	41.6	3.8	38.7	3.6	2
Utah	54.2	1.7	54.7	1.7	109.2	3.3	3
Florida	-89.0	-0.4	797.8	3.7	706.6	3.3	4
South Carolina	-17.6	-0.3	181.0	3.5	164.2	3.2	5
Texas	243.5	0.8	639.3	2.2	884.1	3.0	6
Arizona	-5.5	-0.1	212.9	3.0	207.7	2.9	7
Delaware	-2.1	-0.2	30.6	3.1	28.4	2.9	8
South Dakota	4.2	0.5	18.7	2.1	23.1	2.6	9
North Carolina	10.9	0.1	248.9	2.4	259.6	2.5	10
Selected States							
Maryland	20.3	0.3	-35.0	-0.6	-12.6	-0.2	37
Pennsylvania	-56.2	-0.4	21.3	0.2	-30.7	-0.2	38
New Jersey	24.2	0.3	-52.7	-0.6	-27.3	-0.3	39
Ohio	-39.6	-0.3	-6.0	-0.1	-43.3	-0.4	41
Bottom 10 (Total Population Gains as a Share of April 1, 2020 Population)							
Michigan	-29.2	-0.3	-16.9	-0.2	-43.2	-0.4	42
Massachusetts	6.2	0.1	-49.6	-0.7	-48.0	-0.7	43
Mississippi	-12.6	-0.4	-9.1	-0.3	-21.2	-0.7	44
Hawaii	6.8	0.5	-21.7	-1.5	-15.1	-1.0	45
West Virginia	-23.9	-1.3	5.0	0.3	-18.6	-1.0	46
California	201.5	0.5	-699.9	-1.8	-508.9	-1.3	47
Louisiana	0.4	0.0	-68.8	-1.5	-67.5	-1.4	48
Illinois	6.3	0.0	-238.6	-1.9	-230.5	-1.8	49
Washington D.C.	5.2	0.8	-19.9	-2.9	-17.7	-2.6	50
New York	44.8	0.2	-556.9	-2.8	-524.1	-2.6	51
U.S. Total	431.2	0.1	1,406.8	0.4	1,838.0	0.6	--

Note: Share of population is value divided by the population as of April 1, 2020.
Source: U.S. Census Bureau. Annual and Cumulative Estimates of the Components of Resident Population Change for the United States, Regions, States, District of Columbia, and Puerto Rico: April 1, 2020 to July 1, 2022.

Demographics – Net Domestic Migration

State Net Migration from April 1, 2020 to July 1, 2022							
	Net International		Net Domestic		Total Net Migration		
	# (000s)	% Pop.	# (000s)	% Pop.	# (000s)	% Pop.	Rank
Top 10 (Total Net Migration as a Share of April 1, 2020 Population)							
Idaho	2.6	0.1%	88.6	4.8%	91.2	5.0%	1
Montana	2.6	0.2	39.0	3.6	41.6	3.8	2
Florida	175.3	0.8	622.5	2.9	797.8	3.7	3
South Carolina	15.0	0.3	165.9	3.2	181.0	3.5	4
Delaware	3.5	0.3	27.1	2.7	30.6	3.1	5
Arizona	30.5	0.4	182.4	2.5	212.9	3.0	6
Maine	3.6	0.3	30.6	2.2	34.2	2.5	7
North Carolina	37.0	0.4	211.9	2.0	248.9	2.4	8
Tennessee	11.4	0.2	146.4	2.1	157.8	2.3	9
Nevada	13.9	0.4	56.3	1.8	70.2	2.3	10
Selected States							
West Virginia	2.5	0.1	2.5	0.1	5.0	0.3	27
Virginia	52.8	0.6	-29.8	-0.3	23.0	0.3	28
Pennsylvania	37.6	0.3	-16.2	-0.1	21.3	0.2	31
Ohio	33.9	0.3	-39.9	-0.3	-6.0	-0.1	34
Maryland	33.3	0.5	-68.3	-1.1	-35.0	-0.6	41
Bottom 10 (Total Net Migration as a Share of April 1, 2020 Population)							
New Jersey	55.0	0.6	-107.7	-1.2	-52.7	-0.6	42
North Dakota	1.8	0.2	-7.2	-0.9	-5.4	-0.7	43
Massachusetts	61.3	0.9	-110.9	-1.6	-49.6	-0.7	44
Alaska	3.3	0.5	-11.4	-1.6	-8.1	-1.1	45
Louisiana	11.5	0.2	-80.3	-1.7	-68.8	-1.5	46
Hawaii	8.0	0.5	-29.7	-2.0	-21.7	-1.5	47
California	171.2	0.4	-871.1	-2.2	-699.9	-1.8	48
Illinois	43.5	0.3	-282.0	-2.2	-238.6	-1.9	49
New York	108.0	0.5	-664.9	-3.3	-556.9	-2.8	50
District of Columbia	6.4	0.9	-26.2	-3.8	-19.9	-2.9	51
U.S. Total	1,406.8	0.4	--	--	1,406.8	0.4	--
<p>Note: Share of population is the net migration divided by the population as of April 1, 2020. Source: U.S. Census Bureau. Annual and Cumulative Estimates of the Components of Resident Population Change for the United States, Regions, States, District of Columbia, and Puerto Rico: April 1, 2020 to July 1, 2022.</p>							

Demographics – Migration by Age Group and Region

Average Yearly Domestic Migration Into and Out of Pennsylvania (2017 to 2021)			
	Into PA	Out of PA	Net Domestic Migration
<u>Age Group</u>			
<18	43,115	36,701	6,414
18-24	64,152	64,421	-269
25-34	63,341	59,669	3,672
35-44	31,360	28,624	2,736
45-54	20,574	20,717	-143
55-64	16,068	20,821	-4,753
65-74	11,162	14,514	-3,352
75+	<u>7,021</u>	<u>7,815</u>	<u>-794</u>
Total	256,793	253,282	3,511
<u>Region of U.S.</u>			
Border States*	132,986	91,872	41,114
Northeast	13,865	14,393	-528
West	26,278	27,809	-1,531
Midwest	18,929	21,027	-2,098
Southwest	13,349	17,556	-4,207
Southeast	<u>51,386</u>	<u>80,625</u>	<u>-29,239</u>
Total	256,793	253,282	3,511
<u>*Border States Breakout</u>			
New York	48,501	21,782	26,719
New Jersey	43,133	25,994	17,139
Maryland	19,068	12,845	6,223
West Virginia	3,441	4,993	-1,552
Delaware	7,173	10,591	-3,418
Ohio	<u>11,670</u>	<u>15,667</u>	<u>-3,997</u>
Total	132,986	91,872	41,114
<p>Note: Domestic migration includes movement between Pennsylvania and the 49 other states plus the District of Columbia. Northeast includes: ME, VT, NH, MA, CT & RI. West includes: WA, OR, CA, ID, NV, UT, MT, WY, CO, AK & HI. Midwest includes: MI, IN, IL, MN, IA, MO, ND, SD, NE, KS & WI. Southwest includes: AZ, NM, TX & OK. Southeast includes: VA, KY, TN, NC, SC, AR, LA, MS, AL, GA, FL & DC.</p> <p>Source: U.S. Census Bureau. American Community Survey. 2021 5-year Public Use Microdata files. Calculations by IFO.</p>			

Revenues – Fiscal Year-to-Date

Fiscal Year to Date Revenues (Growth Rate Adjusted)		
	Feb 2023 FYTD	YOY Growth
Total General Fund	\$26,093	7.1%
Total Tax Revenue	25,658	6.7
Corporate Net Income	3,035	15.9
Other Corporate	231	25.6
<u>Sales and Use</u>	<u>9,389</u>	<u>6.4</u>
Nonmotor	8,499	6.4
Motor Vehicle	890	6.6
Cigarette	572	-11.0
Other Tobacco Products	102	2.3
Malt Beverage	15	-0.6
Liquor	301	3.4
<u>Personal Income</u>	<u>10,364</u>	<u>7.9</u>
Withholding	8,164	6.0
Quarterly	1,699	10.8
Annuals	501	35.0
Realty Transfer	436	-20.6
Inheritance	985	-2.0
Gaming	242	17.6
Minor and Repealed	-15	-187.9
Total Nontax Revenue	434	38.4

Note: Millions of dollars. Growth rates adjusted for the impact of new and one-time transfers.

Revenues – General Fund Projections

General Fund Revenue Projections				
	Dollar Amount (millions)		Growth Rate	
	22-23	23-24	22-23	23-24
Executive Budget				
Personal Income	\$17,668	\$18,051	-2.3%	1.8%
Sales and Use	13,994	13,795	4.3	-1.4
Corporate Income	5,517	5,347	3.7	-3.1
All Other	<u>6,748</u>	<u>6,036</u>	<u>-2.6</u>	<u>-10.6</u>
Total General Fund	43,927	43,229	0.4	-1.7
Less: Revenue Proposals				
Personal Income	\$0	\$21	--	--
Sales and Use	0	-382	--	--
Corporate Income	0	9	--	--
All Other	<u>0</u>	<u>-626</u>	<u>--</u>	<u>--</u>
Total General Fund	0	-978	--	--
Executive Budget Baseline				
Personal Income	\$17,668	\$18,030	-2.3%	1.7%
Sales and Use	13,994	14,177	4.3	1.3
Corporate Income	5,517	5,338	3.7	-3.2
All Other	<u>6,748</u>	<u>6,662</u>	<u>-2.6</u>	<u>-1.3</u>
Total General Fund	43,927	44,208	0.4	0.5
IFO January 2023 Baseline				
Personal Income	\$17,622	\$18,348	-2.5%	3.8%
Sales and Use	13,848	14,077	3.3	1.7
Corporate Income	5,301	5,155	-0.4	-2.8
All Other	<u>6,941</u>	<u>7,004</u>	<u>0.2</u>	<u>0.9</u>
Total General Fund	43,713	44,584	-0.1	1.9
Executive Budget Less IFO				
Personal Income	\$46	-\$318	--	--
Sales and Use	146	100	--	--
Corporate Income	216	183	--	--
All Other	<u>-193</u>	<u>-342</u>	<u>--</u>	<u>--</u>
Total General Fund	215	-376	--	--
Note: Revenue proposals exclude higher refunds paid. Growth rates adjusted for new and one-time transfers. The IFO 23-24 estimate assumes a transfer of \$115.3 million from cigarette tax to the tobacco settlement fund. Therefore, this transfer is excluded from the revenue proposals.				

Energy Trends

Pennsylvania Energy Profile				
	2019	Rank	2022	Rank
Natural gas production (bcf) ¹	6,815	2	7,450	2
Impact Fee Collections (\$ millions) ²	\$200.4	--	\$274.8	--
Coal production (million short tons) ³	50.1	3	--	3
<u>Electricity</u>				
Net Generation (million megawatt hrs)	229.0	3	237.9	3
Natural Gas	98.0	3	129.7	3
Nuclear	83.2	2	76.2	2
Coal	37.9	8	22.6	12
Renewable ⁴	9.3	23	9.2	30
Net Exports (million megawatt hrs) ⁵	70.3	1	80.5	1
Residential price (cents/kwh)	13.8	15	16.1	13

1 Bcf is billion cubic feet.

2 Collections by reporting year, not in which fees were collected. 2022 is estimated by the IFO.

3 Coal production for 2022 not available. Rank is for 2021 production.

4 Includes hydroelectric, wind, solar and other very minor sources.

5 Exports for 2022 are estimated by the IFO based on 2022 net generation.

Sources: Natural gas production reported by the Department of Environmental Protection. Impact fee collections for 2019 reported by the Public Utility Commission (PUC). Coal production reported by the U.S. Energy Information Administration. All electricity data reported by the U.S. Energy Information Administration unless otherwise noted.

Electricity Exports and Emissions - Regional States						
State	Net Exports			CO ₂ Emissions Per Unit		
	2018	2022	Change	2018	2022	Change
Pennsylvania	52.4	80.5	28.1	0.38	0.31	-0.07
West Virginia	31.2	21.1	-10.1	0.90	0.87	-0.03
New Jersey	-6.9	-13.0	-6.1	0.23	0.29	0.06
Ohio	-34.9	-22.7	12.2	0.48	0.51	0.03
New York	-12.4	-26.1	-13.7	0.17	0.20	0.03
Virginia	-32.3	-47.8	-15.5	0.26	0.27	0.01

Note: Net exports in millions of megawatt hours. Emissions per unit is metric tons per megawatt hours of net generation.

Source: U.S. Energy Information Administration. Net exports for 2022 uses 2021 amounts for direct use and line losses, which are not yet available for 2022. Emissions for 2022 are estimated by the IFO based on 2022 generation.

Impact Fee and Natural Gas Trends

	2017	2018	2019	2020	2021	2022
Impact Fee Revenues (\$ millions) ¹	\$209.6	\$251.8	\$200.4	\$146.3	\$233.8	\$274.8
Growth Rate	20.9%	20.1%	-20.4%	-27.0%	59.8%	17.5%
Market Value (\$ billions) ²	\$7.4	\$11.6	\$9.4	\$4.5	\$17.7	\$36.7
Computed Effective Tax Rate	2.8%	2.2%	2.1%	3.3%	1.3%	0.7%
PA Production (bcf) ³	5,364	6,123	6,815	7,092	7,575	7,450
Growth Rate	5.3%	14.1%	11.3%	4.1%	6.8%	-1.7%
New Horizontal Wells Drilled	811	777	614	476	518	574
NYMEX Natural Gas Price ⁴	\$3.11	\$3.09	\$2.63	\$2.08	\$3.84	\$6.64
PA Natural Gas Price ⁵	\$2.10	\$2.59	\$2.10	\$1.38	\$3.03	\$5.53
Growth Rate	42.0%	23.5%	-18.7%	-34.4%	119.6%	82.5%

1 Impact fee revenues as reported by the PUC. Revenues shown according to drilling year, not the year revenues were received. 2022 is estimated by the IFO.

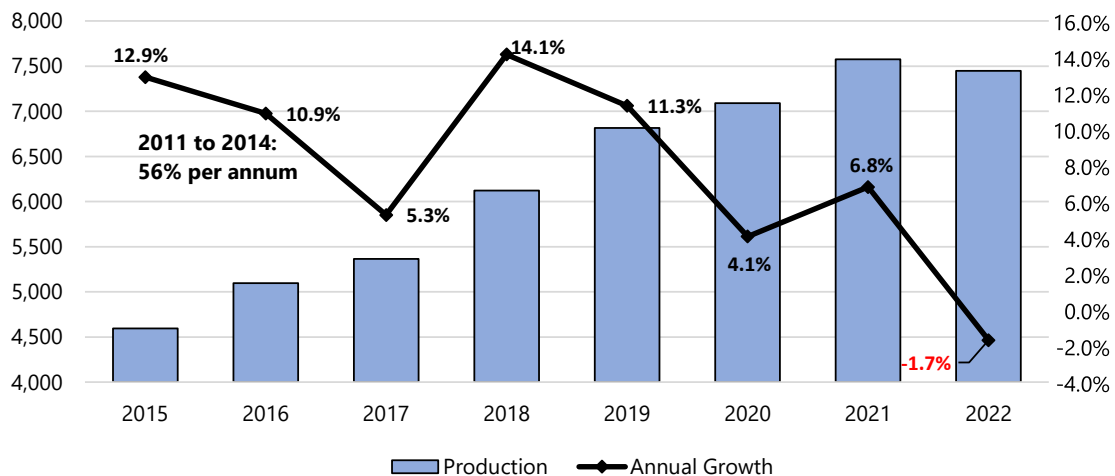
2 Equal to total production multiplied by the average PA natural gas hub price (net of post-production costs, assumed to be \$0.80 per mcf.

3 Unconventional gas only.

4 Annual average price of natural gas near-month settlements on the New York Mercantile Exchange, upon which the impact fee schedule is based.

5 Weighted average spot price of major Pennsylvania hubs. Source: Bentek Energy.

Annual Production Volume (bcf) and Growth



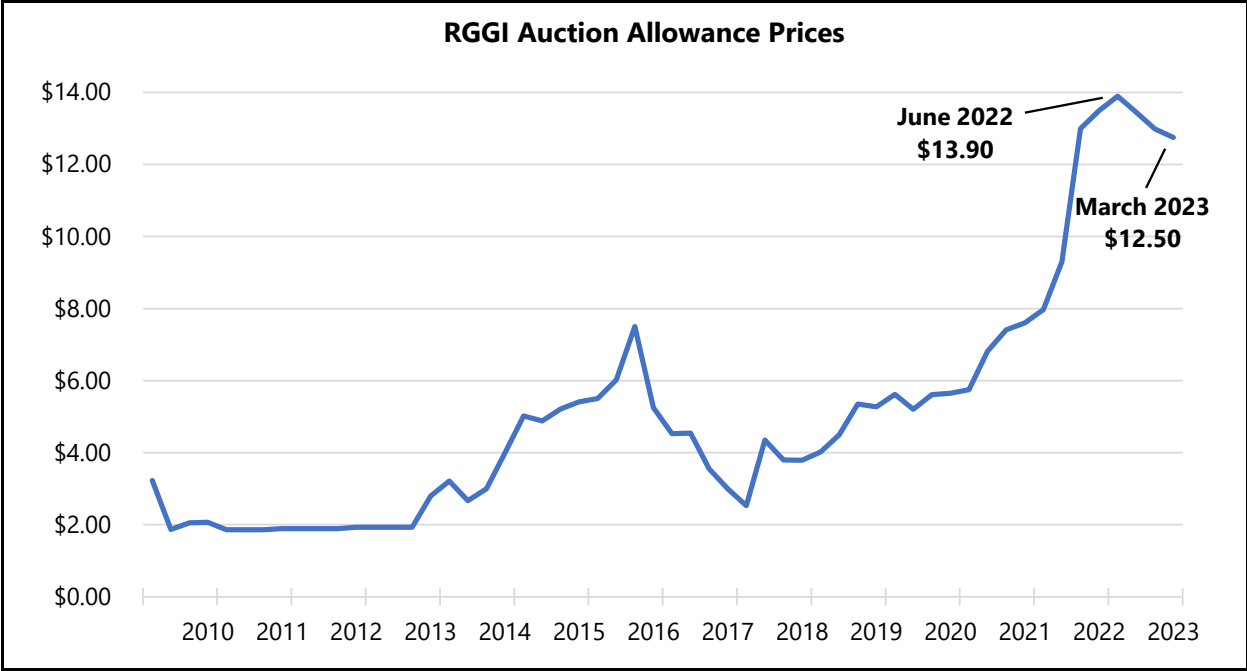
Source: Department of Environmental Protection.

Regional Greenhouse Gas Initiative

The Executive Budget assumes that Pennsylvania joins the Regional Greenhouse Gas Initiative (RGGI), a regional cap-and-invest initiative, for FY 2023-24. The administration estimates that proceeds from this initiative will total \$663 million for FY 2023-24. The budget proposes using proceeds to invest in greenhouse gas abatement, energy efficiency and clean and renewable energy programs. These investments would be disbursed from the Clean Air Fund. The budget also includes resources to implement the CO2 trading program.

RGGI proceeds are based on CO2 auctions and the allowance prices determined at those auctions. A history of allowance prices is displayed in the figure below. The figure shows that the allowance price peaked in mid-2022, likely due to high energy inflation and coal generation becoming more cost competitive.

In the latest model published by the Department of Environmental Protection, the analysis had assumed that 55 million allowances would be purchased by Pennsylvania utilities that join RGGI for 2023. Assuming an auction price of \$12.50, total proceeds would be \$688 million.



State and Local Tax Burden

State and Local Tax Burden: Average Tax Rate and Rank								
Corporate Income			Personal Income			Sales and Use		
	Rank	ATR		Rank	ATR		Rank	ATR
DE	1	3.82%	NY	1	4.77%	OH	16	2.82%
NJ	4	0.97	MD	5	4.06	NY	25	2.42
NY	7	0.79	DE	7	3.70	NC	26	2.39
PA	16	0.53	VA	13	3.17	WV	30	2.19
MD	17	0.49	NC	16	2.74	NJ	35	2.06
NC	23	0.43	WV	20	2.63	MI	37	2.05
WV	33	0.32	PA	22	2.57	PA	40	1.96
VA	35	0.30	OH	26	2.55	VA	42	1.68
MI	39	0.28	NJ	28	2.52	MD	43	1.48
OH	46	0.09	MI	32	2.28	DE	48	0.09
USw		0.49	USw		2.55	USw		2.47
USuw		0.50	USuw		2.28	USuw		2.43
Property			Liquor, Tobacco, Game			Total Taxes		
	Rank	ATR		Rank	ATR		Rank	ATR
NJ	3	4.76%	WV	1	0.92%	NY	1	14.05%
NY	5	4.32	PA	3	0.64	DE	6	11.79
VA	19	2.94	MD	4	0.61	NJ	9	11.55
MI	20	2.92	MI	9	0.53	MD	13	10.92
OH	25	2.72	NC	10	0.52	WV	17	10.29
PA	27	2.66	DE	11	0.50	PA	21	10.08
MD	28	2.66	OH	21	0.39	VA	25	9.93
WV	37	2.23	NJ	30	0.34	OH	27	9.82
NC	41	2.07	NY	32	0.30	NC	28	9.36
DE	46	1.84	VA	33	0.30	MI	30	9.24
USw		2.97	USw		0.34	USw		10.14
USuw		2.87	USuw		0.38	USuw		9.80

Note: Average Tax Rate (ATR) is the ratio of the state-local tax revenue to modified state personal income. USw is weighted average. USuw is unweighted average (each state has same weight). Total Taxes excludes any severance tax or impact fee.

Source: *State and Local Tax Revenues: A 50 State Comparison*, IFO (February 2023).

Corporate Net Income Tax State Comparison

States With Corporate Net Income Tax					
Rank	State ¹	2023 Tax Rate ²	Rank ³	State ¹	FY 20-21 ATR ⁴
1	New Jersey	11.50%	1	Delaware	3.82%
2	Minnesota	9.80	2	New Hampshire	1.10
3	Illinois	9.50	3	Oregon	1.00
4	Alaska	9.40	4	New Jersey	0.97
5	Pennsylvania	8.99	5	Tennessee	0.92
6	Maine	8.93	6	Connecticut	0.90
7	California	8.84	7	New York	0.79
8	Delaware	8.70	8	California	0.78
9	Vermont	8.50	9	Wisconsin	0.72
10	Iowa	8.40	10	Illinois	0.72
11	Maryland	8.25	11	Massachusetts	0.64
12	Massachusetts	8.00	12	Minnesota	0.63
13	Wisconsin	7.90	13	Alabama ⁵	0.57
14	Oregon	7.60	14	Kentucky	0.57
15	Connecticut	7.50	15	Mississippi	0.55
15	Louisiana ⁵	7.50	16	Pennsylvania	0.53
15	New Hampshire	7.50	17	Maryland	0.49
18	Nebraska	7.25	18	Nebraska	0.49
18	New York	7.25	19	Iowa	0.46
20	Kansas	7.00	20	Arkansas	0.45
20	Rhode Island	7.00	21	Vermont	0.44
22	Montana	6.75	22	Montana	0.43
23	Alabama ⁵	6.50	23	North Carolina	0.43
23	Tennessee	6.50	24	Utah	0.43
23	West Virginia	6.50	25	Kansas	0.43
26	Hawaii	6.40	26	Maine	0.39
27	Michigan	6.00	27	Idaho	0.37
27	Virginia	6.00	28	Rhode Island	0.35
29	New Mexico	5.90	29	Indiana	0.35
30	Idaho	5.80	30	South Carolina	0.34
31	Georgia	5.75	31	North Dakota	0.34
32	Florida	5.50	32	Colorado	0.33
33	Arkansas	5.30	33	West Virginia	0.32
34	Kentucky	5.00	34	Georgia	0.31
34	Mississippi	5.00	35	Virginia	0.30
34	South Carolina	5.00	36	Louisiana ⁵	0.29
37	Arizona	4.90	37	Florida	0.29
37	Indiana	4.90	38	Alaska	0.29
39	Utah	4.85	39	Michigan	0.28
40	Colorado	4.40	40	Oklahoma	0.27
41	North Dakota	4.31	41	Hawaii	0.24
42	Missouri ⁵	4.00	42	Arizona	0.22
42	Oklahoma	4.00	43	Missouri ⁵	0.21
44	North Carolina	2.50	44	New Mexico	0.13

1 Nevada, Ohio, South Dakota, Texas, Washington and Wyoming do not levy a corporate net income tax.
2 Tax rate reflects the highest tax bracket for states with a graduated corporate income tax for tax year 2023.
3 States are ranked by ratio of state and local CNIT revenue to personal income.
4 Average Tax Rate (ATR) is the ratio of the state-local tax revenue to modified state personal income for 2020. CY 2020 is the six-month overlap in state and local data.
5 State allows corporations to deduct all federal taxes paid from state taxable income (or up to 50%, LA).
Source: *State and Local Tax Revenues: A 50 State Comparison*, IFO (February 2023).

State Pension Outlook

State Pension System Funding Outlook								
FY Ending	SERS ¹				PSERS			
	Employer Rate	\$ State Contrib	System Return	Unfunded Liability	Employer Rate	\$ State Contrib	System Return	Unfunded Liability
2005-2010	3.53%	\$225	3.50%	\$9,736	5.34%	\$337	2.99%	\$19,699
2010-2015	10.97	745	6.90	19,452	11.63	699	9.73	37,336
2016	25.01	1,622	6.51	19,923	25.84	1,719	1.29	42,724
2017	29.51	1,897	15.08	19,662	30.03	2,064	10.14	44,512
2018	33.24	2,049	-4.55	22,793	32.57	2,264	9.27	44,855
2019	32.93	2,115	18.75	23,039	33.43	2,488	6.68	44,134
2020	33.59	3,186 ²	11.11	22,395	34.29	2,628	1.11	44,035
2021	33.48	2,871 ³	17.24	16,080	34.51	2,702	24.58	45,534
2022	33.81	2,054	-12.15	16,347	34.94	2,747	2.23	43,965
2023	34.16	2,146	6.875	15,703	35.26	2,986	7.00	43,061
2024	34.44	2,184	6.875	15,637	34.00	2,971	7.00	42,314
2025	33.39	2,178	6.875	15,925	34.73	3,027	7.00	41,104

Note: Dollars in millions. Data sourced from various system projections, releases and financial reports, unless noted otherwise. For year ranges (e.g., 2005-2010), Employer Contribution Rate and State Contributions are averages. System Return is 5-year performance as noted in system ACFR. Unfunded Liability is final year UAL. Calculations by the IFO.

1 SERS reported on calendar year basis except for Employer Contribution Rate. Includes all funds.

2 Includes \$1.1 billion prepayment in unfunded liability from The Pennsylvania State University.

3 Includes \$825 million prepayment in unfunded liability from the Pennsylvania State System of Higher Education.

Pension System Investment Performance General Fund Impacts

	Overperformance (+2%)			Underperformance (-2%)		
	SERS	PSERS	Total	SERS	PSERS	Total
Five Years	-\$0.24	-\$0.29	-\$0.53	\$0.23	\$0.25	\$0.48
Ten Years	-\$1.43	-\$2.00	-\$3.43	\$1.28	\$1.80	\$3.08

Notes: Annual baseline return assumptions (not shown) are 6.875% for SERS and 7.00% for PSERS. Five-year time period is FY 23-24 to FY 27-28, ten-year period extends to FY 32-33.

Pension System Stochastic Analyses Results

Distribution Percentiles	Average Return (%)	Additional Contributions		Final Fund. Ratio (%)
		Total	State GF	
PSERS: FY 23-24 to FY 50-51				
Upside - 95th Percentile	11.8%	-\$49.3	-\$27.1	>200%
Favorable - 75th	9.5	-31.6	-17.3	>200
Expected - 50th	7.9	-8.3	-4.6	168
Baseline	6.8	--	--	106
Unfavorable - 25th	6.3	36.7	20.2	88
Downside - 5th	4.0	110.8	60.9	42
SERS: FY 23-24 to FY 42-43				
Upside	11.8%	-\$21.7	-\$10.8	187%
Favorable	8.5	-15.6	-7.8	129
Baseline	6.9	--	--	105
Unfavorable	4.1	20.1	10.0	69
Downside	0.9	36.2	18.0	45

Notes: Dollars in billions. Data from SERS and PSERS, calculations by the IFO. "Baseline" reflects baseline simulation used for scenario analyses.

Economic Development Incentives

Tax Credits and Economic Development Incentives						
	Actual (\$ millions)				Budget	Proposed
	18-19	19-20	20-21	21-22	22-23	23-24
Tax Credit or Refund						
Educational Improvement	\$150.9	\$174.8	\$179.5	\$209.7	\$340.0	\$340.0
Keystone Opportunity Zone (KOZ)	95.1	84.3	85.8	110.0	113.3	112.1
Neighborhood Improvement Zone (NIZ)	40.5	61.1	46.6	69.3	71.2	73.0
Film Production	60.9	63.0	65.1	66.9	100.0	100.0
Educational Opportunity Scholarship	32.6	33.6	53.6	54.0	65.0	65.0
Research and Development	43.6	46.9	54.9	46.3	60.0	60.0
Neighborhood Assistance Programs	18.0	18.0	33.6	35.9	36.0	36.0
Coal Refuse Energy and Reclamation	9.8	17.1	10.8	15.2	20.0	20.0
Keystone Innovation Zone (KIZ)	15.3	15.1	15.0	15.0	15.0	15.0
Tax Credit for New Jobs	10.1	3.0	3.3	13.8	9.2	10.9
Resource Enhancement and Protection	5.4	5.6	11.2	11.9	13.0	13.0
City Revitalization and Improve. Zone (CRIZ)	7.2	7.8	9.5	8.7	9.7	13.7
Historic Preservation Incentive	3.0	5.0	5.0	5.0	5.0	5.0
Mixed-Use Development	2.0	3.0	3.0	4.5	4.5	4.5
Entertainment and Economic Enhancement	5.6	4.0	4.0	3.6	24.0	24.0
Brewers' Tax Credit	4.9	2.6	2.1	3.0	5.0	5.0
Computer Data Center Equipment Incentive	2.0	7.0	5.4	2.8	0.0	0.0
Waterfront Development	0.0	0.2	1.4	1.5	5.0	5.0
Video Game Production	1.0	1.0	1.0	1.0	1.0	1.0
Manufacturing Tax Credit	0.0	0.0	0.0	0.1	4.0	4.0
Pennsylvania Resource Manufacturing	0.0	0.0	0.0	0.0	17.1	49.6
Pennsylvania Housing	--	--	--	0.0	10.0	10.0
Rural Jobs and Investment	0.0	0.0	0.0	0.0	0.0	0.0
Airport Land Development Zones	--	--	--	--	1.8	4.5
Mobile Telecomm. Broadband Investment	4.6	3.0	--	--	--	--
Local Resource Manufacturing	--	--	--	--	--	28.3
Pennsylvania Milk Processing	--	--	--	--	--	15.0
Regional Clean Hydrogen Hubs	--	--	--	--	--	25.0
Semicond. & Biomedical Manuf. & Research	--	--	--	--	--	<u>20.0</u>
Subtotal	512.5	556.1	590.8	678.2	929.8	1,059.6

Note: Act 132 of 2020 eliminated the Mobile Telecommunications Broadband Investment Tax Credit and established the Underserved Broadband Funding Program, a grant program administered by the CFA.

In July 2015, \$100 million in Innovate in PA Tax Credits were purchased by qualified insurance companies. The credits may be utilized to offset tax year liabilities for 2016 and thereafter, in an amount not to exceed \$20 million annually. The net amount transferred to DCED was \$85.4 million. The net benefit to purchasers is the differential between tax credits sold and monies received (\$14.6 million). The annual impact is the difference between the tax credit claimed in that year and the amount paid for the credit. Due to the technical nature of accounting for the differential, the Innovate in PA Tax Credits are omitted from this table.

The Strategic Development Areas, Keystone Special Development Zone, Organ and Bone Marrow Donation, Community-Based Services, Qualified Manufacturing Innovation & Reinvestment Deduction and Beginning Farmers' tax credits are not included due to a small number of filers or zero filers.

The Computer Data Center Equipment Incentive was repealed as of December 31, 2021 and replaced with a tax exemption (tax exemptions are not reflected in the table).

	Actual (\$ millions)				Budget	Proposed
	18-19	19-20	20-21	21-22	22-23	23-24
State Spending or Grants						
PA Race Horse Development Fund	\$231.9	\$164.3	\$177.3	\$205.9	\$202.0	\$194.4
RACP ¹	172.8	139.6	101.0	99.9	100.0	100.0
GEDTF	95.5	25.5	25.5	34.8	51.4	55.5
BFTDA - Challenge Grants	14.5	14.5	14.5	14.5	16.4	16.4
PA First	7.4	12.3	11.8	13.1	12.0	23.0
Marketing to Attract Tourists (Advertising)	2.2	5.5	2.6	9.2	7.1	9.1
Infrastructure and Facilities Improvement	12.9	10.7	7.7	7.6	10.0	10.0
BFTDA - Venture Investment	6.5	3.0	8.5	6.5	16.0	13.5
Office of International Business Development	6.0	5.6	5.1	5.3	6.0	6.2
Life Sciences Greenhouses	3.0	3.0	3.0	3.0	3.0	3.0
Infrastructure and Technology Assistance	1.8	1.5	1.2	2.9	2.5	2.5
Marketing to Attract Business	2.2	4.9	2.7	1.7	2.0	2.1
Business in Our Sites (CFA)	50.0	10.0	16.5	0.0	19.4	0.0
PIDA Industrial Parks	2.8	4.5	4.7	0.0	5.0	7.0
Sports Tourism and Marketing Grants	--	--	--	--	5.0	5.0
Building PA (CFA)	0.0	6.3	0.0	0.0	0.0	0.0
PA Dairy Investment Program (CFA)	<u>4.5</u>	<u>5.5</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
Subtotal	614.0	416.7	382.1	404.4	457.8	447.7
Jobs Training Programs						
Manufacturing PA	12.0	12.0	12.0	12.0	12.0	13.0
WedNet	7.9	6.5	8.2	11.0	8.0	10.0
Labor and Industry	12.3	12.6	10.6	10.6	11.3	17.1
Partnerships for Regional Economic Perf.	<u>8.0</u>	<u>13.0</u>	<u>6.7</u>	<u>10.2</u>	<u>10.9</u>	<u>10.9</u>
Subtotal	40.2	44.1	37.5	43.8	42.2	51.0
State Loan Programs						
PIDA Loan Program	42.1	24.4	26.1	21.0	35.0	40.0
Small Business First Loans	8.1	68.1	5.7	6.5	20.0	25.0
Machinery and Equipment Loans	7.6	4.7	12.8	3.0	11.8	11.8
Minority Business	<u>1.3</u>	<u>1.4</u>	<u>1.0</u>	<u>0.7</u>	<u>1.3</u>	<u>1.4</u>
Subtotal	59.1	98.6	45.6	31.2	68.1	78.2
Note: PA Race Horse Development Trust Fund disbursements exclude transfers to Agriculture and Farm Products Show Fund.						
1 Redevelopment Assistance Capital Program (RACP) expenditures are estimated by the IFO at \$100 million for FY 22-23 and FY 23-24. Actual expenditures may vary.						
Source: PA Department of Revenue, PA Department of Community and Economic Development, Commonwealth Executive Budget FY 2023-24, Annual Comprehensive Financial Reports and state accounting system.						

Minimum Wage Rates by State

Minimum Wage Rates by State (As of January 1st)				
State/Territory	2023 Rank	2023	2024	2025
Washington D.C.	1	\$16.10	\$16.55	\$16.95
Washington	2	15.74	16.18	16.59
California	3	15.50	15.93	16.33
Massachusetts	4	15.00	15.00	15.00
New York	5	14.20	14.60	14.96
New Jersey	6	14.13	15.00	15.38
Connecticut	7	14.00	15.30	15.68
Arizona	8	13.85	14.25	14.60
Maine	9	13.80	14.20	14.55
Colorado	10	13.65	14.05	14.40
Oregon	11	13.50	13.88	14.22
Maryland	12	13.25	14.00	15.00
Vermont	13	13.18	13.55	13.89
Rhode Island	14	13.00	14.00	15.00
Illinois	14	13.00	14.00	15.00
Hawaii	16	12.00	14.00	14.00
Virginia	16	12.00	12.00	13.50
Missouri	16	12.00	12.35	12.65
New Mexico	16	12.00	12.00	12.00
Delaware	20	11.75	13.25	15.00
Florida	21	11.00	12.00	13.00
Arkansas	21	11.00	11.00	11.00
Alaska	23	10.85	11.15	11.43
South Dakota	24	10.80	11.10	11.40
Minnesota	25	10.59	10.85	11.13
Nebraska	26	10.50	12.00	13.50
Nevada	26	10.50	11.25	12.00
Michigan	28	10.10	10.33	10.56
Ohio	28	10.10	10.40	10.65
Montana	30	9.95	10.25	10.50
West Virginia	31	8.75	8.75	8.75
Pennsylvania	32	7.25	7.25	7.25
Other	32	7.25	7.25	7.25

Note: Over 50 localities have adopted a minimum wage above their state's minimum wage.
 1 Inflation adjustments use an estimated 2.8% for 2024 for 2.5% for 2025.
 Source: The Economic Policy Institute. Minimum Wage Tracker (as of January 1, 2023).

Marijuana Taxes

Marijuana Tax Collections						
States	Fiscal Year (\$ millions)					
	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Alaska	\$1.7	\$11.1	\$19.2	\$24.5	\$28.9	\$28.9
California ¹	--	401.6	646.8	1,136.4	1,362.0	1,085.9
Colorado ¹	247.4	266.5	302.5	387.5	423.5	325.1
Maine ¹	--	--	--	1.2	12.4	--
Massachusetts	--	--	22.1	81.7	176.7	--
Nevada	--	69.8	99.2	105.2	157.8	152.3
Oregon	70.3	82.2	102.1	133.2	178.3	170.6
Washington	315.2	362.0	390.4	469.2	555.4	511.1

1 Represent calendar year data.
Source: Various state websites.

State Taxes on Recreational Marijuana

State	Year	Unit or Wholesale Tax	Excise Tax	Sales Tax
Alaska	2014	\$50/oz mature bud and flower; \$25/oz immature or abnormal bud; \$15/oz remainder of plant; \$1/clone		
Arizona	2020		16%	5.60%
California	2016		15%	7.25%
Colorado	2012		15%	15.00%
Connecticut	2021	\$0.00625/mg of THC in plant material \$0.0275/mg of THC in edibles \$0.09/mg of THC in non-edible products		6.35%
Illinois	2019	Cultivation Privilege Tax: 7% on the value at the wholesale level	10% tax- cannabis flower or products at or below 35% THC; 20% tax- products infused with cannabis; 25% tax- any product with a THC concentration higher than 35%	6.25%
Maine	2016	\$335/lb of flower or mature plant \$94/lb of trim \$1.50 per immature plant or seedling \$0.30 per seed	10%	5.50%
Massachusetts	2016		10.75%	6.25%
Michigan	2018		10%	6.00%
Montana	2020		20%	
Nevada	2016	15% at the wholesale level	10% retail tax/consumer tax	6.85%
New Jersey	2020	\$1.10/oz sold by Class 1 cultivators		6.625%
New Mexico	2021		12%	5.13%
New York	2021	\$0.005/mg of THC in flower \$0.008/mg of THC in concentrates \$0.03/mg of THC in edibles	9%	
Oregon	2014		17%	
Rhode Island	2022		10%	7.00%
Vermont	2020		14%	6.00%
Virginia	2021		21%	5.30%
Washington	2012		37%	6.50%

Notes: Local sales taxes may also apply.

