

November 2021

Pennsylvania

ECONOMIC AND BUDGET OUTLOOK

Fiscal Years 2021-22 to 2026-27



Independent Fiscal Office

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INDEPENDENT FISCAL OFFICE

November 15, 2021

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 the Congressional Budget Office or IHS Markit. Demographic projections are from the IFO based on tabulations from the 2020 Population Estimates by the U.S. Census Bureau and data supplied by the Pennsylvania Department of Health. 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,

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

Dr. Matthew J. Knittel
Director

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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) 2026-27. Based on the economic and demographic assumptions used by this report, the analysis projects a substantial surplus for FY 2021-22, but operating deficits for future years.

For FY 2021-22, General Fund tax revenues (excludes non-tax revenues and a \$3.84 billion transfer from the American Rescue Plan (ARP)) expand by 6.2% (\$2.31 billion) after controlling for the shifting of revenues into FY 2020-21 from delayed tax due dates. For FY 2022-23, tax revenues expand by only 0.4% (\$165 million, excludes a \$2.41 billion ARP transfer) as the impact of \$120 billion of federal stimulus disbursed to Pennsylvania residents and businesses wanes. From FY 2022-23 to FY 2026-27, the forecast projects that General Fund tax revenues will increase at an average rate of 3.3% per annum. During that time, the state economy partially reverts to pre-COVID patterns as consumers shift spending towards services, labor force participation rates increase, and asset markets resume long-term trends.

For FY 2021-22, General Fund expenditures increase by 13.5% due to the use of substantial federal monies in FY 2020-21. For FY 2022-23, expenditures increase by 7.1% due to strong growth in healthcare programs and the reversion of the federal Medicaid matching rate to pre-COVID levels. From FY 2022-23 to FY 2026-27, expenditures expand at an average rate of 3.0% per annum. Overall growth is restrained by low growth in employer pension contributions. When combined with available revenues, the projected operating deficit peaks in FY 2024-25 at \$2.0 billion and then declines to \$1.7 billion by FY 2026-27.

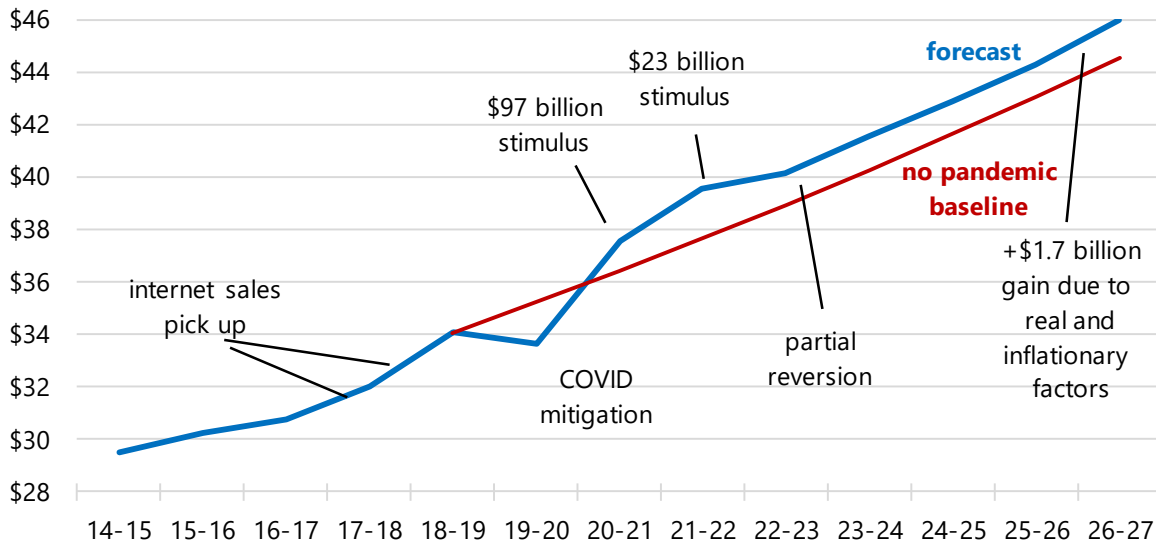
General Fund Financial Statement

Fiscal Year	20-21	21-22	22-23	23-24	24-25	25-26	26-27
Beginning Balance ¹	-\$2,715	\$0	--	--	--	--	--
Current Year Revenues	40,392	44,173	\$42,875	\$41,847	\$43,144	\$44,587	\$46,107
Less Refund Reserve	<u>-1,262</u>	<u>-1,325</u>	<u>-1,300</u>	<u>-1,325</u>	<u>-1,350</u>	<u>-1,375</u>	<u>-1,400</u>
Net Revenue	39,130	42,848	41,575	40,522	41,794	43,212	44,707
State Expenditures ²	-34,013	-38,589	-41,320	-42,513	-43,878	-45,135	-46,534
Current Year Balance	2,402	4,259	255	-1,991	-2,083	-1,923	-1,828
Reduced Spending ³	0	763	0	0	0	0	0
Adjustment for Lapses ⁴	-2,402	110	110	110	110	110	110
Preliminary Ending Balance	0	5,132	365	-1,881	-1,973	-1,813	-1,718

Note: Millions of dollars.

- 1 Beginning balance omitted for FY 22-23 and thereafter.
- 2 Based on appropriations. Includes current year lapses and approved supplemental appropriations.
- 3 Reflects the administration's recommended changes to enacted General Fund appropriations.
- 4 Prior year lapses and actual transfers to the Budget Stabilization Reserve Fund.

General Fund Tax Revenues (\$ billions)



The COVID-19 pandemic caused fundamental changes to the national and state economies and will affect short- and long-term revenue projections. Overall, the forecast projects a net nominal revenue gain due to the pandemic. The long-term gain is displayed in the above figure. The technical explanation is as follows:

- Prior to COVID-19, General Fund tax revenues (excludes non-tax revenues) expanded by roughly 3.3% per annum if extra revenue gains that are non-recurring (internet sales taxation, tobacco tax increases) are excluded. That average rate provides a reasonable long-term growth rate for General Fund revenues under normal economic conditions.
- That rate is applied to FY 2018-19 General Fund tax revenues in the figure (red line).
- Actual revenues dipped in FY 2019-20 and then expanded rapidly due to \$120 billion of federal stimulus disbursed to Pennsylvania residents and businesses.
- For FY 2022-23, the forecast assumes demand slows and various technical factors partially revert to values prior to the pandemic. Some reversions help revenue growth (e.g., labor force participation rates increase) while others hinder it (e.g., consumers shift back to purchases of services from taxable goods).
- By the end of the forecast, there remains a \$1.7 billion nominal revenue gain compared to the counterfactual without a pandemic. Some of those gains are real (e.g., higher profit margins, gains from remote working) and some are inflationary (e.g., permanently higher car prices, inflated stock market).

The remainder of this report provides further detail and context for these changes. General Fund expenditures are also affected by the pandemic, and those issues are discussed as well.

Introduction

This report provides an overview of the demographic, economic, revenue and expenditure trends that will affect the Commonwealth's fiscal condition through FY 2026-27. 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 2026-27. 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. In this manner, the economic forecast represents an optimistic scenario.

The report designates FY 2021-22 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 2026-27. The report makes two forecasts of baseline expenditures. The first forecast represents a "cost to carry" concept and only includes increases in mandatory spending such as debt service, pension contributions and entitlement programs. The second 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. Combined, the two forecasts provide a reasonable lower and upper bound for future spending.

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.

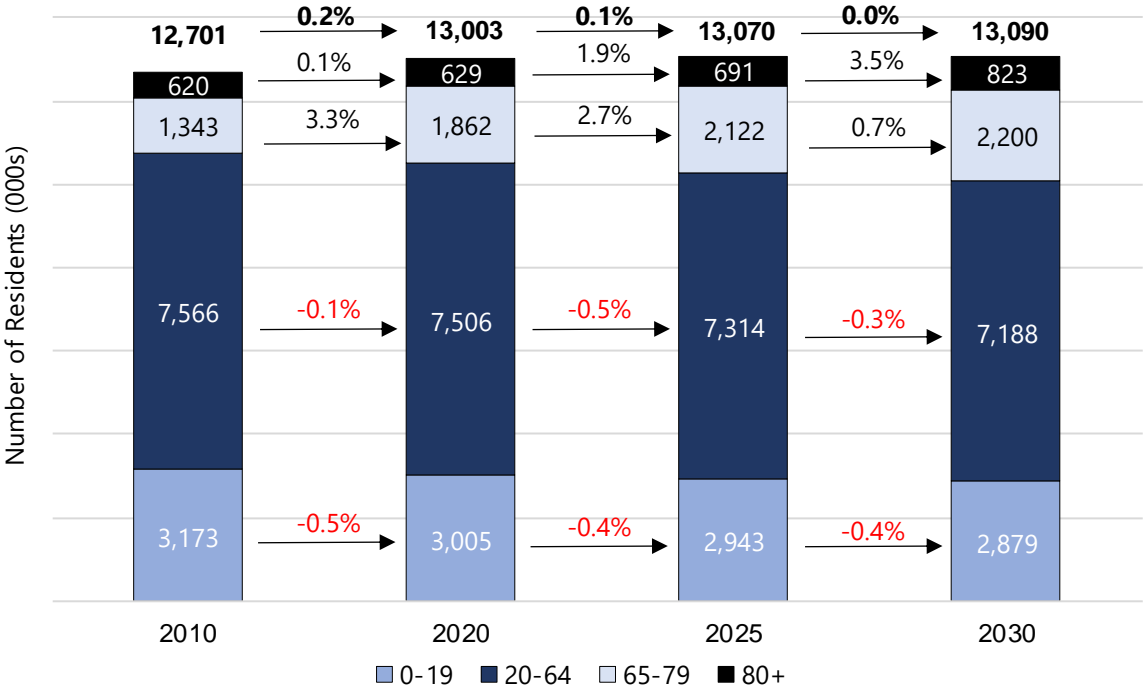
The report starts with the demographic and economic outlooks. Those outlooks provide the foundation for the five-year projections of General Fund tax revenues and expenditures that follow. Several appendices provide further details on all forecasts contained in this report.

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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 potential labor force that affects economic growth, elementary and secondary students who require educational services and elderly 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* (November 2021).¹ Some detail tables and figures from that report are included in the Appendix to this report.

Figure 2.1
Pennsylvania Demographic Trends and Projections by Age Group



Note: Percents listed between bars are the average annual growth rates of the relevant age groups.

Figure 2.1 presents the average annual growth rates for various age cohorts for three time periods. Those periods are: 2010 to 2020 (the previous decade), 2020 to 2025 (near-term projections) and 2025 to 2030 (long-term projections). While near-term projections should be similar to actual population estimates, long-term projections are less certain because birth, death and migration rates can vary significantly due to factors such as changing economic conditions, immigration policies, domestic migration incentives and healthcare.

¹ The *Pennsylvania Demographic Outlook* used data from the U.S. Census Bureau, U.S. Centers for Disease Control and Prevention (CDC) and Pennsylvania Department of Health (DOH). For more details, see the IFO release.

Figure 2.1 reveals the following trends:

- The total population grew 0.2% per annum from 2010 to 2020 and is projected to grow slightly in the near term (0.1% per annum) and remain flat long term.
- The school age cohort (age 0 to 19) declined 0.5% per annum from 2010 to 2020 and is projected to decline 0.4% per annum in the near term and in the long term.
- The working-age cohort (age 20 to 64) declined 0.1% per annum from 2010 to 2020 and is projected to contract by 0.5% per annum in the near term and 0.3% per annum in 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). If labor force participation rates do not increase, then this trend will constrain economic and revenue growth in the future.
- The retiree cohort (age 65 to 79) increased 3.3% per annum from 2010 to 2020 and is projected to expand by 2.7% per annum in the near term and then expand 0.7% per annum in the long term. In 2025, this group includes most of the Baby Boom Generation (born 1946 to 1964). The increase in this age cohort and the next age cohort implies strong demand for healthcare and long-term care services moving forward.
- The elderly cohort (age 80+) increased 0.1% per annum from 2010 to 2020 and is projected to expand by 1.9% per annum in the near term and 3.5% per annum in the long term. In 2025, this group mostly includes the Silent Generation (born 1926 to 1945) and a small number of individuals from the Greatest Generation (born 1905 to 1925).

Components of Population Change

Table 2.1 deconstructs the change in state population from 2010 to 2030 to illustrate the factors that motivate low population growth rates. Three factors drive the trends during the 20-year time period:

- The forecast projects that births decline while deaths increase. In the previous decade (2010 to 2020), births (1.388 million) outnumbered deaths (1.339 million) by 48,300 or 4,800 per annum. By 2020 to 2025, deaths are projected to outnumber births by 57,400 (11,500 per annum).

Table 2.1
Components of Population Change by Time Period

	2010-20	2020-25	2025-30
Start of Period	12,701	13,003	13,070
Natural Increase	48	-57	-102
Births	1,388	660	666
Deaths	-1,339	-718	-768
Net Migration	253	125	122
End of Period	13,003	13,070	13,090
Total Population Gain	301	68	20

Note: Thousands of residents.

Sources: The data for 2010 through 2020 are from the U.S. Census Bureau 2020 Population Projections and U.S. CDC. The 2020 data also contain a proportional gross up so that the total equals the U.S. Census Bureau's Decennial Census. Projections for 2021 through 2030 use data from the U.S. Census Bureau and CDC. Calculations by the IFO.

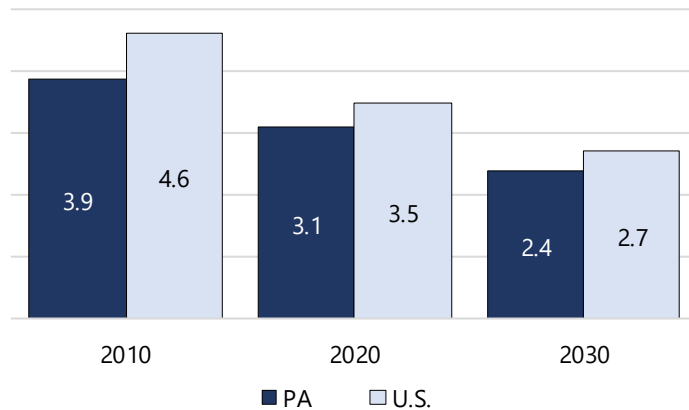
- In the previous decade, net migration was 253,000 (25,300 per annum). It is expected to remain flat with a net inflow around 25,000 per annum from 2020 to 2030. The overall positive net migration is due to net inflows from international migration.
- As of the release of this report, full-year data are not available on how the COVID-19 pandemic impacted net migration for 2020 and 2021 and births in 2021. Preliminary data on COVID-related deaths are available for 2020 and the first part of 2021. For more detail, see the IFO release *COVID-19 Impact on Pennsylvania Deaths*.²

Dependency Ratios

Working-age residents remit the majority of state tax revenues that support dependents attending school and elderly 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 20-64) to youth (age <20) and working-age to retiree (age 65+) populations. From 2010 to 2030, the working-age to youth ratio is projected to remain stable at roughly 2.4 to 2.6 for Pennsylvania and 2.3 to 2.4 for the United States. For Pennsylvania, this implies that there are 2.4 to 2.6 working-age adults per youth.

Unlike the working-age to youth ratio, the working-age to retiree ratio is trending downward for both Pennsylvania and the United States. Figure 2.2 displays this ratio for Pennsylvania (blue) and the United States (light blue) for 2010, 2020 (estimated) and 2030 (projected). In 2010, there were 3.9 working-age residents per retiree in Pennsylvania and 4.6 for the United States. Both ratios are estimated to decline substantially in 2020 (3.1 for Pennsylvania, 3.5 for the United States) and continue to decline through 2030 (2.4 for Pennsylvania, 2.7 for the United States). The downward trend directly corresponds to the retirement of Baby Boomers and the resulting contraction of the working-age population.

Figure 2.2
Working-Age (20-64) to Retiree (65+) Ratios



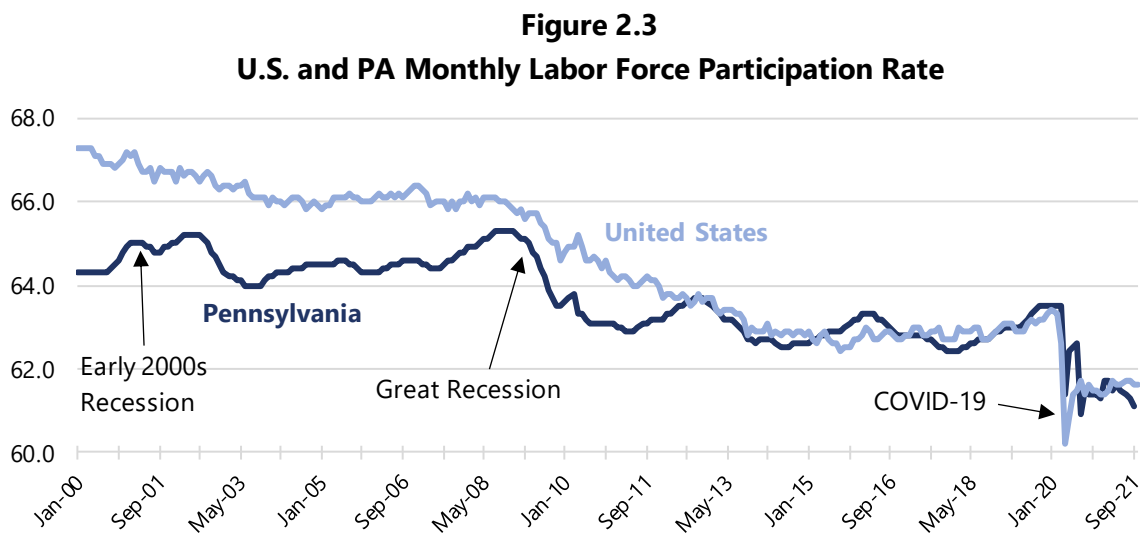
Sources: Data for 2010 and 2020 are from the U.S. Census Bureau 2020 Population Estimates with a proportional gross up in 2020 data to match the 2020 Decennial Census. The 2030 Pennsylvania data are projections by the IFO. The 2030 U.S. data are from the U.S. Census Bureau Population Projections 2017.

² See <http://www.ifo.state.pa.us/releases/487/COVID-19-Impact-on-Pennsylvania-Deaths/>.

Labor Force Participation Rates

Labor force participation rates determine the size of the actual Pennsylvania labor force. The labor force includes all residents age 16 or older if they are employed or actively seek employment. The statewide labor force participation rate is equal to the ratio of the labor force to all non-institutionalized residents age 16 or older. Overall job growth in the Commonwealth requires that either the working-age population expands or a larger share of the working-age population participates in the labor force.

Figure 2.3 displays monthly labor force participation rates from January 2000 to October 2021 for the U.S. and through September 2021 for Pennsylvania. The figure illustrates that while Pennsylvania labor force participation lagged the U.S. in the 2000s, by 2013 both had similar rates. It also displays the magnitude of the decline the labor force participation rate during the COVID-19 pandemic. In April 2020, the Pennsylvania labor force participation rate fell 2.1 percentage points from March 2020 (63.5% to 61.4%), which is the largest monthly percentage point drop in the history of the series (started in 1976). The U.S. rate fell 2.4 percentage points (62.6% to 60.2%) and is also its largest single month percentage point drop in the history of that series (started in 1948). As of September 2021, the Pennsylvania labor force participation rate was 61.1% while the U.S. rate was 61.6%. The economic forecast assumes that labor force participation rates will revert to pre-pandemic levels over the next five years.



Source: Federal Reserve Bank of St. Louis, Economic Research Division.

Economic Outlook

As the state and national economies continue to recover from the COVID-19 pandemic, much uncertainty remains regarding the outlook for the current economic expansion. The pandemic imposed temporary and permanent changes to key structural parameters such as birth and death rates, labor force participation, remote working, consumer spending patterns and employee productivity. This section provides a brief review of those changes and how they impact the state economy.

Table 3.1 displays the economic forecast used for this report. The forecast assumes continued economic recovery in calendar year (CY) 2022 and a reversion to steady state or typical economic growth in CY 2023 and later years. (See Appendix for further details.) The economic forecast reflects various short- and long-term assumptions:

- Although Congress may enact or extend new social spending programs (e.g., the expanded Child Tax Credit), the forecast does not include new programs or extensions. Based on analyses from Moody’s and the Penn Wharton Budget Model, the forecast assumes that the infrastructure bill approved by Congress will have only a modest effect on output, largely after CY 2024.
- A new variant of the coronavirus does not arise that triggers further mitigation efforts.
- Approximately 330,000 payroll jobs lost to the pandemic (relative to 2019) do not return. Those jobs are concentrated in the food service, accommodation, retail trade and government sectors.
- Over several years, labor force participation rates recover to rates observed prior to the pandemic. Currently, those rates are much lower.
- The Federal Reserve begins to taper bond purchases, raise interest rates and is able to moderate accelerating inflation. Inflation returns to a long-term steady-state rate of 2.3%, which is somewhat higher than the original target rate of 2.0%.
- A material correction does not occur in the financial markets.

Table 3.1
Annual Growth Rates for Pennsylvania Economic Variables

	2019	2020	2021	2022	2023	2024	2025
Real Gross Domestic Product	1.7%	-4.5%	4.4%	2.3%	2.1%	2.1%	2.0%
Wages and Salaries	4.4%	-0.3%	7.7%	5.2%	4.4%	4.0%	3.9%
Philadelphia Metro CPI-U	2.0%	0.9%	4.3%	3.9%	2.4%	2.3%	2.3%
CPI-U Exclude Shelter	1.5%	0.3%	5.6%	--	--	--	--
Change in Payroll Jobs (000s)	56	-463	115	80	65	59	53

Note: Payroll jobs exclude self-employed.
Source: U.S. Bureau of Economic Analysis and U.S. Bureau of Labor Statistics. Forecast by IFO.

Economic growth is typically measured by the growth in real Gross Domestic Product (GDP), which measures the value of all final goods and services produced by the state economy. The data show a significant economic contraction for CY 2020, and a nearly offsetting expansion in CY 2021. By CY 2022, real output surpasses levels from CY 2019. After that point, the state economy phases in to a steady-state growth rate. The economic forecast does not include a recession because the purpose of the analysis is to quantify any potential structural surplus or deficit. The determination of a structural budget surplus or deficit assumes an economy that operates at full-employment (i.e., no recession) and excludes all one-time measures such as temporary borrowing, shifting of funds or payment delays.

Table 3.2 displays state economic data for recent quarters. Recent trends include:

- **Real GDP** growth surged by 11.5% from the prior year in 2021 Q2.
- **Personal Income** recorded historic growth in 2021 Q1 due to federal unemployment compensation programs, economic impact payments and Paycheck Protection Program (PPP) transfers. Growth in 2021 Q2 contracts due to the decline of federal stimulus compared to 2020 Q2.
- **Wages and Salaries** grew by more than 10% in the second and third quarters.
- Inflation as measured by the **Consumer Price Index (CPI-U)** accelerated rapidly in 2021 Q2 and maintained its high rate in 2021 Q3. If the imputed Shelter component is excluded, the acceleration is considerably stronger. The CPI-U excluding Shelter is a better metric for actual consumer purchases because it excludes rent imputed to homeowners.
- The **Unemployment Rate** continues to decline, largely due to departures from the labor force.
- Compared to 2019 Q3, the state **labor force** contracted by 230,000 in 2021 Q3, **payroll jobs** were down 320,000 and the **number unemployed** increased by 88,000.

Table 3.2
Recent Pennsylvania Economic Growth Rates or Change

	2020.3	2020.4	2021.1	2021.2	2021.3
Real Gross Domestic Product	-4.3%	-3.4%	-0.3%	11.5%	--
Personal Income	8.8%	4.5%	16.4%	-2.8%	--
Wages and Salaries	-0.7%	1.8%	2.2%	10.9%	10.5%
Philadelphia CPI-U	0.4%	0.9%	1.0%	4.7%	4.6%
Excluding Shelter	-0.4%	0.8%	1.4%	7.1%	6.1%
Unemployment Rate (level)	10.2%	6.6%	7.7%	6.1%	6.2%
Change From Two Years Prior (000s)					
Labor Force	-92	-156	-167	-200	-230
Payroll Jobs	-461	-421	-399	-373	-320
Unemployed	399	158	184	115	88

Notes: All growth rates are year-over-year. Wage growth for 2021 Q3 based on adjusted withholding. Labor market data are not seasonally adjusted.

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

Federal and State Programs

In response to the COVID-19 pandemic, numerous programs injected significant funds into the state economy. **Table 3.3** displays amounts for funds received in CY 2020 and CY 2021 and estimates of additional monies that will flow to Pennsylvania residents and businesses in CY 2022. During CY 2020 and CY 2021, Pennsylvania residents and businesses received nearly \$119 billion in support. Most support will end in CY 2021 as federal stimulus declines to \$1.4 billion in CY 2022.

Details regarding the major stimulus programs are as follows:

- **State and federal unemployment compensation (UC) payments** include (1) state UC payments, (2) Federal Pandemic Unemployment Compensation (FPUC) bonus payments, (3) federal Pandemic Unemployment Assistance (PUA) for self-employed, gig and other normally non-qualifying workers and (4) other federal UC benefits including extended benefits, Lost Wage Assistance (LWA) payments and the first week of unemployment for all affected workers.
- Federal UC programs, including PUA, ended the first week of September. The programs provided over \$42 billion to individuals experiencing unemployment and reduced employment. In the final week of the programs, 530,000 individuals were still claiming expanded benefits.
- Regular UC peaked at 1.1 million claims in April 2020 and fell to nearly 341,000 by the end of CY 2020. For October 2021, an average of 100,000 individuals were still receiving these benefits. Figures in the table show amounts that exceed normal payment levels for CY 2020 and CY 2021.
- The Commonwealth received approval from the U.S. Department of Agriculture to issue emergency allotments for **Supplemental Nutrition Assistance Program (SNAP)** recipients. This emergency funding provides all SNAP households the maximum monthly benefit based on size of household. The amount for CY 2022 (\$0.7 billion) represents four months (January through April) of expanded benefits.
- **Economic impact payments (EIPs)** flowed to 6.6 million residents and totaled \$11.0 billion in CY 2020. Two additional rounds of EIPs were delivered in CY 2021 for \$21 billion in additional support. Residual funds may be delivered in the spring of CY 2022 to account for changes in household size and incomes.
- There were significant changes made to the **Child Tax Credit (CTC)** for tax year (TY) 2021, including: increase in the maximum amount from \$2,000 to \$3,000 (\$3,600 for children under age six), removal of the minimum income threshold, and full refundability (previously only \$1,400 was refundable). The IFO estimates that these changes increase the value of the tax credit by \$3.5 billion. The CTC for TY 2021 was also partially advanceable. Eligible families began receiving monthly installments in July, which the IFO projects will total \$3.3 billion through December.
- Federal stimulus legislation authorized the U.S. Department of the Treasury to provide funding for **emergency rental and homeowner assistance** directly to tenants and homeowners. Approximately \$1.5 billion has been authorized for use in Pennsylvania in CY 2021, and another \$365 million could be made available in CY 2022 if economic conditions necessitate it.

Table 3.3
Federal and State Pandemic Relief Programs

	2020	2021	2022	Total
Payments to Individuals or Businesses				
State Unemployment Compensation	\$5.2	\$0.8	\$0.0	\$6.0
Federal Pandemic Unemployment Comp	16.2	8.7	0.0	24.9
Pandemic Unemployment Assistance (PUA)	7.0	4.1	0.0	11.1
LWA and UC Extensions	3.1	3.2	0.0	6.3
SNAP Benefits	0.9	1.8	0.7	3.3
Economic Impact Payments	11.0	21.0	0.2	32.2
Expanded Child Tax Credits	0.0	3.3	0.1	3.5
Rental and Homeowner Assistance	0.0	1.5	0.4	1.9
Paycheck Protection Program (PPP)	<u>20.7</u>	<u>10.0</u>	<u>0.0</u>	<u>30.7</u>
Total	64.2	54.4	1.4	120.0
Other Federal Programs				
Direct State Support	\$5.9	\$20.1	\$0.0	\$25.9
Direct Local Support	2.6	8.1	0.0	10.6
Other Support	<u>6.2</u>	<u>2.6</u>	<u>0.0</u>	<u>8.8</u>
Total	14.6	30.7	0.0	45.4

Note: Figures in dollar billions. State support does not include federal funds associated with the temporary increase in the Federal Medical Assistance Percentage (FMAP) used to reimburse states for Medicaid program costs (effective January 1, 2020 until the termination of the national public health emergency declaration).

- Commonwealth firms and non-profits received \$20.7 billion of forgivable **PPP loans** in CY 2020 and another \$10.0 billion in CY 2021.
- **Direct state support** reflects funds allocated directly to states for general and targeted programmatic needs. General aid accounted for \$3.9 billion in CY 2020 and \$7.3 billion in CY 2021. **Direct local support** reflects similar funding provided to local governments and includes \$1.0 billion in general aid in CY 2020 and \$6.2 billion in CY 2021. **Other support** was authorized by the federal government for CY 2020 and CY 2021. Funds were awarded directly to healthcare providers, educational institutions, non-profits and specific industry partners.

Payroll Employment

In Spring 2020, the Pennsylvania labor market made a rapid recovery from the initial shock of 1.13 million job losses as businesses reopened and partially resumed normal operations. However, the pace of the jobs recovery has slowed notably in recent months. Relative to February 2020 (the month prior to the onset of COVID-19), seasonally adjusted job losses were as follows: -1.13 million (April 2020), -583,000 (July 2020), -490,200 (December 2020), -407,200 (May 2021) and -358,900 (September 2021).

Table 3.4. displays the latest payroll jobs data for September 2021 relative to September 2019. (Data are compared to the same month; therefore, non-seasonally adjusted data are used.) The current jobs contraction is -328,500 across all sectors. Results for specific sectors are as follows:

- The accommodations-food service sector lost the most jobs with 76,000 (-15.9%) fewer payroll jobs. The arts and entertainment sector (e.g., movie theatres, bowling alleys) recorded the largest relative jobs contraction with 22,100 fewer jobs (-20.8%).
- The administration and waste management sector also contracted significantly (-46,400 jobs, -14.2%) largely due to the building services (e.g., custodial and landscaping) and employment services (i.e., temp workers) subsectors.
- Transportation and warehousing (+10,400) and professional and technical services (+7,700) were the only sectors to expand relative to September 2019.

Table 3.4
Payroll Employment: September 2021 vs September 2019

	Number (000s)		Change	
	Sept '19	Sept '21	Number	Percent
Total Payroll Employment	6,096	5,767	-329	-5.4%
Construction	273	254	-19	-6.9
Manufacturing	572	550	-22	-3.9
Retail and Wholesale Trade	817	784	-32	-3.9
Transport and Warehouse	303	314	10	3.4
Financial and Real Estate	331	331	0	-0.1
Professional and Technical	360	367	8	2.1
Admin and Waste Management	326	280	-46	-14.2
Education (excludes local SD)	242	231	-12	-4.8
Healthcare-Social Assistance	1,061	1,016	-45	-4.2
Arts and Entertainment	106	84	-22	-20.8
Accommodation and Food Service	479	403	-76	-15.9
Other Services	261	238	-24	-9.0
All Government	716	680	-36	-5.0
All Other	249	236	-13	-5.2

Note: Data are not seasonally adjusted. Figures for September 2021 are preliminary. Excludes self-employed.

Source: U.S. Bureau of Labor Statistics, CES State and Metro Area Employment.

Table 3.5 provides additional employment detail for certain subsectors. Full-service restaurants (-31,200, -15.9%), employment services (-30,500, -24.9%) and nursing-residential care facilities (-26,100, -12.9%) recorded the largest contractions based on the number of part- and full-time jobs lost. Childcare has recovered recently but employment remains 4,500 lower (-9.5%) than pre-pandemic levels. The bottom of the table lists subsectors that expanded. Notable expansions occurred in the in the warehousing-storage (+14,200, 15.2%) and couriers and messengers (+11,000, 30.5%) subsectors.

Table 3.5
Change in Payroll Employment: Subsector Detail

	Number (000s)		Change	
	Sept '19	Sept '21	Number	Percent
Jobs Contraction				
Full Service Restaurants	196.1	164.9	-31.2	-15.9%
Employment Services	122.5	92.0	-30.5	-24.9
Nursing and Residential Care	202.0	175.9	-26.1	-12.9
Accommodation	61.4	45.7	-15.7	-25.6
Amusements and Gaming	75.2	60.5	-14.7	-19.5
Local Gov't - Education	275.0	263.9	-11.1	-4.0
Services to Buildings	82.3	73.7	-8.6	-10.4
Transit and Ground Passenger	38.7	30.1	-8.6	-22.2
Limited Service Restaurants	161.4	153.5	-7.9	-4.9
Colleges and Universities	163.3	155.6	-7.7	-4.7
Child Care	47.4	42.9	-4.5	-9.5
Jobs Expansion				
Warehousing and Storage	93.5	107.7	14.2	15.2
Courier and Messengers	36.1	47.1	11.0	30.5
Real Estate	44.9	48.7	3.8	8.5
Building and Garden Retail	44.3	48.2	3.9	8.8

Note: Data are not seasonally adjusted. Figures for September 2021 are preliminary. Excludes self-employed.
Source: U.S. Bureau of Labor Statistics, CES State and Metro Area Employment.

Labor Force Trends

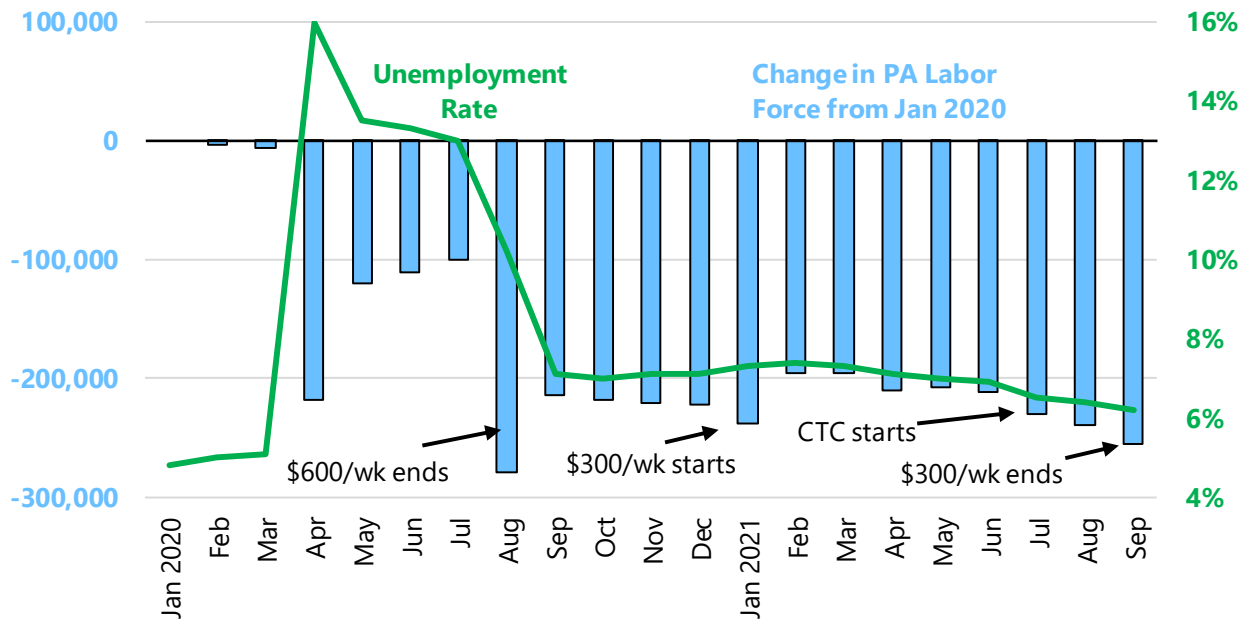
Figure 3.1 displays trends in the unemployment rate and change in labor force since January 2020 (seasonally adjusted data). The unemployment rate recently improved after stagnating from September 2020 to May 2021 at 7.0%. Since May, a contracting labor force combined with modest job gains reduced the unemployment rate from 7.0% (May 2021) to 6.2% (September 2021). Recent departures from the labor force coincide with the end of extra federal unemployment benefits the first week of September.

Due to the contraction of the working age population, it will be critical for labor force participation rates to increase. Other potential factors that motivate departures from the labor force include:

- Continued concerns with the transmission of COVID-19.
- A shift to home schooling or care for elderly parents who prefer to live with children and not residential care facilities or nursing homes.
- Early retirements. However, it is unclear whether that is a permanent or temporary trend.

- Expanded federal benefits. The U.S. Treasury Department started to advance new, fully refundable CTCs in July 2021. For October 2021, Pennsylvania payments were as follows: \$558 million, 1.3 million payments, 2.21 million children claimed, \$428 average per recipient. For two dependents, benefits will generally range from \$500 to \$600 per month (maximum of \$300 per child). Unlike the prior credit, recipients do not need to work to receive the full benefit. Expanded SNAP benefits also remain in effect, which are nearly double the normal level. A family of four qualifies for a maximum benefit of \$835 per month and the annual income limit is \$34,450.

Figure 3.1
Pennsylvania Labor Force Contracts



Source: U.S. Bureau of Labor Statistics. Data are seasonally adjusted.

The graph illustrates that the timing of certain labor force trends generally aligns with changes in federal programs. The large exit from the labor force in August 2020 aligns exactly with the expiration of the extra \$600 weekly FPUC payment. The more recent contraction of the labor force in July 2021 aligns with the new advance payments of the fully refundable CTC. Also relevant is the uptick in COVID-19 cases that began to occur in August 2021 likely due to the Delta variant.

Recent articles have focused on early retirements as a potential factor that explains the contracting labor force. For example, the Wall Street Journal cites a study by the Federal Reserve Bank of Dallas that found the share of adults aged 16 or older who were not in the labor force due to retirement increased from 18.5% in February 2020 to 19.5% in April 2021. After accounting for general demographic factors, the study identified 1.5 million retirees (0.6 percentage points of the 1.0 percentage point increase) above recent pre-pandemic trends.³

³ See https://www.wsj.com/articles/covid-19-pushed-many-americans-to-retire-the-economy-needs-them-back-11635691340?mod=hp_lead_pos11.

However, those data are based on surveys from the Current Population Survey and may not accurately reflect the underlying dynamics of the labor market. A more reliable source is the U.S. Census Bureau’s Quarterly Workforce Indicators because it utilizes administrative data to identify the age of workers. The drawback is that the data are only available with a lag and the latest data available are from 2020 Q3.

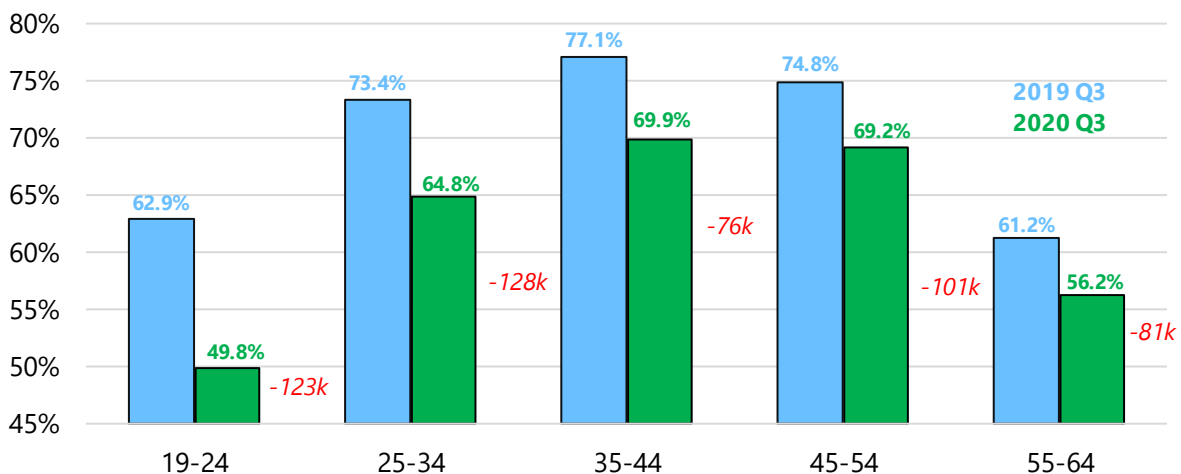
Based on those data, **Figure 3.2** compares the ratio of employment to total population for various age groups.⁴ The bars compare ratios for 2019 Q3 to 2020 Q3 and the data labels are the ratio of number of workers to total residents for that age group. The corresponding figures in red show the decline in the number of workers for each age group.

These data reveal that:

- The decline in the employment to population ratio was most dramatic for the 19 to 24 age group, declining 13.0 percentage points with 123,500 fewer workers.
- Moving to older age groups, the decline in the employment to population ratio becomes less dramatic. For the 55 to 64 age group, the decline is 5.0 percentage points (80,700 fewer workers).
- Due to space constraints, results are not shown for the age 65 to 79 group. For that group, the ratio declined only 3.4 percentage points (44,100 fewer workers).

These data show that while early retirements may have increased, there were more important factors that caused the reduction in employment and labor force participation. As noted, these data are only available with a lag because they utilize administrative data, and do not rely on surveys. It is possible that early retirements increased more significantly in 2021 compared to 2020 Q3. The very strong performance of the stock market since the onset of the pandemic may have contributed to that result.

Figure 3.2
Pennsylvania Employment / Population Ratio by Age Group



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

⁴ For these computations, the denominator uses data from the U.S. Census Bureau’s decennial census.

Income Trends

The COVID-19 pandemic had significant implications on the amount and type of income received by state residents. For the purpose of the revenue forecast, the IFO constructs an income concept called Pennsylvania Cash Income that includes all types of income received by state residents that can be spent or saved such as wages, business income, capital income (capital gains, interest, dividends and rent), retirement income (Social Security, pensions received, IRA disbursements) and income assistance (SSI, veterans benefits, unemployment compensation, SNAP, refundable tax credits).⁵ Unlike state Personal Income published by the U.S. Bureau of Economic Analysis, it does not include imputed dividend, rent and interest income, but does include capital gains. Projected Cash Income levels are as follows: \$690.0 billion (CY 2020), \$734.2 billion (CY 2021) and \$719.2 billion (CY 2022).

Table 3.6 shows the annual change in the five components of Cash Income. Typically, wages provide the largest income gains in any year, followed by capital income and retirement and Social Security income. However, for CY 2020, federal programs such as unemployment compensation, economic impact payments and forgivable PPP loans provided nearly all of the income gains. Those amounts declined modestly in CY 2021 as wage and capital income surged due to an ongoing labor shortage and a robust stock market. By CY 2022, the forecast projects that the various income sources revert to normal patterns observed prior to the pandemic. Due to the expiration of federal programs, Cash Income contracts by \$15.0 billion (-2.0%) in CY 2022. The projected contraction is reflected in the sales and use tax forecast for FY 2022-23.

Table 3.6
Dollar Change in Pennsylvania Cash Income

Income Type	2018	2019	2020	2021	2022
Wages and Salaries	\$14.8	\$14.5	-\$1.0	\$27.6	\$19.8
Capital Income	7.8	1.9	5.3	11.5	2.5
Business Income	1.2	1.4	1.2	4.8	3.8
Retirement and Social Security	5.6	5.9	4.1	4.0	7.1
Income Maintenance	0.0	0.5	55.3	-3.7	-48.2
Change Cash Income	29.5	24.2	64.9	44.2	-15.0
Percent Change	5.2%	4.0%	10.4%	6.4%	-2.0%

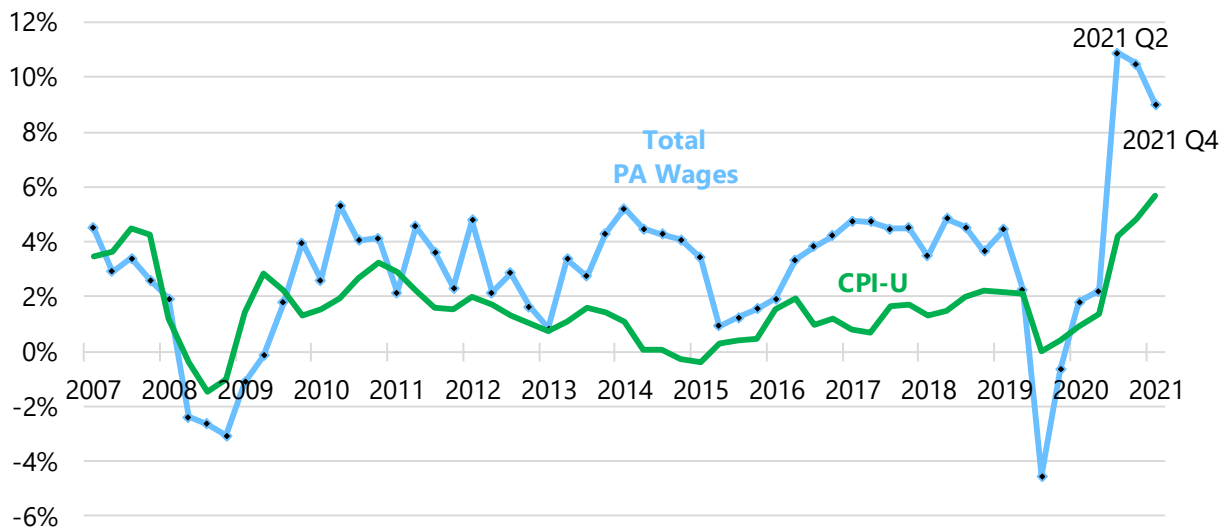
Note: Figures in dollar billions.

⁵ Due to lack of reliable data, Cash Income does not include unreported tip income. Cash Income does include estimates for other income that is not reported on tax returns based on IRS Tax Gap studies. See <https://www.irs.gov/pub/irs-pdf/p1415.pdf> for the latest IRS study used by the IFO to impute unreported income by source.

Figure 3.3 provides more detail on recent Pennsylvania wage trends. The blue line shows the YOY growth for wages paid to all payroll employees (excludes self-employed). For 2021 Q2, wages paid grew by 11.0% over the prior quarter, partly due to the recovery from the jobs contraction in 2020 Q2 from business closures and mitigation efforts, and also real wage gains for workers who maintained employment, were rehired or obtained new employment. For 2021 Q4, approximately 130,000 jobs (+2.2%) were added from the prior year, but wages are projected to increase 9.0% on a YOY basis. That data point illustrates the very strong nominal wage gains in the quarter.

For the full CY 2021, total wages paid to all workers is projected to increase by 8.1%. If that holds, it will be the strongest annual wage growth since 1979. That full year rate would also be much stronger than the recovery from the Great Recession, when wages contracted by -2.3% in CY 2009 and rebounded by 2.1% in CY 2010. By comparison, wages contracted by -0.3% in CY 2020 and are projected to expand by 8.1% in CY 2021.

Figure 3.3
Annual Growth Rates: Pennsylvania Wages and CPI-U



Note: Wages exclude self-employed. Year markers denote Q4.

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

Unspent Federal Stimulus

A relevant issue for near-term economic growth is the amount of federal stimulus that was saved and remains to be spent. To examine that issue, **Table 3.7** displays data from the Federal Reserve on checkable deposit balances at the end of June for the latest four years of data by wealth group. Research finds that recipients of the three economic impact payments immediately spent only 30% to 40% of those funds and saved the residual or paid down debt. The data from Table 3.7 confirm that finding as checkable deposit balances increased by \$2.44 trillion (238%) in June 2021 compared to typical levels in 2018 and 2019. That result suggests significant stimulus funds could still be spent.

Table 3.7
Checkable Deposits and Securities Held by Federal Reserve

Wealth Group	Checkable Deposits End of Q2				Growth	
	2018	2019	2020	2021	Amount	Percent
Top 1%	\$226	\$181	\$307	\$999	\$795	391%
80% to 99%	451	394	570	1,274	851	201
60% to 80%	184	164	247	611	437	252
40% to 60%	116	93	141	356	252	242
20% to 40%	74	64	88	160	91	132
0% to 20%	<u>51</u>	<u>55</u>	<u>67</u>	<u>67</u>	<u>14</u>	<u>26</u>
Total	1,101	951	1,421	3,467	2,441	238

	FRB Debt Holdings End of October				Growth	
	2018	2019	2020	2021	Amount	Percent
Securities Held by Fed	\$3,973	\$3,624	\$6,547	\$8,061	\$4,263	112%

Note: Amounts in billions of dollars. Growth is 2021 amount compared to average for 2018 and 2019.

Source: Federal Reserve Board.

However, a closer look at the data reveals that two-thirds of the increase accrues to the two top groups: the top 1% of the wealth distribution (as defined by the Federal Reserve) and those residing in the 80th to 99th percentile. For those groups, it is likely that the large increase in checkable deposits only partially reflects unspent stimulus monies. It is more likely they reflect strong gains in business or capital income, such as business profits, capital gains and dividends. Those individuals have a much lower propensity to consume new income, so the near-term economic implication of those higher balances is unclear.

Conversely, the bottom group has only a moderate uptick in checkable deposit balances, while the middle three groups show a considerable gain. If the Pennsylvania share of that higher national balance for those three groups is 4%, then that implies \$31 billion of potential spending capacity from unspent federal stimulus. That amount may have declined to closer to \$25 billion by this forecast (November 2021). Those amounts will provide some cushion for the remainder of the fiscal year, but are notably smaller than the massive stimulus already injected into the state economy.

The bottom of Table 3.7 shows the balance and growth in Federal Reserve holdings of U.S. Treasuries and mortgage-backed securities. The Federal Reserve purchased large amounts of federal government and other debt to facilitate the stimulus injected into the national economy since March 2020. Relative to levels prior to the pandemic, Federal Reserve debt holdings increased \$4.3 trillion (112%), which translates nearly directly into an increase in the supply of money. The large increase in the money supply is the primary cause of accelerating inflation because the supply side of the economy has been unable to adjust to the rapid increase in demand. That result has been compounded by various supply chain disruptions, labor shortages and bottlenecks.

Recently, the Federal Reserve announced that it will begin to taper its debt purchases and will reduce the \$120 billion purchased each month by \$15 billion in November and \$15 billion again in December. The Fed will then re-evaluate its tapering of asset purchases.

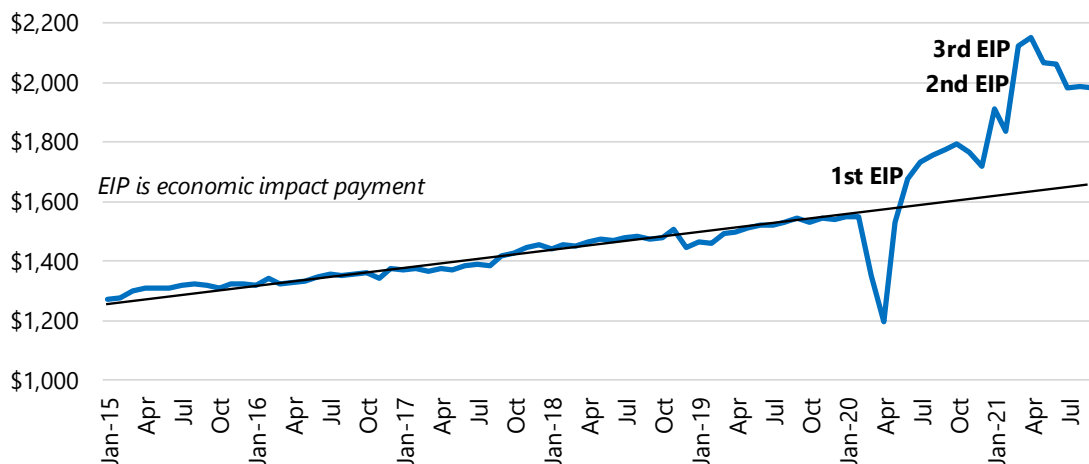
Consumer Spending Patterns

The federal stimulus programs enacted in response to the pandemic triggered a surge in consumer purchases, particularly for durable goods subject to state sales tax. Although personal consumption data are available at the state level, they are available only with a significant lag and only published on an annual basis. Conversely, national data are available on a monthly basis with only a one- or two-month lag. For these reasons, the data in this subsection use national data, but state data from 2020 reflect the same general pattern.

Figure 3.4 displays the dramatic increase in purchases of consumer durable goods such as cars, furniture and electronics since the first injection of federal stimulus monies in Spring 2020. (Note: The levels shown are nominal and annualized levels for the month.) Although the latest data show that purchases have trended down since the final and largest economic impact payment (EIP) in April 2021, the level of durable goods purchases remains highly elevated, and is an important factor that motivates current shortages. It should be noted that the data in Figure 3.4 are nominal amounts and include inflation. Durable goods inflation has been especially strong due to high demand and supply constraints. Based on price indices for U.S. personal consumption expenditures, the index for durable goods consumption increased 7.3% in September on a year-over-year basis. By comparison, the overall index for all personal consumption expenditures (including services) increased by 4.4% from the prior year.

At the state level, data for CY 2020 confirm the significant shift toward goods purchases, and more specifically, goods subject to state sales tax. For CY 2020, the goods share of total consumer spending increased by nearly 2.0 percentage points over historical averages. Because many goods are subject to state sales tax, that change in spending composition has significant implications for sales tax revenues. Based on historic relationships, a 1.0 percentage point shift from non-taxable services to taxable goods generates \$150 to \$200 million more of sales tax revenues. In the next section, the sales tax forecast assumes some reversion (but not full) to normal consumer spending patterns occurs during the forecast.

Figure 3.4
U.S. Purchases of Durable Goods



Note: Billions of dollars. Nominal dollars.

Source: U.S. Bureau of Economic Analysis, Table 2.8.5.

Inflation and Sales Taxes

As noted in the prior subsection, consumers have shifted purchases towards durable goods, which are generally subject to sales tax. **Table 3.8** shows year-over-year growth rates for the All Item Consumer Price Index (CPI) for the Philadelphia metro region, the CPI excluding Shelter, and various CPIs for purchases that are and are not subject to state sales tax. The final column displays the weight of the component in the overall CPI basket. The table illustrates that prices for items subject to sales tax (top half of table) have increased more rapidly than items and services not subject to sales tax (bottom half). This trend is especially notable for used and new cars, which account for 5.3% of the CPI basket. For this report, the sales tax forecast generally assumes that higher prices are permanent and do not revert to prior levels through deflation. For example, there is a permanent gain in motor vehicle sales tax revenues solely due to higher prices.

Table 3.8
High Inflation Disproportionately Impacts Sales Tax Base

	Year-Over-Year Growth in CPI-U for 2021				CPI-U Weight
	Apr	Jun	Aug	Oct	
Philadelphia CPI-U - All Items	3.5%	4.9%	4.6%	5.6%	100.0%
Exclude Shelter	5.0	6.7	6.1	7.1	67.0
Subject to Sales Tax					
Dining Out	4.1	3.4	3.1	3.3	7.6
Home Furnishings	8.3	11.0	12.4	11.6	5.3
Other Goods	6.6	6.1	5.5	5.0	3.4
Used Cars	20.7	45.3	32.3	27.2	2.2
New Cars	8.7	18.7	20.8	24.2	3.1
Not Subject to Sales Tax					
Shelter	0.6	1.1	1.7	2.7	33.0
Medical Care	4.4	2.8	0.0	0.8	8.7
Apparel	7.1	6.9	2.3	5.0	3.0
Food at Home	-2.5	-1.0	0.5	3.9	8.0

Source: U.S. Bureau of Labor Statistics.

Financial Trends

Table 3.9 displays year-over-year growth rates for metrics that track the U.S. stock market, corporate profitability, Pennsylvania home values and consumer debt. Notable trends include the following:

- Relative to December 30, 2020, the S&P 500 Index was up 25.4% through September.
- Corporate profits have surged due to various factors: robust demand, inventory depletions, ability to pass on nearly all higher costs, lower expenditures on travel, meals and entertainment and higher worker productivity. The forecast in the next section assumes some of this change is permanent and General Fund revenues benefit from a permanent gain through higher corporate net income and personal income tax collections.
- The forecast anticipates more strong growth for Pennsylvania home values in 2021 Q3. Those data will be released November 30.
- Auto loan debt surged in 2021 Q2 and Q3. That is likely related to the third and largest economic impact payment that was disbursed in the spring.
- Credit card balances continue to decline on a year-over-year basis.
- Growth in primary mortgage debt has accelerated due to higher home prices.

Table 3.9
Financial and Consumer Data

	Year-Over-Year Growth			
	2020.4	2021.1	2021.2	2021.3
<u>Financials</u>				
S&P 500 Index	12.0%	26.2%	42.8%	32.4%
Non-Financial Corporate Profits	5.3	29.2	70.4	--
PA Home Price Index	11.1	12.2	16.4	--
<u>PA Per Capita Consumer Debt</u>				
Auto Loan	2.6	2.5	12.7	9.9
Credit Card	-11.6	-14.3	-6.2	-2.8
Primary Mortgage	3.1	4.5	4.2	6.3
Home Equity Line of Credit	-10.2	-3.8	-3.8	0.6
Student Loan	<u>1.5</u>	<u>1.4</u>	<u>1.2</u>	<u>1.8</u>
Total Consumer Debt	1.0	2.0	3.5	5.1

Note: Primary mortgage includes closed-end home equity loans. Profits exclude foreign profits.

Source: Wall Street Journal, Yardeni.com, Federal Housing Finance Agency and NYFRB.

Revenue Outlook

General Fund revenues of \$40.39 billion in FY 2020-21 included roughly \$1.94 billion in collections that were shifted from the prior fiscal year due to delayed tax due dates related to the COVID-19 pandemic. After adjusting for this shift, collections for FY 2021-22 are expected to increase 4.9% (excludes the transfer from the Federal Coronavirus State Fiscal Recovery Fund). (See **Table 4.1**.) For FY 2021-22, all major revenue sources are expected to outperform the IFO's Official Revenue Estimate by a significant amount. Including statutory changes enacted with the state budget, the updated forecast used by this report reflects an increase of \$2.26 billion over the IFO's Official Revenue Estimate released in June 2021.⁶

Table 4.1
General Fund Revenues

Fiscal Year	20-21	21-22	22-23	23-24	24-25	25-26	26-27
Personal Income	\$16,283	\$16,079	\$16,920	\$17,662	\$18,380	\$19,123	\$19,900
Sales and Use	12,835	13,065	12,514	12,966	13,373	13,752	14,133
Corporate Income	4,424	4,578	4,423	4,482	4,547	4,742	4,975
Gross Receipts	990	1,052	1,039	1,025	1,002	992	982
Inheritance Tax	1,346	1,371	1,322	1,338	1,372	1,407	1,446
All Other	<u>4,514</u>	<u>8,029</u>	<u>6,657</u>	<u>4,376</u>	<u>4,470</u>	<u>4,570</u>	<u>4,670</u>
Total Revenue	40,392	44,173	42,875	41,847	43,144	44,587	46,107
Growth Rate	25.1%	9.4%	-2.9%	-2.4%	3.1%	3.3%	3.4%

Note: Millions of dollars.

Revenues for FY 2022-23 are projected to increase at a rate of 0.3% (excludes the impact of transfers of federal funds). Revenues then increase at an average rate of 3.3% per annum for FY 2022-23 to FY 2026-27. In the near-term, notable factors that impact revenues include:

- Sales and use tax (SUT) collections are dramatically impacted by (1) more consumer spending on taxable goods/less spending on non-taxable services, (2) rising prices (inflation) due to a more than doubling of the money supply and COVID-19 impacts on supply chains and (3) strong demand as consumers spend income from higher wages and federal stimulus.
- A new transfer from SUT to the Public Transportation Trust Fund (PTTF) begins in FY 2022-23. For that year, the forecast projects a transfer of \$456 million from motor vehicle SUT and the transfer increases to \$516 million in FY 2026-27.

⁶ See *Official Revenue Estimate FY 2021-22* for more information: http://www.ifo.state.pa.us/download.cfm?file=Resources/Documents/June_Revenue_Estimate_2021.pdf.

- Profits subject to corporate net income tax (CNIT) and personal income tax (PIT) may be impacted by income shifting as taxpayers adjust behavior in anticipation of higher federal (or global) tax rates.
- PIT collections benefit from robust increases in wages, profits and capital gains, which more than offset reduced withholding (wages) from jobs lost during the pandemic.
- Realty transfer taxes continue to surge as home prices reflect limited supply and the extension of low interest rates.

The text that follows provides a brief discussion of revenue trends and the outlook for three of the largest General Fund revenue sources. The final subsection provides an overview of other revenue sources. Historical data for General Fund revenues can be found in the Appendix.

Personal Income Tax

PIT revenues of \$16.08 billion are \$561 million higher than the IFO’s official estimate for FY 2021-22.⁷ The strength is driven by rising wages (after adjusting for an extra due date in 2020, fiscal year withholding collections grew at a rate of 10.4% through October) and strong increases in net profits and capital gains (non-withheld income) for tax year 2021. Some portion of the increase in non-withheld collections could also be the result of changes in taxpayer behavior (i.e., shifting of income into the current year in anticipation of higher federal tax rates in the near-term). For example, the administration proposes a new 5% tax on income above \$10 million and an additional 3% surtax on income above \$25 million to pay for the Build Back Better plan.

PIT revenues are projected to increase at a rate of 4.1% per annum from FY 2022-23 to FY 2026-27. (See **Table 4.2.**) Non-withholding tax revenues grow at a stronger rate (4.6%), while withholding tax revenues increase more slowly (4.0%) as wages moderate over the long-term. For purposes of this analysis, the forecast disregards the occurrence of 53 weekly withholding due dates (Wednesdays) in FY 2026-27, because the one-time increase in revenue (roughly \$130 million) reverses the following year.

Table 4.2
Personal Income Tax Revenue

Fiscal Year	20-21	21-22	22-23	23-24	24-25	25-26	26-27
Withholding	\$10,838	\$11,668	\$12,245	\$12,743	\$13,251	\$13,772	\$14,313
Quarterly	2,559	2,398	2,549	2,707	2,861	2,988	3,119
Annuals	<u>2,886</u>	<u>2,014</u>	<u>2,126</u>	<u>2,212</u>	<u>2,268</u>	<u>2,364</u>	<u>2,469</u>
Total Revenue	16,283	16,079	16,920	17,662	18,380	19,123	19,900
Growth Rate	26.9%	-1.3%	5.2%	4.4%	4.1%	4.0%	4.1%

Note: Millions of dollars.

⁷ Collections for FY 2020-21 include \$1.35 billion that was delayed from the prior fiscal year as a result of COVID-related extended tax due dates and were reduced by a transfer of \$200 million to the Property Tax Relief Fund. Adjusting for these one-time events, growth rates are as follows: FY 2020-21 (6.9%) and FY 2021-22 (6.1%).

Sales and Use Tax

The FY 2021-22 SUT estimate reflects an increase of \$606 million from the IFO's official estimate due to strength in both non-motor and motor vehicle collections.⁸ (See **Table 4.3.**) Non-motor collections have been bolstered by (1) higher retail sales as households continue to spend income from rising wages and federal stimulus and (2) higher prices (inflation). Recent data report that U.S. retail sales in September were 13.9% higher than the prior year. In addition, consumers are spending less on services (generally not subject to sales tax) and more on goods (largely subject to tax). The forecast assumes that consumer spending patterns will partially revert to a historical share of good/service purchases.

In addition to higher retail sales, prices of taxable goods have risen in recent months. The October Philadelphia CPI-U less shelter increased 7.1% year-over-year, while the CPI-U for durable commodities grew 22.1% and the index for home furnishings grew 11.6%. Supply chain constraints, robust financial markets, strong wage gains and federal stimulus monies all contribute to higher prices in 2021. The forecast assumes supply chain constraints and higher inflation will abate in 2022 and 2023.

For motor vehicle SUT, the shortage of semiconductor chips used in the manufacture of new vehicles continues to constrain sales and boost prices for new and used cars. According to JD Power, car dealerships report a lack of inventory, causing U.S. new car sales for September to fall 25% from the prior year and forcing some consumers to delay purchases until inventory is replenished. As a result of strong demand and limited supply, the October Philadelphia CPI-U for used cars increased 27.2% from the prior year and the index for new cars increased 24.2%.

Both non-motor and motor vehicle collections are projected to decline in FY 2021-22, as the residual effects of the federal stimulus payments wind down in CY 2022. For FY 2022-23 to FY 2026-27, the forecast projects that total SUT will expand at an average rate of 3.1% per annum. The motor vehicle forecast is impacted by a new transfer to the PTF that begins in FY 2022-23. The transfer is estimated to be \$456 million for that fiscal year and grows to \$516 million in FY 2026-27.⁹ The forecast projects that non-motor vehicle revenues will expand at a rate of 3.3% per annum for FY 2022-23 to FY 2026-27. For motor vehicles, revenues expand at an average rate of 1.4% per annum for the same period. If the new PTF transfer is excluded, then the average growth rate increases to 1.8% per annum.

⁸ Collections for FY 2020-21 include \$160 million that was delayed from the prior fiscal year as a result of the temporary suspension of the prepayment requirement. Adjusting for this shift, growth rates are as follows: FY 2020-21 (15.5%) and FY 2021-22 (3.1%).

⁹ The transfer is equal to the greater of (1) the ratio of \$450 million to FY 2020-21 sales tax receipts multiplied by current year sales tax receipts or (2) \$450 million.

Table 4.3
Sales and Use Tax Revenue

Fiscal Year	20-21	21-22	22-23	23-24	24-25	25-26	26-27
Non-Motor	\$10,987	\$11,266	\$11,095	\$11,524	\$11,914	\$12,273	\$12,634
Motor Vehicle	<u>1,848</u>	<u>1,799</u>	<u>1,419</u>	<u>1,442</u>	<u>1,459</u>	<u>1,479</u>	<u>1,499</u>
Total Revenue	12,835	13,065	12,514	12,966	13,373	13,752	14,133
Growth Rate	18.6%	1.8%	-4.2%	3.6%	3.1%	2.8%	2.8%

Note: Millions of dollars.

Corporate Net Income Tax

The forecast projects that CNIT collections reach \$4.58 billion in FY 2021-22, an increase of \$812 million from the IFO's official estimate. FY 2021-22 revenues reflect a further 3.5% increase after the surge in revenues for FY 2020-21.¹⁰ In FY 2022-23, revenues contract by 3.4% and then expand at an average rate of 2.6% per annum for the remainder of the forecast period. (See **Table 4.4.**)

Revenues over the forecast horizon are influenced by strong increases in profits as corporations fared much better than expected throughout the pandemic. For tax year 2021, the forecast projects that corporate profits expand by 30%. Corporations benefit from strong demand and limited supply which enables them to pass on higher input costs to consumers. Profit margins have also increased due to reductions in certain discretionary spending (e.g., travel) and worker productivity gains, some related to remote working. Profits growth is projected to moderate to 3.0% in CY 2022, and remain relatively flat through 2025, as firms replenish depleted inventories and consumer demand cools in the absence of continued federal stimulus.

A proposal to levy a new 15% minimum federal corporate income tax could impact CNIT liabilities in the near-term. Strong estimated (for TY 2021) and final (TY 2020) payments could indicate that firms are shifting profits to the prior and current tax year in anticipation of higher federal (or global) tax rates.

Table 4.4
Corporate Net Income Tax Revenue

Fiscal Year	20-21	21-22	22-23	23-24	24-25	25-26	26-27
Total Revenue	\$4,424	\$4,578	\$4,423	\$4,482	\$4,547	\$4,742	\$4,975
Growth Rate	56.5%	3.5%	-3.4%	1.3%	1.4%	4.3%	4.9%

Note: Millions of dollars.

¹⁰ Collections for FY 2020-21 include \$375 million that was delayed from the prior fiscal year as a result of COVID-related extended tax due dates. Adjusting for this shift, growth rates are as follows: FY 2020-21 (26.4%) and FY 2021-22 (13.1%).

Other Revenue Sources

Other notable trends that affect General Fund revenues include the following:

- Cigarette tax revenues are assumed to be reduced by \$115 million annually for debt service related to the Tobacco Settlement Bonds.
- The realty transfer tax forecast assumes that recent strong gains in home prices are retained in the future.
- The estimates assume that \$185 million will be available annually for transfer from the State Stores Fund to the General Fund.
- Other miscellaneous collections for FY 2021-22 and FY 2022-23 include one-time transfers from the Federal Coronavirus State Fiscal Recovery Fund of \$3.84 billion and \$2.41 billion, respectively.

Table 4.5
Other General Fund Revenue Sources

Fiscal Year	20-21	21-22	22-23	23-24	24-25	25-26	26-27
Accelerated Deposits	\$5	\$0	\$0	\$0	\$0	\$0	\$0
Utility Property	40	41	42	42	43	44	44
Insurance Premiums	452	461	484	523	528	536	543
Financial Institutions	423	441	459	481	502	525	549
Cigarette	964	903	880	847	815	774	733
Other Tobacco Products	135	140	145	150	154	159	164
Malt Beverage	23	24	24	24	24	24	24
Liquor	416	425	440	456	472	488	505
Realty Transfer	640	719	735	758	790	831	875
Gaming	242	305	344	385	424	459	491
Minor and Repealed	-38	-47	-50	-52	-55	-59	-63
Liquor Store Profits	185	185	185	185	185	185	185
Licenses, Fees & Misc.	963	4,366	2,901	509	519	534	548
Fines, Penalties & Int.	<u>64</u>	<u>66</u>	<u>67</u>	<u>68</u>	<u>70</u>	<u>71</u>	<u>73</u>
Total Revenue	4,514	8,029	6,657	4,376	4,470	4,570	4,670
Growth Rate	7.6%	77.9%	-17.1%	-34.3%	2.2%	2.2%	2.2%

Note: Millions of dollars.

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Expenditure Outlook

For FY 2021-22, total state General Fund appropriations are \$38.59 billion, a \$4.58 billion increase (13.5%) over FY 2020-21.¹¹ The increases between FY 2020-21 and FY 2021-22 are primarily in the Department of Human Services (DHS, +\$2.52 billion), Department of Criminal Justice (DCJ, +\$1.25 billion) and Department of Education (PDE, +\$665 million). The increase in DCJ is largely due to the replacement of Coronavirus Aid, Relief, and Economic Security (CARES) Act Coronavirus Relief Fund (CRF) dollars that were used in FY 2020-21 (\$1.26 billion).

The projections throughout most of this section represent General Fund appropriations required to maintain the same level of services provided in the FY 2021-22 base year. Unless otherwise noted, the analysis assumes that FY 2021-22 expenditures supported by funds such as 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 the funding source will be unable to provide the same level of relative support in future years. A primary example of this type of funding source is the enhanced Federal Medical Assistance Percentage (FMAP) used to reimburse states for Medicaid program costs during the COVID-19 public health emergency. These funds are not assumed to be available in FY 2022-23, and as a result, must be replaced with General Fund dollars. Other instances of funding sources that do not maintain the same level of support are described in the relevant subsections that follow, as well as the Other Funds subsection in the Appendix.

From FY 2021-22 to FY 2022-23, General Fund expenditures are expected to increase by \$2.73 billion (7.1%). Half of this increase (\$1.36 billion) is within DHS Medical Assistance and Long-Term Living appropriations, and primarily due to the expiration of the enhanced FMAP. Excluding these DHS program costs, the annual growth into FY 2022-23 is \$1.37 billion (3.5%), primarily driven by the following:

- The Public School Employees' Retirement System (PSERS) projects growth in both employer contribution rates and school employee wage growth. The estimated increase in the state General Fund portion is \$200 million higher (7.3%) in FY 2022-23 than FY 2021-22.
- A temporary reduction in executive agency payments for retiree healthcare benefits through the Retired Employees Health Program (REHP) is expected to end in FY 2021-22. The return to a more typical payment increases General Fund expenditures by an estimated \$85 million (65.0%) in FY 2022-23.
- For the last several years, PSP expenditures have shifted out of the Motor License Fund (MLF) to the General Fund as a result of Act 85 of 2016. For FY 2022-23, the General Fund is projected to absorb both the annual decrease in MLF support (decline of \$32 million from FY 2021-22) and any projected increased costs for PSP operations in FY 2022-23. The reduction of the MLF cap plus the

¹¹ The text in this section uses the terms appropriation and expenditure interchangeably. However, the spending authority granted to a particular department or 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.

growth in the PSP budget related to the MLF is estimated to shift \$59 million in additional costs to the General Fund in FY 2022-23.

- Due to anticipated growth in both the State Employees' Retirement System (SERS) employer contribution rates and state employee wages, state General Fund employee pension costs are projected to increase by an estimated \$58 million (5.9%) in FY 2022-23.
- The remainder of the projected cost increases into FY 2022-23 are largely due to inflation adjustments for all state agency programs.

From FY 2022-23 to FY 2026-27, General Fund expenditures are projected to increase at an average rate of 3.0% per annum. The overall trends in the out years are driven by DHS and PDE, as those two agencies comprise over 80% of total General Fund expenditures. Three factors motivate the trends in total expenditures:

- Service populations that expand or contract (e.g., age 65+ population).
- The growth of employee wages, pensions and employee and retiree healthcare.
- Various inflation adjustments that maintain the purchasing power of funds appropriated in the base year for all future years.

**Table 5.1
General Fund Expenditures by Agency**

Fiscal Year	20-21	21-22	22-23	23-24	24-25	25-26	26-27
Amount							
Education	\$14,356	\$15,021	\$15,598	\$15,958	\$16,308	\$16,701	\$17,055
Human Services	13,615	16,136	17,941	18,552	19,240	20,019	20,854
Criminal Justice	1,415	2,664	2,796	2,838	2,871	2,915	2,966
Treasury	1,190	1,225	1,258	1,326	1,360	1,457	1,498
All Other	<u>3,437</u>	<u>3,541</u>	<u>3,728</u>	<u>3,839</u>	<u>4,098</u>	<u>4,042</u>	<u>4,161</u>
Total Expenditures	34,013	38,589	41,320	42,513	43,878	45,135	46,534
Growth Rates							
Education	0.9%	4.6%	3.8%	2.3%	2.2%	2.4%	2.1%
Human Services	8.0	18.5	11.2	3.4	3.7	4.0	4.2
Criminal Justice	-45.9	88.3	4.9	1.5	1.2	1.5	1.8
Treasury	-0.6	3.0	2.6	5.4	2.6	7.2	2.8
All Other	<u>3.9</u>	<u>3.0</u>	<u>5.3</u>	<u>3.0</u>	<u>6.7</u>	<u>-1.4</u>	<u>2.9</u>
Total Expenditures	0.1	13.5	7.1	2.9	3.2	2.9	3.1

Note: Millions of dollars. Forecasts by the IFO.

Tables 5.1 and **5.2** provide detail based on department and expenditure category. Notable factors not mentioned above include:

- The SERS and PSERS contribution growth rates continue to moderate or decline after many years of significant growth. From FY 2022-23 to FY 2026-27, SERS General Fund contributions are estimated to decline 2.3% per annum while PSERS expenditures for the same time period grow 2.4%. The large annual increase (12.7%) in FY 2021-22 is due to the temporary use of federal funds in FY 2020-21 to cover costs of certain state personnel expenses, including pension costs.
- Pre-K to Grade 12 expenditures grow modestly due to inflation. The uptick in growth for FY 2021-22 (6.1%) is due to the return of the Authority Rentals and Sinking Fund requirements (commonly known as PlanCon reimbursements, discussed further in the Education subsection).
- The strong growth rate in the All Other line item in FY 2024-25 followed by a decline in FY 2025-26 is due to the repayment of a May 2017 \$165 million transfer from the Workers' Compensation Security Fund to the General Fund.

The bottom of Table 5.2 (next page) lists the economic and demographic forecasts used to extrapolate General Fund expenditures from the FY 2021-22 base year through FY 2026-27. Projected expenditures are a function of (1) service populations, (2) inflation and (3) various technical factors (e.g., an increased state share under the FMAP rate used to reimburse Medicaid costs or a shift in expenditures between funding sources).

When possible, agency base year expenditures were disaggregated into five categories: (1) wages, (2) pensions, (3) employee healthcare and other benefits, (4) retiree healthcare and (5) other expenditures (e.g., grants and subsidies, non-personnel expenses). Those categories were forecast separately for each appropriation using the extrapolators displayed and then recombined at the agency level.

For each agency, wages were extrapolated using two factors. 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 negative due to retirements at the upper end of the pay scale that are replaced by younger workers who receive lower wages. The second factor is a general adjustment that reflects (1) a cost-of-living increase and (2) a general step increase. The forecast assumes that this second factor is the same across most agencies (4.8% in FY 2022-23, based on cost-of-living and step increases built into the largest state employee union contract, followed by 3.75% in FY 2023-24 through FY 2026-27). When combined, the two factors yield a growth rate of roughly 3% to 4% per annum.

The SERS pension extrapolator represents the change in pension contributions based on projected employer contribution rates. The SERS extrapolator in Table 5.2 does not reflect the projected growth in wages or personnel. Hence, the total growth in pension contributions would equal the product of the growth rates for SERS contribution rates, wages and any change in the state complement.

Table 5.2
General Fund Expenditures by Category

Fiscal Year	20-21	21-22	22-23	23-24	24-25	25-26	26-27
Expenditure Type							
Wages ¹	\$1,858	\$2,867	\$2,988	\$3,071	\$3,155	\$3,243	\$3,332
Pensions (SERS/PSERS)	3,304	3,722	3,980	4,039	4,060	4,113	4,175
Healthcare/Benefits ²	590	864	999	1,055	1,106	1,160	1,217
Pre-K-12 Education ³	10,155	10,778	11,111	11,357	11,605	11,887	12,132
Medical Assistance	4,729	5,643	6,313	6,535	6,797	7,103	7,434
Long-Term Living	3,517	4,532	5,227	5,428	5,666	5,944	6,246
Intellectual Disability	1,950	2,221	2,449	2,531	2,614	2,700	2,790
Other Human Services	2,836	3,051	3,212	3,303	3,396	3,489	3,584
Debt Service	1,143	1,178	1,208	1,275	1,308	1,404	1,443
All Other	<u>3,931</u>	<u>3,732</u>	<u>3,834</u>	<u>3,919</u>	<u>4,169</u>	<u>4,092</u>	<u>4,182</u>
Total Expenditures	34,013	38,589	41,320	42,513	43,878	45,135	46,534
Growth Rates							
Wages ¹		54.3%	4.2%	2.8%	2.7%	2.8%	2.8%
Pensions (SERS/PSERS)		12.7	6.9	1.5	0.5	1.3	1.5
Healthcare/Benefits ²		46.5	15.7	5.6	4.8	4.9	4.9
Pre-K-12 Education ³		6.1	3.1	2.2	2.2	2.4	2.1
Medical Assistance		19.3	11.9	3.5	4.0	4.5	4.7
Long-Term Living		28.8	15.3	3.8	4.4	4.9	5.1
Intellectual Disability		13.9	10.3	3.3	3.3	3.3	3.3
Other Human Services		7.6	5.3	2.9	2.8	2.7	2.7
Debt Service		3.1	2.5	5.5	2.6	7.3	2.8
All Other		<u>-5.1</u>	<u>2.7</u>	<u>2.2</u>	<u>6.4</u>	<u>-1.9</u>	<u>2.2</u>
Total Expenditures		13.5	7.1	2.9	3.2	2.9	3.1
Extrapolators							
Employee Wages ⁴		--	4.1%	3.1%	3.1%	3.1%	3.1%
Pensions (SERS) ⁵		--	1.4	-4.5	-6.9	-4.9	-3.7
Retiree Healthcare ⁶		--	91.7	5.6	5.6	5.6	5.6
Employee Healthcare		--	3.9	3.4	3.3	3.3	3.3
Non-Personnel Expenses		--	2.9	2.3	2.3	2.3	2.3
Residents Age 65+		--	2.5	2.3	2.1	2.0	1.7

Note: Millions of dollars.

1 Includes wages, salaries, bonuses and payroll taxes (Medicare and Social Security).

2 Includes all non-pension benefits such as health and life insurance and other miscellaneous benefits for retirees and employees.

3 Excludes department personnel expenses and the state share of PSERS funding.

4 Reflects an average employee turnover factor. Turnover factors vary by department.

5 Growth in employer contribution rates only.

6 The growth rate in FY 22-23 is higher than typical due to the temporary reduction of agency and row office payments for retiree healthcare benefits in FY 21-22. Separate extrapolators are used for Pennsylvania State Police troopers, Legislature and Judiciary (not shown).

The forecast assumes that payments for active employee healthcare increase at an average rate of 3.3% to 3.4% per annum after FY 2022-23. That rate is equal to general consumer inflation plus a 1.0 percentage point premium for healthcare costs. The retiree healthcare extrapolator assumes that the employer contribution rate will dramatically increase in FY 2022-23 to return to a normal rate after the temporary reduction in FY 2021-22. The extrapolator rate then returns to 5.6% per annum. The projected growth rates are based on the latest projection of employer benefit payments published by the actuary for the REHP.

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.

The remainder of this section details (1) the differences between the current service versus cost-to-carry baselines, (2) General Fund pension costs, (3) DHS, PDE and DCJ program costs and (4) a brief discussion of other agencies.

Current Services Versus Cost-to-Carry Baselines

Expenditures can be forecast using various methods. A “current services” concept is reflected in Tables 5.1 and 5.2 and used throughout this section. The current services method applies inflationary or demographic adjustments to maintain the level of real services provided to residents of the Commonwealth in the base year. Another method to project expenditures is the cost-to-carry approach. The cost-to-carry concept only increases funding for programs or line items that must be funded due to state or federal law, debt or pension obligations or the care of individuals under the jurisdiction of a state agency. The following items or agencies are treated the same under both concepts:

- Programs administered by DHS, DCJ and PSP;
- State employee personnel costs including wages, retiree healthcare and current employee healthcare and other benefits;
- General obligation debt service funded by the General Fund;
- Pension contributions funded by the General Fund;
- Payments to school districts for partial reimbursement of school employee Social Security employer costs; and
- PlanCon reimbursements and repayment of the May 2017 \$165 million transfer from the Workers’ Compensation Security Fund to the General Fund.

All other programs or line items (referred to as discretionary spending) are held flat at FY 2021-22 funding levels. Those items include the basic and special education subsidies, as well as funds for non-personnel expenses such as office supplies, rent, utilities, furniture, computers and travel.¹²

¹² Within the basic education subsidy, the school employee Social Security portion is allowed to grow.

Table 5.3 itemizes the adjustments needed to convert current services to a cost-to-carry baseline. For example, in FY 2022-23, the current services baseline includes \$190 million more in basic education funding than the cost-to-carry baseline. The cost-to-carry baseline holds the basic education funding flat at FY 2021-22 levels because it represents discretionary spending.

The difference between the current services and cost-to-carry baselines increases from \$419 million in FY 2022-23 to \$1.72 billion in FY 2026-27. From FY 2021-22 to FY 2026-27, the cost-to-carry forecast grows at an average rate of 3.0% per annum while the current services forecast grows by 3.8% per annum. There is strong growth in both concepts from FY 2021-22 into FY 2022-23 due to the General Fund absorbing costs paid by federal funds in FY 2021-22. Starting with FY 2022-23, the cost-to-carry forecast grows at an average rate of 2.3% per annum while the current services forecast grows by 3.0% per annum. The subsections that follow use the current services approach.

Table 5.3
Cost-to-Carry Versus Current Services Baseline

Fiscal Year	21-22	22-23	23-24	24-25	25-26	26-27
Current Services Baseline	\$38,589	\$41,320	\$42,513	\$43,878	\$45,135	\$46,534
Basic Education Funding ¹	0	190	348	507	669	835
Special Education Funding	0	36	66	96	126	158
Post-Secondary Education ²	0	41	74	108	143	179
Other Education Discretionary ²	0	95	151	207	264	323
PHEAA ²	0	3	5	6	7	9
DCED ²	0	5	9	13	17	21
Health ²	0	6	10	13	17	21
Agriculture ²	0	4	8	11	15	18
Other Discretionary ²	0	39	69	99	129	160
Cost-to-Carry Baseline	38,589	40,901	41,774	42,818	43,747	44,811
Difference	0	419	739	1,060	1,388	1,724

Note: Millions of dollars.

1 Excludes the school district Social Security portion of this line item.

2 Excludes personnel expenditures.

General Fund Pensions

Combined payments to SERS and PSERS from General Fund appropriations are projected to grow from \$3.30 billion in FY 2020-21 to \$4.17 billion by FY 2026-27. Pension contribution projections are based on (1) the growth of employer payrolls and (2) the growth in the employer contribution rate. The Commonwealth reimburses school districts for a portion of their employer contributions, and the PSERS projection represents the state share (approximately 57%). **Table 5.4** reflects the most recent estimates for employer contribution rates from the two pension systems.

Table 5.4
Employer Contribution Rates

Fiscal Year	Employer Rate ¹		% Change in Rate	
	SERS	PSERS	SERS	PSERS
2017-18	33.24%	32.57%	12.6%	8.5%
2018-19	32.93	33.43	-0.9	2.6
2019-20	33.59	34.29	2.0	2.6
2020-21	33.48	34.51	-0.3	0.6
2021-22	33.81	34.94	1.0	1.2
2022-23	34.27	35.79	1.4	2.4
2023-24	32.73	36.38	-4.5	1.6
2024-25	30.47	36.83	-6.9	1.2
2025-26	28.97	37.39	-4.9	1.5
2026-27	27.91	37.83	-3.7	1.2

1 Expressed as a percentage of payroll.

Source: Rates are from information transmitted to the IFO by SERS and PSERS. The SERS rates reflect a simulation requested by the IFO that assumes a 10% net investment return for CY 2021. This assumption is not incorporated into employer rates certified by SERS.

In August 2021, the PSERS Board reduced the long-term assumed rate of investment return from 7.25% to 7.00%. The change in assumed rate of return will affect employers beginning in FY 2022-23, and the change is reflected in the forecast. No changes were made to the long-term assumed return rate for SERS, which remains 7.00%.

The SERS projections in **Table 5.5** represent only the amounts estimated to be paid from General Fund appropriations. In addition to these appropriations, state agencies make employer contributions from other sources such as augmentations, federal funds and other state funds. In FY 2020-21, personnel expenditures were shifted away from the General Fund to utilize federal dollars available through the CARES Act CRF. These shifts reduce the share of pension costs paid by the General Fund in FY 2020-21. This forecast incorporates the return of these expenditures to the General Fund in FY 2021-22.

Table 5.5
Employer Pension Contributions - State General Fund Share

Fiscal Year	20-21	21-22	22-23	23-24	24-25	25-26	26-27
SERS	\$602	\$988	\$1,046	\$1,028	\$984	\$962	\$953
PSERS	<u>2,702</u>	<u>2,734</u>	<u>2,934</u>	<u>3,011</u>	<u>3,076</u>	<u>3,151</u>	<u>3,221</u>
Total	3,304	3,722	3,980	4,039	4,060	4,113	4,175
Growth Rate	-5.7%	12.7%	6.9%	1.5%	0.5%	1.3%	1.5%
GF Revenue Share	8.6%	9.2%	9.8%	9.7%	9.4%	9.2%	9.1%

Note: Millions of dollars.

Table 5.5 also projects the share of revenue used to support the state’s pension obligations. The FY 2021-22 budget contains \$3.8 billion in revenue from the American Rescue Plan (ARP) Act that is not included in the General Fund revenue base. The IFO’s revenue projection for FY 2022-23 includes \$2.4 billion in ARP revenue, which is also not included. The share of revenues used for pension costs is projected to peak at 9.8% in FY 2022-23 and then fall to 9.1% by FY 2026-27 as revenue growth outpaces pension costs.

Human Services

For FY 2021-22, General Fund appropriations for the Department of Human Services (DHS) total \$16.14 billion. State special funds, augmenting revenues and federal funds provide additional support. While General Fund appropriations are the primary focus of the analysis, those appropriations will fluctuate in response to the availability of funds from other sources. For example, the General Fund may pick up the difference if a special fund, such as the Lottery Fund or the Tobacco Settlement Fund, cannot maintain its current level of support.

For FY 2021-22, base year appropriations for DHS are \$2.52 billion higher than the prior fiscal year. (See **Table 5.6.**) This funding level does not reflect all actual program costs due to the use of nearly \$1.4 billion in one-time sources to manage current year appropriations. For example, FY 2021-22 expenditures are offset by the temporary increase in the Federal Medical Assistance Percentage (FMAP) used to reimburse states for Medicaid program costs. FY 2022-23 expenditures are expected to increase by 11.2% as a result of the elimination of one-time funding sources and the long-term growth trend. By FY 2026-27, the forecast projects that General Fund expenditures will be \$20.85 billion, an average increase of 3.8% per annum after FY 2021-22.

The provision of Medicaid services comprises the largest share of expenditures for DHS. Medicaid is a joint state/federal program that plays an important role in the provision of (1) physical and behavioral healthcare services to eligible low-income individuals and families and (2) home and community-based and long-term care services to eligible residents who have physical or cognitive disabilities. Medicaid services are provided through various programs grouped under the Medical Assistance (MA), Long-Term Living (LTL) and Intellectual Disabilities (ID) categories. These program categories comprise roughly three-

quarters of DHS General Fund expenditures, and the forecast projects that they will increase at an average rate of 4.2% per annum from FY 2022-23 to FY 2026-27.

Two general factors that impact the forecast are identified in the following bullets. Specific factors that affect expenditure projections for FY 2021-22 and beyond are discussed in the paragraphs that follow.

- The projections assume costs per enrollee for MA and LTL will increase by 3.9% per annum. These rates are motivated by inflation.
- Increases in the service population track the growth in the age 60 or older population (1.2% per annum) for LTL programs while the service populations essentially remain flat for the ID program. Enrollment for MA is assumed to decline 10% after the termination of the COVID-19 public health emergency, then remain steady for the remainder of the forecast period.

Table 5.6
General Fund Expenditures - Department of Human Services

Fiscal Year	20-21	21-22	22-23	23-24	24-25	25-26	26-27
Wages ¹	\$249	\$328	\$340	\$350	\$359	\$369	\$379
Pensions	133	164	173	170	162	158	157
Retiree Healthcare	24	25	49	51	54	57	60
Employee Healthcare ²	177	172	179	185	191	197	204
All Other							
Medical Assistance	4,729	5,643	6,313	6,535	6,797	7,103	7,434
Long-Term Living	3,517	4,532	5,227	5,428	5,666	5,944	6,246
Intellectual Disabilities	1,950	2,221	2,449	2,531	2,614	2,700	2,790
Human Services Programs	1,263	1,431	1,501	1,549	1,598	1,646	1,695
Mental Health	708	706	745	770	795	821	848
Child Development	449	472	485	493	500	507	513
Income Maintenance	223	234	240	246	252	257	263
Human Services Support	130	141	145	149	152	156	159
Children's Health Insurance	<u>63</u>	<u>68</u>	<u>95</u>	<u>97</u>	<u>100</u>	<u>102</u>	<u>104</u>
Total	13,615	16,136	17,941	18,552	19,240	20,019	20,854
Growth Rate	8.0%	18.5%	11.2%	3.4%	3.7%	4.0%	4.2%

Note: Millions of dollars.

1 Includes wages, salaries, bonuses and payroll taxes (Medicare and Social Security).

2 Includes all non-pension benefits such as health and life insurance and other miscellaneous benefits.

Appropriations from the Lottery Fund and the Tobacco Settlement Fund supplement General Fund expenditures for the MA and LTL program groups. The Lottery Fund is projected to supply \$424 million for DHS expenditures in FY 2022-23 and remain at that level through FY 2026-27. The Tobacco Settlement Fund is projected to supply \$259 million in FY 2021-22 and remain at that level through FY 2026-27. See the Appendix for additional information regarding the relevant special fund forecasts.

Support for MA and LTL programs is derived from augmenting revenues from various assessments (e.g., MCOs, hospitals and nursing homes). These assessments expire at various points prior to the end of the forecast period in this report (June 2025), but the analysis assumes that they are extended. The forecast further assumes that the augmenting facility assessments, along with the corresponding federal matching revenues, supply the same share of funding for total DHS expenditures as supplied in the base year.

The following bullets list specific factors that affect DHS expenditures for the current fiscal year and forecast period:

- Use of one-time funds to pay current fiscal year expenses. This method of temporarily reducing current year appropriations creates a significant increase in appropriation levels the following year unless additional funds become available. The enacted budget for FY 2021-22 relies on a \$200 million transfer from the Pennsylvania Professional Liability Joint Underwriting Association (JUA) as a one-time funding mechanism to offset DHS program costs.
- Use of a temporarily enhanced FMAP for Medicaid program costs. Due to the COVID-19 pandemic, the federal government allows a higher matching rate to state funds. The enacted budget assumed \$1.2 billion in additional federal funds to offset Medicaid costs from July to December 2021. These funds will need to be replaced with additional state funds in FY 2022-23, assuming the enhanced federal matching rate is not further extended.
- The administration's Fall Update recommends reducing DHS appropriations by \$798 million for FY 2021-22. The primary reason for the reduction is the extension of the enhanced FMAP through the third quarter of the fiscal year. The administration's updated estimates account for changes in program enrollment and utilization and assume the \$200 million transfer from the JUA will not be received in the current fiscal year.
- Declines in MA enrollment from the termination of the public health emergency, which is assumed to end in 2022 Q1. The forecast assumes that approximately 330,000 individuals disenroll from MA beginning 2022 Q2. The majority of individuals expected to be disenrolled fall into the newly eligible category (90% FMAP) while the remainder are families and children (traditional FMAP). As MA enrollment declines, CHIP enrollment returns to historical levels as families move off MA and back to CHIP.
- The FMAP declines significantly from 52.68 in FFY 2022 to 52.00 in FFY 2023. The decline may have been impacted by the amount of federal stimulus (e.g., PUA, economic impact payments) in Pennsylvania personal income in 2020. Many states will experience unusual declines in FMAPs in FFY 2023. This forecast assumes that Pennsylvania's FMAP returns to pre-COVID levels.
- Possible future cost drivers include: (1) costs related to the expiration of the additional 10% federal match for home and community-based programs in FY 2024-25, (2) increased premiums for Medicare Parts A and B, (3) nursing home regulations that are expected to take effect January 2023, and (4) increased rates, including childcare rates. Potential state savings result from the closure of the White Haven and Polk State Centers.

Education

The Pennsylvania Department of Education (PDE) provides resources, support and oversight to the state's 500 school districts and post-secondary institutions including: 14 universities within the Pennsylvania State System of Higher Education (PASSHE), 15 community colleges and 4 state-related universities. PDE appropriations can be separated into three broad categories: (1) Pre-K to Grade 12, (2) Post-Secondary and (3) other. The text that follows provides brief descriptions of the two largest categories of Pre-K to Grade 12 and Post-Secondary. The other category includes general government operations and libraries and comprises less than 1% of PDE General Fund expenditures.

For FY 2021-22, PDE's total appropriation is \$15.02 billion, a \$665 million (4.6%) increase from the prior fiscal year, primarily due to the large increase in the basic education subsidy and Authority Rentals and Sinking Fund line item. The forecast projects that expenditures will increase to \$17.06 billion (2.6% per annum) by FY 2026-27.

Pre-K to Grade 12

Most PDE appropriations (approximately 90%) are dedicated to Pre-K to Grade 12. For FY 2021-22, Pre-K to Grade 12 appropriations are \$13.51 billion, \$656 million (5.1%) higher than FY 2020-21 appropriations. (See **Table 5.8.**) These amounts include the basic education and special education subsidies, the state share of school employees' retirement contributions, pupil transportation, school employees' Social Security, early intervention, Ready to Learn Block Grant, Authority Rentals and Sinking Fund and other miscellaneous expenditures.¹³ From FY 2021-22 to FY 2026-27, Pre-K to Grade 12 expenditures expand at about the rate of inflation with higher growth in Public School Employees' Retirement (3.3% per annum) and Pupil Transportation (3.4% per annum).

Post-Secondary

For FY 2021-22, PDE's post-secondary appropriations are \$1.40 billion, nearly level-funding from FY 2020-21 appropriations. These amounts comprise slightly less than 10% of total expenditures by PDE and include state-owned and state-related universities, community colleges and Thaddeus Stevens College of Technology. While the number of students attending post-secondary institutions has declined, appropriations for recent years suggest that policymakers desire to provide a level of funding that grows at roughly the same rate as inflation. Therefore, the forecast assumes that all post-secondary line items grow with general inflation (2.4% per annum) to \$1.58 billion in FY 2026-27.

¹³ The Authority Rentals and Sinking Fund appropriation, also known as PlanCon, provides funds to reimburse school districts for school construction costs. The appropriation also supports roughly \$10.5 million in annual charter school lease reimbursements.

Table 5.7
General Fund Expenditures - Department of Education

Fiscal Year	20-21	21-22	22-23	23-24	24-25	25-26	26-27
Pre-K to Grade 12							
Basic Education Subsidy ¹	\$6,255	\$6,555	\$6,745	\$6,903	\$7,062	\$7,224	\$7,390
School Employees' Retirement	2,702	2,734	2,934	3,011	3,076	3,151	3,221
Special Education Subsidy	1,187	1,237	1,273	1,302	1,332	1,363	1,394
Pupil Transportation	543	597	643	659	674	689	705
School Employees' Social Sec. ¹	610	580	596	598	604	610	616
Early Intervention	326	337	346	354	363	371	379
Ready To Learn Block Grant	268	288	296	303	310	317	325
Authority Rentals & Sinking Fund	11	201	200	201	201	229	214
All Other ²	<u>947</u>	<u>976</u>	<u>1,004</u>	<u>1,028</u>	<u>1,051</u>	<u>1,076</u>	<u>1,100</u>
Total Pre-K to Grade 12	12,849	13,505	14,037	14,360	14,674	15,030	15,345
Post-Secondary							
State-Related Universities	597	597	614	629	643	658	673
Community Colleges ³	302	306	315	323	330	338	346
PASSHE-State Universities	477	477	491	503	514	526	538
Thaddeus Stevens Coll. of Tech.	19	19	19	20	20	21	21
Other Post-Secondary	<u>3</u>	<u>3</u>	<u>3</u>	<u>4</u>	<u>4</u>	<u>4</u>	<u>4</u>
Total Post-Secondary	1,398	1,403	1,444	1,478	1,512	1,546	1,582
General Government Operations ⁴	29	34	35	36	37	37	38
Libraries ⁵	<u>80</u>	<u>80</u>	<u>82</u>	<u>84</u>	<u>86</u>	<u>88</u>	<u>90</u>
Grand Total	14,356	15,021	15,598	15,958	16,308	16,701	17,055
Growth Rate	0.9%	4.6%	3.8%	2.3%	2.2%	2.4%	2.1%

Note: Millions of dollars.

1 The school district Social Security subsidy is excluded from the basic education subsidy line and included in the school employees' Social Security line.

2 Includes Pre-K Counts, special education-approved private schools, services to nonpublic schools, nonpublic and charter school pupil transportation and other line items.

3 Includes community colleges, transfer to Community College Capital Fund, Northern PA Regional College and regional community colleges.

4 Includes the General Government Operations and Information and Technology Improvement line items.

5 Includes library services for the disabled, public library subsidy, library access and state library.

Criminal Justice

The Department of Criminal Justice (1) provides for the care and supervision of all offenders under its jurisdiction and (2) ensures citizen safety through careful selection of offenders who qualify for parole and their re-entry into society. **Table 5.8** displays a time series of inmates and parolees under the jurisdiction of DCJ. From CY 2013 to CY 2019, the inmate population decreased at a rate of 1.9% per annum, while the parolee population expanded at a rate of 1.5% per annum. These trends were motivated by structural and data-driven changes implemented by the Justice Reinvestment Initiative, which diverted technical parole violators (TPVs) from state prisons to contracted county jails and community corrections centers. In CY 2020, the prison population fell dramatically due to various factors related to the COVID-19 pandemic, including court closures and increased diversion of offenders from prison. There were 39,493 inmates at the end of CY 2020, a decrease of 6,382 inmates (-13.9%) from the end of CY 2019. The population declined further in 2021, to 37,519 at the end of September.

Table 5.8
Populations - Department of Criminal Justice

	2014	2015	2016	2017	2018	2019	2020	2021
Inmate Population	50,756	49,914	49,301	48,438	47,370	45,875	39,493	37,519
Number Change	-756	-842	-613	-863	-1,068	-1,495	-6,382	-1,974
Percent Change	-1.5%	-1.7%	-1.2%	-1.8%	-2.2%	-3.2%	-13.9%	-5.0%
Parolee Population	39,726	41,226	41,500	42,069	41,305	41,459	41,219	39,800
Number Change	1,755	1,500	274	569	-764	154	-240	-1,419
Percent Change	4.6%	3.8%	0.7%	1.4%	-1.8%	0.4%	-0.6%	-3.4%

Note: Parolee population is reported on a fiscal year basis.

Source: Pennsylvania Department of Criminal Justice.

For FY 2021-22, total General Fund appropriations for DCJ are \$2.66 billion, \$1.25 billion (88.3%) more than FY 2020-21 appropriations due to CRF funds offsetting General Fund expenditures in that year. For FY 2020-21, the CRF funding included \$1.16 billion for state correctional institutions and \$99 million for inmate medical care. When compared to FY 2019-20, the latest year that was not impacted by significant federal funding, the appropriations for FY 2021-22 represent an increase of \$49 million (1.9%). The majority of that increase is related to state correctional institutions (+\$39 million) and inmate medical care (+\$23 million).

Table 5.9 displays expenditures for DCJ. The forecast projects that DCJ expenditures will grow by 2.2% per annum from FY 2021-22 to FY 2026-27.

Table 5.9
General Fund Expenditures - Department of Criminal Justice

Fiscal Year	20-21	21-22	22-23	23-24	24-25	25-26	26-27
Wages ¹	\$531	\$1,304	\$1,342	\$1,367	\$1,392	\$1,418	\$1,444
Pensions	143	425	443	431	408	396	388
Retiree Healthcare	20	51	98	104	109	116	122
Employee Healthcare ²	94	255	265	274	283	293	302
Inmate Medical Care ³	209	208	214	219	224	229	235
All Other	<u>417</u>	<u>421</u>	<u>434</u>	<u>444</u>	<u>454</u>	<u>464</u>	<u>475</u>
Total	1,415	2,664	2,796	2,838	2,871	2,915	2,966
Growth Rate	-45.9%	88.3%	4.9%	1.5%	1.2%	1.5%	1.8%

Note: Millions of dollars.

1 Includes wages, salaries, bonuses and payroll taxes (Medicare and Social Security).

2 Includes all non-pension benefits such as health and life insurance and other miscellaneous benefits.

3 Excludes personnel costs.

All Other Expenditures

The forecasts for all other agencies excluding PDE, DHS and DCJ use the extrapolators shown in Table 5.2. As **Table 5.10** details, total General Fund appropriations for these agencies grow by 3.0% in FY 2021-22. For FY 2021-22, notable agency trends include:

- PSP appropriations grow \$253 million (121.0%) primarily due to (1) \$226 million in temporary CARES Act CRF funds used in FY 2020-21 and (2) continued decline in MLF support due to Act 85 of 2016.
- Department of Health (DOH) appropriations grow \$27 million (14.6%) primarily due to \$14 million in temporary CARES Act CRF funds used in FY 2020-21.
- Executive offices appropriations decline \$118 million (-39.2%) as a result of a large one-time appropriation in FY 2020-21 to repay a \$145 million transfer from the Workers' Compensation Security Fund.
- All other agency appropriations decline \$104 million (-17.1%) primarily due to a one-time FY 2020-21 appropriation to the Department of Insurance (\$85 million) and a \$38 million reduction in Pennsylvania Emergency Management Agency (PEMA) appropriations to reflect a decrease in the amount of state matching funds needed for federally declared disasters.

For FY 2022-23, appropriations for all other agencies are projected to grow by 4.6%. Notable factors that motivate the above average annual growth are as follows:

- PSP expenditures are projected to grow \$67 million (14.5%) due to the continued decline of MLF support as a result of Act 85 of 2016.

- Agency contributions for retiree health benefits were temporarily reduced in the FY 2021-22 budget and are projected to return to normal levels in FY 2022-23.

For FY 2022-23 to FY 2026-27, most of the agencies listed in Table 5.10 have a projected per annum growth rate between 2.2% and 2.4%. Increases in wages, health benefits and general inflation are partially offset by declining pension contributions.

Table 5.10
General Fund Expenditures - All Other Agencies

Fiscal Year	20-21	21-22	22-23	23-24	24-25	25-26	26-27
Treasury	\$1,190	\$1,225	\$1,258	\$1,326	\$1,360	\$1,457	\$1,498
State Police	209	462	529	572	604	641	683
Legislature ¹	420	427	442	453	463	475	487
PHEAA	369	369	373	374	376	377	378
Judiciary	356	356	371	380	387	396	406
Health	183	210	221	226	231	236	242
Community & Economic Dev.	182	194	201	206	210	215	220
Revenue	191	193	203	208	212	217	222
Executive Offices	301	183	190	195	199	204	209
Agriculture	170	175	181	185	189	194	198
Environmental Protection	156	169	179	183	187	192	197
Military & Veterans Affairs	157	161	169	174	177	182	186
Cons. & Natural Resources	135	139	146	149	152	156	159
All Others ²	<u>609</u>	<u>505</u>	<u>522</u>	<u>535</u>	<u>711</u>	<u>559</u>	<u>573</u>
Total	4,627	4,767	4,986	5,165	5,458	5,499	5,659
Growth Rate	2.7%	3.0%	4.6%	3.6%	5.7%	0.8%	2.9%

Note: Millions of dollars.

1 Includes government support agencies.

2 Includes all other agencies not listed above with the exception of PDE, DHS and DCJ.

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Fiscal Outlook

This report provides an assessment of the Commonwealth’s fiscal outlook based on demographic and economic trends. To facilitate that assessment, **Table 6.1** combines the revenue and expenditure projections from previous sections to identify any potential long-term structural imbalance over the forecast period.¹⁴ The IFO’s previous long-term assessment (released in January 2021) identified an approximate \$2.0 billion structural deficit by the end of the five-year forecast window (FY 2025-26). For this update, the long-term structural deficit is roughly \$1.71 billion by the end of the forecast horizon (FY 2026-27). In the near term, one-time transfers to the General Fund from the Federal Coronavirus State Fiscal Recovery Fund and the use of federal relief funds (e.g., increased FMAP) to offset state expenditures produce temporary budget surpluses.

**Table 6.1
General Fund Financial Statement**

Fiscal Year	20-21	21-22	22-23	23-24	24-25	25-26	26-27
Beginning Balance ¹	-\$2,715	\$0	--	--	--	--	--
Current Year Revenues	40,392	44,173	\$42,875	\$41,847	\$43,144	\$44,587	\$46,107
Less Refund Reserve	<u>-1,262</u>	<u>-1,325</u>	<u>-1,300</u>	<u>-1,325</u>	<u>-1,350</u>	<u>-1,375</u>	<u>-1,400</u>
Net Revenue	39,130	42,848	41,575	40,522	41,794	43,212	44,707
State Expenditures ²	<u>-34,013</u>	<u>-38,589</u>	<u>-41,320</u>	<u>-42,513</u>	<u>-43,878</u>	<u>-45,135</u>	<u>-46,534</u>
Current Year Balance	2,402	4,259	255	-1,991	-2,083	-1,923	-1,828
Reduced Spending ³	0	763	0	0	0	0	0
Adjustment for Lapses ⁴	-2,402	110	110	110	110	110	110
Preliminary Ending Balance	0	5,132	365	-1,881	-1,973	-1,813	-1,718

Note: Millions of dollars.

- 1 Beginning balance omitted for FY 22-23 and thereafter.
- 2 Based on appropriations. Includes current year lapses and approved supplemental appropriations.
- 3 Reflects the administration’s recommended changes to enacted General Fund appropriations.
- 4 Prior year lapses and actual transfers to the Budget Stabilization Reserve Fund.

Similar to previous budgets, the enacted budget for FY 2021-22 relies on various one-time measures:

- One-time transfer of federal funds to the General Fund to replace revenue loss due to COVID-19 as provided under the American Rescue Plan Act. (The transfer is \$3.84 billion in FY 2021-22. Another \$2.41 billion is expected in FY 2022-23.)

¹⁴ 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.

- A temporarily enhanced federal matching rate that provides \$1.19 billion in additional federal funds to offset Medicaid costs from July to December 2021. The extension of the enhanced FMAP through March 2022 has been incorporated into the administration's updated projections that result in an overall expenditure reduction of \$763 million for FY 2021-22.
- A \$200 million transfer from the Pennsylvania Professional Liability Joint Underwriting Association (JUA) to offset DHS program costs. The transfer has been challenged in federal court, and it is assumed a DHS supplemental appropriation will be needed to cover these costs.
- The temporary reduction in agency contributions for retiree healthcare in FY 2021-22 that is not expected to continue in FY 2022-23.

The use of one-time or temporary measures to reduce program costs in FY 2021-22 drives the 7.1% growth in expenditures in FY 2022-23 as these costs are shifted back to the General Fund.

The projected deficit peaks at \$2.0 billion in FY 2024-25 and declines to \$1.7 billion in FY 2026-27. For FY 2023-24 to FY 2026-27 (post-recovery), average revenue growth (3.3%) exceeds average expenditure growth (3.1%) and the deficit contracts. As noted, the forecast assumes that the Pennsylvania economy operates at its long-term potential, energy prices and interest rates do not increase dramatically and a recession does not occur.

Appendix

Demographics

The tables that follow are from an IFO report titled *Pennsylvania Demographic Outlook* (November 2021). 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.

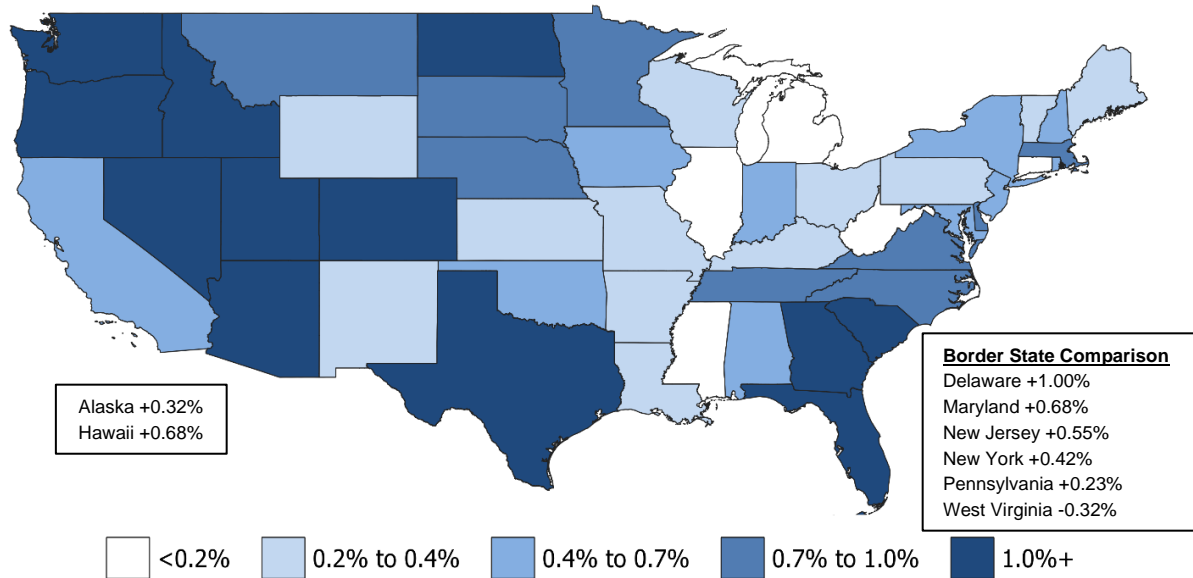
Table A.1
Pennsylvania Population Projections 2020 to 2030

Age	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
0-4	701	686	677	672	669	668	673	676	675	674	673
5-9	738	736	733	728	720	711	696	686	680	678	677
10-14	759	757	754	751	752	752	750	746	741	733	724
15-19	807	809	815	817	814	813	812	809	805	805	805
20-24	803	804	807	813	818	820	822	827	829	827	825
25-29	857	840	822	808	797	795	796	798	804	810	811
30-34	877	887	892	890	881	864	847	829	814	804	802
35-39	811	821	831	845	864	880	890	896	894	884	868
40-44	748	766	782	796	806	813	824	834	848	867	883
45-49	758	729	717	718	727	743	761	777	790	801	808
50-54	830	823	810	790	765	738	709	699	700	709	724
55-59	908	882	859	835	811	798	793	779	760	736	710
60-64	913	914	903	890	879	863	838	817	793	771	758
65-69	788	805	825	840	849	853	855	844	831	821	806
70-74	638	669	666	678	695	715	732	750	763	770	774
75-79	436	444	485	503	528	554	582	573	587	602	620
80-84	294	298	307	326	336	343	348	387	397	419	438
85-89	196	197	198	199	200	198	203	211	226	230	234
90-94	100	102	102	101	101	103	102	102	104	103	101
95-99	32	35	37	38	38	39	39	38	38	38	40
100+	5	6	7	7	8	9	9	9	9	9	10
Total	13,003	13,013	13,028	13,045	13,059	13,070	13,079	13,086	13,090	13,091	13,090

Note: Thousands of residents.

Source: Data are projections by the IFO using data from the U.S. Census and U.S. CDC.

Figure A2
Average Annual Population Growth: 2010 to 2020 Decennial Census



Source: U.S. Census Bureau, 2010 and 2020 Census.

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 modest 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 to 60,000 net jobs per year. The forecast assumes a moderate reduction in that trend through 2027. This assumption yields an upward trend in the employment to population ratio, which is consistent with recent historical data prior to the pandemic. (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 \$118,100 of real output or production. The forecast assumes that labor productivity greatly accelerated in 2020 and 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 2.0% 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 2.4% per annum from 2021 to 2027. The average regional rate used by this report is slightly lower (2.3%).

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 ranges from 0.7 to 0.9% per annum. The CBO forecast also includes a premium for U.S. workers, and the premium generally ranges from 1.2 to 1.4% per annum. The Pennsylvania premium is consistent with historical state trends.

Given these assumptions, the average wage for all workers increases by roughly 3.0% per annum. If employment expands by 1.0% per annum, then total wages paid to all workers will increase by the product of those growth rates, or roughly 4.0% per annum. Similar to the other forecasts, Pennsylvania wages and salaries expand at a somewhat slower pace than the typical CBO national forecast (4.2%) of total wages.

Table A.2
Pennsylvania Economic Variables

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Payroll Employment ¹	5,741	5,789	5,835	5,883	5,941	6,010	6,066	5,603	5,718	5,798	5,863	5,921	5,975	6,023	6,071
Change	14.5	48.0	46.8	47.5	58.4	68.6	56.0	-463.1	115.0	80.0	65.0	58.6	53.3	47.8	48.2
Growth Rate	0.3%	0.8%	0.8%	0.8%	1.0%	1.2%	0.9%	-7.6%	2.1%	1.4%	1.1%	1.0%	0.9%	0.8%	0.8%
Residents: Age 20 to 69 ¹	8,233	8,253	8,262	8,264	8,228	8,209	8,178	8,295	8,293	8,282	8,261	8,235	8,202	8,169	8,129
Employ / Population	0.697	0.701	0.706	0.712	0.722	0.732	0.742	0.675	0.689	0.700	0.710	0.719	0.728	0.737	0.747
Avg. Output per Worker ¹	\$114.3	\$115.7	\$117.0	\$117.0	\$116.8	\$117.1	\$118.1	\$122.0	\$124.8	\$126.0	\$127.2	\$128.6	\$130.0	\$131.5	\$132.9
Growth Rate	1.0%	1.2%	1.1%	0.0%	-0.1%	0.2%	0.8%	3.4%	2.3%	0.9%	1.0%	1.1%	1.1%	1.1%	1.1%
Real GDP ²	\$655.9	\$669.6	\$682.5	\$688.4	\$694.2	\$703.9	\$716.2	\$683.8	\$713.9	\$730.4	\$745.9	\$761.7	\$777.0	\$791.8	\$806.9
Growth Rate	1.2%	2.1%	1.9%	0.9%	0.9%	1.4%	1.7%	-4.5%	4.4%	2.3%	2.1%	2.1%	2.0%	1.9%	1.9%
Philadelphia CPI-U	240.9	244.1	243.9	245.3	248.4	251.6	256.6	258.9	270.1	280.0	286.8	293.4	300.1	307.0	314.1
Growth Rate	1.2%	1.3%	-0.1%	0.6%	1.3%	1.3%	2.0%	0.9%	4.3%	3.7%	2.4%	2.3%	2.3%	2.3%	2.3%
Wages-Salaries ²	\$285.2	\$296.4	\$308.4	\$312.7	\$325.4	\$339.3	\$354.1	\$353.2	\$380.3	\$399.9	\$417.4	\$434.2	\$451.2	\$468.9	\$487.4
Average Wage ¹	\$49.7	\$51.2	\$52.8	\$53.2	\$54.8	\$56.5	\$58.4	\$63.0	\$66.5	\$68.9	\$71.1	\$73.2	\$75.4	\$77.8	\$80.2
Growth Rate	1.6%	3.0%	3.2%	0.6%	3.0%	3.1%	3.4%	8.0%	5.5%	3.6%	3.2%	3.0%	3.0%	3.1%	3.1%

1 Thousands of units or dollars.

2 Billions of dollars.

Revenues

Table A.3
General Fund Revenues

FY Ending	Amounts (\$ millions)						Share of GDP
	Corporate Net Income	Other Corporate	Sales and Use	Personal Income	All Other	General Fund	
2010	\$1,791	\$2,788	\$8,029	\$9,969	\$5,071	\$27,648	4.68%
2011	2,132	2,761	8,590	10,436	3,578	27,497	4.47
2012	2,022	2,941	8,772	10,801	3,141	27,678	4.35
2013	2,423	2,766	8,894	11,371	3,192	28,647	4.35
2014	2,502	2,397	9,130	11,437	3,142	28,607	4.20
2015	2,811	2,305	9,493	12,107	3,875	30,593	4.34
2016	2,842	2,295	9,795	12,506	3,463	30,902	4.29
2017	2,751	2,030	10,004	12,664	4,219	31,669	4.30
2018	2,879	2,010	10,381	13,399	5,898	34,567	4.56
2019	3,398	2,113	11,100	14,096	4,152	34,858	4.43
2020	2,827	2,012	10,818	12,835	3,784	32,276	4.11
2021	4,424	1,910	12,835	16,283	4,940	40,392	5.02
2022	4,578	1,995	13,065	16,079	8,457	44,173	5.12
2023	4,423	2,024	12,514	16,920	6,993	42,875	4.72
2024	4,482	2,071	12,966	17,662	4,667	41,847	4.41
2025	4,547	2,076	13,373	18,380	4,769	43,144	4.36
2026	4,742	2,096	13,752	19,123	4,873	44,587	4.33
2027	4,975	2,118	14,133	19,900	4,981	46,107	4.29
Average Annual Growth Rates							
2010 to 2021	8.6%	-3.4%	4.4%	4.6%	-0.2%	3.5%	--
2021 to 2027	2.0%	1.7%	1.6%	3.4%	0.1%	2.2%	--

Note: GDP is nominal GDP and includes inflation.

Source: Executive Budget, various years. Projections by IFO.

Expenditures

Table A.4
General Fund Expenditures

FY Ending	Amount (\$ millions)						Share of GDP
	PDE ¹	DHS	Criminal Justice ²	Treasury	All Other	General Fund	
2010 ³	\$10,588	\$8,577	\$1,593	\$976	\$3,208	\$24,942	4.22%
2011 ³	10,455	8,780	1,663	1,023	3,146	25,067	4.08
2012	10,491	10,495	1,856	1,090	3,099	27,031	4.25
2013	10,967	10,623	1,867	1,139	3,121	27,717	4.21
2014	11,114	11,045	1,998	1,117	3,121	28,395	4.17
2015	11,564	11,362	2,134	1,144	2,949	29,153	4.14
2016	12,103	11,517	2,402	1,177	2,927	30,127	4.18
2017	12,801	12,380	2,564	1,171	3,027	31,942	4.34
2018	13,243	12,151	2,438	1,121	2,995	31,948	4.21
2019	13,748	12,802	2,562	1,165	3,125	33,402	4.25
2020 ³	14,378	12,593	2,616	1,197	3,306	34,090	4.34
2021 ³	14,356	13,615	1,415	1,190	3,437	34,013	4.23
2022	15,021	16,136	2,664	1,225	3,541	38,589	4.47
2023	15,598	17,941	2,796	1,258	3,728	41,320	4.55
2024	15,958	18,552	2,838	1,326	3,839	42,513	4.48
2025	16,308	19,240	2,871	1,360	4,098	43,878	4.44
2026	16,701	20,019	2,915	1,457	4,042	45,135	4.38
2027	17,055	20,854	2,966	1,498	4,161	46,534	4.33

Average Annual Growth Rates

2010 to 2021	2.8%	4.3%	-1.1%	1.8%	0.6%	2.9%	--
2021 to 2027	2.9%	7.4%	13.1%	3.9%	3.2%	5.4%	--

Note: GDP is nominal GDP and includes inflation.

1 Includes State System of Higher Education and Thaddeus Stevens College of Technology.

2 Prior to FYE 2017, Criminal Justice excludes the Board of Probation and Parole.

3 Excludes expenditures supported by funds provided under the American Recovery and Reinvestment Act of 2009 (ARRA), the Family First Coronavirus Response Act of 2020 and the Coronavirus Aid, Relief, and Economic Security Act of 2020 (CARES Act).

Source: Executive Budget, various years. Projections by IFO.

Other Funds

In addition to the General Fund, the Commonwealth maintains numerous special funds dedicated to specific purposes. In general, this report does not address those funds; however, three special funds have unique implications for General Fund expenditures. For recent fiscal years, General Fund appropriations for the Departments of Human Services and Conservation and Natural Resources have been supplemented by the Lottery Fund (Human Services), the Tobacco Settlement Fund (Human Services) and the Oil and Gas Lease Fund (Conservation and Natural Resources). **Table A.5** displays a history and forecast for special funds that augment General Fund expenditures.

Table A.5
Other Fund Disbursements to Offset General Fund Expenditures

Fiscal Year	Lottery ¹	Tobacco ²	Oil & Gas ³	Total
2009-10	\$178	\$263	\$19	\$460
2010-11	178	228	24	430
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	346	48	746
2022-23	424	288	50	762
2023-24	424	288	50	762
2024-25	424	288	50	762
2025-26	424	288	50	762
2026-27	424	288	50	762

Note: Millions of dollars.

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

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

3 Includes General Government, State Parks and State Forests.

Due to the interrelation between these 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 2021-22 to FY 2026-27. 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.

Lottery Fund

The majority of Lottery Fund revenues support programs that address the needs of a growing elderly population in Pennsylvania. The Departments of Human Services, Revenue and Transportation receive General Fund and Lottery Fund appropriations. Lottery monies fund most of the budget for the Department of Aging, and that agency does not receive any General Fund appropriations.

For FY 2020-21, Lottery Fund revenues (\$2.12 billion) exceeded expenditures (\$1.88 billion) by an amount sufficient to eliminate the negative \$120 million beginning balance for that fiscal year. (See **Table A.6.**) The forecast assumes that (1) the Lottery Fund will absorb \$352 million of DHS program costs in FY 2021-22 and \$424 million per annum in FY 2022-23 through FY 2026-27, and (2) programs administered by the Department of Transportation will be flat funded for all future years. Combined with higher revenues, these assumptions allow the Lottery Fund to generate a \$71 million ending balance for FY 2021-22, while maintaining the fund's traditional \$75 million reserve. Annual budget shortfalls in future fiscal years are offset by the projected ending balance in FY 2021-22.

Gross ticket sales are projected to grow at an average rate of 3.6% per annum from FY 2021-22 to FY 2026-27:

- Instant ticket sales grow by 4.4% per annum, as the model projects weak annual growth for FY 2021-22 (-8.2%) after a very strong year in FY 2020-21 (18.0%), followed by moderate growth in FY 2022-23 as the stimulus dollars do not continue, and stronger growth in the out years due to increased nominal income.
- Multi-state Lottery sales are primarily driven by large jackpots and grow at an average rate of 3.1% per annum.
- Sales for iLottery are projected to total \$772.8 million in FY 2021-22, which is a 12.9% decline over FY 2020-21. The strength of iLottery in FY 2020-21 was partially the result of the closure of casinos in response to the COVID-19 pandemic, as consumption shifted to online platforms as well as large stimulus payments. Sales from FY 2021-22 to FY 2026-27 are projected to grow at 3.2% per annum.
- Other games (in-state lottery, numbers, raffle, Keno and Xpress Sports) sales grow modestly by 0.7% per annum. Numbers games are projected to decline by 0.6% per annum, while in-state lottery sales are projected to increase by 2.9% per annum.

The forecast projects that net revenues (gross ticket sales less prizes, commissions, transfers and other amounts) grow at an average rate of 2.1% per annum from FY 2021-22 to FY 2026-27, with revenue growth of 3.6% per annum exceeding total expenditure increases of 1.8% per annum. The department details are as follows:

- Department of Aging appropriations grow by 1.6% per annum. That funding is earmarked for general operations, PENNCARE, Pre-Admission Assessment, Caregiver Support, Alzheimer’s Outreach, Pharmaceutical Assistance Fund and Grants to Senior Centers. Most of the Aging appropriations are flat-funded in all years, with increases in the largest program (PENNCARE) projected based on the change in the CPI-U.
- Projections for DHS appropriations (primarily MA Community HealthChoices) assume the Lottery Fund will absorb \$352 million of program costs in FY 2021-22 and \$424 million annually in FY 2022-23 through FY 2026-27. This level of DHS support allows the Lottery Fund to maintain a positive balance in future fiscal years.
- Department of Revenue appropriations are projected to increase by 1.4% per annum from FY 2021-22 through FY 2026-27. Approximately 70% of appropriations are used for the payment of prize monies and Property Tax Rent Rebates (PTRR). The PTRR forecast declines over the forecast period due to the program’s statutorily set rebate amounts and income eligibility thresholds. As incomes rise over time, more households will exceed 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.6
Lottery Fund Financial Statement

Fiscal Year	20-21	21-22	22-23	23-24	24-25	25-26	26-27
Beginning Balance	-\$120	\$48	--	--	--	--	--
Reserve from Prior Year	0	75	\$75	\$75	\$75	\$75	\$75
Total	-120	123	--	--	--	--	--
Gross Ticket Sales	6,189	5,740	5,901	6,122	6,352	6,593	6,844
Less Field Prizes & Comm.	-4,183	-3,863	-3,987	-4,152	-4,324	-4,505	-4,694
Transfers, Earnings and Lapses	<u>113</u>	<u>142</u>	<u>111</u>	<u>107</u>	<u>103</u>	<u>99</u>	<u>95</u>
Net Revenue	2,119	2,019	2,025	2,077	2,131	2,187	2,245
Funds Available	1,999	2,142	2,025	2,077	2,131	2,187	2,245
Aging	474	470	479	487	494	502	510
Human Services	442	352	424	424	424	424	424
Revenue	789	1,002	999	1,017	1,035	1,054	1,074
Transportation	<u>171</u>	<u>171</u>	<u>171</u>	<u>171</u>	<u>171</u>	<u>171</u>	<u>171</u>
Total Expenditures	1,876	1,996	2,073	2,098	2,124	2,150	2,178
Current Year Reserve	-75	-75	-75	-75	-75	-75	-75
Ending Balance	48	71	-48	-21	7	37	67

Note: Figures are in dollar millions. Beginning balance omitted for FY 22-23 and thereafter.

Tobacco Settlement Fund

The Tobacco Settlement Fund 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.7
Tobacco Settlement Fund Financial Statement

Fiscal Year	20-21	21-22	22-23	23-24	24-25	25-26	26-27
Beginning Balance¹	\$106	\$135	--	--	--	--	--
Gross Settlements	362	356	\$356	\$356	\$356	\$356	\$356
Transfer to Tobacco Revenue Bond Debt Service	-115	-115	-115	-115	-115	-115	-115
Transfer from Cigarette Tax	<u>115</u>	<u>115</u>	<u>115</u>	<u>115</u>	<u>115</u>	<u>115</u>	<u>115</u>
Total Revenues	362	356	356	356	356	356	356
Funds Available	468	491	356	356	356	356	356
Community & Economic Development	2	4	3	3	3	3	3
Health	60	121	64	64	64	64	64
Human Services	<u>271</u>	<u>346</u>	<u>288</u>	<u>288</u>	<u>288</u>	<u>288</u>	<u>288</u>
Total Expenditures	333	471	355	355	355	355	355
Ending Balance	135	20	1	1	1	1	1

Note: Millions of dollars. Excludes federal funds.

¹ Beginning balance omitted for FY 22-23 and thereafter.

For FY 2020-21, receipts (\$362 million) were greater than expenditures (\$333 million), which increased the fund balance from \$106 million at the beginning of the fiscal year to an estimated \$135 million at the end of the year (excludes federal funds). Tobacco Settlement Fund revenue projections for FY 2021-22 through FY 2026-27 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. Act 24 of 2021 mandates a transfer of cigarette tax revenues into the Tobacco Settlement Fund in the amount of the required debt service for FY 2021-22. As a result, the fund is held harmless in the current fiscal year. The forecast assumes that General Fund revenues will continue to be transferred into the fund to cover the annual debt service payments.

The expenditure forecast reflects the following assumptions:

- The Department of Health expenditures are based on the FY 2021-22 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 Un-compensated Care are based on the FY 2021-22 allocation percentages for these line items. The Community HealthChoices appropriation is projected at \$153 million in FY 2022-23 and remains level through FY 2026-27.

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. Expenditures 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 2020-21, revenues (\$66 million) were more than expenditures (\$64 million), and the ending balance for the fund was \$10.5 million. Expenditures for this year represented a decline of \$20 million from the prior year, as OGLF revenues were down \$11 million in the same period and were insufficient to fund the full statutory \$35 million transfer to the Marcellus Legacy Fund. For FY 2021-22, appropriations from the OGLF include \$33 million to state park and state forest programs, \$15 million for DCNR's general government operations and a \$15 million transfer to the Marcellus Legacy Fund. Based on revenues of \$85 million, the fund balance is projected to be \$32.6 million at the end of the fiscal year. **Table A.8** on the next page displays the financial statement for the OGLF.

The forecast projects that royalty revenues will record a significant increase in FY 2021-22 due to the rise of natural gas prices in 2021. Regional prices have increased by approximately 100% during 2021 due to the combination of weaker-than-usual supply growth and demand rebounding from closures and mitigation efforts related to the COVID-19 pandemic. This would be the largest year-over-year increase in OGLF revenues since FY 2014-15. Recent data from the Department of Environmental Protection (DEP) show that through August, statewide production in Pennsylvania is up 6.3% over the same period in 2020, which was the weakest year in terms of production growth on record. If 2021 year-to-date production growth holds for the entire year, it would be much lower than 2019 (11.4%) and 2018 (14.2%).

After 2021, regional prices are projected to decline moderately and settle at levels that are 10% higher than pre-pandemic levels (2019). In general, national and regional prices are likely to remain elevated in the near future due to global supply and demand pressures. The revenue projection uses a combination of data provided by DCNR, DEP and Bentek Energy. Royalties are forecasted using expected trends in price and production through 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:

- Expenditures from the fund represent statutory provisions for (1) an appropriation of up to \$50 million annually 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). This transfer was reduced to \$15 million for the last three fiscal years, but the forecast assumes that it returns to \$35 million in the out-years.

- 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 2026-27 as annual budget shortfalls are offset by the projected ending balance in FY 2021-22.

Table A.8
Oil and Gas Lease Fund Financial Statement

Fiscal Year	20-21	21-22	22-23	23-24	24-25	25-26	26-27
Beginning Balance¹	\$8	\$11	--	--	--	--	--
Royalties	57	76	\$71	\$71	\$71	\$71	\$71
Rents, Interest and Other	<u>9</u>	<u>9</u>	<u>9</u>	<u>9</u>	<u>9</u>	<u>9</u>	<u>9</u>
Total Revenues	66	85	80	80	80	80	80
Funds Available	74	95	80	80	80	80	80
Cons. and Natural Resources	49	48	50	50	50	50	50
Transfers to Other Funds	<u>15</u>	<u>15</u>	<u>35</u>	<u>35</u>	<u>35</u>	<u>35</u>	<u>35</u>
Total Expenditures	64	63	85	85	85	85	85
Ending Balance	11	33	-5	-5	-5	-5	-5

Note: Millions of dollars.

¹ Beginning balance omitted for FY 22-23 and thereafter.

