Pennsylvania

Economic and Budget Outlook

FISCAL YEARS 2023-24 TO 2028-29

November 2023

Independent Fiscal Office

Independent Fiscal Office
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INDEPENDENT FISCAL OFFICE

November 15, 2023

The Honorable Members of the Pennsylvania General Assembly:

Section 604-B (a)(2) of the Administrative Code of 1929 specifies that the Independent Fiscal Office (IFO) shall "provide an assessment of the state's current fiscal condition and a projection of what the fiscal condition will be during the next five years. The assessment shall take into account the state of the economy, demographics, revenues and expenditures." In fulfillment of that obligation, the IFO submits this report to the residents of the Commonwealth and members of the General Assembly. In accordance with the mission of the office, this report does not make any policy recommendations.

The data and projections presented in this report are from various sources. Economic projections for Pennsylvania are from the IFO, while projections for the U.S. are from S&P Global. Demographic projections are from the IFO based on tabulations from the 2022 Population Estimates by the U.S. Census Bureau and data from the U.S. Centers for Disease Control and Prevention. Historical revenue and expenditure data are from the *Governor's Executive Budget*, the state accounting system and various departmental reports. All revenue and expenditure projections are from the IFO. Other data sources are noted in the relevant sections of this report.

The office would like to thank all of the individuals, agencies and organizations that assisted in the production of this report. Questions and comments can be submitted to contact@ifo.state.pa.us.

Sincerely,

Matthew J. Knittel
Director

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Contents

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Executive Summary

This report examines the demographic, economic, revenue and expenditure trends that will affect the Commonwealth's fiscal condition through fiscal year (FY) 2028-29. For FY 2023-24, there is a significant General Fund ending balance, but operating deficits for that year and all future years. The projected deficits are sufficient to eliminate the combined General Fund and Rainy Day Fund (includes interest accrual) balances by the end of the forecast period.

The projected deficit expands rapidly after the FY 2023-24 base year: $1.3 billion for FY 2024-25 and another $1.1 billion for FY 2025-26. After that year, deficit expansion continues but moderates as average spending growth outpaces revenues. The main factors that drive rapid deficit expansion are:

- Reduced revenues from the phased-in corporate net income tax rate reduction, an assumed profits contraction and lower Treasury collections.
- Strong expenditure growth for the intellectual disabilities and long-term living programs. This outcome occurs due to the expiration of the enhanced federal matching rate (FMAP) and a rapidly expanding age 75+ population that requires long-term care.

Relative to the enacted budget, the FY 2023-24 deficit for this outlook is $425 million lower. That comparison uses the financial statement from the Office of the Budget with estimated spending reductions from the October 2023 Fall Update (-$450 million) and incorporates a projected transfer from cigarette tax revenues (-$115 million) to the Tobacco Settlement Fund.

General Fund Financial Statement

Fiscal Year	22-23	23-24	24-25	25-26	26-27	27-28	28-29
Current Year Revenues	$44,917	$45,190	$45,813	$46,556	$47,838	$48,966	$50,278
Refund Reserve	-1,489	-1,495	-1,445	-1,395	-1,345	-1,345	-1,345
Net Revenue	43,428	43,695	44,368	45,161	46,493	47,621	48,933
State Expenditures[1]	-40,801	-44,974	-46,528	-48,379	-49,996	-51,600	-53,149
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Current Year Balance	2,627	-1,279	-2,159	-3,218	-3,503	-3,979	-4,216
Reduced Spending[2]	0	450	0	0	0	0	0
Adjustment for Lapses[3]	-88	205	200	200	200	200	200
Preliminary Ending Balance	**2,538**	**-624**	**-1,959**	**-3,018**	**-3,303**	**-3,779**	**-4,016**
General Fund Ending Balance[4]	8,085	7,461	5,501	2,483	0	0	0
Rainy Day Fund Ending Balance[5]	6,027	6,314	6,588	6,841	6,236	2,602	-1,371

Note: Millions of dollars.

1 Based on appropriations. Includes current year lapses.

2 Anticipated reduction in current year spending as provided by the Office of the Budget on October 31, 2023.

3 Prior year lapses, minus transfers to the Budget Stabilization Reserve Fund (i.e., Rainy Day Fund). FY 22-23 reflects two transfers to the Rainy Day Fund.

4 Prior year ending General Fund balance plus current year surplus/deficit.

5 Prior year balance plus interest earnings, less any shortfall that cannot be absorbed by the General Fund.

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Introduction

This report provides an overview of the demographic, economic, revenue and expenditure trends that will affect the Commonwealth's fiscal condition through FY 2028-29. The report examines long-term trends to facilitate an assessment of current tax and spending policies. The projections are best viewed as plausible outcomes from the application of reasonable economic assumptions and the continuation of current policies and demographic trends. Actual revenues and expenditures could deviate significantly from the projections in this report due to the uncertainty of economic outcomes and unanticipated technical factors, such as changes to federal tax laws and federal matching funds.

The economic projections displayed in this report motivate most General Fund revenues through FY 2028-29. The projections do not represent a formal economic forecast, but rather a controlled simulation. They assume that economic growth is consistent with full employment, historical labor productivity gains and inflation expectations. The economic simulation provides a neutral baseline that policymakers can use to assess fiscal sustainability, and it assumes that a recession does not occur over the five-year budget window. Therefore, the economic forecast likely represents an optimistic scenario.

The report designates FY 2023-24 as the base year. All revenue and expenditure projections use that year as a reference year and assume that the policy choices embedded therein do not change through FY 2028-29. The forecast assumes that expenditures grow in a manner that is sufficient to maintain the level of real services provided to service populations in the base year. Hence, most expenditure projections include an inflationary adjustment to compensate for rising prices.

The report projects expenditures supported by General Fund revenues, as well as other revenue sources. To that end, the report includes projections for the Lottery, Tobacco Settlement and Oil and Gas Lease Funds. Certain disbursements from those funds support General Fund programs, and the projections allow policymakers to determine if legislative or policy changes are needed so the funds can maintain their current levels of support. Projections of non-General Fund revenues are included in the Appendix.

The report starts with the demographic and economic outlooks. Those outlooks provide the foundation for the five-year projections of General Fund tax revenues and expenditures that follow. Several appendices provide further details on all forecasts contained in this report.

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Demographic Outlook

Demographics are a critical factor that motivate long-term economic, revenue and expenditure trends. Demographic trends determine key populations such as the labor force that affects economic growth, elementary and secondary students who require educational services and older residents who may require long-term care. All population projections and certain descriptive text contained in this section are from the IFO report *Pennsylvania Demographic Outlook* (October 2023).[1]

Table 2.1 presents the population change for various age cohorts for three time periods. Those periods are: 2015 to 2020 (historical), 2020 to 2025 (near-term projections) and 2025 to 2030 (long-term projections). While near-term projections should be close to actual population estimates, long-term projections are less certain because birth, death and migration rates can vary significantly due to changing economic conditions, immigration policies, domestic migration incentives and health care.

Table 2.1
Pennsylvania Demographic Trends and Projections

Age	Number of Residents (000s)				Total Growth		
Cohort	2015	2020	2025	2030	2015-20	2020-25	2025-30
0-19	3,101	3,035	2,937	2,833	-2.1%	-3.2%	-3.5%
20-64	7,616	7,522	7,326	7,203	-1.2	-2.6	-1.7
65-79	1,559	1,831	2,076	2,146	17.5	13.4	3.4
80+	615	606	656	792	-1.5	8.2	20.8
Total	**12,891**	**12,994**	**12,995**	**12,974**	**0.8**	**0.0**	**-0.2**

Note: Detail may not sum to total due to rounding.
Sources: The 2015 data are estimates by the IFO based on the U.S. Census Bureau Vintage 2020 and 2022 Population Estimates. The 2020 data are from the U.S. Census Bureau Vintage 2022 Population Estimates. 2025 and 2030 are projections by the IFO using data from the U.S. Census Bureau and U.S. CDC.

Table 2.1 reveals the following trends:

- The total population grew 0.8% from 2015 to 2020 and is projected to remain flat in the near term and then decrease slightly during the long term (-0.2%).
- The school age cohort (age 0 to 19) declined 2.1% from 2015 to 2020 and is projected to decline 3.2% in the near term and then decline 3.5% during the long term.
- The working-age cohort (age 20 to 64) declined 1.2% from 2015 to 2020 and is projected to continue to contract by 2.6% in the near term and then decline 1.7% during the long term. In 2025, this group includes mostly Generation X (born 1965 to 1980) and Millennials (born 1981 to 1997) and a portion of Generation Z (born 1998 to 2015).
- The retiree cohort (age 65 to 79) increased 17.5% from 2015 to 2020 and is projected to expand 13.4% in the near term and then 3.4% during the long term. In 2025, this group includes most of

[1] The *Pennsylvania Demographic Outlook* used data from the U.S. Census Bureau and U.S. Centers for Disease Control and Prevention (CDC).

the Baby Boom Generation (born 1946 to 1964). The increase in this age cohort and the next age cohort implies strong demand for health care and long-term care services moving forward.

- The advanced age cohort (age 80+) decreased 1.5% from 2015 to 2020 and is projected to expand 8.2% in the near term and then 20.8% during the long term. In 2025, this group mostly includes the Silent Generation (born 1926 to 1945) and a small number from the Greatest Generation (born 1905 to 1925).

Components of Population Change

Table 2.2 decomposes the change in state population from 2015 to 2030 to illustrate the factors that motivate low population growth rates. Two factors drive the trends during the 15-year time period:

- The forecast projects that the number of births will decline while the number of deaths increases. From 2015 to 2020, births outnumbered deaths (organic growth) by 7,000. Deaths are projected to outnumber births by 76,000 from 2020 to 2025 and 111,000 from 2025 to 2030.
- From 2015 to 2020, estimated net migration was 97,000. For 2020 to 2025, the projections assume a reduction to a net inflow of 77,000. Net migration is lower moving forward because the forecast is based on migration patterns from 2018 to 2022, which were notably lower than 2015 to 2020. For 2025 to 2030, net migration is projected to be 91,000 as it reverts to pre-COVID rates.

Table 2.2
Components of Pennsylvania Population Change

	Time Period		
	2015-20	2020-25	2025-30
Start of Period	**12,891**	**12,994**	**12,995**
Natural Increase	**7**	**-76**	**-111**
Births	684	650	638
Deaths	-677	-726	-750
Net Migration	**97**	**77**	**91**
End of Period	**12,994**	**12,995**	**12,974**
Total Population Gain	**103**	**0**	**-21**

Note: Thousands of residents.

Sources: The 2015 through 2019 data are from the U.S. Census Bureau Vintage 2020 Population Estimates and U.S. CDC with adjustments by the IFO. 2020 through 2022 data are from the U.S. Census Bureau Vintage 2022 Population Projections. 2022 through 2030 data are projections by the IFO using data from the U.S. Census Bureau and U.S. CDC. Calculations by the IFO.

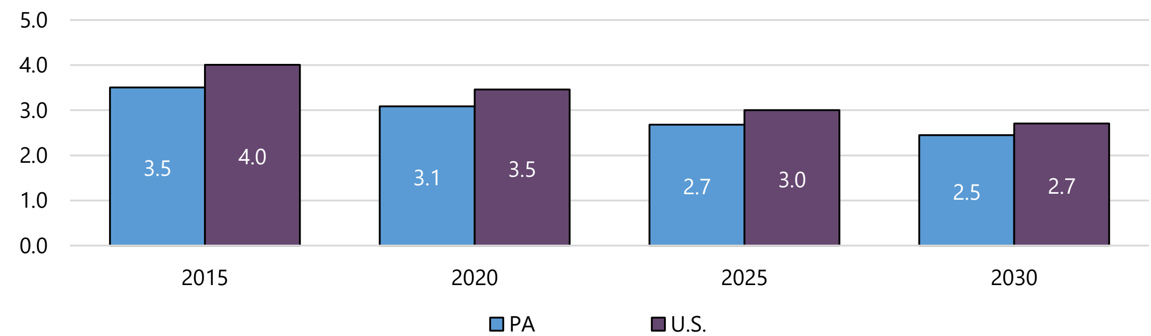
Dependency Ratios

Working-age residents remit the majority of state tax revenues that support dependents who attend school and advanced age residents who require dedicated healthcare services. Demographers use two metrics known as dependency ratios to illustrate the relationships between these three groups. The two ratios are the working-age (age 20 to 64) to youth (age <20) and working-age to older adult (age 65+) populations. From 2015 to 2030, the working-age to youth ratio is projected to remain stable at 2.5 for Pennsylvania and 2.3 to 2.4 for the U.S. (not shown). For Pennsylvania, this implies that there are roughly 2.5 working-age adults per youth.

Unlike the working-age to youth ratio, the working-age to older adult ratio is trending downward for Pennsylvania and the U.S. **Figure 2.1** displays this ratio for Pennsylvania (blue) and the U.S. (purple) for 2015, 2020, 2025 (projected) and 2030 (projected). In 2015, there were 3.5 working-age residents per older adult in Pennsylvania and 4.0 for the U.S. Both ratios declined by 2020 (3.1 for Pennsylvania, 3.5 for the U.S.) and are projected to decline further through 2030 (2.5 for Pennsylvania, 2.7 for the U.S.). The downward trend directly corresponds to the retirement of Baby Boomers and the resulting contraction of the working-age population.

Figure 2.1 illustrates the challenges that policymakers will encounter during the next decade. Over time, there will be relatively fewer working-age residents to support the needs of rapidly expanding retiree and advanced age populations. Stated differently, the burden of support will fall on a smaller group of taxpayers. The actual contraction of the working-age cohort suggests that real per capita taxes for that age group must increase to keep pace with the anticipated increase in demand for health care and other services.

Figure 2.1
PA and U.S. Working-Age (20-64) to Older Adult (65+) Ratios



Sources: Pennsylvania data for 2015 and 2020 are from U.S. Census Bureau various Population Estimates with adjustments by the IFO for 2015. Data for 2025 and 2030 are projections by the IFO. U.S. data are from the U.S. Census Bureau. International Database (last accessed on October 5, 2023).

Focus: Labor Force Trends Among Older Adults

A major challenge highlighted in recent years has been the strong growth of older adults while the working-age population contracts. This trend has long-term implications for various state economic metrics, notably the labor force participation rate (LFPR). The LFPR is published by the U.S. Bureau of Labor Statistics and represents the share of residents age 16 or older that work or actively seek employment. If the LFPR declines, then it suggests that less labor resources are available, which has negative implications for economic growth.

In general, older residents have much lower LFPRs. Therefore, as the state population continues to age, the overall LFPR will decline automatically if rates for specific age groups do not increase. **Table 2.3** presents data and average annual growth rates for the older adult population from 2020 to 2030. The older worker (age 55 to 64), retiree (age 65 to 74) and advanced age (age 75+) cohorts comprise the population of older adults in the Commonwealth. The forecast projects that the older worker cohort will contract (-2.1% per annum), while the retiree (1.0%) and advanced age cohorts (3.2%) expand.

Age	Residents (000s) 2020	2025	2030	10-Year Change	AAGR '20-'30
55 to 64	1,826	1,669	1,483	-343	-2.1%
65 to 74	1,411	1,548	1,564	153	1.0
75 to 84	705	868	1,031	326	3.9
85+	322	326	372	50	1.5
Total	**4,263**	**4,412**	**4,450**	**187**	**0.4**

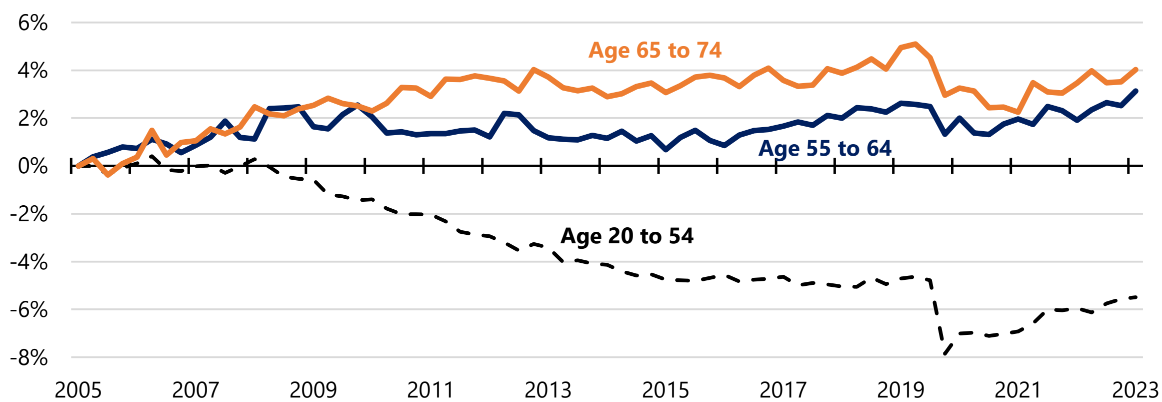
Table 2.3
Older Adult Population Projections for Pennsylvania

Note: AAGR is average annual growth rate.
Source: U.S. Census Bureau. Estimates and projections by the IFO.

Two primary factors motivate these trends. First, the Baby Boom generation will continue to transition into the retiree and advanced age cohorts. For 2022, Baby Boomers comprised the largest share of Pennsylvania's population distribution (22.7%). Since younger generations comprise a relatively smaller share compared to the older adult population, there will be fewer working-age residents compared to retiree and advanced age residents. Second, healthcare advancements should extend resident longevity.

Figure 2.2 displays the total change in LFPRs for the older worker, retiree and age 20 to 54 cohorts, relative to 2005 Q3.[2] For that year, the LFPR for the working-age (age 20 to 54) was 80.4%. Since then, the working-age LFPR declined 5.5 percentage points, while those age 65 to 74 increased 4.0 percentage points and those age 55 to 64 increased 3.1 percentage points. This outcome implies that a higher share of older adults are working or seeking work than was the case for previous generations.

Figure 2.2
Change in U.S. Labor Force Participation Rates for Older Adults Since 2005



Note: Data shown are for Q3.
Source: U.S. Bureau of Labor Statistics.

Given the projected expansion of the age 65 to 74 cohort (see Table 2.3) and the strong growth in the LFPR for that cohort (see Figure 2.2), a relevant issue is whether future labor demand will occur in industries and occupations in which those residents could work, if desired. To examine this issue, **Table 2.4** presents the share of employment in each industry for three age cohorts: (1) residents age 19 to 54, (2) residents

[2] Figure 2.2 uses LFPR estimates for the U.S. and not Pennsylvania because the national data include (1) many more data points, and therefore, the rates have narrower confidence intervals, (2) detail for both the age 65 to 74 and age 75+ groups and (3) recent data for 2023. Overall, LFPR trends for Pennsylvania show a less dramatic reduction in the LFPR for those age 20 to 54 and a more dramatic increase for those age 65+.

age 55 to 64 and (3) residents age 65 to 79. The two rightmost columns display detail for those age 65 to 79, including the number employed by sector, and the relative share of those age 65 to 79 who work and are employed by a specific sector. (These data exclude self-employed individuals and independent contractors.) For these workers, the data reveal that:

- The arts-entertainment (11.4%), other services (10.5%), retail-wholesale trade and education (both 9.9%) have a relatively high share of workers age 65 to 79. (See third column of data.) Many of those jobs are part-time or have limited physical demands.
- For those working, residents age 65 to 79 were much more likely to work in the retail-wholesale trade (17.2%) and healthcare and social assistance (17.6%) sectors (see final column). These data show the sectors that older workers prefer, which may be due to flexible and part-time hours (retail) and limited physical demands (social assistance/counseling). By contrast, manual labor employment in construction (3.8%) or small sectors with minimal employment opportunities (arts-entertainment, 2.5%) employ a relatively small proportion of residents age 65 to 79 who work.

Table 2.4
Pennsylvania Labor Market Data by Age and Sector

	% Employment by Age Group			Age 65-79 Employment	
	19-54	55-64	65-79	# (000s)	Share
All Industries	**73.3%**	**18.9%**	**7.8%**	**439.8**	**100.0%**
Construction	74.8	18.9	6.4	16.9	3.8
Manufacturing	69.2	24.0	6.8	38.2	8.7
Retail and Wholesale Trade	71.9	18.2	9.9	75.7	17.2
Transport and Warehouse	72.1	18.9	9.0	26.0	5.9
Financial and Real Estate	72.6	20.7	6.6	22.0	5.0
Professional and Technical	75.9	17.2	6.9	26.5	6.0
Admin and Waste Management	75.7	16.2	8.1	25.6	5.8
Education (excludes local SD)	71.2	18.9	9.9	17.8	4.1
Healthcare-Social Assistance	73.6	18.8	7.6	77.6	17.6
Arts-Entertainment	74.6	14.1	11.4	11.0	2.5
Accommodation-Food Service	82.3	11.7	6.0	22.6	5.1
Government	73.3	18.9	7.8	39.9	9.1
Other Services	70.5	19.0	10.5	20.2	4.6
All Other	74.5	19.1	6.4	19.9	4.5

Note: Data not seasonally adjusted. Figures for 2022 Q3. Excludes self-employed, independent contractors and workers under age 19. Workers age 80+ removed from employment totals due to nominally low labor force participation.

Source: Quarterly Workforce Indicators, U.S. Census Bureau.

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Economic Outlook

This section presents the economic forecast used to project most General Fund revenue sources. The convention used for this five-year outlook assumes that the Pennsylvania economy reverts to long-term, historical growth rates that are also motivated by broad, demographic trends. The economic projections are not a traditional economic forecast. Rather, they are an economic simulation that provides policymakers with a neutral baseline that can be used to assess long-term fiscal sustainability.

Table 3.1 displays the economic projections used for this report. The table displays three distinct phases or time periods: COVID (2020-22), recovery and reversion (2023-25, orange shading) and long-term (2026 and later, blue shading). The forecast assumes that growth decelerates for calendar year (CY) 2024, accelerates in CY 2025, and then reverts to long-term growth rates for CY 2026 and later years. (See Appendix for further detail.) The projections reflect four key assumptions which do not assume an economic contraction through 2028, and therefore lean optimistic:

- Labor force participation rates recover and then exceed rates observed prior to the pandemic. Due to a contraction of the working age cohort, that outcome must occur to generate moderate jobs growth. Currently, those rates are lower than pre-pandemic rates.
- Annual jobs growth slows compared to historical averages. That outcome reflects the ongoing contraction of the state working-age population.
- Inflation decelerates to 2.3% per annum, somewhat higher than the Federal Reserve target rate of 2.0%.
- Workers receive wage increases that exceed inflation by 1.0 percentage point (i.e., average real wages increase by 1.0% per annum).

Table 3.1
Pennsylvania Economic Forecasts

	Annual Growth Rate or Change								
	2020	2021	2022	2023	2024	2025	2026	2027	2028
Real GDP	-4.8%	4.4%	2.1%	2.6%	0.5%	1.3%	1.6%	1.7%	1.8%
Nominal GDP	-3.5%	9.4%	9.3%	6.8%	3.6%	3.8%	3.9%	4.0%	4.1%
Philadelphia CPI-U	0.9%	4.0%	7.9%	4.1%	3.1%	2.5%	2.3%	2.3%	2.3%
Wages and Salaries	-0.1%	7.3%	7.7%	5.0%	3.3%	3.7%	3.9%	3.9%	3.9%
Net Payroll Jobs (000s)	-461	155	227	145	15	31	37	37	38
U.S. Dom. Corp. Profits	-1.5%	28.7%	12.6%	10.1%	0.0%	-6.1%	-2.6%	0.4%	2.0%

Note: Payroll jobs exclude self-employed and independent contractors. U.S. Domestic Corporate Profits forecast from S&P Global. Forecast made November 2023. Includes banks and insurers.

Source: U.S. Bureau of Economic Analysis, U.S. Bureau of Labor Statistics and S&P Global.

Economic growth is typically measured by real Gross Domestic Product (GDP, excludes inflation), the value of all final goods and services produced by the state economy. **Real GDP** growth decelerates for CY 2024 and then reverts to a long-term, steady state growth rate of 1.8% per annum. That long-term growth rate is the product of the employment (0.6%) and labor productivity (real output per worker, 1.2%) growth rates. (See **Figure 3.1**.) If inflation is included (2.3%), then long-run **Nominal GDP** is projected to grow by 4.1% per annum. Nominal GDP is the broadest statewide metric used to quantify the (nominal) expansion of the state economy.

Wages and Salaries paid to payroll workers ($430 billion for CY 2023) is the primary factor that motivates nominal GDP growth and state personal income. It also motivates personal income tax withholding and sales and use tax revenues, which comprised 61% of General Fund tax revenues in FY 2022-23. Figure 3.1 illustrates that projected wage growth is the product of three rates: (1) jobs growth, (2) inflation and (3) a real wage premium. The forecast assumes that workers, on average, receive a 1.0 percentage point premium over and above inflation. Alternatively, wage growth can be conceptualized as the growth in the average statewide wage paid (3.3%) plus jobs growth (0.6%).

Figure 3.1
Long Run Macro Growth Rate Components

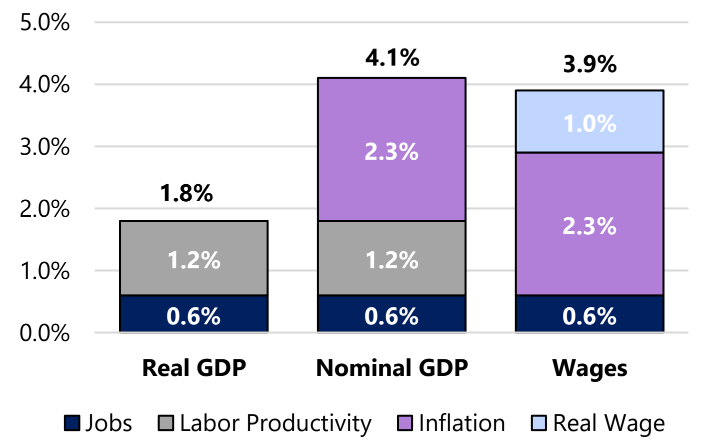
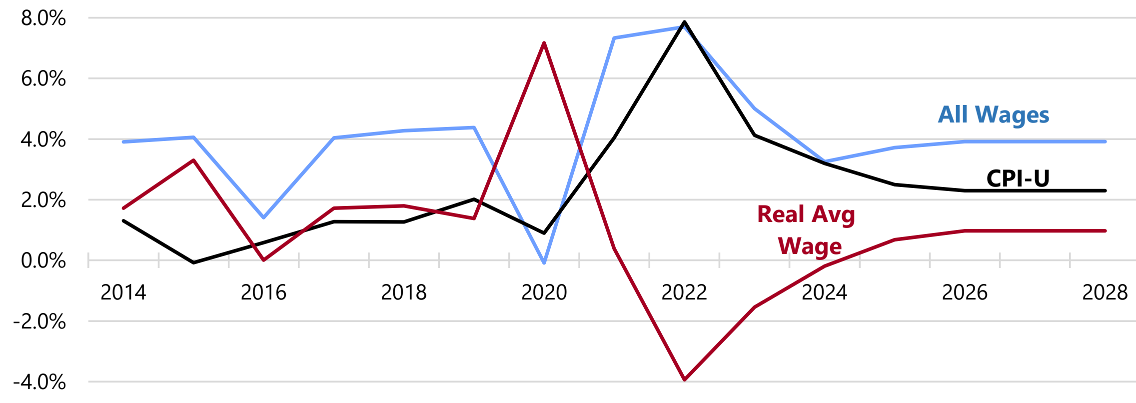


Figure 3.2 displays historical and projected growth rates for wages-salaries, inflation (measured by the Philadelphia CPI-U) and the statewide real average wage. The figure illustrates the highly unusual growth rates during the COVID and post-COVID recovery years:

- Pre-COVID, wages-salaries grew by roughly 4.0% per annum in five of six years. During COVID and recovery, wage growth averaged 5.0% per annum. The forecast reverts to 3.9% per annum.
- Pre-COVID, inflation was unusually low (1.4% per annum). During COVID and recovery, inflation averaged 4.2% per annum. The forecast reverts to 2.3% per annum.
- Pre-COVID, real average wages expanded at an average rate of 1.6% per annum. During COVID and recovery, statewide average wages contracted two years (but positive overall) due to high inflation. An unusual spike occurred in CY 2020 due to temporary layoffs of lower-wage workers, and then contracted in CY 2022 due to unusually high inflation (7.9%). The forecast assumes real wage growth reverts to 1.0% per annum.[3]

[3] For the purpose of Figure 3.2, the real average wage is computed as total wages paid divided by payroll employment and then deflated by the Philadelphia CPI-U.

Figure 3.2
Annual Growth Rates of Macro Variables



Source: U.S. Bureau of Labor Statistics and U.S. Bureau of Economic Analysis.

The section concludes with data that display recent macroeconomic and labor market trends for the Pennsylvania economy. Recent economic trends do not influence the assumed long-term growth rates used for this report, but they do provide a snapshot of current economic conditions and context for the near-term revenue forecast discussed in the next section.

The top portion of **Table 3.2** displays macroeconomic trends:

- The latest real GDP growth rate for Pennsylvania is 1.9% for 2023 Q1. The latest data for the U.S. is for 2023 Q3 and shows 4.5% quarterly annualized growth. The forecast projects that average state growth for CY 2023 will be 2.6%, which exceeds historical rates.
- Wage growth was very strong in 2022 due to labor shortages and strong consumer demand. While the latest data show deceleration, growth still exceeds historical averages.
- Regional inflation has decelerated but remains well above the Federal Reserve target rate of 2.0%. The latest reading for October 2023 shows that the regional CPI-U grew by 3.5% compared to the prior year.
- The increase in median home values has slowed, but relative to 2019 Q3, the home value index increased 40.6%, greatly reducing home affordability. Due to rapidly accelerating home prices and mortgage rates, home sales have declined to levels last recorded in the Great Recession.

Table 3.2
Recent Pennsylvania Economic Growth Rates, Levels or Change

	2022.3	2022.4	2023.1	2023.2	2023.3
Macroeconomics					
Real GDP	3.2%	3.2%	1.9%	--	--
Wages and Salaries	8.4%	4.9%	6.6%	6.2%	5.5%
CPI-U - All Items	8.1%	7.1%	6.9%	3.9%	3.9%
FHFA Home Value Index	9.5%	8.3%	5.3%	5.2%	3.5%
RedFin Home Sales	-13.6%	-24.5%	-20.1%	-17.6%	-17.5%
Labor Market					
Unemployment Rate	4.3%	4.4%	4.3%	4.0%	3.5%
Change Payroll Jobs (000s)	224	189	172	155	148
Change All Jobs (000s)	133	95	44	41	74
Labor Force Participation Rate	61.7%	61.7%	61.9%	62.0%	61.9%

Notes: All growth rates or changes are year-over-year except Real GDP, which is quarterly annualized. Labor market data are seasonally adjusted. 2023 Q3 Wages and Salaries growth rate based on withholding revenues.

Sources: U.S. Bureau of Economic Analysis, U.S. Bureau of Labor Statistics, FHFA and RedFin.

The bottom portion of Table 3.2 displays state labor market trends:

- The unemployment rate is at the lowest rate since state data have been published (1976).
- The annual pace of job gains remains very strong. For payroll employment (excludes self-employed, based on the U.S. Bureau of Labor Statistics (BLS) establishment survey), employers added 148,000 jobs compared to the prior year. Prior to COVID, the annual rate of payroll jobs creation was 55,000 to 60,000.
- If the household survey is used, which includes self-employed individuals and counts multiple job holders only once, the annual pace of job gains falls to 74,000. Currently, it is not clear what factors drive the difference between the two labor market surveys.
- The labor force participation rate remains relatively flat at 61.9%. Prior to COVID, the rate was closer to 63.0%. A portion of the decline is due to the general aging of the state population: older residents have lower LFPRs (see prior section). Many working age residents elected to depart the labor force during COVID, and the data suggest that a portion have not returned.

Revenue Outlook

General Fund revenues of $44.92 billion in FY 2022-23 were reduced due to a corporate net income tax (CNIT) rate reduction/base expansion (-$110 million) and a new motor vehicle sales and use tax (SUT) transfer to the Public Transportation Trust Fund (-$508 million). After adjusting for these tax law changes and a one-time transfer of $3.84 billion of federal funds to the General Fund in FY 2021-22, revenue increased at a rate of 2.8% for FY 2022-23.

Table 4.1
General Fund Revenues

Fiscal Year	22-23	23-24	24-25	25-26	26-27	27-28	28-29
Personal Income	$17,628	$18,294	$19,030	$19,812	$20,789	$21,531	$22,425
Sales and Use	14,024	14,059	14,397	14,830	15,256	15,691	16,120
Corporate Income	6,143	5,540	5,139	4,767	4,572	4,439	4,292
Gross Receipts	1,181	1,194	1,191	1,172	1,155	1,141	1,107
Inheritance	1,524	1,525	1,525	1,571	1,644	1,713	1,775
All Other	4,416	4,578	4,531	4,404	4,421	4,452	4,559
Total Revenue	**44,917**	**45,190**	**45,813**	**46,556**	**47,838**	**48,966**	**50,278**
Growth Rate	-6.7%	0.6%	1.4%	1.6%	2.8%	2.4%	2.7%

Note: Millions of dollars.

The updated forecast for FY 2023-24 collections reflects a reduction of $215 million from the IFO's Official Revenue Estimate released in June 2023.[4] The update assumes that cigarette tax revenues are reduced by $115 million for debt service related to the Tobacco Settlement Bonds. The remaining reduction is largely driven by recent weakness in CNIT and personal income tax (PIT) quarterly payments and is partially offset by higher than anticipated Treasury collections and strength in PIT annual payments. FY 2023-24 collections are expected to increase 0.6% to $45.19 billion (1.4% after adjusting for the continued reduction of the CNIT rate). (See **Table 4.1**.) Revenues then increase at an average rate of 2.7% per annum for FY 2023-24 to FY 2028-29 (adjusted for the continued reduction of the CNIT rate). In the near term, notable factors that impact revenues include:

- Nonwithheld PIT growth is moderate in FY 2023-24, as capital gains (+79%) and net profits (+29%) soared in tax year (TY) 2021, weakened dramatically (capital gains, -45%; net profits, 0%) in TY 2022, then partly recover in TY 2023 (capital gains, +5%; net profits, -2%). Nonwithholding collections for FY 2024-25 through FY 2028-29 are projected to increase at rates consistent with historical averages for non-recession years.
- Sales and use tax (SUT) growth for FY 2023-24 decelerates, as inflation moderates, student loan repayments restart and most pandemic-related federal assistance is depleted or has expired. Motor vehicle SUT collections are further limited by high interest rates and low vehicle inventories. Conditions are expected to improve in FY 2024-25.

[4] See *Official Revenue Estimate FY 2023-24* for more information.

- CNIT collections are impacted by rate/base changes enacted with the FY 2022-23 state budget. These changes reduce CNIT collections by an estimated $480 million for FY 2023-24 and $1.86 billion by FY 2028-29.
- Realty transfer tax (RTT) collections for FY 2023-24 are severely impacted by a "lock in" effect, as homeowners who obtained historically low-rate mortgages available over the past few years are now reluctant to sell.
- Treasury collections continue a dramatic rise from $452 million in FY 2022-23 to a projected $678 million in FY 2023-24. The increase is due to unusually high General Fund cash balances and a historically high federal funds rate. Collections are expected to remain elevated through FY 2024-25 ($561 million) but then decline as General Fund balances are depleted and short-term interest rates revert to historical levels.

The subsections that follow provide a brief discussion of revenue trends, the outlook for select General Fund revenue sources and highlights for smaller revenue sources. Historical data for General Fund revenues can be found at the IFO website.

Revenue Trends and Projections

The revenue projections in this report assume a reversion to "typical" economic growth to provide a neutral baseline that can be used to assess the fiscal condition of the state. To provide context for the revenue forecast, **Table 4.2** displays average annual growth rates and average dollar change for three five-year periods, generally (1) pre-pandemic (FY 2013-14 to FY 2018-19), (2) pandemic/recovery (FY 2018-19 to FY 2023-24) and (3) post-pandemic (FY 2023-24 to FY 2028-29, forecast period). Notable trends and outcomes include:

- During the pre-pandemic period, average revenue growth (4.3% per annum) was enhanced due to (1) the collection of tax from remote sellers (SUT), (2) new taxes (other tobacco) or tax increases (cigarettes) and (3) licensing fees related to gaming expansion. Average dollar gains ($1.31 billion per annum) were driven by consumption taxes ($497 million) and taxes on profits, wealth and capital income ($419 million), followed by tax on labor income (withholding, $340 million).
- Average annual revenue growth accelerated 1.1 percentage points during the pandemic period (4.3% to 5.3%) as state residents, businesses and governments received nearly $200 billion of federal stimulus and recovery funds. Employee wages, consumer spending, business profits and inflation increased dramatically. Due to high General Fund balances and short-term interest rates, Treasury collections also surged to record levels (non-tax column).
- Over the forecast period, average revenue growth decelerates to 2.2% per annum and annual dollar gains fall to $1.02 billion. Revenues from taxes on profits, wealth and capital income slow dramatically due to the continued phase-in of the CNIT rate cut and a projected profits reversion. Treasury collections revert to historical levels and decline by roughly $120 million per annum. Withholding maintains its average revenue contribution ($565 million per annum) while taxes on consumption slow due to higher interest rates, higher housing costs and the resumption of student loan repayments.

Table 4.2
General Fund Revenue Collection Trends

	Average Annual Growth Rate				
FY Ending	**General Fund**	**PIT Withheld**	**Profits, Wealth & Capital Inc.**	**Consumer**	**All Non-Tax**
2014-19	4.3%	3.6%	5.8%	3.7%	9.5%
2019-24	5.3%	4.9%	7.9%	3.6%	12.1%
2024-29	2.2%	3.9%	0.6%	2.6%	-9.3%

	Average Annual Dollar Change ($ millions)				
FY Ending	**General Fund**	**PIT Withheld**	**Profits, Wealth & Capital Inc.**	**Consumer**	**All Non-Tax**
2014-19	$1,314	$340	$419	$497	$58
2019-24	$2,066	$563	$791	$589	$124
2024-29	$1,018	$565	$77	$486	-$110

Note: Millions of dollars. General Fund excludes capital stock and foreign franchise tax. Profits, Wealth and Capital Income includes CNIT, non-withheld PIT, inheritance, financial institutions, utility property and minor and repealed taxes. Consumer includes SUT, GRT, cigarette, other tobacco products, malt beverage, liquor, RTT and gaming taxes.

Personal Income Tax

PIT revenues of $18.29 billion are $60 million lower than the IFO's official estimate for FY 2023-24. The decline is due to weaker collections from quarterly payments attributable to TY 2023. Currently, it is unclear what factors drive this weakness as Pennsylvania economic and labor market indicators remain resilient through 2023 Q3.

After a 3.8% increase in FY 2023-24, PIT revenues are projected to grow at an average rate of 4.2% per annum through FY 2028-29. (See **Table 4.3**.) Withholding tax revenues increase at a slightly slower rate (3.9%), while nonwithholding tax revenues increase more quickly (4.7%).

The forecast includes strong growth (5.0%) in FY 2026-27 withholding payments due to the occurrence of 53 weekly due dates (Wednesdays) in that fiscal year. This strength is reversed in FY 2027-28 (3.0%), as the number of due dates returns to normal. The forecast does not include a PIT transfer to the Environmental Stewardship Fund after FY 2023-24.

Table 4.3
Personal Income Tax Revenue

Fiscal Year	**22-23**	**23-24**	**24-25**	**25-26**	**26-27**	**27-28**	**28-29**
Withholding	$12,644	$13,259	$13,790	$14,327	$15,044	$15,495	$16,084
Quarterly	2,691	2,546	2,807	2,932	3,023	3,173	3,334
Annuals	2,293	2,489	2,433	2,553	2,723	2,863	3,007
Total Revenue	**17,628**	**18,294**	**19,030**	**19,812**	**20,789**	**21,531**	**22,425**
Growth Rate	-2.7%	3.8%	4.0%	4.1%	4.9%	3.6%	4.2%

Note: Millions of dollars.

Sales and Use Tax

Total SUT collections for FY 2023-24 are expected to be flat (+0.2% increase) compared to the prior fiscal year. (See **Table 4.4**.) Fiscal year-to-date non-motor vehicle collections are up 1.5%. During COVID, non-motor collections were bolstered by (1) historically low interest rates (facilitates more credit and loans and the refinance of mortgages at lower rates/payments), (2) higher prices (i.e., inflation) and (3) various federal stimulus and relief policies (e.g., economic impact payments, student loan moratorium and expansion of SNAP benefits). Non-motor SUT growth has decelerated, as inflation moderated and federal assistance was depleted or expired. Data from the U.S. Census Bureau show that total retail sales through September 2023 increased by 3.1% from the prior year, largely due to growth in food services and drinking places (+11.8%). For comparison, total retail sales increased by 10.6% during the same period in CY 2022.

For motor vehicle SUT, vehicle sales have begun to recover from the limitations imposed by shortages of semiconductor chips and other parts. According to J.D. Power, October sales of new vehicles increased 6.6% from the prior year.[5] The October data show that new vehicle inventory levels have increased significantly from the prior year (+41.2%) but remain well below pre-pandemic levels. Vehicle price inflation has also moderated greatly. The regional index for used and new car purchases from the U.S. Bureau of Labor Statistics increased by 17.3% in CY 2021 and 13.3% in CY 2022. The latest YOY inflation for October 2023 is 1.3%. Despite moderation in vehicle price inflation, consumers spent more on new vehicles this October than any other October on record according to J.D. Power.

For FY 2024-25 to FY 2028-29, the forecast projects that total SUT will expand at an average rate of 2.9% per annum. The forecast projects that non-motor vehicle SUT revenues will expand at a rate of 2.9% per annum and motor vehicles revenues will expand at an average rate of 2.1% per annum. These moderate long-term growth rates reflect the higher consumer borrowing and housing costs compared to recent years.

Table 4.4
Sales and Use Tax Revenue

Fiscal Year	22-23	23-24	24-25	25-26	26-27	27-28	28-29
Non-Motor	$12,640	$12,680	$12,990	$13,392	$13,789	$14,192	$14,589
Motor Vehicle	1,384	1,379	1,407	1,437	1,468	1,499	1,530
Total Revenue	**14,024**	**14,059**	**14,397**	**14,830**	**15,256**	**15,691**	**16,120**
Growth Rate	0.8%	0.2%	2.4%	3.0%	2.9%	2.8%	2.7%

Note: Millions of dollars.

[5] J.D. Power's Automotive Forecast (October 2023).

Corporate Net Income Tax

The forecast projects CNIT collections of $5.5 billion for FY 2023-24, a decrease of $170 million from the IFO's official estimate and a contraction of 9.8% from the prior fiscal year. For FY 2024-25, revenues contract by 7.2% and then decline at an average rate of 3.4% per annum for FY 2025-26 to FY 2028-29. (See **Table 4.5**.) This pattern is due to (1) a projected corporate profits contraction and (2) policy changes enacted in 2022.

For 2023, the preliminary ratio of U.S. domestic corporate profits to GDP is 10.8%, the highest ratio since 1966. The unusually high ratio is driven by strong consumer demand (and federal stimulus) and historically high profit margins. The U.S. profits forecast from S&P Global assumes that the profits/GDP ratio falls to 10.4% for 2024 (no profits growth), 9.4% for 2025 (6.1% profits contraction) and 8.8% for 2026 (2.6% contraction). The taxable corporate profits forecast used for this report follows that general trajectory. The U.S. Congressional Budget Office also projects a profits contraction and reversion in their latest economic forecast (July 2023).

CNIT collections are also impacted by rate/base changes enacted with the FY 2022-23 state budget (Act 53 of 2022). Act 53 (1) reduced the CNIT rate from 9.99% to 8.99% for tax years beginning after December 31, 2022, with additional reductions of 0.5% annually until the rate reaches 4.99% for TY 2031 and (2) expanded the CNIT base by sourcing certain intangible property to where the benefit is received, and codifying Corporation Tax Bulletin 2019-04 related to nexus. These changes reduce CNIT collections by an estimated $480 million for FY 2023-24 and $1.86 billion by FY 2028-29 (see Table 4.5). Collections are also reduced due to dissipating gains from a federal tax law change that requires certain research and experimentation expenditures to be amortized and not expensed.

Table 4.5
Corporate Net Income Tax Revenue

Fiscal Year	22-23	23-24	24-25	25-26	26-27	27-28	28-29
Revenues: Pre-Act 53	$6,253	$6,020	$5,819	$5,687	$5,782	$5,949	$6,152
Growth Rate	17.5%	-3.7%	-3.3%	-2.3%	1.7%	2.9%	3.4%
Impact: Act 53	-$110	-$480	-$680	-$920	-$1,210	-$1,510	-$1,860
Net Revenues	**6,143**	**5,540**	**5,139**	**4,767**	**4,572**	**4,439**	**4,292**
Growth Rate	15.4%	-9.8%	-7.2%	-7.2%	-4.1%	-2.9%	-3.3%

Note: Millions of dollars. Act 53 of 2022 gradually reduced the CNIT rate from 9.99% for TY 2022 to 4.99% for TY 2031 and expanded the tax base related to the sourcing of intangible property and income.

Realty Transfer Tax

RTT revenues of $579 million are $70 million lower than the IFO's official estimate for FY 2023-24 due to continued weakness in the housing market. Data from the Pennsylvania Realtors Association show that home sales have been declining since spring of 2021, and recently fell 20.6% in September (compared to same month in prior year), as homeowners who locked into historically low-rate mortgages over the past few years are reluctant to sell, thereby limiting inventory. The latest data from the National Association of Realtors show that the national home affordability index fell to 91.7 in August 2023, the lowest level since 1989, due to surging mortgage rates and very strong growth in home prices.[6] For Pennsylvania, data from the Federal Home Financing Agency (FHFA) show that the median value of an existing home increased 44% from 2019 Q2 to 2023 Q2.

Over the forecast period (see **Table 4.6**), net RTT revenues (after transfers) increase at an average rate of 8.9% per annum as home prices stabilize and average mortgage rates decline from a projected peak in 2023. The forecast also assumes that sales benefit from pent-up demand, especially from first-time home-buyers. By FY 2027-28, net RTT revenues surpass their pandemic peak value of $847 million recorded in FY 2020-21.

Table 4.6
Realty Transfer Tax Revenue

Fiscal Year	22-23	23-24	24-25	25-26	26-27	27-28	28-29
Realty Transfer	$644	$579	$630	$682	$759	$852	$885
Growth Rate	-24.0%	-10.1%	8.8%	8.3%	11.3%	12.2%	3.9%

Note: Millions of dollars.

Other Revenue Highlights

Other notable trends that affect General Fund revenues (see **Table 4.7**) include the following:

- Gross receipts tax (GRT) revenues are projected to increase by 1.1% for FY 2023-24, a significant deceleration from the prior year. (See Table 4.1.) GRT revenues increased by 15.5% for FY 2022-23 largely due to abnormal growth in electricity prices. Data from the U.S. Energy Information Administration (EIA) show that Pennsylvania electricity price growth has rapidly decelerated and recently turned negative. The average price for August 2023 was 2.3% below the prior year, the first year-over-year decline since May 2021. The forecast assumes that (1) electricity liabilities record minor declines followed by flat growth during the forecast period and (2) telecommunications liabilities decline by 10% per annum consistent with historical trends. Total GRT revenues are projected to decline by 1.8% per annum from FY 2024-25 through FY 2028-29.
- Record high General Fund balances and rising interest rates dramatically increase Treasury collections for FY 2023-24 and FY 2024-25, then collections gradually decline in the out-years, as the General Fund balance is depleted, and short-term interest rates revert to historical levels.

[6] A value below 100 indicates that a household with median income does not earn enough to qualify for a mortgage on a median-priced home.

- Cigarette tax revenues are reduced by $115 million annually (including FY 2023-24) for debt service related to the Tobacco Settlement Bonds. Base revenues continue their long-term trend decline of 3.0% per annum.
- The estimate assumes that $185 million will be available annually for transfer from the State Stores Fund to the General Fund.

Table 4.7
Other General Fund Revenue Sources

Fiscal Year	22-23	23-24	24-25	25-26	26-27	27-28	28-29
Utility Property	$46	$46	$47	$47	$48	$48	$49
Insurance Premiums	522	505	505	514	524	541	558
Financial Institutions	366	370	389	409	429	451	474
Cigarette	773	682	655	629	604	579	555
Other Tobacco Products	153	160	169	178	187	197	207
Malt Beverage	22	23	23	23	23	23	23
Liquor	451	464	480	497	514	532	551
Gaming	365	394	415	434	451	467	482
Minor and Repealed	-65	-64	-78	-82	-86	-90	-95
Liquor Store Profits	185	185	185	185	185	185	185
Licenses, Fees & Misc.	890	1,171	1,047	824	718	602	618
Treasury	452	678	561	323	207	75	75
Fines, Penalties & Int.	66	64	65	66	67	68	69
Total Revenue	**3,773**	**4,000**	**3,901**	**3,722**	**3,662**	**3,601**	**3,674**
Growth Rate	-48.7%	6.0%	-2.5%	-4.6%	-1.6%	-1.7%	2.0%

Note: Millions of dollars.

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Expenditure Outlook

Notes: (1) As of November 15, 2023, portions of the FY 2023-24 budget have not been finalized, and certain expenditure line items have not been entered into the state accounting system. See the Appendix for a list of assumptions. (2) On October 31, 2023, the Office of the Budget released the annual Fall Update, which includes potential spending reductions totaling $450 million. For this report, the estimated spending reductions were included in the forecast years within specific program areas. The adjustments are not shown for FY 2023-24 so that those figures match the budget as enacted.

For FY 2023-24, state General Fund appropriations are $44.97 billion, a $4.17 billion increase (10.2%) over FY 2022-23.[7] (See **Table 5.1** and **Table 5.2**.) Most of the robust growth is in the Medical Assistance (MA, +$970 million, 19.2%), long-term living (LTL, +$966 million, 20.4%) and intellectual disabilities (ID, +$492 million, 22.1%) program areas, primarily due to the replacement of expiring federal COVID funds with state funds.[8] Pre-K to 12 Education appropriations (excludes state personnel expenditures) increase by $716 million (4.8%), largely due to the Basic Education line item (+$792 million, 11.2%).

Table 5.1
General Fund Expenditures by Category

Fiscal Year	22-23	23-24	24-25	25-26	26-27	27-28	28-29
Pre-K to 12 Education[1]	$14,997	$15,713	$16,182	$16,652	$17,071	$17,479	$17,887
State Personnel[2]	4,963	5,513	5,706	5,934	6,172	6,451	6,667
Medical Assistance[3]	5,040	6,010	6,131	6,395	6,661	6,924	7,187
Long-Term Living[3]	4,745	5,711	6,051	6,521	6,889	7,255	7,622
Intellectual Disability[1,3]	2,228	2,720	2,847	2,986	3,107	3,226	3,346
Higher Education[4]	1,974	1,975	1,975	1,975	1,975	1,975	1,975
All Other	6,854	7,331	7,636	7,916	8,122	8,291	8,464
Total Expenditures	**40,801**	**44,974**	**46,528**	**48,379**	**49,996**	**51,600**	**53,149**
Growth Rate	3.7%	10.2%	3.5%	4.0%	3.3%	3.2%	3.0%

Note: Millions of dollars.

1 Excludes state personnel expenses.

2 Includes wages, salaries, bonuses, employer payroll taxes (Medicare and Social Security), and employer contributions to state employee pensions (SERS) and other benefits for retiree and current employees.

3 Only includes Department of Human Services appropriations.

4 Includes distributions to Community Colleges, State and State-Related Universities, Thaddeus Stevens College of Technology, Student Teacher Stipend, Parent Pathways and PA Higher Education Assistance Agency (PHEAA).

[7] The text in this section uses the terms appropriation and expenditure interchangeably. However, the spending authority granted to an agency (i.e., the appropriation) need not equal actual expenditures for that year. Unused spending authority is reflected as a lapse that reduces budget shortfalls or increases budget surpluses.

[8] This section is organized by the largest programs within selected agencies rather than by agency. Table A.3 in the Appendix provides agency-level projections for the 15 largest state General Fund agencies.

Most projections beyond FY 2023-24 represent General Fund appropriations required to maintain the same level of service provided in the FY 2023-24 base year. Unless otherwise noted, the forecast assumes that FY 2023-24 expenditures supported by federal funds and other state funds or user fees (sometimes referred to as augmentations) continue to receive support from those sources. An exception occurs when it is clear that a funding source will be unable to provide the same level of relative support in future years. For example, some residual federal COVID funds used in FY 2023-24 will not be available in future years and must be replaced with General Fund revenues. Other funding sources that do not maintain the same level of relative support are described in the relevant subsections that follow and the Other Funds subsection in the Appendix.

Table 5.2
General Fund Expenditure Growth Rates by Category

Fiscal Year	23-24	24-25	25-26	26-27	27-28	28-29	AAGR[1]
Growth Rates							
Pre-K-12 Education	4.8%	3.0%	2.9%	2.5%	2.4%	2.3%	2.6%
State Personnel	11.1	3.5	4.0	4.0	4.5	3.4	3.9
Medical Assistance	19.2	2.0	4.3	4.2	3.9	3.8	3.6
Long-Term Living	20.4	5.9	7.8	5.6	5.3	5.1	5.9
Intellectual Disability	22.1	4.6	4.9	4.0	3.9	3.7	4.2
Higher Education	0.1	0.0	0.0	0.0	0.0	0.0	0.0
All Other	7.0	4.2	3.7	2.6	2.1	2.1	2.9
Total Expenditures	**10.2**	**3.5**	**4.0**	**3.3**	**3.2**	**3.0**	**3.4**
Selected Extrapolators							
Employee Wages[2]	--	3.6%	3.8%	3.6%	3.6%	3.6%	3.6%
Pensions (SERS)[3]	--	-3.3	-0.4	0.8	3.0	-2.0	-0.4
Retiree Healthcare[4]	--	0.0	5.8	5.2	5.2	5.3	4.3
Employee Healthcare[4]	--	10.0	2.9	3.0	3.0	3.0	4.3
Non-Personnel Expenses	--	2.8	2.4	2.3	2.3	2.3	2.4

Note: See footnotes in Table 5.1 for notes on each category.
1 AAGR is the average annual growth rate from FY 23-24 to FY 28-29.
2 Reflects an average employee turnover factor. Turnover factors vary by agency.
3 Reflects the percentage change in employer contributions as a share of payroll.
4 Separate extrapolators are used for Pennsylvania State Police troopers, Legislature and Judiciary (not shown).

From FY 2023-24 to FY 2028-29, state General Fund expenditures are projected to increase 18.2% over the five-year forecast period (3.4% per annum). Trends over that period are driven by program expenditures for Pre-K to 12 Education (+$2.17 billion, 13.8% five-year total growth), MA (+$1.18 billion, 19.6%), LTL (+$1.91 billion, 33.5%), and ID (+$626 million, 23.0%) and state personnel expenditures (+$1.15 billion, 20.9%). These program areas and personnel expenditures comprise roughly 80% of total General Fund expenditures.

Factors that motivate trends in total expenditures include: (1) service populations that expand or contract due to demographics (e.g., age 65+ population); (2) growth of employee wages, pensions, and employee and retiree healthcare; (3) inflation adjustments required to maintain purchasing power of funds appropriated in the base year for all future years and (4) changes in federal funding levels (e.g., federal matching rates for MA programs) to support various human services program line items.

Technical Notes and Methodology

Table 5.2 (previous page) displays growth rates based on expenditure category and the extrapolators used to project General Fund expenditures from the FY 2023-24 base year through FY 2028-29. When possible, base year expenditures by agency were disaggregated into five categories: (1) wages (includes employee payroll taxes), (2) pensions, (3) employee health care and other benefits, (4) retiree health care and (5) other expenditures (e.g., grants and subsidies, non-personnel expenses). Those categories were forecast separately using relevant extrapolators displayed in Table 5.2 and other miscellaneous extrapolators (not shown) and then recombined at the agency level. A brief description of the extrapolation procedure for these five categories follows:

Wages: Two factors are used to extrapolate wages. The first factor is an agency-specific employee turnover rate based on data compiled by the Office of Administration (not shown). For most agencies, that factor is slightly negative (most between -1% and 0%) due to retirements and departures at the upper end of the pay scale that are replaced by less experienced, lower compensated employees and the brief transition period in which positions are unfilled. The second factor reflects a (1) cost-of-living increase and (2) general step increase. The forecast uses the latest American Federation of State, County and Municipal Employees (AFSCME) Council 13 and Service Employees International Union (SEIU) Local 668 collective bargaining agreements (CBAs) to forecast the inflation-adjustment and step increases.[9] From FY 2024-25 to FY 2028-29, the inflation-adjustment is 2.00% to 2.25% per annum and the step increase is 2.25% per annum.

Pensions: The State Employees' Retirement System (SERS) pension extrapolator represents the percentage change in total employer contributions as a share of projected payroll. The SERS extrapolator in Table 5.2 does not include the projected growth in payroll. Hence, the total growth in pension contributions would equal the product of (1) the SERS pension extrapolator and (2) the wage growth rate.

Health and other non-pension benefits: The forecast assumes that payments for active employee health care increase at rates detailed in the latest AFSCME Council 13 and SEIU Local 668 CBAs, which reflects per employee healthcare contribution growth of 10% for FY 2024-25 and roughly 3% for later years. Based on the administration's budget instructions to agencies, the retiree healthcare extrapolator assumes that the employer contribution rate remains flat for FY 2024-25 and then grows at a rate needed to keep the Retired Employees Health Program (REHP) administered by the Pennsylvania Employee Benefit Trust Fund (PEBTF) fully funded.

Non-Personnel: Non-personnel expenses include items such as computers, office supplies and utilities. The forecast assumes those expenditures grow at the same rate as the regional CPI-U. Non-personnel expenses also include grants or subsidies made to local units and institutions. Forecasts for grants and subsidies generally assume that the relevant service population grows with demographic projections, and the average cost to provide services grows with inflation. An exception is Pre-K to 12 Education program expenditures (see subsection that follows).

The remainder of this section presents (1) historical (FY 2018-19 to FY 2023-24) and projected (FY 2023-24 to FY 2028-29) trends and (2) a brief narrative for the expenditure categories displayed in Table 5.1.

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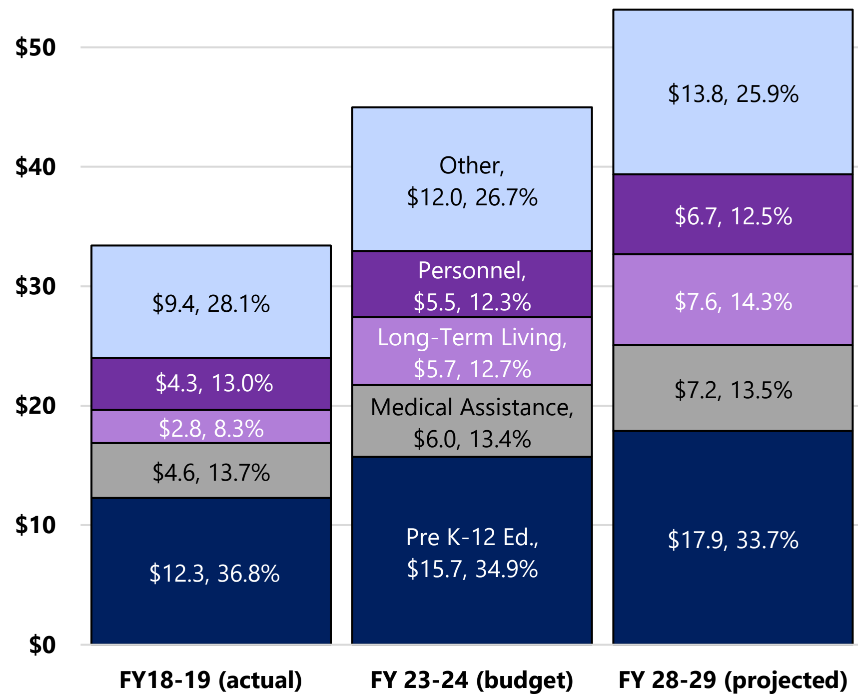
[9] Most Commonwealth unionized positions are covered by the AFSCME or SEIU contracts. Employees not covered by those contacts typically receive similar pay increases and the forecast assumes that outcome.

Historical and Projected Trends

Figure 5.1 displays the distribution of expenditures for FY 2018-19, FY 2023-24 and FY 2028-29 for the four largest programs or categories and residual expenditures.

From FY 2018-19 to FY 2023-24, LTL expenditures increased from 8.3% to 12.7% of the General Fund budget, an average increase of 15.5% per annum. This program is projected to again expand at the fastest rate over the forecast period (5.9% per annum) and comprise 14.3% of the General Fund budget in FY 2028-29. Pre-K to 12 Education program expenditures is the largest category and increases over the decade. However, it declines as a share of the General Fund budget: 36.8% in FY 2018-19; 34.9% in FY 2023-24 and 33.7% in FY 2028-29.

Figure 5.1
General Fund Expenditures



Notes: Billions of dollars. % shown is share of General Fund expenditures.

Table 5.3 displays average annual growth rates (top portion) and average dollar change (bottom) over the same two time periods. For the historical period, total General Fund spending increased at an average rate of 6.1% per annum, or $2.32 billion per year. In dollar terms, Pre-K to 12 spending was the largest factor ($685 million per annum) while LTL expanded most rapidly (15.5% per annum). For the forecast period, total General Fund spending increases at an average rate of 3.4% per annum ($1.63 billion per annum), driven by Pre-K to 12 ($435 million) and LTL ($382 million). LTL also expands at the fastest rate (5.9%). By comparison, the average annual growth rates for the regional CPI-U (not shown) are 3.9% (historical) and 2.4% (projected).

Table 5.3
General Fund Expenditure Growth and Dollar Change

	Average Annual Growth Rate					
Fiscal Year	**Total GF**	**PreK-12**	**MA**	**LTL**	**Personnel**	**Other**
18-19 to 23-24	6.1%	5.0%	5.5%	15.5%	4.9%	5.1%
23-24 to 28-29	3.4%	2.6%	3.6%	5.9%	3.9%	2.8%
	Average Annual Dollar Change ($ millions)					
Fiscal Year	**Total GF**	**PreK-12**	**MA**	**LTL**	**Personnel**	**Other**
18-19 to 23-24	$2,315	$685	$284	$587	$233	$525
23-24 to 28-29	$1,635	$435	$235	$382	$231	$352

Personnel Costs

For FY 2023-24, state General Fund appropriations for personnel across all agencies are $5.51 billion, a $550 million increase (11.1%) over FY 2022-23. From FY 2018-19 to FY 2023-24, General Fund personnel expenditures expanded by 4.9% per annum. (See **Table 5.4**.) Historical growth includes additional Pennsylvania State Police (PSP) personnel expenditures that transitioned from the Motor License Fund (MLF) to the General Fund.[10] If PSP MLF personnel expenditures are included in both FY 2018-19 and FY 2023-24, then the adjusted growth would have been roughly 3.1% per annum. General Fund personnel expenditures are projected to increase to $6.67 billion (3.9% per annum) by FY 2028-29.[11] Detail for specific components is as follows:

Table 5.4
General Fund Personnel Expenditures

				Avg. Ann. Growth	
Category	**18-19**	**23-24**	**28-29**	**19-24**	**24-29**
Wages-Payroll Taxes	$2,553	$3,196	$3,857	4.6%	3.8%
Pensions (SERS)	$856	$1,200	$1,419	7.0%	3.4%
Other Benefits	$940	$1,117	$1,390	3.5%	4.5%
Total	**$4,349**	**$5,513**	**$6,667**	**4.9%**	**3.9%**

Notes: Millions of dollars. Average annual growth for 19-24 is from FY 18-19 to FY 23-24 and 24-29 is from FY 23-24 to FY 28-29.

- State General Fund wages and employer payroll taxes are 58% of personnel expenditures in FY 2023-24. For the historical period, wages and payroll taxes grew 4.6% per annum. For the projection period, wages and employer payroll taxes are projected to grow 3.8% per annum due to general pay and step increases.
- For the historical period, State Employee Retirement System (SERS) employer contributions grew 7.0% per annum and are projected to grow 3.4% per annum for the projection period. This growth tracks with wages and the projected change in employer contribution rates.
- Other benefits include non-pension benefits paid by state agencies such as health, life insurance and other miscellaneous benefits for retirees and current employees. For the historical period, other benefits grew 3.5% per annum and are projected to grow 4.5% per annum over the forecast period. Employer payments for active employee health care comprise more than half of other benefits.

[10] In FY 2018-19, $770 million of PSP appropriations were from the MLF and most of these appropriations were personnel costs. By FY 2023-24, MLF appropriations to PSP were reduced to $375 million, of which roughly 87% were budgeted as personnel expenditures. The General Fund absorbed PSP appropriations that were no longer supported by the MLF.

[11] This growth assumes that the MLF appropriation to PSP is held flat at $375 million through FY 2028-29. The growth in MLF-supported expenditures that exceeds $375 million (roughly $56 million in personnel costs by FY 2028-29) is replaced with General Fund expenditures. Excluding the estimated $56 million in FY 2028-29, the adjusted per annum growth rate is 3.7%.

Pre-K to 12 Education

For FY 2023-24, state General Fund appropriations (excludes personnel expenditures) for Pre-K to 12 Education are $15.71 billion, a $716 million increase (4.8%) over FY 2022-23.[12] From FY 2018-19 to FY 2023-24, General Fund Pre-K to 12 expenditures expanded by 5.0% per annum. (See **Table 5.5**.) These appropriations are projected to increase to $17.89 billion (2.6% per annum) by FY 2028-29.

Table 5.5
General Fund Pre-K to 12 Education Expenditures

Appropriation	18-19	23-24	28-29	Avg. Ann. Growth 19-24	Avg. Ann. Growth 24-29
Basic Education[1]	$6,095	$7,972	$8,989	5.5%	2.4%
PSERS[2]	$2,488	$2,995	$3,562	3.8%	3.5%
Special Education	$1,137	$1,387	$1,641	4.1%	3.4%
Pre-K Funds[3]	$551	$747	$843	6.3%	2.4%
Other	$2,018	$2,612	$2,852	5.3%	1.8%
Total	**$12,289**	**$15,713**	**$17,887**	**5.0%**	**2.6%**

Notes: Millions of dollars. Excludes state personnel costs.

1 FY 23-24 includes Level-Up funding.

2 State share of the school employees retirement employer contribution.

3 Includes Early Intervention, Head Start Supplemental Assist. and Pre-K Counts.

The largest share of Pre-K to 12 Education expenditures is Basic Education (includes Level-Up funds). The program comprises a little over half of all Pre-K to 12 expenditures in FY 2023-24. During the historical period, the Basic Education appropriation grew 5.5% per annum. For the projection period, Basic Education is assumed to grow 2.4% per annum which equals the projected rate of inflation. However, it is noted that this line item is a discretionary appropriation that policymakers have historically increased at a rate that exceeds inflation.

The second largest appropriation is the Pennsylvania School Employees Retirement System (PSERS) state contribution. During the historical period, this line item increased 3.8% per annum and is expected to grow 3.5% per annum during the projection period. Projections are primarily based on estimated school employee wage growth, projected employer contribution rates (actuarily determined) and provisions within current statute. For FY 2023-24, the state funds 55.1% of total PSERS contributions and employers fund the remainder.

The third largest appropriation is state funds to school districts for special education. During the historical period, the Special Education appropriation grew 4.1% per annum. During the projection period it is forecast to grow by 3.4% per annum, which is equal to the projected rate of inflation (2.4%) plus an assumed expansion in the special education student population (1.0%). Unlike Basic Education, the number of pupils enrolled in Special Education programs is expanding. From FY 2018-19 to FY 2022-23, PDE data show that special education students increased by 27,076 (+9.1%).[13]

[12] This does not reflect a $10 million reduction from the Fall Update's estimate for Pupil Transportation and School Employees' Social Security. Fall Update adjustments are carried in all future fiscal years and as a bottom-line adjustment for FY 2023-24 in the final Balance Sheet (see Fiscal Outlook section).
[13] Pennsylvania Department of Education, Bureau of Special Education. Special Education Data Reporting.

Table 5.6
Student Enrollment and K to 12 Education Funding

				Avg. Ann. Growth	
	18-19	23-24[1]	28-29[1]	19-24	24-29
Public Schools Students (000s)					
School districts	1,569	1,513	1,438	-0.7%	-1.0%
Charter schools	143	164	167	2.7%	0.4%
Other public options[2]	11	9	9	-2.3%	-0.9%
Total public schools	**1,722**	**1,686**	**1,614**	**-0.4%**	**-0.9%**
Non-public & private (000s)	239	236	226	-0.3%	-0.9%
Total student enrollment	**1,962**	**1,922**	**1,840**	**-0.4%**	**-0.9%**
K to 12 State Funds ($ millions)[3]	$11,738	$14,966	$17,044	5.0%	2.6%
K to 12 $/public school student[4]	$6,800	$8,900	$10,600	5.4%	3.5%

Note: Table focuses on K to 12 instead of the typical Pre-K to 12 since counts of public school students exclude many Pre-K students.

1 Estimates use FY 22-23 student counts and apply a demographic growth rate.

2 Includes residual not enrolled in school districts or charter schools such as those in state juvenile correctional institutions, comprehensive career and technology centers or attending classes on a full-time basis outside of their parents' district of residence.

3 Excludes state personnel costs and Pre-K specific funds (see Table 5.5).

4 Amounts are state funding and are slightly overstated due to some funds being spent on private school students and preschool students (not paid for by Pre-K Counts, Head Start or Early Intervention funds).

Source: Student counts from the PA Dept. of Education. Projections by the IFO.

Table 5.6 displays historical and projected growth in K to 12 student populations.[14] During the historical period, public school enrollment declined 0.4% per annum and the contraction is expected to accelerate (-0.9% per annum) through FY 2028-29 due to a projected decline in the population of school-age children.

The bottom half of the table displays state funds appropriated per public school student. This calculation excludes non-public and private school students who receive some funding from the state. Additionally, a small amount of state Basic Education funds are spent on Pre-K education. As a result, the average level of spending per student is slightly overstated and focus should be placed on average annual growth rates. During the historical period, K to 12 state funding per public school student increased 5.4% per annum. Moving forward, average spending per student increases 3.5% per annum because the forecast assumes that funding grows with inflation while enrollment contracts.

[14] This table focuses on K to 12 since student counts by local education agencies (e.g., school districts) exclude many Pre-K students.

Medical Assistance (MA)

For FY 2023-24, state General Fund appropriations for MA are $6.01 billion, a $970 million increase (19.2%) over FY 2022-23.[15] From FY 2018-19 to FY 2023-24, General Fund MA expenditures expanded by 5.5% per annum. (See **Table 5.7**.) These funds are projected to increase to $7.19 billion (3.6% per annum) by FY 2028-29.

Table 5.7
General Fund State Medical Assistance Expenditures

				Avg. Ann. Growth	
Appropriation	**18-19**	**23-24**	**28-29**	**19-24**	**24-29**
MA-Capitation	$3,304	$4,035	$4,787	4.1%	3.5%
Medicare Payments[1]	$755	$1,012	$1,290	6.0%	5.0%
MA-Fee for Service	$343	$756	$833	17.1%	2.0%
Other	$187	$208	$277	2.1%	5.9%
Total	**$4,588**	**$6,010**	**$7,187**	**5.5%**	**3.6%**

Notes: Millions of dollars. Excludes state personnel costs.

1 Payments to Federal Government-Medicare Drug Program.

Capitation comprises about two-thirds of MA expenditures in FY 2023-24. MA enrollment (unduplicated) peaked at 3.7 million in April 2023, and the latest enrollment data (September) show a roughly 7% reduction from that amount due to disenrollments, now that the federal Public Health Emergency has expired. DHS will complete program redeterminations by June 1, 2024, and the forecast assumes that enrollment will be flat in FY 2024-25 and then increase 0.7% per annum from FY 2024-25 to FY 2028-29. During the projection period, capitation is projected to grow 3.5% per annum and is the primary driver of the overall growth in MA.

The second largest item within MA is the federal Medicare Drug Program line item. Individuals who are dually eligible for Medicare and Medicaid receive coverage for certain drugs under the MA prescription drug program in the event those drugs are not covered under the Medicare Part D plan. The Commonwealth remits payments monthly for this coverage, and the change in the federal matching rate (FMAP) impacts these payments. When the enhanced FMAP fully expires, these payments will increase. During the historical period, this line item increased 6.0% per annum and is expected to grow 5.0% per annum during the projection period.

The third largest item within MA is Fee-for-Service (FFS) which funds all services provided to MA recipients not covered under a managed care plan, including primary health care, preventive services and essential care in an inpatient and outpatient setting. During the historical period, the FFS appropriation grew 17.1% per annum and is projected to grow 2.0% per annum during the projection period.

[15] This does not reflect a $203 million reduction from the Fall Update's estimate for various MA line items. Fall Update adjustments are carried in all future fiscal years and as a bottom-line adjustment for FY 2023-24 in the Balance Sheet (see Fiscal Outlook section).

Long-Term Living (LTL)

For FY 2023-24, state General Fund appropriations for LTL are $5.71 billion, a $966 million increase (20.4%) over FY 2022-23.[16] From FY 2018-19 to FY 2023-24, LTL expenditures expanded by 15.5% per annum. (See **Table 5.8**.) The strong growth rate is primarily due to the expansion of the Community HealthChoices (CHC) program. In FY 2018-19, there were 88,400 individuals enrolled in CHC who required MA long-term services and supports (LTSS). That figure increased to approximately 156,500 (+77%) in FY 2023-24 and the forecast assumes further growth to 172,200 (+10%) in FY 2028-29.

Table 5.8
General Fund Long-Term Living Expenditures

				Avg. Ann. Growth	
Appropriation	**18-19**	**23-24**	**28-29**	**19-24**	**24-29**
MA-CHC	$694	$5,389	$7,164	50.7%	5.9%
All Other	$2,082	$323	$459	-31.1%	7.3%
Total	**$2,776**	**$5,711**	**$7,622**	**15.5%**	**5.9%**
Recipients receiving CHC services (000s)[1]					
HCBS - Waiver	63.2	115.3	126.9	12.8%	1.9%
Institutional Care	25.2	41.2	45.3	10.3%	1.9%
Total	**88.4**	**156.5**	**172.2**	**12.1%**	**1.9%**
MA-CHC $/Recipient[2]	**--**	**$34,400**	**$41,600**	**--**	**3.9%**

Notes: Millions of dollars. MA-CHC is Medical Assistance-Community HealthChoices. HCBS is home and community based services.

1 Monthly average of recipients receiving services as published in the FY 23-24 Executive Budget. Projections grown by estimated growth in the age 65+ population by the IFO.

2 Actual dollars. FY 18-19 state MA-CHC $/Recipient is excluded because MA-CHC was still in the implementation stage.

CHC is a managed care program for older Pennsylvanians and adults aged 21 and older with physical disabilities. The program coordinates physical health and LTSS needs of participants to improve care coordination and health outcomes, with a focus on home and community-based settings. CHC was implemented statewide effective January 1, 2020, and the Commonwealth has been transitioning eligible residents to CHC since its inception. The strong historical growth rate occurred because the CHC program was implemented across a third of the Commonwealth in FY 2018-19, and the initial appropriation was $694 million. For FY 2023-24, the appropriation is $5.39 billion and is projected to increase to $7.16 billion in FY 2028-29.

Total LTL expenditures are projected to increase to $7.62 billion (5.9% per annum growth) by FY 2028-29 due to statewide demographic trends, as the forecast projects that the older adult population will continue to expand rapidly. Similar to MA, there is a shift from federal funds (e.g., home and community-based services under the American Rescue Plan Act of 2021) to state general funds.

[16] This does not reflect a $171 million reduction from the Fall Update's estimate for various LTL line items. Fall Update adjustments are carried in all future fiscal years and as a bottom-line adjustment for FY 2023-24 in the Balance Sheet (see Fiscal Outlook section).

Intellectual Disabilities (ID)

Table 5.9
General Fund Intellectual Disabilities Expenditures

Appropriation	18-19	23-24	28-29	Avg. Ann. Growth 19-24	Avg. Ann. Growth 24-29
Community Waiver Program	$1,644	$2,323	$2,861	7.2%	4.3%
Community Base Program	$149	$154	$198	0.6%	5.1%
All Other	$183	$243	$288	5.9%	3.4%
Total	**$1,976**	**$2,720**	**$3,346**	**6.6%**	**4.2%**
# Receiving Services (000s)[1]	57.3	62.8	64.4	1.9%	0.5%
$/Recipient Receiving Services[2]	**$34,500**	**$43,300**	**$52,000**	**4.7%**	**3.7%**

Notes: Millions of dollars.
1 Number receiving services include those receiving Autism or ID services as published in the FY 23-24 Executive Budget. The FY 28-29 projection assumes 0.5% per annum growth in the service population.
2 Actual dollars.

For FY 2023-24, state General Fund appropriations (excludes personnel expenditures) for ID are $2.72 billion, a $492 million increase (22.1%) over FY 2022-23.[17] The strong growth rate in FY 2023-24 is primarily due to a shift from federal spending (e.g., enhanced FMAP, home and community-based services under the American Rescue Plan Act of 2021, etc.) to state general funds. From FY 2018-19 to FY 2023-24, ID expenditures expanded by 6.6% per annum. (See **Table 5.9**.) The robust growth is primarily due to the ongoing effort to reduce waitlists for waiver programs (e.g., Consolidated, Person-Family Directed Services, Community Living). About 1,500 individuals with ID and/or autism in the emergency need category began to receive services through waitlist initiatives that expanded the Community Living Waiver in FY 2022-23 and FY 2023-24. Expenditures are projected to increase to $3.35 billion (4.2% per annum) by FY 2028-29.

The community-based waiver programs are the largest component of ID expenditures and support individuals who wish to live more independently in their homes and participate in their communities. During the historical period, the Community Waiver Program line item increased 7.2% per annum and is estimated to grow 4.3% per annum during the projection period.

[17] This does not reflect a $76 million reduction from the Fall Update's estimate for ID-Community Waiver Program. Fall Update adjustments are carried in all future fiscal years and as a bottom-line adjustment for FY 2023-24 in the Balance Sheet (see Fiscal Outlook section).

Higher Education

Higher education includes state funds to the Pennsylvania State System of Higher Education (PASSHE), Pennsylvania Higher Education Assistance Agencies (PHEAA), four state-related universities, community colleges and other smaller line items. For FY 2023-24, state General Fund appropriations for higher education are $1.97 billion, nearly flat growth (0.1%) over FY 2022-23.[18] From FY 2018-19 to FY 2023-24, General Fund higher education expenditures expanded by 3.2% per annum. (See **Table 5.10**.) The forecast assumes these discretionary programs remain flat from FY 2023-24 through FY 2028-29.

Table 5.10
General Fund Higher Education Expenditures

				Avg. Ann. Growth	
Appropriation	**18-19**	**23-24**	**28-29**	**19-24**	**24-29**
State-Related[1]	$581	$597	$597	0.5%	0.0%
PASSHE	$468	$586	$586	4.6%	0.0%
PHEAA	$323	$430	$430	5.9%	0.0%
All Other	$313	$362	$362	2.9%	0.0%
Total	**$1,685**	**$1,975**	**$1,975**	**3.2%**	**0.0%**
# College Students[2]	869	767	679	-2.5%	-2.4%
State $/Student[3]	$1,900	$2,600	$2,900	5.8%	2.4%

Notes: Millions of dollars. PASSHE is the Pennsylvania State System of Higher Education. PHEAA is the Pennsylvania Higher Education Assistance Agency.

1 Includes The Pennsylvania State University, University of Pittsburgh, Temple University and Lincoln University.

2 Thousands of students. Unduplicated 12-month enrollment at PA institutions from the U.S. Department of Education, National Center for Education Statistics. FY 23-24 and FY 28-29 are estimated using the average annual growth rate (-2.4%) of PA college students from FY 11-12 to FY 21-22.

3 General Fund post-secondary education expenditures divided by college students.

The forecast contains no growth as the assumed rate of inflation (2.4% per annum) offsets the projected decline in Pennsylvania college students (-2.4%, equal to the per annum growth over the last 10 years). If these assumptions hold, then the state will provide the same level of real per capita support over the forecast period. However, it is noted that higher education expenditures are discretionary appropriations that policymakers have historically increased at a rate that exceeds inflation.

The last line in the table, state funds per student, is a calculation of the total General Fund higher education expenditures divided by the total number of college students in Pennsylvania (includes part-time and community college). During the historical period, state support per student increased by 5.8% per annum due to a decline in college students. State appropriations during the projection period are assumed to remain flat, but state funds per student increase by 2.4% per annum (average rate of inflation) due to a projected decline in the post-secondary student population.

[18] This assumes that state-related university appropriations for FY 2023-24 are held at FY 2022-23 levels.

All Other Expenditures

For FY 2023-24, state General Fund appropriations for all other expenditures (excludes Pre-K to 12 Education, MA, LTL, ID, higher education and state employee personnel expenditures) are $7.33 billion, a $478 million increase (7.0%) over FY 2022-23. From FY 2018-19 to FY 2023-24, other expenditures expanded by $1.59 billion (5.0% per annum). (See **Table 5.11**.) These appropriations are projected to increase by $1.13 billion (2.9% per annum) by FY 2028-29.

Table 5.11
General Fund All Other Expenditures

Appropriation/ Agency	18-19	23-24	28-29	Avg. Ann. Growth 19-24	Avg. Ann. Growth 24-29
DHS Other	$2,795	$3,488	$4,112	4.5%	3.3%
Treas. Debt Service	$1,118	$1,201	$1,365	1.4%	2.6%
Corrections	$594	$710	$801	3.6%	2.4%
DCED	$128	$439	$494	28.0%	2.4%
Agriculture	$126	$209	$235	10.5%	2.4%
Health	$135	$161	$182	3.6%	2.4%
Executive Offices	$89	$155	$175	11.8%	2.4%
State Police	$59	$128	$152	16.9%	3.5%
All Other	$694	$841	$948	3.9%	2.4%
Total	**$5,739**	**$7,331**	**$8,464**	**5.0%**	**2.9%**

Notes: Millions of dollars. Excludes personnel. DHS Other excludes MA, LTL and ID programs. DCED is Department of Community and Economic Development.

The robust growth during the historical period was driven primarily by the following agencies:

- Department of Community and Economic Development (DCED): Due to several new programs implemented over the last two years (i.e., Community and Economic Assistance ($81 million), Hospital and Health System Emergency Relief ($50 million), Whole Home Repairs ($50 million), Historical Disadvantaged Business Assistance ($20 million), Workforce Development ($8 million) and several others ($6 million)).
- State Police: Due to the transfer of MLF appropriations to General Fund appropriations.
- Executive Offices: Due to programs that were not in operation during FY 2018-19 (i.e., Violence Intervention and Prevention ($40 million), Improvement of Adult Probation Services ($16 million), Indigent Defense ($7.5 million) and Transfer to Nonprofit Security Grant Fund ($5 million)).
- Department of Agriculture: Due to programs that were not appropriated from the General Fund in FY 2018-19 (i.e., Agriculture Preparedness and Response ($34 million), Animal Health and Diagnostic Commission ($11 million), Transfer to Farm Show Products Fund ($5 million), Agricultural Business and Workforce Investment ($5 million) and several others ($3 million)).

Estimated growth during the projection period largely trends with inflation (2.4% per annum) with the exception of DHS Other (3.3%) and State Police (3.5%). DHS Other higher growth is primarily the result of residual federal funds used in FY 2023-24 that are replaced by state funds. State Police's higher growth is primarily the result of the assumed cap on MLF appropriations that can be used for the State Police.

Fiscal Outlook

Table 6.1 combines the revenue and expenditure projections from prior sections to identify any potential long-term structural imbalance over the forecast period.[19] The IFO's previous five-year outlook (November 2022) estimated a $3.1 billion structural deficit by the end of the forecast period (FY 2027-28). For this update, the long-term structural deficit is $4.0 billion by the end of the forecast period (FY 2028-29). Increased demand for long-term care, higher inflation and higher interest rates (less disposable income after debt service, fewer loans) increase the size of the annual structural imbalance compared to the IFO's prior year report. The FY 2023-24 projected General Fund ending balance plus Rainy Day Fund balance ($13.8 billion) is sufficient to offset projected budget deficits through FY 2027-28, but a portion of the $4.0 billion deficit for FY 2028-29 remains.

Table 6.1
General Fund Financial Statement

Fiscal Year	22-23	23-24	24-25	25-26	26-27	27-28	28-29
Current Year Revenues	$44,917	$45,190	$45,813	$46,556	$47,838	$48,966	$50,278
Refund Reserve	-1,489	-1,495	-1,445	-1,395	-1,345	-1,345	-1,345
Net Revenue	43,428	43,695	44,368	45,161	46,493	47,621	48,933
State Expenditures[1]	-40,801	-44,974	-46,528	-48,379	-49,996	-51,600	-53,149
Current Year Balance	2,627	-1,279	-2,159	-3,218	-3,503	-3,979	-4,216
Reduced Spending[2]	0	450	0	0	0	0	0
Adjustment for Lapses[3]	-88	205	200	200	200	200	200
Preliminary Ending Balance	**2,538**	**-624**	**-1,959**	**-3,018**	**-3,303**	**-3,779**	**-4,016**
General Fund Ending Balance[4]	8,085	7,461	5,501	2,483	0	0	0
Rainy Day Fund Ending Balance[5]	6,027	6,314	6,588	6,841	6,236	2,602	-1,371

Note: Millions of dollars.

1 Based on appropriations. Includes current year lapses.

2 Anticipated reduction in current year spending as provided by the Office of the Budget on October 31, 2023.

3 Prior year lapses, minus transfers to the Budget Stabilization Reserve Fund (i.e., Rainy Day Fund). FY 22-23 reflects two transfers to the Rainy Day Fund.

4 Prior year ending General Fund balance plus current year surplus/deficit.

5 Prior year balance plus interest earnings, less any shortfall that cannot be absorbed by the General Fund.

[19] A long-term structural imbalance is an imbalance that remains after unusual economic conditions or other factors (e.g., one-time revenue transfers) are no longer relevant or available.

From FY 2023-24 to FY 2028-29, average expenditure growth (3.4% per annum) significantly exceeds average revenue growth (2.1%). Major factors that motivate these trends include:

- By FY 2028-29, revenues are reduced by $1.9 billion due to the net impact from CNIT rate reduction and base expansion. For the FY 2023-24 base year, roughly $480 million of that reduction has been absorbed.
- Historically high levels of corporate profits that boosted revenues for TY 2022 and TY 2023 revert to levels more consistent with the size of the overall economy (i.e., GDP).
- Treasury collections fall from $678 million in FY 2023-24 to $75 million by FY 2028-29 as General Fund balances are used to fund projected operating deficits and short-term interest rates decline.
- DHS expenditures grow at an average rate of 4.4% per annum from FY 2023-24 to FY 2028-29. Factors that affect DHS program costs over this time include (1) the complete phaseout of the 6.2% enhanced FMAP used to offset state Medicaid costs, (2) provider rate and fee increases and (3) expiration of the additional 10% federal match for home and community-based services in FY 2024-25. The temporary enhanced federal matching rate (phased down) provides approximately $473 million in additional federal funds to offset Medicaid costs in the current fiscal year and will expire at the end of December 2023.

Figure 6.1
Rapid Deficit Expansion Next Two Fiscal Years

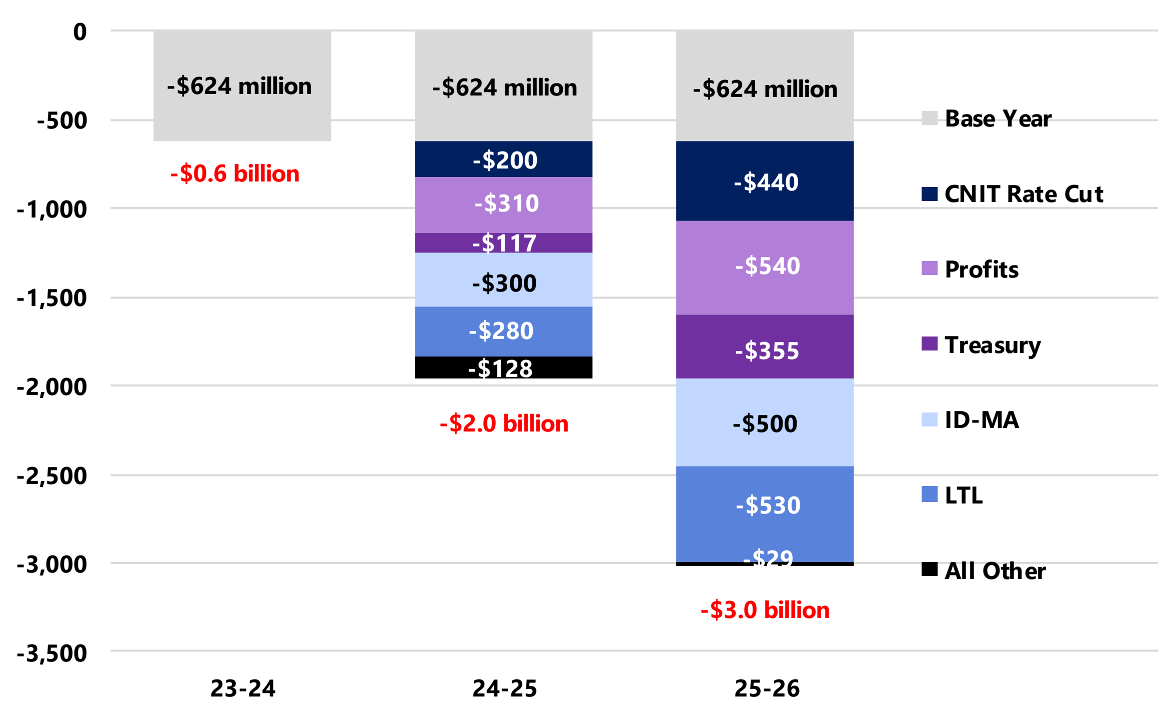


Figure 6.1 displays the change in the projected deficit relative to the FY 2023-24 base year and the main factors that drive the expansion. While many factors drive a structural imbalance, factors were identified if they had (1) an unusual impact on long-term growth (e.g., CNIT rate reduction, Treasury collections) or (2) display unusually strong or weak growth due to the expiration of temporary federal funds (ID-MA) or strong expansions of service populations (LTL). Most deficit expansion occurs in the first two forecast years and the graph only includes those two years. After FY 2025-26, deficit expansion moderates but continues as average spending growth (3.2% per annum) exceeds revenue growth (2.6%).

For the first two forecast years, the main drivers of deficit expansion are as follows:

- Revenue reduction caused by the CNIT rate reduction: -$200 and -$440 million.
- Revenue reduction caused by the assumed profits contraction: -$310 and -$540 million. The forecast assumes profits partially revert to typical levels relative to the overall economy, but remain elevated due to permanent gains realized during the pandemic (e.g., less rental expense for office space, lower meals and entertainment expenses).
- Revenue reduction from lower Treasury collections: -$117 and -$355 million. This impact reflects lower General Fund balances and a moderate decline in the Federal Funds interest rate.
- Expenditure increase from strong growth in ID-MA: -$300 and -$500 million. Includes an ongoing effort to reduce waitlists for waiver programs and a shift from federal spending to state general funds due to the phaseout of the enhanced FMAP and the expiration of the 10% enhanced matching rate for home and community-based services under the American Rescue Plan Act of 2021.
- Net expenditure increase from strong growth in LTL: -$280 and -$530 million. Reflects net impact from loss of federal funds, greater support from state General and non-General Fund sources (i.e., Lottery and Tobacco Settlement Funds), provider rate and fee increases and underlying demand as the age 75+ cohort expands by 3.1% per annum in the early years of the forecast period.

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Appendix

Demographics

The table that follows is from an IFO report titled *Pennsylvania Demographic Outlook* (October 2023). That report used data from the U.S. Census Bureau and Centers for Disease Control and Prevention (CDC). However, all demographic projections are by the IFO.

Table A.1
Pennsylvania Population Projections 2020 to 2030

Age	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
0-4	689	678	671	665	661	657	657	654	652	650	648
5-9	729	727	722	718	710	701	690	683	677	673	669
10-14	779	770	757	746	741	739	738	735	731	723	714
15-19	838	843	833	823	831	840	834	823	812	805	803
20-24	817	843	841	857	847	824	808	804	797	806	813
25-29	836	823	807	796	791	801	822	835	851	842	820
30-34	869	875	876	871	862	847	830	815	804	799	809
35-39	818	827	834	846	862	875	882	884	880	870	855
40-44	754	772	785	800	809	818	829	838	849	865	878
45-49	765	734	721	723	733	747	766	781	795	805	814
50-54	837	832	816	797	773	746	717	706	709	718	733
55-59	915	891	865	840	818	805	801	788	769	745	720
60-64	911	912	901	888	877	863	840	818	794	773	761
65-69	784	799	814	830	838	840	843	834	822	812	799
70-74	627	658	655	666	682	702	716	731	744	751	753
75-79	420	426	467	486	509	534	560	552	565	579	595
80-84	284	287	296	314	324	331	336	375	385	406	424
85-89	194	190	186	188	190	190	195	203	219	223	227
90-94	95	94	92	93	93	94	94	95	96	97	96
95-99	28	28	28	30	32	34	34	34	34	34	36
100+	4	4	4	5	6	7	7	8	9	9	9
Total	**12,994**	**13,012**	**12,972**	**12,981**	**12,988**	**12,995**	**12,998**	**12,998**	**12,994**	**12,985**	**12,974**

Note: Thousands of residents.

Source: Data from 2020 to 2022 from U.S. Census Bureau 2022 Vintage Population Estimates. 2023 through 2030 are projections by the IFO using data from the U.S. Census and U.S. CDC.

Economics

The economic forecast used for this report follows the general methodology used by the U.S. Congressional Budget Office (CBO). The approach is a simplified "growth accounting" framework, where real economic output or Gross Domestic Product (GDP) is equal to the product of (1) growth in employment and (2) growth in average worker output, also known as labor productivity. For example, if the number of individuals employed grows by 1.0 percentage point and the average productivity of all workers grows by 0.5 percentage points, then real economic growth would equal (1.01) * (1.005) - 1.0, or 1.5%. Hence, an increase (decrease) in employment growth or labor productivity will translate into higher (lower) economic growth.

The state economic forecast is built upon four basic assumptions. They are as follows:

- Over several years, the Federal Reserve achieves its target inflation rate of 2.0%, as measured by the personal consumption expenditures price index. Based on historical trends, the more widely used consumer price index (CPI-U) would increase at a slightly faster pace, and the analysis assumes that rate is 2.3%.
- The Philadelphia CPI-U grows at the same rate as the U.S. CPI-U.
- Statewide labor productivity reverts to a historical average and is consistent with U.S. projections.
- The average worker's wage grows by inflation plus a 1.0% premium that is consistent with historical trends for the U.S. and Pennsylvania.

The economic forecast is somewhat different than forecasts typically issued by government entities or private firms. The forecast assumes that certain economic variables revert to historical rates of growth that are consistent with (1) forecasts for the U.S. economy and (2) demographic projections by the IFO. The main purpose of the forecast is to serve as a neutral benchmark against which policymakers could assess the sustainability of fiscal policies over a five-year time horizon. Therefore, the economic forecast employs a simple methodology and does not attempt to capture the many intricacies of the Pennsylvania economy that may ultimately drive economic growth.

The model first establishes the real growth rate of the Pennsylvania economy, which is a function of employment growth and labor productivity. Prior to 2020, the Pennsylvania economy generated an average of 50,000 net jobs per year. The forecast assumes a reduction in that trend (35,000 average gain) through 2029. This assumption yields an upward trend in the employment to population ratio, which is consistent with pre-COVID historical data. (See **Table A.2**.) This trend is also consistent with the assumption of higher labor force participation rates. The middle of Table A.2 displays the average output per worker, and the growth in that metric, which may also generally be viewed as labor productivity. For 2019, the average worker produced $117,900 of real output or production. The forecast assumes that labor productivity reverts to a historical rate of growth of roughly 1.1% per annum. The employment and worker productivity forecasts yield real economic growth of roughly 1.8% per annum.

The bottom of Table A.2 displays the forecast for the Philadelphia CPI-U. As noted, the forecast assumes that the regional inflation measure follows the level and trends of the national inflation forecast. The CBO forecast assumes that the national CPI-U will increase at an average rate of 2.3% per annum from 2024 to 2029, the same rate assumed by this forecast.

The final primary economic variable is total wages and salaries paid to workers. The Pennsylvania forecast assumes that wages for the average worker will increase by the rate of inflation, plus a modest premium so that the purchasing power of those wages increases over time. For this analysis, that premium is 1.0% per annum. The CBO forecast also includes a premium for U.S. workers, and the premium generally ranges from 1.5% to 2.0% per annum. The Pennsylvania premium is consistent with historical state trends.

Given these assumptions, the average wage for all workers increases by roughly 3.3% per annum. If employment expands by 0.6% per annum, then total wages paid to all workers will increase by the product of those growth rates, or roughly 3.9% per annum.

Table A.2

Pennsylvania Economic Variables

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Payroll Employment[1]	5,883	5,941	6,010	6,066	5,605	5,760	5,987	6,132	6,147	6,178	6,215	6,252	6,290	6,328
Change	47.5	58.4	68.6	56.1	-461.2	155.4	227.1	145.0	15.0	30.7	37.1	37.3	37.5	37.7
Growth Rate	0.8%	1.0%	1.2%	0.9%	-7.6%	2.8%	3.9%	2.4%	0.2%	0.5%	0.6%	0.6%	0.6%	0.6%
Residents: Age 20 to 69[1]	8,680	8,658	8,649	8,644	8,641	8,645	8,594	8,576	8,541	8,502	8,470	8,432	8,394	8,358
Employ / Population	0.678	0.686	0.695	0.702	0.649	0.666	0.697	0.715	0.720	0.727	0.734	0.742	0.749	0.757
Avg. Output per Worker[1]	$117.0	$117.0	$117.1	$117.9	$121.5	$123.4	$121.3	$121.5	$121.9	$122.8	$124.1	$125.4	$126.9	$128.5
Growth Rate	0.0%	0.0%	0.2%	0.6%	3.1%	1.6%	-1.8%	0.2%	0.3%	0.8%	1.0%	1.1%	1.2%	1.2%
Real GDP[2]	$688.4	$694.9	$704.0	$715.1	$681.0	$711.0	$726.0	$745.1	$749.2	$758.9	$771.1	$784.3	$798.5	$812.9
Growth Rate	0.9%	0.9%	1.3%	1.6%	-4.8%	4.4%	2.1%	2.6%	0.5%	1.3%	1.6%	1.7%	1.8%	1.8%
Philadelphia CPI-U	245.3	248.4	251.6	256.6	258.9	269.4	290.5	302.5	312.2	320.0	327.3	334.9	342.6	350.5
Growth Rate	0.6%	1.3%	1.3%	2.0%	0.9%	4.0%	7.9%	4.1%	3.2%	2.5%	2.3%	2.3%	2.3%	2.3%
Wages-Salaries[2]	$312.7	$325.4	$339.3	$354.1	$353.8	$379.8	$409.0	$429.5	$443.4	$459.9	$477.9	$496.7	$516.1	$536.4
Average Wage[1]	$53.2	$54.8	$56.5	$58.4	$63.1	$65.9	$68.3	$70.0	$72.1	$74.4	$76.9	$79.4	$82.1	$84.8
Growth Rate	0.6%	3.0%	3.1%	3.4%	8.1%	4.4%	3.6%	2.5%	3.0%	3.2%	3.3%	3.3%	3.3%	3.3%

1 Thousands of units or dollars.

2 Billions of dollars.

Expenditures

As of November 15, 2023, portions of the FY 2023-24 budget have not been finalized, and certain expenditure line items have not been entered into the state accounting system. Below is a summary of all assumptions made within the expenditure section of this document.

Executive Offices

A new line item of Indigent Defense is appropriated $7.5 million and the entire line item is non-personnel.

Department of Agriculture

The University of Pennsylvania-Center for Infectious Disease and University of Pennsylvania-Veterinary Activities line items are appropriated the same level as FY 2022-23 for a total of $33.553 million.

Department of Community and Economic Development

Two new line items of Hospital and Health System Emergency Relief and Whole Home Repairs are each appropriated $50 million, and both lines items are all non-personnel.

Pennsylvania Department of Education

The Level-Up Supplement line item is appropriated $100 million and is generally included with the Basic Education line item within the expenditure section.

State-related universities receive the same support they received in FY 2022-23 and include these line items:

- Pennsylvania State University (PSU) – General Support: $242.096 million
- PSU – PA College of Technology: $26.736 million
- University of Pittsburgh (Pitt) – General Support: $151.507 million
- Pitt – Rural Education Outreach: $4.346 million
- Temple University – General Support: $158.206 million
- Lincoln University – General Support: $15.166 million

The PA Award for Student Scholarship Program is not included.

Department of Human Services (DHS)

The transfers from the Tobacco Settlement Fund into DHS are based on values found in the FY 2023-24 Spring Update (May 2023).

Pennsylvania State Police (PSP)

The projections assume that the Motor License Fund (MLF) cap for PSP expenditures remains at $375 million through FY 2028-29.

Tables A.3 provides expenditures by agency. This differs slightly from most of the tables in the expenditure section as this table includes personnel costs within agency expenditures. Throughout most of the expenditure section, personnel costs for all agencies are combined and displayed separately.

Table A.3
General Fund Expenditures by Agency

Fiscal Year	22-23	23-24	24-25	25-26	26-27	27-28	28-29
Human Services	$16,004	$18,634	$19,452	$20,455	$21,341	$22,230	$23,111
Education	16,680	17,382	17,855	18,328	18,750	19,162	19,573
Corrections	2,732	2,894	2,996	3,104	3,216	3,344	3,450
Treasury	1,181	1,256	1,279	1,392	1,431	1,429	1,430
State Police	743	982	1,015	1,061	1,109	1,166	1,208
Legislature	445	441	455	471	487	505	521
DCED	317	481	495	507	520	532	545
PHEAA	414	430	430	430	430	430	430
Judiciary	362	395	406	421	436	453	467
Health	224	239	246	253	260	268	275
Agriculture	226	241	248	254	261	268	274
Executive Office	203	234	241	248	255	262	269
Revenue	197	228	236	243	251	259	267
Military & Veterans Affairs	198	212	220	227	234	242	249
Environmental Protection	183	203	210	217	224	233	240
All Others	691	721	744	767	790	816	839
Total	**40,801**	**44,974**	**46,528**	**48,379**	**49,996**	**51,600**	**53,149**
Growth Rate	3.7%	10.2%	3.5%	4.0%	3.3%	3.2%	3.0%

Note: Millions of dollars. DCED stand for Department of Community and Economic Development. PHEAA stands for Pennsylvania Higher Education Assistance Agency.

Other Funds

In addition to the General Fund, the Commonwealth maintains numerous special funds dedicated to specific purposes. In general, this report does not track those funds. However, due to the interaction between three special funds and certain General Fund appropriations, this Appendix projects revenues and expenditures for the Lottery Fund, Tobacco Settlement Fund and Oil and Gas Lease Fund for FY 2023-24 to FY 2028-29. These forecasts inform the projection of General Fund appropriations found in the main body of the report. Unless otherwise noted, if special funds cannot sustain the same level of funding provided in prior years, the analysis assumes that future General Fund appropriations will increase to make up the difference. **Table A.4** displays a history and forecast for special funds that augment General Fund expenditures.

Table A.4
Other Fund Disbursements to Offset General Fund Expenditures

Fiscal Year	Lottery[1]	Tobacco[2]	Oil & Gas[3]	Total
2011-12	$178	$290	$60	$528
2012-13	309	255	68	632
2013-14	330	256	102	688
2014-15	477	326	132	935
2015-16	310	284	86	680
2016-17	308	297	50	655
2017-18	253	303	58	614
2018-19	372	291	48	710
2019-20	338	290	70	698
2020-21	442	271	49	762
2021-22	352	306	48	706
2022-23	353	310	56	719
2023-24	353	322	77	752
2024-25	500	292	50	842
2025-26	500	292	50	842
2026-27	500	292	50	842
2027-28	500	292	50	842
2028-29	500	292	50	842

Note: Millions of dollars.

1 Includes MA Long-Term Care, Home and Community-Based Services, Community HealthChoices and Transportation.

2 Includes Uncompensated Care, MA for Workers with Disabilities, Long-Term Care, Home and Community-Based Services and Community HealthChoices.

3 Includes General Government, State Parks and State Forests Operations.

Lottery Fund

Most Lottery Fund revenues support programs within the Departments of Human Services, Revenue and Transportation that address the needs of a growing older adult population in Pennsylvania. Lottery monies also fund most of the budget for the Department of Aging (does not receive any state General Fund appropriations).

For FY 2022-23, net Lottery Fund revenues ($2.23 billion) exceeded expenditures ($2.21 billion) to increase the fund's ending balance to $163 million (includes deduction of $75 million for internal reserves). (See **Table A.5**.) The forecast assumes that the Lottery Fund absorbs $353 million of DHS program costs in FY 2023-24. Combined with strong revenue growth, these assumptions allow the Lottery Fund to generate a $268 million ending balance for FY 2023-24, while maintaining the fund's traditional $75 million reserve. For future years, the forecast assumes the fund will absorb $500 million per annum of DHS program costs. Annual budget shortfalls through FY 2028-29 are offset by the projected ending balance in FY 2023-24.

Gross ticket sales are projected to grow at an average rate of 2.7% per annum from FY 2023-24 to FY 2028-29:

- Multi-state Lottery sales decline by 3.4% per annum. Current multi-state Lottery sales are at historically high levels as a result of very large jackpots due, in part, to high interest rates that artificially inflate advertised jackpots and encourage play. Ticket sales are expected to remain elevated in FY 2024-25 and then contract in FY 2025-26 and FY 2026-27 as interest rates decline.
- Instant ticket sales grow by 2.7% per annum. The model projects slightly stronger growth in FY 2025-26 and FY 2026-27 followed by lower, long-run average growth rates in the out years. As multi-state jackpots increase, some Lottery players switch their play from instant tickets to multi-state tickets. The model projects stronger growth in FY 2025-26 and FY 2026-27 as multi-state sales are projected to decline during that time period.
- Sales for iLottery are projected to grow by 5.6% per annum due to the continued popularity of online play by some Lottery players. Additionally, traditional Lottery games played online are counted within iLottery and are also expected to increase over the long run.
- Other Lottery games (in-state lottery, numbers, raffle, Keno and Xpress Sports) sales grow modestly (0.9% per annum).

The forecast projects that net revenues (gross ticket sales less prizes, commissions, transfers and other amounts) grow at an average rate of 2.5% per annum from FY 2023-24 to FY 2028-29, as revenues from ticket sales growth (2.7% per annum) fall short of total expenditure growth (3.9% per annum). The department details are as follows:

- Appropriations for the Department of Aging increase by 0.1% per annum. Those funds are earmarked for general operations, PENNCARE, Pre-Admission Assessment, Caregiver Support, Alzheimer's Outreach, Pharmaceutical Assistance Fund and Grants to Senior Centers. Most Aging appropriations are flat-funded in all years, except for a gradual decline in the Pharmaceutical Assistance Fund to match historical trends and a slight increase in the transfer to PENNCARE as detailed in the Executive Budget (March 2023). Appropriations for general operations grow at the same rate as the CPI-U.

- Projections for DHS appropriations (primarily MA Community HealthChoices) assume the Lottery Fund absorbs $353 million of program costs in FY 2023-24 and $500 million per annum in FY 2024-25 through FY 2028-29. This level of DHS support allows the Lottery Fund to maintain a positive balance in future fiscal years but may fluctuate based on the actual balance within the fund.
- Department of Revenue appropriations are projected to increase by 4.9% per annum from FY 2023-24 through FY 2028-29. Over 70% of appropriations are used for the payment of prize monies and Property Tax and Rent Assistance. The Property Tax and Rent Assistance forecast increases over the forecast period due to a recent increase to the income cap and rebate amounts for homeowners and renters. Previously, as incomes increased over time, more households exceeded the income limits.
- Department of Transportation appropriations are held flat through the forecast period. The revenues are earmarked for the Older Pennsylvanians Shared Ride program and a transfer to the Public Transportation Trust Fund.

Table A.5
Lottery Fund Financial Statement

Fiscal Year	22-23	23-24	24-25	25-26	26-27	27-28	28-29
Beginning Balance[1]	**$150**	**$163**	--	--	--	--	--
Reserve from Prior Year	75	75	$75	$75	$75	$75	$75
Total	**225**	**238**	**--**	**--**	**--**	**--**	**--**
Gross Ticket Sales	5,907	6,076	6,225	6,356	6,536	6,740	6,951
Less Field Prizes & Comm.	-3,900	-4,024	-4,136	-4,259	-4,416	-4,587	-4,766
Transfers, Earnings and Lapses	219	148	273	279	286	294	302
Net Revenue	**2,225**	**2,199**	**2,362**	**2,377**	**2,407**	**2,447**	**2,487**
Funds Available	**2,450**	**2,437**	**2,437**	**2,452**	**2,482**	**2,522**	**2,562**
Aging	452	479	485	485	481	481	482
Human Services	353	353	500	500	500	500	500
Revenue	1,236	1,091	1,247	1,279	1,313	1,351	1,388
Transportation	171	171	171	171	171	171	171
Total Expenditures	**2,213**	**2,094**	**2,402**	**2,435**	**2,465**	**2,503**	**2,541**
Current Year Reserve	-75	-75	-75	-75	-75	-75	-75
Ending Balance	**163**	**268**	**-40**	**-58**	**-58**	**-55**	**-54**

Note: Millions of dollars.

1 Beginning balance omitted for FY 24-25 and thereafter.

Tobacco Settlement Fund

The Tobacco Settlement Fund (TSF) receives monies paid to the Commonwealth under the Tobacco Master Settlement Agreement. The agreement ended litigation between certain large tobacco companies and state attorneys general regarding the advertising, marketing and promotion of tobacco products, as well as the costs incurred by state Medicaid programs to treat smoking-related illnesses. The revenues received by the fund generally are used for health-related programs.

Table A.6
Tobacco Settlement Fund Financial Statement

Fiscal Year	22-23	23-24	24-25	25-26	26-27	27-28	28-29
Beginning Balance[1]	**$152**	**$171**	--	--	--	--	--
Gross Settlements	358	360	$360	$360	$360	$360	$360
Transfer for Tobacco Bond Debt Service	-115	-115	-115	-115	-115	-115	-115
Transfer from Cigarette Tax	115	115	115	115	115	115	115
Total Revenues	**358**	**360**	**360**	**360**	**360**	**360**	**360**
Funds Available	**510**	**531**	**360**	**360**	**360**	**360**	**360**
Community & Economic Development	2	4	3	3	3	3	3
Health	27	132	65	65	65	65	65
Human Services[2]	310	322	292	292	292	292	292
Total Expenditures	**339**	**458**	**360**	**360**	**360**	**360**	**360**
Ending Balance	**171**	**73**	--	--	--	--	--

Note: Millions of dollars. Excludes federal funds.

1 Beginning balance omitted for FY 24-25 and thereafter.

2 FY 23-24 does not include $47.1 million in budgetary reserve as of the release of this document.

For FY 2022-23, receipts ($358 million) were greater than expenditures ($339 million), which increased the fund balance from $152 million at the beginning of the fiscal year to an estimated $171 million at the end of the year (excludes federal funds). Tobacco Settlement Fund revenue projections for FY 2023-24 through FY 2028-29 are based on the schedule of annual payments to Pennsylvania included in the Master Settlement Agreement.

As permitted by Act 43 of 2017, the Commonwealth Financing Authority issued 30-year bonds with a principal amount of $1.5 billion backed by proceeds from the Master Settlement Agreement. Annual principal and interest payments totaling $115 million began in FY 2019-20. Funds to make the principal and interest payments will be transferred to the Commonwealth Financing Authority. The forecast assumes that a transfer of $115 million from the General Fund (cigarette tax revenues) to the TSF to offset required annual debt service payments will be enacted for FY 2023-24 and each year thereafter. As a result, the projections assume that the fund is held harmless for the debt service payments.

The expenditure forecast reflects the following assumptions:

- The Department of Health expenditures are based on historical percentage allocations of receipts for the Tobacco Use, Prevention and Cessation and the Health Research line items. These allocations are used for all years of the forecast.

- The Department of Human Services appropriations for MA – Workers with Disabilities and Uncompensated Care are based on historical allocation percentages for these line items. The Community HealthChoices appropriation is projected at $155 million in FY 2024-25 and remains level through FY 2028-29.

Oil and Gas Lease Fund

The Oil and Gas Lease Fund (OGLF) receives monies from the leasing of state lands for oil and gas drilling, in the form of rents, royalties, bonus payments and interest. The OGLF revenues support programs related to environmental conservation. Appropriations from the fund are made to the Department of Conservation and Natural Resources (DCNR), with priority given to state park and state forest programs and the Marcellus Legacy Fund, which supports other conservation-related programs.

For FY 2022-23, revenues ($180 million) increased by $57 million (47%) from the prior year and exceeded expenditures ($127 million), driving the ending fund balance to $132 million. (See **Table A.7** on next page.) This increase was due to continued strength in regional natural gas prices, as the average spot price at major Pennsylvania hubs in 2022 was 81% higher than the prior year. Total royalty revenues for FY 2021-22 and FY 2022-23 exceeded the prior four fiscal years combined.

For FY 2023-24, appropriations from the OGLF include (1) $57 million to state park and state forest programs, (2) $19 million for DCNR's general government operations, (3) $112 million for infrastructure projects in state parks and forests and (4) a $15 million transfer to the Marcellus Legacy Fund. Overall, these appropriations represent an increase of $77 million (61%) over the prior year. The forecast projects that royalty revenues will fall by nearly $100 million in FY 2023-24 due to the significant decline in natural gas prices in CY 2023. Due to a substantial rise in inventory that largely resulted from a mild winter and weak demand, regional prices have decreased by 70% from the prior year. Based on estimated revenues of $84 million, the fund balance is projected to be $12 million at the end of the fiscal year.

After 2023, natural gas prices are projected to rebound modestly and then record minor declines through the end of the forecast period. The revenue projection uses a combination of data provided by DCNR, the U.S. Energy Information Administration (EIA) and Natural Gas Intelligence. Royalties are forecasted using expected trends in price throughout the forecast horizon, with adjustments to reflect actual prices received from sales of the gas extracted from state lands. Rentals and bonus payments are projected to remain flat.

The forecast reflects the following assumptions:

- Disbursements from the fund represent statutory provisions for (1) an appropriation of $50 million per annum for DCNR and (2) a $35 million transfer to the Marcellus Legacy Fund for distribution to the Environmental Stewardship Fund ($20 million for FY 2017-18 and thereafter) and the Hazardous Sites Cleanup Fund ($15 million for FY 2017-18 and thereafter). The total transfer was reduced to $15 million for the last four fiscal years, but the forecast assumes that it returns to $35 million.
- Under current law, at least $85 million of available funds are needed each fiscal year to meet the statutory obligations of the OGLF. The current revenue forecast projects that the fund can support $50 million in annual appropriations for DCNR operations and the full transfer to the Marcellus Legacy Fund through FY 2028-29.

- Table A.7 assumes disbursements follow statutory requirements and that the increases in the past two fiscal years, which includes general support for DCNR operations and new infrastructure spending, do not occur again. Therefore, the OGLF builds a surplus throughout the forecast period, totaling $54 million by FY 2028-29 (not shown in table).

Table A.7
Oil and Gas Lease Fund Financial Statement

Fiscal Year	22-23	23-24	24-25	25-26	26-27	27-28	28-29
Beginning Balance[1]	**$78**	**$132**	--	--	--	--	--
Royalties	165	68	$83	$82	$80	$79	$78
Rents, Interest and Other	15	16	16	14	12	10	9
Total Revenues	**180**	**84**	**99**	**96**	**92**	**89**	**86**
Funds Available	**258**	**216**	**99**	**96**	**92**	**89**	**86**
Cons. and Natural Resources	112	189	50	50	50	50	50
Transfers to Other Funds	15	15	35	35	35	35	35
Total Expenditures	**127**	**204**	**85**	**85**	**85**	**85**	**85**
Ending Balance	**132**	**12**	**14**	**11**	**7**	**4**	**1**

Note: Millions of dollars.

1 Beginning balance omitted for FY 24-25 and thereafter.