

ANALYSIS OF REVENUE PROPOSALS

FY 2024-25 EXECUTIVE BUDGET

INDEPENDENT FISCAL OFFICE

MARCH 2024

Independent Fiscal Office

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INDEPENDENT FISCAL OFFICE

March 28, 2024

The Honorable Members of the Pennsylvania General Assembly:

This report provides an analysis of the tax and revenue proposals included in the *2024-25 Governor's Executive Budget* released in February 2024. The Independent Fiscal Office (IFO) publishes this report to fulfill its statutory duties as provided under Section 604-B (a)(4) of the Administrative Code of 1929. The statute requires that the IFO "provide an analysis, including economic impact, of all tax and revenue proposals submitted by the Governor or the Office of the Budget."

This report uses various data sources to derive estimates of the revenue proposals included in the budget. All data sources and methodologies used to derive those estimates are noted in the relevant sections of this document.

The IFO would like to thank the various agencies and organizations that provided data or input for this report. Questions or comments regarding the contents of this report can be submitted to contact@ifo.state.pa.us.

Sincerely,

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

Matthew J. Knittel
Director

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Introduction

This report provides revenue estimates for the tax and revenue proposals contained in the *2024-25 Governor's Executive Budget* released in February 2024. The Independent Fiscal Office (IFO) publishes this report to fulfill its statutory duties as provided under Section 604-B (a)(4) of the Administrative Code of 1929. The statute requires that the IFO "provide an analysis, including economic impact, of all tax and revenue proposals submitted by the Governor or the Office of the Budget."

The report contains two sections. The first section analyzes General Fund tax and revenue proposals, including the proposal to legalize cannabis for adult recreational use. The second section analyzes the proposal to increase the state minimum wage.

The analyses contained in this report are based on descriptions from the *2024-25 Governor's Executive Budget* and, where applicable, legislative language or supporting documentation provided by the administration. As necessary, assumptions to assess the potential revenue implications of the proposals are noted in the text.

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Tax and Revenue Proposals

Legalize Cannabis for Adult Recreational Use

The Executive Budget includes a proposal to legalize cannabis for adult recreational use and impose a 20% excise tax on the wholesale price of products sold. Retail sales of cannabis would also be subject to sales and use tax (SUT). The new tax on cannabis would be deposited into a restricted account. Annual distributions from the account include: (1) \$5 million to the Pennsylvania Commission on Crime and Delinquency (PCCD) for restorative justice initiatives, (2) \$5 million to the Department of Agriculture, (3) \$2 million to the State Police for enforcement and (4) \$0.5 million to the Department of Revenue for administration. The balance remaining in the account would be transferred to the General Fund.

Assuming legal sales begin on January 1, 2025, the IFO projects the proposal could generate \$41 million in General Fund revenue for fiscal year (FY) 2024-25 and \$271 million for FY 2028-29 (see **Table 1.1**). The revenue estimate is based on the annual average dollar amount of legalized cannabis purchased per adult (age 21 or older) from other states and applied to Pennsylvania’s population.

Currently, all border states except West Virginia have legalized and impose tax on adult recreational use cannabis. These taxes were enacted recently in Ohio (2023), Maryland (2023), New York (2021) and New Jersey (2020). Because nearly all border states already tax recreational cannabis, the estimate is not increased for cross border sales that may have occurred in other states that were first to tax recreational marijuana in a region.

	2024-25	2025-26	2026-27	2027-28	2028-29
Wholesale Excise Tax	\$31	\$115	\$157	\$161	\$165
Less Transfers:					
Restorative Justice	-\$5	-\$5	-\$5	-\$5	-\$5
Dept. of Agriculture	-\$5	-\$5	-\$5	-\$5	-\$5
State Police	-\$2	-\$2	-\$2	-\$2	-\$2
Dept. of Revenue	<u>-\$1</u>	<u>-\$1</u>	<u>-\$1</u>	<u>-\$1</u>	<u>-\$1</u>
Net Transfer to GF	\$19	\$103	\$145	\$148	\$152
Sales Tax	<u>\$22</u>	<u>\$83</u>	<u>\$113</u>	<u>\$116</u>	<u>\$119</u>
General Fund	\$41	\$185	\$258	\$264	\$271

Note: Millions of dollars. Assumes sales begin January 1, 2025 and a one-month delay in tax collections.

Cannabis companies that operate in states that have legalized marijuana face banking challenges because marijuana remains a Schedule I substance under the federal Controlled Substances Act. As a result, many financial institutions are hesitant to work with firms in the cannabis industry, leading them to deal exclusively in cash transactions.¹ Because the analysis is based on actual tax collections in other states, the lower compliance rate associated with cash transactions is already incorporated into the estimate.

¹ See: [Marijuana Banking: Legal Issues and the SAFE\(R\) Banking Acts \(congress.gov\)](https://www.congress.gov/bills/117/104).

Legalization of recreational use marijuana impacts medical marijuana markets differently across states and the magnitude of the impact depends on factors such as (1) the maturity of the existing medical market, (2) the effective tax rate differential between medical and recreational use and (3) how easy it is to obtain a medical marijuana license.² In Pennsylvania, roughly 5% of the age 21+ population has access to medical marijuana (441,000 active patient medical marijuana certifications and 9,200 active carded caregivers).³ In addition, Pennsylvania sales of medical marijuana are exempt from sales tax and subject to a 5% excise tax (lower than the proposed 20% excise tax on the wholesale price of recreational marijuana). Based on these factors, legalization of recreational use marijuana should have minimal impact on the medical market, but it is unclear how other factors (e.g., location of retail outlets) could ultimately impact sales.

Various studies and articles have been published on the impact of legalized recreational marijuana related to traffic safety, emergency department visits and poison control calls:

- *Effects of Cannabis Legalization on Road Safety: A Literature Review (2023)* was a comprehensive review of 29 papers on the impact of marijuana legalization (medical, recreational and both) on road safety. Most papers (22) found a negative impact from legalization of marijuana on road safety. However, seven papers found no increase in traffic accidents or in the number of visits to hospitals following an accident.⁴
- *Cannabis Positivity Rates in 17 Emergency Departments Across the United States with Varying Degrees of Marijuana Legalization (2023)* analyzed data from 17 healthcare institutions in 15 states and concluded that broader marijuana legalization could cause an increase in cannabis-related emergency department visits.⁵
- In *Warning After Increase in Calls to Our Poison Center for Children Eating Marijuana Edibles (2022)*, data from New York showed that from 2019 to 2022, calls for youth (ages 0 to 19) who ate marijuana edibles increased nearly sixfold. Calls increased at an even higher rate for children under 5. New York legalized recreational marijuana in 2021.⁶
- *The Number of Calls to CA Poison Control About Marijuana Exposure Among Children Are Increasing (2021)* reported that from 2018 to 2021 there was a 140% increase in the number of poison control calls regarding marijuana exposure of children under 6 and a 28% increase in exposure of youth (ages 6 to 19). California legalized recreational marijuana in 2016.⁷
- *The Effect of State Marijuana Legalizations: 2021 Update (2021)* presents the difference in driving fatalities between the 11 states (Colorado, Washington, Alaska, Oregon, California, Nevada, Maine, Vermont, Massachusetts, Michigan and Illinois) and the U.S. average, relative to the year of legalization, measured in fatalities per 100 million vehicle miles traveled. The study found that in most states the trend remained relatively flat post-legalization. Oregon, however, saw an increase in fatality rates that began prior to legalization.⁸
- *Change in Traffic Fatality Rates in the First 4 States to Legalize Recreational Marijuana (2020)* used a difference-in-difference analysis that found a statistically significant increase of 2.1 traffic fatalities per billion vehicle miles traveled in Alaska, Oregon, Colorado and Washington compared to

² See: [NFD-2023USCannabisReport.pdf \(visualcapitalist.com\)](#).

³ See: [Medical Marijuana Advisory Board Meeting \(pa.gov\)](#).

⁴ See: [Effects of Cannabis Legalization on Road Safety: A Literature Review - PMC \(nih.gov\)](#).

⁵ See: [Cannabis positivity rates in 17 emergency departments across the United States with varying degrees of marijuana legalization - PubMed \(nih.gov\)](#).

⁶ See: [Warning After Increase in Calls to Our Poison Center for Children Eating Marijuana Edibles | Upstate New York Poison Center | SUNY Upstate](#).

⁷ See: [Cannabis-Poison-Control-Infographic](#).

⁸ See: [The Effect of State Marijuana Legalizations: 2021 Update | Cato Institute](#).

states that had not legalized either medical or recreational marijuana within the study's time period.⁹

- *Incidence of Pediatric Cannabis Exposure Among Children and Teenagers Aged 0 to 19 Years Before and After Medical Marijuana Legalization in Massachusetts (2019)* found that the incidence of single-substance pediatric cannabis calls increased from 0.4 per 100,000 before legalization to 1.1 after (140% increase).¹⁰

Regulate and Tax Games of Skill

The Executive Budget proposes to regulate electronic games of skill machines and impose a 42% tax on the daily gross gaming revenue (i.e., revenues after payouts). The proposal includes the following regulatory fees in addition to the new tax (detail provided by the Governor’s Budget Office):

- Initial Distributor/Operator License: \$1,000,000
- Annual Renewal of Distributor/Operator License: \$100,000
- Initial Establishment License: \$1,000 per machine
- Annual Renewal Establishment License: \$500 per machine

The IFO projects that the proposal could generate \$103 million in licensing fees and gaming tax revenues for FY 2024-25 and \$421 million by FY 2028-29 (see **Table 1.2**). The estimate assumes that: (1) 15,000 machines are regulated and operating in FY 2024-25 and that number increases to 29,000 by FY 2028-29, (2) the average gross gaming revenue per machine is \$30,000 in FY 2024-25 and that average grows by 2.5% per annum, and (3) 25 wholesalers are licensed.¹¹

	2024-25	2025-26	2026-27	2027-28	2028-29
Licensing Fees	\$40	\$18	\$18	\$17	\$18
Gaming Tax Revenues	<u>\$63</u>	<u>\$291</u>	<u>\$357</u>	<u>\$380</u>	<u>\$403</u>
General Fund	\$103	\$308	\$376	\$397	\$421

Note: Millions of dollars. Assumes (1) average annual gross revenues of \$30,000 per machine for FY 2024-25 and (2) regulation/operation of machines begins March 1, 2025.

Under current law, the Commonwealth does not regulate games of skill machines including those at private non-profit organizations (e.g., civic clubs) that may use revenues generated by the machines to support the operations or charitable activities of the club. It is unclear how the proposal might impact the long-term operations of those non-profits. The estimate assumes that the proposal is unlikely to impact current gaming revenues, because it simply regulates an existing activity, and does not establish a new form of gaming.

⁹ See: [Change in Traffic Fatality Rates in the First 4 States to Legalize Recreational Marijuana | Emergency Medicine | JAMA Internal Medicine | JAMA Network.](#)

¹⁰ See: [Incidence of Pediatric Cannabis Exposure Among Children and Teenagers Aged 0 to 19 Years Before and After Medical Marijuana Legalization in Massachusetts - PMC \(nih.gov\).](#)

¹¹ The estimate also assumes that the regulation and enforcement of games of skill machines would be similar to video gaming terminals (e.g., connected to a central control computer) and cause attrition in the number of machines that currently operate in the Commonwealth.

Cigarette Tax Transfer to Tobacco Settlement Fund

The proposal transfers cigarette tax revenues to the Tobacco Settlement Fund (TSF) for debt service payments and would reduce FY 2024-25 cigarette tax revenues by \$115 million.

Personal Income Tax Transfer to Environmental Stewardship Fund

The proposal transfers personal income tax (PIT) revenues to the Environmental Stewardship Fund for Growing Greener debt service payments and would reduce FY 2024-25 PIT withholding revenues by \$10 million.

Realty Transfer Tax Transfer to PHARE Fund

The proposal modifies the amount of the transfer from realty transfer tax (RTT) to the Pennsylvania Housing Affordability and Rehabilitation Enhancement (PHARE) Fund to \$70 million for FY 2024-25, \$80 million for FY 2025-26, \$90 million for FY 2026-27 and \$100 million for FY 2027-28 and each year thereafter. The current formula and \$60 million cap is eliminated. The proposal would reduce RTT revenues by \$10 million for FY 2024-25, by \$20 million for FY 2025-26, by \$30 million for FY 2026-27 and by \$40 million for FY 2027-28 and each year thereafter. The creation of a fixed transfer with a cap that rises by an established increment in lieu of a formula with a static cap provides additional funding for the PHARE Fund over the forecast period.

Sales and Use Tax Transfer to PTF

The proposal creates a new transfer to the Public Transportation Trust Fund (PTTF) equal to 1.75% of total SUT revenues. The proposal would reduce SUT revenues by \$264 million for FY 2024-25 and by \$295 million by FY 2028-29.

Raise the Minimum Wage

The Executive Budget proposes to raise the state minimum wage from \$7.25 to \$15.00 per hour for non-tipped workers and from \$2.83 to \$9.00 per hour for tipped workers on January 1, 2025. For tipped workers, it is assumed that employers would still be required to ensure that most workers receive at least the regular minimum wage after accounting for tips earned.

Since 2015, the IFO has published numerous analyses of various minimum wage proposals, with the most recent analysis released in May 2023. Because this analysis is very similar to prior years, the methodology and descriptions of the analysis have been scaled back compared to prior years. For more detail regarding the methodology used and a literature review, see prior years' Analysis of Revenue Proposals.¹²

The federal minimum wage of \$7.25 per hour was last increased in 2009. Due to inflation, the real value of the wage rate has eroded over time. From February 2009 through February 2024, the Philadelphia CPI-U increased by 41.3%, an average rate of 2.3% per annum. If the minimum wage had been adjusted for inflation through the current year, then the rate would be \$10.24 in 2024.

Comparison of State Minimum Wage Rates

As of January 1, 2024, Pennsylvania and 19 other states do not require employers to pay a wage that exceeds the federal minimum. (See **Table 2.1.**) By contrast, seven states (Washington, California, Connecticut, New Jersey, New York, Massachusetts and Maryland) and the District of Columbia require employers to pay an hourly wage of \$15 or more. By January 1, 2026, six additional states (Rhode Island, Illinois, Hawaii, Delaware, Virginia and Nebraska) will require employers to pay an hourly wage of at least \$15. Colorado and Arizona adjust their minimum wage through annual indexing and are also projected to be above the \$15 threshold by January 1, 2026.

Currently, all border states have an hourly minimum wage that exceeds Pennsylvania by at least \$1.50, and four states (New York, Maryland, New Jersey and Delaware) have a minimum wage that is at least \$6.00 higher. If Pennsylvania increases the hourly minimum wage to \$15 in 2025, 10 states and the District of Columbia would be equal to or higher than Pennsylvania.

¹² IFO. [Analysis of Revenue Proposals: FY 2023-24 Executive Budget](#) (May 2023); [Analysis of Revenue Proposals: FY 2022-23 Executive Budget](#) (April 2022); and [Analysis of Revenue Proposals: FY 2021-22 Executive Budget](#) (April 2021).

Table 2.1
Minimum Wage Rates by State (As of January 1st)

State/Territory	2024 Rank	2024	2025	2026
Washington D.C.	1	\$17.00	\$17.40	\$17.80
Washington	2	16.28	16.67	17.05
California	3	16.00	16.38	16.76
Connecticut	4	15.69	16.07	16.44
New Jersey	5	15.13	15.49	15.85
New York	6	15.00	15.50	16.00
Massachusetts	6	15.00	15.00	15.00
Maryland	6	15.00	15.00	15.00
Colorado	9	14.42	14.77	15.11
Arizona	10	14.35	14.70	15.05
Oregon	11	14.20	14.55	14.90
Maine	12	14.15	14.50	14.85
Rhode Island	13	14.00	15.00	15.00
Illinois	13	14.00	15.00	15.00
Hawaii	13	14.00	14.00	16.00
Vermont	16	13.67	14.00	14.32
Delaware	17	13.25	15.00	15.00
Missouri	18	12.30	12.60	12.90
Virginia	19	12.00	13.50	15.00
Nebraska	19	12.00	13.50	15.00
Florida	19	12.00	13.00	14.00
New Mexico	19	12.00	12.00	12.00
Alaska	23	11.73	12.01	12.29
Nevada	24	11.25	11.52	11.78
South Dakota	25	11.20	11.45	11.70
Arkansas	26	11.00	11.00	11.00
Minnesota	27	10.85	11.11	11.37
Ohio	28	10.45	10.70	10.95
Michigan	29	10.33	10.56	10.80
Montana	30	10.30	10.55	10.80
West Virginia	31	8.75	8.75	8.75
Pennsylvania	32	7.25	7.25	7.25
Other	32	7.25	7.25	7.25

Note: Over 50 localities have adopted a minimum wage above their state's minimum wage. Inflation adjustments use an estimated 2.4% for 2025 for 2.3% for 2026.

Source: The Economic Policy Institute. Minimum Wage Tracker (as of January 1, 2024).

Distribution of Hourly Wage Rates

This analysis primarily utilizes May 2022 data (released April 2023) from the U.S. Bureau of Labor Statistics' (BLS) Occupational Employment and Wage Statistics (OEWS). The OEWS produces employment and wage estimates based on a survey of business establishments (employers) for both wage and salary workers in nonfarm establishments by occupation. It excludes self-employed, owners and partners in unincorporated firms, household workers and unpaid family workers.

The OEWS program data include the total number of jobs and hourly wage rates for the 10th, 25th, 50th (median), 75th and 90th percentile and the mean wage rate by occupation. This analysis uses these data to create estimated log-normal distribution models for each of the 22 major occupations in Pennsylvania. Minor calibrations are then made within each occupation distribution so that the mean hourly wage is close to the published mean hourly wage from the OEWS data. The OEWS data also include detail that allow occupations primarily comprised of tipped workers to be removed from the primary model.¹³ Additional detail on hours worked and full-time/part-time splits is from the U.S. 2022 Current Population Survey (CPS).¹⁴ The analysis then projects the 2022 wage distribution to 2024 based on actual and assumed growth rates for employment and wages and new full-time/part-time splits from the U.S. February 2024 CPS. Given the strong labor market for many lower-wage occupations, it was assumed that wage growth among the lowest decile (10th percentile) of workers in each occupation increased 4% above the average occupation wage growth and was offset by slower wage growth for the highest wage earners within the same occupation.

Although the hourly minimum wage is \$7.25 for Pennsylvania employers, based on the projected wage distribution for 2024, over 99% of non-tipped jobs will earn more than \$10 per hour, and roughly 98% will earn more than \$11 per hour.¹⁵ Therefore, the data suggest that the effective market minimum wage is roughly \$10.50 to \$11 per hour, so that an increase in the statutory minimum wage up to \$11 per hour would have a negligible impact on employment and earnings.

Table 2.2 provides a breakdown of hourly wage rates below \$18, with tipped workers displayed separately. Jobs that are directly impacted include any job paid less than \$15 per hour. Indirectly-impacted jobs earn between \$15 to \$17.99 per hour, as research finds that employers would likely need to increase compensation for employees within this wage range to maintain pay differentials with less-experienced or lower-skilled staff. For 2024, the analysis estimates that 895,000 non-tipped jobs will be directly impacted and 785,000 will be indirectly impacted by an increase in the minimum wage to \$15 per hour.

The projection of the May 2022 wage distribution to May 2024 reduces the number of directly impacted workers by 277,000 jobs. Nearly one-third is due to a reduction in the number of jobs that earn less than \$10.00 per hour in May 2022 (not shown). Due to a tight labor market for lower-wage workers, the analysis projects that there will be a significant migration of those workers from under \$10.00 per hour to wage rates that are considerably higher.

¹³ These tipped occupations include: (1) bartenders; (2) waiters and waitresses; (3) hosts and hostesses in restaurants, lounges and coffee shops; (4) food preparation and serving-related workers (all other); (5) gambling dealers; (6) hairdressers, hairstylists and cosmetologists; (7) shampooers; (8) baggage porters and bellhops and (9) personal care and service workers (all other). See discussion on tipped workers on next page.

¹⁴ The CPS is jointly sponsored by the U.S. Census Bureau and the U.S. Bureau of Labor Statistics. It provides data on the labor force, employment levels, unemployment rates and various demographic characteristics.

¹⁵ Jobs include non-tipped positions within nonfarm establishments and excludes self-employed, owners and partners in unincorporated firms, household workers and unpaid family workers. Tipped workers are excluded because existing data on tipped workers only include reported wages and tips, and it is likely that there could be significant under-reporting of tipped income.

**Table 2.2
Pennsylvania Employment Distribution by Hourly Wage Rates (<\$18/hour, 000s)**

	May 2022			IFO Projected May 2024		
	Full-time	Part-time	Total	Full-time	Part-time	Total
<u>Directly Impacted Non-Tipped Employment</u>						
<\$11	66	192	257	19	81	99
\$11 - \$12.99	153	223	376	93	234	326
\$13 - \$14.99	<u>288</u>	<u>250</u>	<u>538</u>	<u>182</u>	<u>286</u>	<u>469</u>
Total Directly Impacted	506	665	1,171	294	601	895
<u>Indirectly Impacted Non-Tipped Employment</u>						
\$15 - \$17.99	548	257	805	476	309	785
<u>Tipped Employment¹</u>						
<\$15	48	54	102	34	56	90
\$15 - \$17.99	15	1	15	21	4	25

1 Tipped employment includes occupations such as waiters and waitresses; hosts and hostesses; gambling dealers; hairstylists and cosmetologists; shampooers; and baggage porters and bellhops. The estimated wage is the employer-reported wage with reported tips included. It is likely that wages with non-reported tips are higher.

Source: Total employment by wage category are estimates by IFO based on May 2022 Occupational Employment and Wage Statistics (OEWS) Survey data produced by U.S. Bureau of Labor Statistics (BLS). Full-time/part-time splits are estimates by the IFO based on U.S. Labor Force Statistics from the U.S. BLS Current Population Survey applied to Pennsylvania by occupation. May 2024 data are estimates by IFO.

Note concerning tipped workers: For 2024, it is estimated that 115,000 tipped jobs (bottom of Table 2.2) could be directly or indirectly impacted by the higher minimum wage, but it is unclear how they would be impacted. Currently, employers are required to ensure most tipped staff earn at least the regular hourly minimum wage (\$7.25) with their wages and tips combined. Some tipped workers claim or report tips to meet the regular hourly minimum wage but fail to report all tips. Since the OEWS data include only reported wages and tips combined (and omit unreported tip income), it is unclear how tipped workers would be impacted. There is limited data on (1) what tipped workers earn in wages versus tips to estimate the wage increase needed to bring all workers up to \$9 per hour and (2) the extent that tips are under-reported by employers and if tipped workers are largely already making close to or above \$15 per hour with tips.

For item (1), while hourly wage rates among non-tipped workers have increased over the last several years, it is unclear if that same trend occurred for tipped workers. While tipped workers likely received more tips (typically calculated on the total cost of services that have increased rapidly in recent years), it is uncertain if the base pay for tipped workers increased much beyond the statutory minimum wage of \$2.83 per hour. The proposed minimum wage increase for tipped workers from \$2.83 to \$9.00 per hour would be an increase of over 215%, and any previous minimum wage increase with a single adjustment of that magnitude could not be identified.

For item (2), if tipped workers have sufficient unreported tips to cover the difference between what they currently report and \$15 per hour, it is likely that reported wage and tip income would increase with a commensurate decline in the workers' overall take-home pay since they will remit tax on previously unreported tip income. However, if tipped workers do not have sufficient unreported tips to cover the difference between their current wages plus tips and \$15 per hour, their overall take-home pay will likely increase as employers must make up the difference.

Due to the lack of reliable data on the (1) distribution and composition of wages and tips received by tipped workers and (2) the combined hourly amount that tipped workers actually earn once unreported tips are included, the IFO did not attempt to estimate the impact of an increase in the tipped worker minimum wage from the current \$2.83 per hour to \$9.00 per hour.

Employment, Income and Revenue Impacts

Table 2.3 displays the projected employment impact for directly affected, non-tipped workers due to the enactment of a \$15 minimum wage. The first three columns display the total number of jobs, average hourly wage and the percentage increase in the hourly wage if the \$15 minimum wage is implemented within each wage group. For the lowest paid workers (<\$11 per hour), the proposal increases the hourly wage by 44%. For the highest paid workers directly affected (those earning between \$13 and \$14.99), the increase is only 6.7%. While not directly affected by the proposal, the analysis assumes that workers earning between \$15 to \$17.99 per hour would also realize a modest wage increase of 3.5% (not displayed in Table 2.3).

Column four (elasticity) is the employment response parameter used for each wage group and is based on a review of minimum wage studies. An elasticity or response parameter of -0.135 implies a 1.35% employment reduction for a 10.0% increase in the effective wage paid. Lower-wage workers are disproportionately younger (e.g., high school and college age), so the analysis assumes higher (larger negative) elasticities at lower wage rates. Research finds that employment of younger workers is more sensitive to changes in wage rates because those workers are generally part-time, less experienced and have a higher degree of turnover. Moreover, the percentage wage increase for lower-wage workers is considerably higher, and employers would be more sensitive to their employment compared to other groups under a \$15 minimum.

Prior to application of the noted employment elasticities, two caveats are noted. First, prior minimum wage studies were generally based on modest or moderate increases in the statutory minimum wage, such as an increase of \$1.00 per hour. There are no relevant studies that examine a proposed immediate increase from an effective market minimum wage of roughly \$10.50 per hour to \$15 per hour, an increase of 43% for the lowest paid workers. Second, this analysis disregards geographic location and employer size. Employers in urban areas such as Philadelphia and Pittsburgh are more likely to already pay a minimum wage that approaches \$15 per hour due to higher cost of living. Therefore, rural and small employers are more likely to be impacted by the proposal.

The projected employment impact is displayed in column five (job contraction) and is equal to: number of jobs * percent increase in wage * elasticity or response parameter. The analysis finds a contraction of 15,500 part-time jobs and 5,200 full-time jobs (part-time/full-time split not shown in table), for an overall contraction of 20,700 (-2.3% of directly-affected workers). The proposal disproportionately affects part-time jobs because U.S. data suggest that nearly 81% of jobs that pay under \$11 per hour were part-time. The final column displays the number of jobs that receive a wage increase.

One important caveat is that the projected employment contraction would likely occur over time and present in various ways. Studies find that some of the negative employment impact could manifest itself as reduced work hours for multiple employees instead of the loss of one job. While some part-time workers might experience layoffs, other firms might simply defer filling vacant positions or not replace workers who depart or retire. Some studies find that higher minimum wages have a disproportionate impact on certain new entrants to the labor market (i.e., young and lower-skilled workers).

**Table 2.3
Employment Impact Among Non-Tipped Workers**

	# Jobs (000s)	Avg. Hourly Wage	% Increase to \$15/hr.	Elasticity	Employment Contraction (000s)	Higher Wage (000s)
Directly Affected						
<\$11	99	\$10.42	44.0%	-0.185	8	91
\$11 - \$12.99	326	\$12.13	23.7%	-0.135	10	316
\$13 - \$14.99	<u>469</u>	\$14.06	6.7%	-0.070	<u>2</u>	<u>466</u>
Total Directly Affected	895				21	874

Note: Data exclude tipped workers as described on Table 2.2. Total employment and average hourly wages by wage category are May 2024 estimates by IFO based on May 2022 Occupational Employment and Wage Statistics (OEWS) Survey data produced by U.S. Bureau of Labor Statistics (BLS). Elasticities and percentage increase in wages are estimates by IFO.

Table 2.4 displays the projected impact on income from the higher minimum wage for non-tipped affected workers. The analysis assumes all jobs that earn less than \$15 per hour would earn \$15 per hour under the proposal. In practice, while there would be some “wage compression” due to the higher minimum wage, employers would likely attempt to maintain some of the wage differentials that were effective prior to the higher minimum. Therefore, the estimates in Table 2.4 could be viewed as a lower bound. However, to the extent those wages are raised above \$15 per hour, it would also imply a larger negative employment response. Table 2.4 does assume that workers indirectly affected (earn between \$15 and \$17.99 per hour) would receive a slightly higher wage.

Table 2.4
Full-Year Impact of Minimum Wage Increase on Total State Wages

	Hourly Wage			Total
	<\$11	\$11 - \$12.99	\$13 - \$14.99	
Employment Retained				
Jobs Paid Higher Wage (000s)	91	316	466	874
Average Hourly Gain per Job	\$4.58	\$2.87	\$0.94	\$2.02
Average Annual Wage Gain per Job ¹	\$7,021	\$4,583	\$1,565	\$3,285
<u>Indirectly Affected Jobs (\$15 - \$17.99/hr.)²</u>				
Jobs Indirectly Impacted (000s)				785
Average Hourly Gain				\$0.58
Average Annual Wage Gain per Job				\$1,047
Gross Annual Income Gain (\$ millions)³	\$640	\$1,446	\$723	\$3,632
Employment Lost				
Employment Contraction (000s) ⁴	-8	-10	-2	-21
Gross Annual Income Loss (\$ millions)⁵	-\$129	-\$202	-\$51	-\$381
Total Gross Income Change (\$ millions)⁶	\$511	\$1,244	\$672	\$3,250
Total Net Income Change (\$ millions)⁷	\$449	\$1,092	\$590	\$2,853

Notes: Estimates by IFO and excludes tipped workers.

1 Calculation: Average hourly gain * typical workweek hours (ranges from 29.4 hours for those making <\$11/hr. to 31.7 hours for those making \$13 to \$14.99/hr. due to the larger share of part-time workers at lower hourly wages) * 52 weeks.

2 Model assumes that employees making between \$15 and \$17.99/hr. receive a 3.5% pay boost to minimize wage compression at the lower wage level.

3 Total includes those directly and indirectly impacted by the minimum wage increase.

4 Comprised of a combination of not filling open positions, reduction in staff hours and not expanding job openings that would have occurred absent the minimum wage increase.

5 Calculation: Employment contraction * former average hourly wage * typical workweek hours * 52 weeks.

6 Calculation: Gross annual income gain minus gross annual income loss.

7 Calculation: Total gross income change * 12.22% in taxes including 7.65% in Social Security and Medicare taxes, 3.07% in state income taxes and 1.5% in local wage taxes (varies by local municipality).

Excluding tipped employment, the minimum wage proposal is projected to increase net pre-tax wage income by \$3.25 billion. However, the higher wage income would be subject to employee payroll taxes (7.65%) and state (3.07%) and local (assumed to be 1.0%) income taxes. If those taxes are removed, then after-tax wage income increases by \$2.85 billion. Employers would also remit the employer share of payroll taxes (7.65%) and claim those higher taxes and higher wages as a deduction against state PIT or corporate net income tax (CNIT).

The analysis assumes that the wage gains of lower-wage workers are financed by (1) higher prices (60%), (2) reduced business profits (20%), (3) exported or remitted by non-residents (10%) and (4) business savings through less labor turnover and training and higher employee productivity (10%). While the first two sources imply negative offsets to the wage gains, the final two do not. Based on this assumption, the analysis computes the following annual General Fund revenue impact once the proposal and labor market adjustments are fully reflected:

- PIT increases by \$75 million.
- CNIT falls by \$50 million.
- SUT increases by \$45 million.
- PIT refunds decline by roughly \$5 million.¹⁶

The net annual impact once the proposal is fully phased in is \$75 million. As noted, the estimate does not include the proposed increase in the minimum wage for tipped workers.

For a more detailed discussion of the revenue computation, see the IFO *Analysis of Revenue Proposals* released in April 2021.

¹⁶ Some low-income workers that earn higher wages would have qualified for a tax forgiveness credit and will no longer qualify. A portion of these workers receive this credit as a refund upon filing their annual state income tax return instead of paying lower withholding throughout the year. This decline would not appear until 2025 taxes are filed (spring 2026).

