



The Budgetary Effects of the Raise the Wage Act of 2021

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If enacted at the end of March 2021, the Raise the Wage Act of 2021 (S. 53, as introduced on January 26, 2021) would raise the federal minimum wage, in annual increments, to \$15 per hour by June 2025 and then adjust it to increase at the same rate as median hourly wages. In this report, the Congressional Budget Office estimates the bill's effects on the federal budget.

- The cumulative budget deficit over the 2021–2031 period would increase by \$54 billion. Increases in annual deficits would be smaller before 2025, as the minimum-wage increases were being phased in, than in later years.
- Higher prices for goods and services—stemming from the higher wages of workers paid at or near the minimum wage, such as those providing long-term health care—would contribute to increases in federal spending.
- Changes in employment and in the distribution of income would increase spending for some programs (such as unemployment compensation), reduce spending for others (such as nutrition programs), and boost federal revenues (on net).

Those estimates are consistent with CBO's conventional approach to estimating the costs of legislation. In particular, they incorporate the assumption that nominal gross domestic product (GDP) would be unchanged. As a result, total income is roughly unchanged. Also, the deficit estimate presented above does not include increases in net outlays for interest on federal debt (as projected under current law) that would stem from the estimated effects of higher interest rates and changes in inflation under the bill. Those interest costs would add \$16 billion to the deficit from 2021 to 2031.

The estimates in this report are based on CBO's most recent economic forecast, which was released earlier this month. CBO estimated the budgetary effects using techniques that it has developed over the past two years. Those estimates are based on CBO's estimates of the bill's effects on the economic behavior of individuals and firms—which in this report refers to actions that change relative prices, the distribution of income, employment, and other economic factors.

Underlying the budgetary estimates are CBO's projections of how pay would change for people directly or potentially affected by an increase in the minimum wage—that is, people who would otherwise have been paid hourly wages that were less than the proposed new minimum or slightly above it—and how changes in pay would affect the number of people employed.

- From 2021 to 2031, the cumulative pay of affected people would increase, on net, by \$333 billion—an increased labor cost for firms considerably larger than the net effect on the budget deficit during that period.

Notes: Numbers in the text and tables may not add up to totals because of rounding. Budgetary effects are reported for federal fiscal years, which run from October 1 to September 30 and are designated by the calendar year in which they end. Otherwise, the years referred to are calendar years.

- That net increase would result from higher pay (\$509 billion) for people who were employed at higher hourly wages under the bill, offset by lower pay (\$175 billion) because of reduced employment under the bill.

In an average week in 2025, the year when the minimum wage would reach \$15 per hour, 17 million workers whose wages would otherwise be below \$15 per hour would be directly affected, and many of the 10 million workers whose wages would otherwise be slightly above that wage rate would also be affected. At that time, the effects on workers and their families would include the following:

- Employment would be reduced by 1.4 million workers, or 0.9 percent, according to CBO's average estimate; and
- The number of people in poverty would be reduced by 0.9 million.

This report provides the following details about the bill and CBO's estimates of its effects on federal spending and revenues:

- Background on the Raise the Wage Act of 2021;
- Effects on spending for major health care programs;
- Effects on spending for unemployment compensation;
- Effects on spending for Social Security;
- Effects on spending for nutrition programs;
- Effects on other mandatory spending;
- Effects on revenues;
- Effects on discretionary outlays for wages of federal workers;
- Effects on net spending for interest;
- Uncertainty surrounding the budgetary estimates; and
- How CBO's analysis of budgetary effects has changed.

The report also provides the following information about changes in economic behavior underlying those estimates and about CBO's analytical methods:

- Effects on employment;
- Effects on wages of affected workers;
- Effects on the distribution of family income;
- Effects on real (inflation-adjusted) output;
- Effects on prices;
- Effects on the distribution of labor and capital income;
- Effects on interest rates;
- CBO's economic modeling approach; and
- Comparisons with CBO's July 2019 analysis.

Background on the Raise the Wage Act of 2021

In this report, CBO analyzes the Raise the Wage Act of 2021 as introduced in the Senate on January 26, 2021. It would take effect on the first day of the third month after the date of enactment. If it was enacted at the end of March 2021, the minimum wage would increase by a set amount each year, starting in June 2021, until it reached \$15 in June 2025 (see Table 1 on page 15). In subsequent years, it would increase by the annual percentage increase, if any, in the median hourly wage of all employees. The bill's provisions would cover most low-wage workers, but they would not cover the self-employed, casual babysitters, and certain seasonal workers. The bill would also increase the minimum wage for teenagers and disabled workers, and it would increase the share of the minimum wage for tipped workers that must be paid by their employers. (The minimum wage for those workers has long been different from the minimum wage for other workers. Tipped workers are those whose compensation depends primarily on tips.)

Effects on Spending for Major Health Care Programs

The Raise the Wage Act of 2021 would affect spending for the major federal health care programs. Some of the effects would involve workers employed in the home health care and nursing care industries; CBO projects that if current laws did not change, there would be roughly 3 million such workers by 2025, many of whom would earn less than \$15 per hour. Federal programs, such as Medicaid and Medicare, pay for much of the care supplied by those industries. The effect of increases in the prices of health care stemming from a higher minimum wage is a key factor contributing to an increase in spending for those programs. The effect of changes in the distribution of income is another key factor. Those changes would put downward pressure on spending for Medicaid and increase spending for marketplace subsidies.

Medicaid and CHIP. Under the bill, Medicaid spending would increase because the effects of increases in the price of health care services and increases in enrollment by people who would be jobless as a result of the minimum-wage increase would outweigh the effects of decreases in enrollment by people with higher income (see Table 2 on page 16). Prices, such as those for long-term services and supports and medical services, would increase as a result of negotiations that accounted for higher costs of labor facing health care providers. The number of Medicaid enrollees would tend to rise because of increased enrollment among people who lost employment as a result of the minimum-wage increase and thus became eligible for the program. However, that tendency would be more than offset as the income of some enrollees rose above the thresholds for Medicaid eligibility, causing overall enrollment to decline.

The effects on spending for the Children's Health Insurance Program (CHIP) would similarly reflect higher prices for medical services, as well as a shift in enrollment from Medicaid to CHIP. That shift would occur because some families would become ineligible for Medicaid as their income increased and would enroll their children in CHIP, which has higher income thresholds for eligibility.

Marketplace Subsidies. A minimum-wage increase would boost federal subsidies for health insurance offered through the marketplaces and the Basic Health Program. Some of the people whose wages increased under the bill would be in lower-income families that, as their income increased, gained eligibility for tax credits to cover part of their premiums. (People in families with income between 100 percent and 400 percent of the federal poverty guidelines are generally eligible for those tax credits.) That change in income and eligibility would cause net increases in enrollment in health insurance and in the number of people claiming premium tax credits to purchase that coverage. Some people who would become ineligible for Medicaid because of increases in their income would use those tax credits instead, offsetting some of the reduction in spending that would stem from declines in Medicaid enrollment. (Those tax credits are

refundable, and they affect revenues as well as outlays; the revenue effects are included in the revenue totals discussed below.)

Medicare. A higher minimum wage would increase Medicare spending because Medicare's payment rates for health care providers would be higher. In contrast to Medicaid payments, which are the result of negotiations among states, providers, and managed care insurance companies, many Medicare payments are calculated by taking base payment rates and updating them each year according to a set of statutory formulas. Those updates depend, in turn, on the value of various economic variables, such as price indexes. A higher minimum wage would change some of those variables, resulting in increased spending.

Effects on Spending for Unemployment Compensation

Spending for unemployment compensation would increase under the bill because more workers would be unemployed. That increase would be partially offset when states increased their tax revenues to maintain a positive balance in their unemployment trust funds. (Both benefits paid out and tax revenues credited to state unemployment trust funds are reflected in the federal budget.) In a given year, any increase in spending for unemployment compensation would be offset by an increase in revenues that eventually equaled about 80 percent of the increased spending. Thus, the net effect on the deficit over time would equal about 20 percent of the increase in unemployment compensation. The increases in revenues would occur several years later than the increases in spending, so the deficit effect from 2021 to 2031 would be larger than the total eventual effect. (The effects on revenues are included in the revenue totals discussed below.)

Effects on Spending for Social Security

Spending for Social Security would rise with a higher minimum wage, mainly because of increases in average benefits. Average benefits would increase in part because initial benefits are indexed to economywide average wages, which would be boosted by a higher minimum wage. Average benefits would also increase because raising the minimum wage would increase inflation, in CBO's assessment, which would in turn boost annual cost-of-living increases in Social Security benefits.

A minimum-wage increase would also affect Social Security spending in less significant ways. The reduction in employment resulting from a minimum-wage increase, for example, would induce some workers with serious health conditions to claim disability benefits and some older workers to claim retirement benefits earlier than they would have otherwise. (Social Security includes both kinds of benefits.) However, increases in earnings among low-wage workers would lead some people who would otherwise have claimed Social Security benefits to delay claiming them. Also, higher earnings would exert downward pressure on Social Security spending because some claimants' benefits are reduced when their earnings increase.

Spending from the two Social Security trust funds—the Old-Age and Survivors Insurance Trust Fund and the Disability Insurance Trust Fund—is categorized as off-budget (as are the program's revenues, which are discussed below) because those budgetary accounts are designated by law as excluded from budget totals used for certain purposes.

Effects on Spending for Nutrition Programs

Spending on the Supplemental Nutrition Assistance Program and child nutrition programs would decline, on net, because increases in income for low-income households would reduce both the number of beneficiaries and their average benefit amount. Those effects would be partially offset

under the bill by increases in enrollment stemming from reductions in employment and by increases in price indexes used to calculate benefit amounts.

Effects on Other Mandatory Spending

Other mandatory spending would be affected in a variety of ways. (Such spending is generally governed by statutory criteria and is not normally constrained by the annual appropriation process.) Spending would be affected for refundable tax credits, student loans, Supplemental Security Income (SSI), various retirement programs, certain programs for veterans, and the Postal Service (which is categorized as off-budget).

Higher labor earnings among low-wage workers would reduce spending on the refundable portion of the earned income tax credit (and have effects on revenues, which are discussed in the next section). Those higher labor earnings would also reduce net spending on student loans by increasing the amounts repaid by borrowers enrolled in income-driven repayment plans. The increase in inflation resulting from a higher minimum wage would result in larger cost-of-living increases for benefits in various programs, including retirement programs, veterans' programs, and SSI. (For SSI, that increase would be partially offset by the effects of a boost to the average earnings of working SSI recipients, which would either lower their benefits or make them ineligible for benefits.)

Effects on Revenues

The bill would increase revenues, on net, from 2021 to 2031. That net effect would be the result of a number of factors that worked in opposite directions. Although total nominal income would be roughly unchanged in CBO's estimate, labor income would increase while capital income would decrease. Labor income tends to be more heavily taxed. Income would also shift toward lower-income people and away from higher-income people under the bill. Revenues from payroll taxes for Social Security (which are categorized as off-budget) would increase. Other revenues would decline, on net, because lower-income people face lower tax rates, on average, than higher-income people do.

Several factors would tend to increase revenues. Higher labor earnings among low-wage workers are one. Those higher earnings would be subject to payroll taxes and individual income taxes and would reduce the net amount of refundable credits, such as the earned income tax credit. In addition, revenues would rise in response to increased spending on unemployment insurance, as states increased their tax revenues to maintain a positive balance in their unemployment trust funds, as this report discusses above. Also, a higher economywide average wage would cause revenues to increase by raising the earnings threshold below which workers owe Social Security taxes.

Other factors would tend to decrease revenues. Higher labor costs would cause business income to be lower under the bill than under current law. That would reduce revenues from individual and corporate income taxes. In addition, higher inflation would cause revenues to decline because certain aspects of the individual income tax, such as the tax brackets and standard deduction amounts, are adjusted for inflation. Revenues would also fall because of larger premium tax credits, as this report discusses above.

Effects on Discretionary Outlays for Wages of Federal Workers

CBO estimates that discretionary outlays would increase under the bill, provided that the necessary amounts were appropriated, because a small number of federal workers would see a pay increase under the bill. That estimate is based on information from the Office of Personnel

Management. (Using information from the Postal Service, CBO also estimates that a small number of postal workers would see a pay increase under the bill. Unlike spending for wages of other federal workers, such spending for postal workers is not discretionary and is shown in Table 2 under other mandatory outlays.)

Effects on Net Spending for Interest

A higher minimum wage would increase net spending for interest because interest rates would increase slightly under the bill, in CBO's assessment, and inflation would change. Net spending for interest largely depends on interest rates and the amount of debt that the Treasury issues to the public. The effect of the bill on the deficit that is shown in Table 2 does not include increases in net outlays for interest on federal debt (as projected under current law) that would stem from estimated changes to interest rates and inflation under the bill.

Uncertainty Surrounding the Budgetary Estimates

The effects of the Raise the Wage Act of 2021 on the budget and other outcomes are uncertain, and there is a wide range of possible outcomes on either side of the estimates shown in this report. For example, the effects depend on how quickly wages would grow in the absence of the policy and how employment would respond to higher wages. If wage growth in the absence of the policy proved slower than CBO currently projects in its baseline projections, the bill's effects on employment would be larger, and the bill would probably increase the deficit by a larger amount. (CBO's baseline projections incorporate the assumption that current laws generally do not change.) If wage growth in the absence of the policy proved faster than CBO currently projects, the opposite would be the case.

To take another example, if employment proved less responsive to a higher minimum wage than CBO projects, a larger-than-projected number of people would be lifted out of poverty, which would tend to reduce spending on programs that provide services or benefits to them. If more people were employed than CBO projects, total wages for affected workers would be higher than CBO estimates, which would tend to increase spending affected by the prices of the goods and services they produce.

How CBO's Analysis of Budgetary Effects Has Changed

In April 2019, CBO produced a cost estimate for H.R. 582, the Raise the Wage Act, as ordered reported by the House Committee on Education and Labor on March 6, 2019. The policy specifications in that bill differ somewhat from the specifications in the Raise the Wage Act of 2021. Under the assumptions about dates of enactment that CBO used, the minimum wage would reach \$15 per hour in 2025 under either bill. The step increases toward that new minimum would have started on January 1, 2020, under the 2019 bill, but they start on June 1, 2021, under the 2021 bill. The step increases in the 2021 bill are thus larger and would reach \$15 per hour more quickly.

At the time of its April 2019 estimate, CBO's most recent economic forecast had been released in January 2019.¹ Earlier this month, CBO released the economic forecast that underlies both the baseline budget projections used in this report and this report's estimates of the effects of the

1. See Congressional Budget Office, *The Budget and Economic Outlook: 2019 to 2029* (January 2019), www.cbo.gov/publication/54918.

Raise the Wage Act of 2021.² That forecast reflects the current state of the economy and includes the impact that the 2020–2021 coronavirus pandemic is projected to have on the economy.

The April 2019 estimate included only the effects of raising the pay of federal employees whose wages would be below the new minimum. CBO estimated that those increases in pay would have led to a \$76 million increase in discretionary outlays over the 2019–2029 period, subject to appropriation of the necessary amounts.³ That estimate did not include budgetary impacts stemming from any behavioral effects by firms or individuals.

The estimates in this report include behavioral effects on the budget in a broad set of federal programs and in revenues.⁴ Over the past two years, CBO has developed the capacity to analyze such behavioral effects for minimum-wage legislation. Increasing the minimum wage induces a number of behaviors among businesses and people that result in changes in relative prices, the distribution of income, employment, and other economic factors. CBO has incorporated those effects in this estimate because the analytical approach is ready for use, is more comprehensive, and provides a consistent basis for estimates during this Congress as it considers legislation that would change the minimum wage.

In this report, CBO used its customary process for estimating the budgetary effects of a legislative proposal.⁵ For example, the agency examined how eligibility for subsidies for health insurance coverage would be affected by the bill and estimated the resulting effects on the budget.⁶ To estimate the effects on various types of revenues stemming from changes in the distribution of income, CBO used its microsimulation tax model.⁷ CBO included behavioral effects—such as changes in the likelihood that people will claim a government benefit or changes in subsidies for health insurance resulting from changes in the prices of health care—that it has included in past cost estimates for other types of legislation.⁸

The set of effects incorporated in this estimate is more extensive than the set incorporated in most cost estimates. That is because the effects on economic behavior that would affect the federal budget would be broader for minimum-wage increases than for most policies that CBO examines. Behavioral effects stemming from increases in the minimum wage were not included in the April

2. See Congressional Budget Office, *An Overview of the Economic Outlook: 2021 to 2031* (February 2021), www.cbo.gov/publication/56965, and *The Budget and Economic Outlook: 2021 to 2031* (forthcoming).
3. See Congressional Budget Office, cost estimate for H.R. 582, the Raise the Wage Act (April 22, 2019), www.cbo.gov/publication/55152. By comparison, raising the pay of federal employees whose wages would be below the new minimum under the Raise the Wage Act of 2021 would lead to a \$130 million increase in discretionary outlays over the 2021–2031 period, CBO estimates, subject to appropriation of the necessary amounts.
4. The set of affected programs is broader than those included in some other analyses; for example, this report includes effects on spending for major health care programs, unemployment compensation, and Social Security. Two other analyses are Ben Zipperer, David Cooper, and Josh Bivens, *A \$15 Minimum Wage Would Have Significant and Direct Effects on the Federal Budget* (Economic Policy Institute, February 2021), <https://tinyurl.com/xx4q2ria>; and Michael Reich, *Effect of a Federal Minimum Wage Increase to \$15 by 2025 on the Federal Budget* (Institute for Research on Labor and Employment, February 2021), <https://tinyurl.com/232c9cg1>.
5. See Congressional Budget Office, *How CBO Prepares Cost Estimates* (February 2018), www.cbo.gov/publication/53519.
6. See Congressional Budget Office, “How CBO and JCT Analyze Major Proposals That Would Affect Health Insurance Choices” (January 2020), www.cbo.gov/publication/56053.
7. See Congressional Budget Office, “An Overview of CBO’s Microsimulation Tax Model” (June 2018), www.cbo.gov/publication/54096.
8. For examples of estimates including such effects, see Congressional Budget Office, cost estimate for H.R. 1425, the State Health Care Premium Reduction Act (August 20, 2019), www.cbo.gov/publication/55566, and cost estimate for H.R. 3, the Elijah E. Cummings Lower Drug Costs Now Act (December 10, 2019), www.cbo.gov/publication/55936.

2019 estimate because those effects were complex and would have required further analysis, as CBO explained at the time.

Effects on Employment

Increasing the minimum wage would affect employment in several ways.

- Higher wages would increase the cost to employers of producing goods and services. Employers would pass some of those increased costs on to consumers in the form of higher prices, and those higher prices, in turn, would lead consumers to purchase fewer goods and services. Employers would consequently produce fewer goods and services, and as a result, they would tend to reduce their employment of workers at all wage levels.
- When the cost of employing low-wage workers goes up, the relative cost of employing higher-wage workers or investing in machines and technology goes down. Some employers would therefore respond to a higher minimum wage by shifting toward those substitutes and reducing their employment of low-wage workers.
- In some limited circumstances, increasing the minimum wage could boost employment if employers had what is known as monopsony power—that is, bargaining power that allows them to set wages below the rates that would prevail in a more competitive market.⁹
- Because increasing the minimum wage would shift income toward families with lower income, it would boost overall demand in the short term. Lower-income families spend a larger proportion of any additional income on goods and services than do families with higher income. That increased demand for goods and services would reduce the drop in employment for several years after the implementation of a higher minimum wage, CBO projects.

Taking those factors into account, CBO projects that, on net, the Raise the Wage Act of 2021 would reduce employment by increasing amounts over the 2021–2025 period. In 2025, when the minimum wage reached \$15 per hour, employment would be reduced by 1.4 million workers (or 0.9 percent), according to CBO’s average estimate. In 2021, most workers who would not have a job because of the higher minimum wage would still be looking for work and hence be categorized as unemployed; by 2025, however, half of the 1.4 million people who would be jobless because of the bill would have dropped out of the labor force, CBO estimates. Young, less educated people would account for a disproportionate share of those reductions in employment.

This report focuses on the average (or mean) estimated change in employment because that measure captures the different effects of upward and downward variations from CBO’s baseline projections. In particular, the growth of wages in CBO’s baseline projections is uncertain, and the budgetary effects in this analysis depend on whether the hourly wages of affected workers would otherwise have been below or near the new minimum wage. The effects are asymmetric—that is, they would not be the same size if wage growth was faster than in the baseline projections or equally slower than in the baseline projections—because the effects differ when wages rise above the minimum wage. In addition, the responsiveness of employment to changes in the minimum wage is uncertain, and that uncertainty is also asymmetric. According to the agency’s assessment of the research literature, responsiveness is unlikely to be much lower than CBO’s median

9. For a more detailed discussion, see Congressional Budget Office, “The Minimum Wage in Competitive Markets and Markets With Monopsony Power” (supplemental material for *The Effects on Employment and Family Income of Increasing the Federal Minimum Wage*, December 2019), www.cbo.gov/publication/55410.

estimate (which is equally likely to be too high or too low), but it could be much higher. CBO has formed distributions of values for both wage growth and responsiveness.¹⁰

To generate an average estimate, CBO simulated a distribution of possible changes in employment by drawing randomly from those distributions. The average estimate is a weighted average of the possible employment outcomes in the simulation, with each outcome assigned a weight on the basis of the probability that it occurs. Those probabilities reflect the different effects of upward and downward variations from CBO's baseline projections.

For 2025, the average estimate is that employment would be reduced by 1.4 million workers; the median estimate is 1.0 million workers. The mean exceeds the median in this case because there is a significant possibility of large reductions in employment. CBO estimates that there is a one-third chance of that effect's being between about zero and 1.0 million workers and a one-third chance of its being between 1.0 million and 2.7 million workers.

Effects on Wages of Affected Workers

CBO estimated the amounts by which labor costs for firms would change because of wages paid to people directly or potentially affected by an increase in the minimum wage—that is, people who would otherwise have been paid hourly wages that were less than the proposed new minimums or only slightly above them. Specifically, from 2021 to 2031, cumulative pay would increase by \$509 billion for people who were employed at higher hourly wages under the bill. Pay would decline by \$175 billion because employment would be reduced in that period under the bill. Therefore, the cumulative pay of directly and potentially affected workers would increase, on net, by \$333 billion.

CBO also estimated the number of affected workers who would experience those changes in pay. If the Raise the Wage Act of 2021 is not enacted, 17 million workers (or 10 percent of the labor force as it is projected under current law) will have wages below the minimums proposed by the bill, CBO estimates, during an average week in 2025. That is therefore the number of workers who would be directly affected by the bill. Also, 10 million workers during that average week will have wages that are only slightly higher than the proposed minimums; that is the number who would be potentially affected. If the bill was enacted and the minimum wage rose, wages for many of those workers would increase as employers sought to retain some of the differences in pay that had previously existed among those workers.

Effects on the Distribution of Family Income

The net effect of the Raise the Wage Act of 2021 on income would vary considerably among families. In 2025, 0.9 million fewer people would have income below the federal poverty thresholds, CBO estimates. Families' real income would change in three main ways.

- For families with workers earning wages at or near the federal minimum, real income would increase. That effect would be concentrated in the lowest quintile, or fifth, of the distribution of family income.
- For families that lost employment because of the increase in the minimum wage, real income would fall. That effect would also be concentrated in the lowest quintile of the income distribution, but it would be smaller than the increase in real income just described.

10. See Congressional Budget Office, *The Effects on Employment and Family Income of Increasing the Federal Minimum Wage* (July 2019), www.cbo.gov/publication/55410.

- For families that experienced a decline in business income or saw no change in their labor income but faced higher prices for goods and services, real income would fall. That effect would be concentrated in the highest quintile of the income distribution.

Effects on Real Output

Raising the minimum wage would slightly reduce real GDP, primarily because of reduced employment. However, CBO incorporated the assumption that the bill would not change *nominal* GDP from the amounts in the agency's baseline budget projections, following a practice that is conventional for its cost estimates. As the next section describes, CBO's estimates of the effects of the bill on the GDP price index (and other price indexes) were adjusted to be consistent with that assumption.

In addition to its effect on real output through employment, the bill would cause the stock of capital goods to be smaller than it would be otherwise. Capital goods are assets that businesses use to produce goods and services; they include tools, buildings, vehicles, machinery, and equipment. Some businesses would invest in capital goods to replace workers. Other businesses, however, would be discouraged from constructing new buildings or buying new machines if they anticipated having fewer employees to use them. On average, over the 2021–2031 period, real investment would be slightly lower than it would be if current laws did not change, CBO estimates. That reduction in investment would reduce workers' productivity and lead to further reductions in their employment.

The higher minimum wage would also shift income toward lower-income families, which tend to spend a relatively larger fraction of their income. As a result, the total demand for goods and services would increase for several years, boosting overall real output. After that initial boost, however, CBO expects that the economic effects from increases in demand would disappear.

Effects on Prices

In CBO's assessment, the Raise the Wage Act of 2021 would change the relative prices of goods and services. The largest price increases, relative to the average increase, would be for goods or services whose production required a larger-than-average share of low-wage work, such as food prepared in restaurants. For goods and services that used less low-wage labor in their supply chains, prices would rise less.

CBO made adjustments to the projected levels of price indexes under the bill to incorporate the assumption that nominal GDP would be unchanged. If CBO had relaxed that assumption and allowed nominal GDP to change, the resulting budgetary effects would have been similar to those presented in this report. Also, if nominal GDP were allowed to change, inflation under the bill would return by 2029 to essentially the rate in CBO's baseline projections, although the level of prices would be higher than in the baseline projections.

Effects on the Distribution of Labor and Capital Income

Because CBO incorporated the assumption that the bill would not change nominal GDP from the amounts in the agency's baseline budget projections, total nominal income would be roughly unchanged. However, the share of total income derived from labor would rise, on net, and the share derived from capital would fall.

Labor income would increase under the bill primarily because most people who would have earned wages at or near the federal minimum under current law would receive higher labor

income. However, some people who would have been employed under current law would be jobless under the bill, at least for a while, and their annual labor income would be lower.

Capital income would fall under the bill because of higher labor costs and reduced productivity of capital. For example, corporate profits would be lower, reducing dividend income. Other types of nonwage personal income, such as proprietors' income, would also decline.

Effects on Interest Rates

In CBO's assessment, the Raise the Wage Act of 2021 would cause interest rates to be slightly higher than they would have been otherwise over the 2021–2031 period. CBO expects that from 2021 to 2023, regardless of whether the bill is enacted, real GDP will remain below its potential (that is, its maximum sustainable) level, and interest rates on securities with short-term maturities will remain near zero. The agency expects that those interest rates would increase very slightly for a few years after 2023 under the bill because of the increase in inflation stemming from the rising minimum wage. The rates on securities with longer-term maturities would also respond slightly. Because those rates depend on expected future rates on securities with shorter terms, they would change sooner than the rates on those short-term securities. For example, the interest rate on 10-year Treasury notes would rise before 2024 because it would reflect the anticipated rates on Treasury bills issued in 2024 and later.

CBO's Economic Modeling Approach

In July 2019, CBO analyzed how various options for increasing the federal minimum wage—including a \$15 option based on the version of the Raise the Wage Act ordered reported in the House of Representatives earlier that year—would affect employment and family income.¹¹ To estimate the budgetary effects of the Raise the Wage Act of 2021, CBO started with the analysis of employment and the distribution of income underlying its July 2019 report, shifting it forward to cover the 2021–2031 period and updating it to account for changes in state laws. The agency also accounted for a larger range of economic variables, including real GDP, relative prices, the distribution of labor and capital income, and interest rates. CBO used its estimates of the bill's effects on those factors to estimate changes in federal spending and revenues.

In its 2019 report, CBO projected effects on employment and family income partly on the basis of a review of research on the responsiveness of employment to changes in the minimum wage.¹² In updating that analysis for this report, CBO reviewed recent research on how minimum wages affect employment; also, to account for declines in employment caused by the 2020–2021 coronavirus pandemic, the agency reviewed studies assessing whether those effects would be different during a period of high unemployment. Although the pandemic and associated increases in unemployment affected CBO's baseline projections of the budget and economy for the 2021–2031 period, they did not lead the agency to change its general approach to estimating how employment would respond to a higher minimum wage, for several reasons:

- Under the Raise the Wage Act of 2021, the minimum wage would rise incrementally, reaching \$15 per hour in 2025. In CBO's current baseline economic projections, employment in 2025 is near the level that it was in the baseline projections underlying the 2019 report.

11. See Congressional Budget Office, *The Effects on Employment and Family Income of Increasing the Federal Minimum Wage* (July 2019), www.cbo.gov/publication/55410.

12. *Ibid.*, Appendix A.

- Only a limited number of empirical studies have considered whether employment responds differently to a higher minimum wage during a period of high unemployment, and those studies have yielded inconclusive results.
- Similarly, economic models yield conflicting conclusions. Some researchers have suggested that during and after periods of high unemployment, a larger-than-average share of firms open or go out of business, and employment might be more responsive to a higher minimum wage under such conditions.¹³ But it is also possible that many of the workers who in normal times would be projected to lose their jobs because of a higher minimum wage, such as restaurant workers, have already lost their jobs because of the pandemic. In that case, the bill's effect on employment could be weaker.

To assess the effects of the Raise the Wage Act of 2021 on the economic behavior of individuals and firms, CBO used many of its standard methods of fiscal policy analysis.¹⁴ Those methods incorporate different economic responses when the economy is weak, as it is currently, than when the economy is strong. CBO adjusted the GDP price index so as to hold nominal GDP unchanged from its level in CBO's baseline projections (an assumption consistent with the agency's conventional approach to estimating the costs of legislation). Thus, the estimates reflect effects on real economic behavior.

To project short-term effects on the demand for goods and services, the agency translated estimated changes in labor income caused by an increase in the minimum wage into changes in real purchases, using estimates of the fraction of additional income spent by households across the income distribution. CBO also used its estimates of effects on employment and wages to project effects on capital accumulation. Specifically, CBO used a dynamic general equilibrium model in which minimum-wage workers, other workers, and technology (such as machinery) are imperfect substitutes for one another. (A dynamic general equilibrium model is one in which households and businesses interact with each other in markets for goods and capital, responding to prices—such as wages and the rates of return on saving—that are themselves determined by those interactions.) Using that model, the agency examined how changes in labor income and profits stemming from an increase in the minimum wage would affect capital accumulation and business income.

To project the effects on relative prices, CBO estimated changes in labor costs for different industries and translated them into changes in the prices of goods and services, accounting for industries' dependence on each other. (A given industry's product uses other industries' products as inputs, and the price of the industry's product therefore reflects not only the costs of labor in that industry but also the costs of labor in other industries.)

Comparisons With CBO's July 2019 Analysis

CBO's July 2019 report about an earlier version of the Raise the Wage Act included estimates of how economic behavior by individuals and firms would change as a result of the bill. It also included a qualitative discussion of how those changes in economic behavior would affect the budget, but it did not present quantitative estimates of those budgetary effects.

The results in this report differ from those in the July 2019 report, and there are several reasons for the differences. First, the distribution of hourly wages in 2025 in CBO's current baseline

13. See, for example, Isaac Sorkin, "Are There Long-Run Effects of the Minimum Wage?" *Review of Economic Dynamics*, vol. 18, no. 2 (April 2015), pp. 306–333, <https://doi.org/10.1016/j.red.2014.05.003>.

14. See Congressional Budget Office, *How CBO Analyzes the Effects of Changes in Federal Fiscal Policies on the Economy* (November 2014), www.cbo.gov/publication/49494.

projections differs from that distribution in the agency's 2019 baseline projections. That difference arises partly because CBO projects that the pandemic will depress wages through 2025 and partly because the passage of Florida's Ballot Initiative 2 will raise the state minimum wage in Florida, on an incremental basis, to \$15 per hour by 2026. The Florida law reduces the number of workers who in 2025 would be substantially affected by the Raise the Wage Act of 2021.

Second, the timeline for the policy's implementation ran from January 1, 2020, to January 1, 2025, in the 2019 report, but it runs from June 1, 2021, to June 1, 2025, in this report. In this report, therefore, firms have less time to adjust to the policy's implementation than they did under the policy analyzed in the earlier report. That difference matters because the employment of low-wage workers is more responsive to higher minimum wages when firms have more time to respond to the higher cost.

Third, to capture the different effects of upward and downward variations from its baseline projections (as this report discusses above), CBO focuses here on the mean outcome of its simulations, rather than on an estimate calculated by using the median values of key inputs—specifically, projected wage growth and the responsiveness of employment to changes in the minimum wage.¹⁵ Using the mean outcome results in larger central estimates of reductions in employment and real output.

Taken together, those differences led to differences in the reports' projected effects on employment and family income. In the 2019 report, CBO estimated that employment would fall by 1.3 million workers in 2025; in this report, the estimated reduction is 1.4 million workers. The most important analytical change that led to that difference was CBO's use of the mean rather than the median in determining its central estimates. The distribution of possible employment effects is asymmetric, and the mean is greater than the median. If CBO had used the median values of key inputs, as it did in the 2019 report, its central estimate of the employment effect in 2025 would have been a reduction of 1.1 million workers—a smaller amount than in the 2019 report.

The estimated number of people whose annual income would rise above the federal poverty thresholds in 2025 is smaller in the current report (0.9 million) than it was in the 2019 report (1.3 million). That difference stems from the changes in CBO's baseline projections, from the changes in the policies' timelines, and from the use of mean outcomes rather than outcomes generated by the median values of key inputs.

15. For further discussion of issues that are related to mean outcomes and that involve the estimation of probability-weighted averages of possible costs, see Congressional Budget Office, *Estimating the Cost of One-Sided Bets: How CBO Analyzes the Effects of Spending Triggers* (October 2020), www.cbo.gov/publication/56698.

This Congressional Budget Office report was prepared in response to a request by the Chairman of the Senate Committee on the Budget. In keeping with CBO's mandate to provide objective, impartial analysis, the report contains no recommendations.

Nabeel Alsalam, William Carrington, Justin Falk, and Brooks Pierce prepared the report with assistance from Julia Heinzl and guidance from Molly Dahl, Joseph Kile, and Xiaotong Niu. Estimates of economic and budgetary effects were prepared by Susan Yeh Beyer, Yiqun Gloria Chen, Chad Chirico, Sheila Dacey, Meredith Decker, Devrim Demirel, Nathaniel Frenzt, Edward Gamber, Jennifer Gray, Cornelia Hall, Edward Harris, Lori Housman, Justin Humphrey, Nadia Karamcheva, Brian Klein-Qiu, Leah Koestner, Jamease Kowalczyk (formerly of CBO), Justin Latus, Junghoon Lee, Avi Lerner, Sarah Masi, Noah Meyerson, Alexandra Minicozzi, Eamon Molloy, Hudson Osgood, James Otterson, Allison Percy, Jeffrey Perry, Stephen Rabent, Dan Ready, Sarah Sajewski, Jeffrey Schafer, Kurt Seibert, John Seliski, Joshua Shakin, Naveen Singhal, Emily Stern, Robert Stewart, and Emily Vreeland. Helpful comments were received from Leigh Angres, Christina Hawley Anthony, Sheila Dacey, Wendy Edelberg (formerly of CBO), Heidi Golding, Theresa Gullo, Deborah Kilroe, Paul Masi, John McClelland, Sam Papenfuss, Julie Topoleski, and Jeffrey Werling.

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Mark Doms, Mark Hadley, Jeffrey Kling, and Robert Sunshine reviewed the report, and Christine Browne and Benjamin Plotinsky edited it. The report is available on the agency's website (www.cbo.gov/publication/56975).

CBO continually seeks feedback to make its work as useful as possible. Please send any comments to communications@cbo.gov.



Phillip L. Swagel
Director

Table 1.
Federal Minimum Wages Under S. 53, the Raise the Wage Act of 2021

Date	Federal Minimum Wage
June 1, 2021	\$9.50
June 1, 2022	\$11.00
June 1, 2023	\$12.50
June 1, 2024	\$14.00
June 1, 2025	\$15.00
June 1, 2026 and later	\$15.00 plus an indexing adjustment ^a

Data source: Congressional Budget Office.

CBO analyzed the Raise the Wage Act of 2021 as introduced in the Senate on January 26, 2021. The analysis incorporates the assumption that the bill would be enacted at the end of March 2021.

Under current law, the federal minimum wage is \$7.25.

a. Each year, the indexing adjustment would make the minimum wage equal the previous year's value plus the annual percentage increase, if any, in the median hourly wage of all employees.

Table 2.
Estimated Budgetary Effects of S. 53, the Raise the Wage Act of 2021

Millions of Dollars

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2021– 2026	2021– 2031
Increases or Decreases (-) in Mandatory Outlays													
Major Health Care Programs													
Medicaid	0	1,378	1,416	1,527	1,121	1,463	1,457	1,147	1,140	2,063	3,283	6,905	15,995
Children's Health Insurance Program	0	106	196	424	626	632	686	842	905	970	1,041	1,984	6,427
Premium Tax Credits ^a	0	101	174	44	506	658	1,598	2,184	2,565	2,900	3,279	1,483	14,009
Medicare	0	28	137	310	857	1,049	1,128	1,250	1,222	1,357	1,486	2,381	8,824
Unemployment Compensation	0	695	1,630	2,615	3,405	3,905	4,360	3,990	3,375	3,175	3,365	12,250	30,515
Social Security (Off-budget)	*	6	34	206	625	1,178	1,597	2,040	2,524	3,108	3,841	2,049	15,159
Nutrition Programs													
Supplemental Nutrition Assistance Program	*	-240	-500	-890	-1,210	-1,140	-1,100	-1,130	-1,330	-1,410	-1,330	-3,980	-10,280
Child Nutrition Programs	0	*	-5	-38	-27	-24	-13	-6	-34	-46	-37	-94	-230
Other													
Earned Income, Child, and Other Tax Credits	7	52	74	-44	-360	-781	-1,036	-1,119	-1,190	-1,314	-1,383	-1,052	-7,094
Student Loans ^b	-600	-50	-45	-45	-40	-25	-30	-55	-70	-65	-70	-805	-1,095
Federal Civilian and Military Retirement	0	2	6	22	55	88	106	112	111	115	103	173	720
Veterans' Disability Compensation and Pension Programs	0	2	6	22	52	83	97	105	107	109	111	165	694
Supplemental Security Income	0	-10	-10	-10	0	20	30	40	30	30	30	-10	150
Other Retirement Programs ^c	0	*	*	1	5	9	10	12	12	13	13	15	75
Postal Service (Off-budget) ^d	0	0	0	*	*	*	*	*	*	*	*	*	0
Total Changes in													
Mandatory Outlays	-593	2,070	3,113	4,144	5,615	7,115	8,890	9,412	9,367	11,005	13,732	21,464	73,869
On-budget	-593	2,064	3,079	3,938	4,990	5,937	7,293	7,372	6,843	7,897	9,891	19,415	58,710
Off-budget	*	6	34	206	625	1,178	1,597	2,040	2,524	3,108	3,841	2,049	15,159
Increases or Decreases (-) in Revenues													
Revenues From Income and Payroll Taxes^e													
On-budget	-72	-288	-1,235	-2,342	-5,649	-3,021	-1,499	-519	301	771	889	-12,607	-12,664
Off-budget	58	356	1,061	2,247	3,601	4,439	4,919	5,142	5,335	5,420	5,352	11,762	37,930
Premium Tax Credits ^a	0	-25	-48	-155	-265	-328	-581	-831	-998	-1,092	-1,194	-821	-5,517

Table 2.
Estimated Budgetary Effects of S. 53, the Raise the Wage Act of 2021

Millions of Dollars

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2021– 2026	2021– 2031
Total Changes in Revenues	-14	43	-222	-250	-2,313	1,090	2,839	3,792	4,638	5,099	5,047	-1,666	19,749
On-budget	-72	-313	-1,283	-2,497	-5,914	-3,349	-2,080	-1,350	-697	-321	-305	-13,428	-18,181
Off-budget	58	356	1,061	2,247	3,601	4,439	4,919	5,142	5,335	5,420	5,352	11,762	37,930
Net Increase or Decrease (-) in the Deficit From Changes in Mandatory Outlays and Revenues													
Effect on the Deficit	-579	2,027	3,335	4,394	7,928	6,025	6,051	5,620	4,729	5,906	8,685	23,130	54,120
On-budget	-521	2,377	4,362	6,435	10,904	9,286	9,373	8,722	7,540	8,218	10,196	32,843	76,891
Off-budget	-58	-350	-1,027	-2,041	-2,976	-3,261	-3,322	-3,102	-2,811	-2,312	-1,511	-9,713	-22,771
Increases in Discretionary Outlays^f													
Federal Workers' Pay	*	*	2	7	15	17	15	16	19	20	19	41	130

Data source: Congressional Budget Office.

CBO analyzed the Raise the Wage Act of 2021 as introduced in the Senate on January 26, 2021. The analysis incorporates the assumption that the bill would be enacted at the end of March 2021.

Components may not add up to totals because of rounding.

Off-budget effects are designated by law as excluded from budget totals. The revenues and outlays of the two Social Security trust funds (the Old-Age and Survivors Insurance Trust Fund and the Disability Insurance Trust Fund) and the transactions of the Postal Service are off-budget. All effects in this table are on-budget unless otherwise noted.

This table does not include increases in net outlays for interest on federal debt (as projected under current law) that would stem from estimated changes to interest rates and inflation under the bill. Those interest costs would add \$16 billion to the deficit over the 2021–2031 period.

* = between –\$500,000 and \$500,000.

a. Premium tax credits are federal subsidies for health insurance purchased through the marketplaces established by the Affordable Care Act.

b. Costs for the federal student loan program are estimated using the procedures established in the Federal Credit Reform Act of 1990. Changes to the estimated costs of outstanding loans are shown in 2021, the assumed year of enactment.

c. Includes retirement programs for the Coast Guard and for workers in railroads, the Foreign Service, and the Public Health Service.

d. In CBO's baseline projections, the Postal Service (USPS) exhausts its available budgetary resources in 2031 and consequently reduces its costs in that year to the amount that CBO estimates it would collect in receipts. Because this legislation would increase the costs of the USPS by less than \$500,000 in several years but would not increase its receipts, CBO estimates that the USPS would be forced to reduce its expenses by an equal amount in 2031, resulting in no significant net cost to the agency over the 2021–2031 period.

e. Includes changes to the earned income tax credit and child tax credit. The revenue and outlay effects together represent a reduction of \$4,748 million for the earned income tax credit and an increase of \$2,257 million for the child tax credit. Also includes an increase in revenues that partially offsets the increase in outlays for unemployment compensation. States would increase their tax revenues to maintain a positive balance in their unemployment trust funds over time, and those revenues are reflected in the federal budget.

f. Estimates of discretionary outlays are based on the assumption that appropriations of the necessary amounts will be provided in each year.

PA MINIMUM WAGE STATISTICS

- 90,700 minimum wage employees in PA.
- 6 million total jobs in PA.
- About 1.5% of PA jobs pay minimum wage.
- 78% of minimum wage earners do not have kids; less than 20,000 have kids.
- 55% of minimum wage earners are high school and college age between 16 and 24.
- 42% of minimum wage earners live in households that earn over \$75,000 a year.
- 1 in 4 minimum wage earners live in households that make over \$100,000 a year.
- Over half of minimum wage jobs are in restaurants and bars.

*Please see the attached four pages of the Analysis of the PA Minimum Wage from March of 2020. The full report is available on the Department of Labor and Industry website

at: <https://www.workstats.dli.pa.gov/Documents/Minimum%20Wage%20Reports/Minimum%20Wage%20Report%202020.PDF>

Analysis of the Pennsylvania Minimum Wage

MARCH 2020

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pennsylvania
DEPARTMENT OF LABOR & INDUSTRY

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Pennsylvania and U.S. 2019 Averages
Demographic Characteristics of Various Populations
 (total numbers of workers in thousands, breakdown by characteristic in percent)

Demographic Characteristics	Minimum Wage or Below		Above Minimum Wage		All Employed ²	Population 16 and Over	
	PA ¹	U.S. ¹	Near	Total		PA	U.S.
			PA	PA			
TOTAL	90.7	1,609	938.4	3,335.1	6,224.6	10,288.1	259,175
Gender							
Male	21.4%	33.5%	42.2%	49.4%	51.7%	48.2%	48.4%
Female	78.6%	66.5%	57.8%	50.6%	48.3%	51.8%	51.6%
Race							
Black, non-Hispanic	13.0%	16.3%	14.9%	12.1%	9.6%	10.4%	11.9%
Hispanic	5.4%	18.1%	8.1%	6.9%	5.7%	5.8%	16.8%
Other, non-Hispanic	0.0%	8.0%	6.5%	4.5%	5.3%	5.2%	8.7%
White, non-Hispanic	81.6%	57.5%	70.5%	76.4%	79.5%	78.6%	62.6%
Age							
16-19	21.5%	17.5%	18.7%	6.1%	3.8%	6.3%	6.4%
20-24	33.9%	25.5%	23.9%	12.4%	8.7%	7.6%	8.1%
25-34	7.8%	25.2%	17.8%	23.0%	22.3%	16.6%	17.3%
35-44	10.8%	11.8%	11.0%	16.6%	19.1%	14.2%	15.8%
45-54	11.3%	9.6%	9.4%	16.4%	18.9%	14.5%	15.6%
55-64	13.3%	7.4%	9.3%	18.1%	18.9%	17.4%	16.3%
65 and over	1.4%	2.9%	9.9%	7.4%	8.2%	23.5%	20.4%
Education							
Less than a high school diploma	19.3%	18.4%	19.3%	8.9%	6.7%	11.5%	13.1%
High school graduates, no college	34.9%	34.0%	41.1%	40.0%	30.3%	33.3%	27.8%
Some college, no degree	31.3%	25.9%	18.3%	16.1%	12.2%	12.9%	17.3%
Associate degree	8.5%	8.9%	8.6%	12.6%	10.5%	9.1%	9.4%
Bachelor's degree or higher	6.1%	12.7%	12.7%	22.4%	40.3%	33.2%	32.3%
Marital Status							
Married Spouse Present	17.6%	21.5%	26.1%	43.5%	51.5%	48.6%	49.2%
Marital Status Other	10.0%	12.9%	11.5%	14.1%	14.3%	18.8%	19.3%
Never Married	72.4%	65.6%	62.4%	42.5%	34.1%	32.7%	31.5%

¹ Both the U.S. and PA minimum wages were \$7.25 during 2019.
² All Employed includes hourly workers (minimum wage or below and above minimum wage) and workers not earning an hourly wage.
 Totals may not sum due to rounding.
 Source: U.S. Bureau of the Census, Current Population Survey

Gender

The gender composition of Pennsylvania's at or below minimum wage workers was most similar to that of other at or below minimum wage workers in the U.S. and to a lesser extent to those in Pennsylvania earning the near minimum wage (\$7.26 to \$12.00). The overall population of those 16 years and older in both Pennsylvania and the U.S. was almost evenly divided between males and females as was the total population of those earning above the minimum wage in Pennsylvania. The Pennsylvania population of all employed was also almost evenly divided between males and females. In contrast, females outnumbered males by almost 4 to 1 (78.6 percent to 21.4 percent) among at or below minimum wage workers in Pennsylvania during 2019.

Race

Whites represented a significant majority of Pennsylvania's at or below minimum wage workers, as they did for all of Pennsylvania's other reported wage categories. They were slightly overrepresented relative to their percentage of all employed and to their percentage in the population of those 16 and over. Conversely, they were underrepresented in the near minimum wage and above minimum wage populations in Pennsylvania.

Blacks made up the next highest percentage of all those employed and of the population in Pennsylvania. Their proportion of at or below minimum wage workers exceeded their percentage of the employed in Pennsylvania and that of the population 16 and older.

**Family Status and Family Income of Workers Paid Hourly Rates:
2019 Selected Groups in Pennsylvania and the U.S.
(numbers of workers in thousands)**

Characteristics	At or Below the Minimum Wage		Above the Minimum Wage		Total Hourly Workers
	PA ¹	U.S. ¹	Near	Total	U.S.
			PA	PA	
TOTAL	90.7	1,609	938.4	3,335.1	82,358
Family Status²					
No Children (Single or Married)	78%	77%	82%	75%	71%
Married Parent	12%	11%	11%	18%	20%
Single Parent	10%	11%	7%	7%	9%
1 child	7%	7%	5%	4%	5%
2 children	2%	3%	2%	2%	3%
3 children	1%	2%	1%	1%	1%
4 or more children	0%	1%	0%	0%	0%
Family Annual Income					
\$9,999 or less	3%	6%	7%	4%	3%
\$10,000 to \$19,999	12%	10%	11%	5%	6%
\$20,000 to \$29,999	17%	12%	12%	8%	9%
\$30,000 to \$39,999	5%	14%	11%	12%	12%
\$40,000 to \$49,999	6%	11%	7%	8%	9%
\$50,000 to \$59,999	8%	8%	9%	9%	10%
\$60,000 To \$74,999	7%	10%	10%	12%	13%
\$75,000 To \$99,999	17%	10%	12%	16%	14%
\$100,000 To \$149,999	11%	11%	12%	16%	14%
\$150,000 and Over	14%	9%	9%	10%	9%

¹ PA and U.S. minimum wages in 2019 were \$7.25.

² Classification of an individual as a parent requires having at least one own child under the age of 18. All references to children also refer to own children under the age of 18.

Totals in the table are rounded to the nearest percent and may differ from those in the text and may not sum correctly due to rounding.

Percentages less than one half of one percent were rounded to 0 percent.

Source: U.S. Bureau of the Census, Current Population Survey

Workers having no children made up 78 percent of those earning the minimum wage or less in Pennsylvania. Married parents constituted a slightly higher percentage (12 percent) than the corresponding U.S. population and near minimum wage population in Pennsylvania. The family status of those earning near the minimum wage in Pennsylvania was more like the nation's at or below minimum wage population than that of the Pennsylvania's minimum wage or below population.

In 2019, over 70 percent of the single parents in the Pennsylvania minimum wage or below population had one child. The remaining percentage was split between those with two children (slightly favored) and those with three children.

The family income of those who earned the minimum wage or less in Pennsylvania varied greatly. Over 43 percent of such workers were in families whose combined income was less than \$50,000 per year and 32 percent were in families with less than \$30,000 per year. In contrast, almost 42 percent had annual family incomes of \$75,000 or more a year and 25 percent had annual family incomes of \$100,000 or more per year. The distribution of near minimum wage workers in Pennsylvania was similar to the U.S. minimum wage or below population with more in families whose combined income was less than \$50,000 per year and fewer in households with annual family incomes of \$100,000 or more per year.



To: House Commerce Committee
Date: Feb. 16th, 2020
Re: Written Testimony in support of r
preemption

We are here to testify in support of raising the minimum wage in Pennsylvania. It is unacceptable that our state wage has not been raised since 2006, leaving Pennsylvania as the only state around us that has not raised its wages. We applaud the Commerce Committee and Chairs Representative Galloway and Representative Roae for having this important policy hearing.

WageLocal PA is a campaign that seeks to end minimum wage preemption in our state. We currently have legislation sponsored by Rep. Kevin Boyle that is circulating for cosponsors that would amend the Pennsylvania Minimum Wage Act to include language expressly authorizing municipalities to establish a local minimum wage. Section 14.1, which governs preemption.

I. Different costs of living

Pennsylvania is a diverse state with areas ranging from large urban centers, sprawling suburbs, small coal mining towns, and rural farming communities. The labor needs and the costs of living in each of these areas vary greatly. In 2018, the Center for Rural Pennsylvania conducted a study examining the cost of living in all PA counties.¹ Through their research, they found that Pennsylvania rural counties have a 7.9 percent lower cost of living than its urban counties. **The study also found that urban residents pay about 32.7 percent more on average than rural residents for their housing.** Additionally, housing costs differ significantly across our state. In Scranton, PA you need an hourly wage of \$13.68 to

¹ Kurre, James A. *Differences in the Cost of Living Across Pennsylvania's 67 Counties*. Harrisburg PA: The Center for Rural Pennsylvania.

afford the rent of a two-bedroom apartment.² However, in Philadelphia, you need an hourly wage of \$22.23 to afford the rent of a two-bedroom apartment.

With a state as diverse as PA, one standard minimum wage does not reflect the true cost of living in Philadelphia vs. Scranton. Local minimum wage policies allow local leaders to respond to differences in cost of living and economic and business circumstances.

II. Research shows that higher minimum wages help working families without **negative employment effects.**

Research shows that an increase in the minimum wage does not harm employment. A meta-analysis of over 200 empirical studies by Dale Belman and Paul J Wolfson **found that moderate increases in the minimum wage have “little or no effect on employment and hours.”**³ The authors concluded that raising the minimum wage increases the income of low wage workers, which in turn reduces inequality at the bottom of the earning scale. Another recent analysis from the *Quarterly Journal of Economics* looked at over 138 state minimum wage increases from 1979 to 2016. **The researchers found that the overall number of low-wage jobs remained unchanged over the five years following the increases.**⁴

As noted earlier, Pennsylvania is an outlier among other states around us for not raising the minimum wage. This allows for researchers to use our state in “border country analysis” that looks at the local impacts of minimum wages across adjacent counties. In 2019, the New York Federal Reserve released a report that compared retail and hospitality jobs in 19 counties along the PA-New York border. New York fast-food workers make \$12.75 an hour (the minimum wage has been increasing yearly since 2015) while in PA workers make \$7.25 an hour. The economists found that employment “at New York leisure and hospitality businesses along the border seems to be unaffected by the phasing in of the minimum wage increases.”⁵ **Interestingly, the authors noted that as the minimum wage increased to levels above \$10 an hour in New York countries, hospitality employment increased relative to businesses over the PA state lines.**

² “How much do you need to earn a modest apartment in your state.” *National Low Income Housing Coalition*, 2021. <https://reports.nlihc.org/oor>

³ Paul Wolfson & Dale Belman, Upjohn Inst. for Employ. Res., What Does the Minimum Wage Do? (2014).

⁴ Doruk Cengiz, Arindrajit Dube, Attila Lindner, Ben Zipperer, The Effect of Minimum Wages on Low-Wage Jobs, *The Quarterly Journal of Economics*, Volume 134, Issue 3, August 2019, Pages 1405–1454, <https://doi.org/10.1093/qje/qjz014>

⁵ Bram, Jason., Karaha, Faith., Moore, Bredan. “Minimum Wage Impacts along the New York-Pennsylvania Border” *Liberty Street Economics*. <https://libertystreeteconomics.newyorkfed.org/2019/09/minimum-wage-impacts-along-the-new-york-pennsylvania-border.html>

and can pass policies that reflect the community's values.⁸ Voters know that their local officials are in the best position to respond to the needs and exemplify the values of their constituents.

IV. Conclusion

Raising the minimum wage is a good start, but if we do not end wage preemption in Pennsylvania, we will never provide a living wage for further generations. Pennsylvania has not raised the minimum wage since 2006, and we can not expect our current legislative body to ever go above \$15 an hour for another 14 years. City councils and local governments know the values of their community and what is best for the people who live there. The state legislature must end minimum wage preemption while also increasing the minimum wage, or we run the risk of finding ourselves in this exact situation for decades to come. Local governments' hands will be tied, and workers will suffer the consequences of inaction. Our communities and our workers deserve better.

Thank you for the opportunity to submit written testimony. If you would like to get in touch with Wage Local PA, please email us at hello@wagelocalpa.com

Wage Local PA

Wage Local PA is a campaign launched by Partnership for Working Families, Power Interfaith, Pennsylvania United and countless organizations across the Commonwealth who support ending wage preemption.

⁸ "Poll Results: Groundbreaking New Polls on Local Democracy, Home Rule, Minimum Wage. *National Employment Law Center*. 2018. [Poll Results: Groundbreaking New Polls on Local Democracy, Home Rule, Minimum Wage](#)

Who will benefit from raising the minimum wage to \$15 by 2027 by Group	Total estimated workforce	Count directly affected	Share directly affected
Wage-earner	5,921,032	1,119,313	18.9%
Sex			
Male	2,983,028	428,190	14.4%
Female	2,938,004	691,122	23.5%
Age			
Teenager	322,946	268,656	83.2%
Age 20 or older	5,598,086	850,657	15.2%
Age 16 to 24	921,143	543,557	59.0%
Age 25 to 39	1,853,848	276,041	14.9%
Age 40 to 54	1,856,453	144,985	7.8%
Age 55 or older	1,289,587	154,730	12.0%
Race / ethnicity			
White, non-Hispanic	4,554,844	724,716	15.9%
Black, non-Hispanic	589,441	170,632	28.9%
Hispanic, any race	437,369	153,595	35.1%
Asian, non-Hispanic	235,333	41,103	17.5%
Other race/ethnicity	104,045	29,266	28.1%
Not person of color	4,554,844	724,716	15.9%
Person of color	1,366,188	394,596	28.9%
Family status			
Married parent	1,408,904	108,394	7.7%
Single parent	510,012	137,220	26.9%
Married, no children	1,651,275	146,977	8.9%
Unmarried, no children	2,350,840	726,721	30.9%
Usual weekly work hours category			
Part time (<20 hours per week)	633,058	334,150	52.8%
Mid time (20-34 hours)	805,275	358,196	44.5%
Full time (35+ hours)	4,482,699	426,966	9.5%
Educational attainment			
Less than high school	427,739	233,685	54.6%
High school	1,809,327	471,927	26.1%
Some college, no degree	1,108,697	300,494	27.1%
Associates degree	555,728	63,276	11.4%
Bachelors degree or higher	2,019,541	49,930	2.5%
Major Industry			
Agriculture, fishing, forestry, mining	66,242	17,403	26.3%
Construction	283,787	19,877	7.0%
Manufacturing	739,364	60,602	8.2%
Wholesale trade	167,104	21,637	12.9%

Retail trade	681,482	255,724	37.5%
Transportation, warehousing, utilities	338,410	33,806	10.0%
Information	99,540	8,274	8.3%
Finance, insurance, real estate	367,181	17,173	4.7%
Professional, science, management services	353,245	10,991	3.1%
Administrative, support, waste services	212,880	56,044	26.3%
Educational services	581,211	67,944	11.7%
Healthcare, social assistance	1,024,443	178,773	17.5%
Arts, entertainment, recreational services	105,479	40,611	38.5%
Accommodation	50,099	22,311	44.5%
Restaurants	357,483	229,868	64.3%
Other services	239,635	69,867	29.2%
Public administration	253,448	8,406	3.3%
Sector			
For profit	4,515,159	970,934	21.5%
Nonprofit	756,362	100,101	13.2%
Government	649,510	48,277	7.4%
Family income category			
Less than \$25,000	594,658	337,697	56.8%
\$25,000 - \$49,999	1,087,177	234,526	21.6%
\$50,000 - \$74,999	1,077,729	171,181	15.9%
\$75,000 - \$99,999	916,041	117,068	12.8%
\$100,000 - \$149,999	1,171,268	122,170	10.4%
\$150,000 or more	997,350	80,930	8.1%
Family income-to-poverty status			
In Poverty	389,437	278,464	71.5%
100 - 199% poverty	688,924	281,020	40.8%
200-399% poverty	1,857,773	330,257	17.8%
400%+ poverty	2,984,897	229,572	7.7%
Tipped occupations			
Not tipped	5,759,103	1,014,105	17.6%
Tipped worker	161,929	105,208	65.0%
State of residence			
alabama	545	15	2.7%
arizona	579	58	10.0%
arkansas	165	64	38.8%
california	891	62	6.9%
colorado	380	13	3.4%
connecticut	926	79	8.6%
delaware	31,702	2,893	9.1%
district of columbia	282	0	0.0%
florida	2,959	277	9.3%
georgia	1,545	51	3.3%
idaho	114	0	0.0%
illinois	854	63	7.4%
indiana	959	105	10.9%
iowa	229	0	0.0%

kansas	254	0	0.0%
kentucky	1,072	118	11.0%
louisiana	480	52	10.9%
maine	342	0	0.0%
maryland	16,420	2,011	12.3%
massachusetts	1,031	75	7.3%
michigan	1,162	67	5.7%
minnesota	367	241	65.7%
mississippi	142	10	6.8%
missouri	510	97	19.1%
nebraska	36	0	0.0%
nevada	13	0	0.0%
new hampshire	290	47	16.3%
new jersey	130,317	9,311	7.1%
new mexico	109	0	0.0%
new york	16,553	2,886	17.4%
north carolina	1,772	237	13.4%
north dakota	11	0	0.0%
ohio	20,614	2,444	11.9%
oklahoma	198	0	0.0%
oregon	71	0	0.0%
pennsylvania	5,667,087	1,095,994	19.3%
rhode island	204	22	10.6%
south carolina	601	5	0.9%
south dakota	24	0	0.0%
tennessee	777	63	8.2%
texas	2,373	340	14.3%
utah	88	0	0.0%
vermont	87	0	0.0%
virginia	2,040	82	4.0%
washington	361	48	13.3%
west virginia	13,171	1,474	11.2%
wisconsin	307	9	3.1%
wyoming	20	0	0.0%
	20	0	0.0%

Count indirectly affected	Share indirectly affected	Total affected directly or indirectly	Share of this group affected directly or indirectly	Share of the total affected in this group	Total change in annual wagebill	Average change in annual wages for year-round affected workers
511,115	8.6%	1,630,427	27.5%	100.0%	\$7,169,475,446	\$4,397
204,297	6.8%	632,488	21.2%	38.8%	\$2,566,993,151	\$4,059
306,818	10.4%	997,940	34.0%	61.2%	\$4,602,482,295	\$4,612
23,158	7.2%	291,814	90.4%	17.9%	\$1,617,430,076	\$5,543
487,956	8.7%	1,338,613	23.9%	82.1%	\$5,552,045,370	\$4,148
112,315	12.2%	655,872	71.2%	40.2%	\$3,464,039,092	\$5,282
171,037	9.2%	447,078	24.1%	27.4%	\$2,030,300,891	\$4,541
121,588	6.5%	266,573	14.4%	16.3%	\$944,629,888	\$3,544
106,174	8.2%	260,904	20.2%	16.0%	\$730,505,574	\$2,800
359,142	7.9%	1,083,859	23.8%	66.5%	\$4,553,016,394	\$4,201
65,169	11.1%	235,801	40.0%	14.5%	\$1,036,824,954	\$4,397
58,006	13.3%	211,601	48.4%	13.0%	\$1,010,663,692	\$4,776
19,058	8.1%	60,161	25.6%	3.7%	\$380,782,023	\$6,329
9,740	9.4%	39,006	37.5%	2.4%	\$188,188,383	\$4,825
359,142	7.9%	1,083,859	23.8%	66.5%	\$4,553,016,394	\$4,201
151,972	11.1%	546,569	40.0%	33.5%	\$2,616,459,052	\$4,787
83,151	5.9%	191,544	13.6%	11.7%	\$722,696,886	\$3,773
66,209	13.0%	203,430	39.9%	12.5%	\$929,957,974	\$4,571
114,060	6.9%	261,037	15.8%	16.0%	\$853,922,622	\$3,271
247,695	10.5%	974,417	41.4%	59.8%	\$4,662,897,963	\$4,785
71,073	11.2%	405,224	64.0%	24.9%	\$1,279,569,844	\$3,158
108,588	13.5%	466,784	58.0%	28.6%	\$2,478,530,457	\$5,310
331,453	7.4%	758,420	16.9%	46.5%	\$3,411,375,145	\$4,498
53,171	12.4%	286,856	67.1%	17.6%	\$1,452,909,124	\$5,065
230,012	12.7%	701,939	38.8%	43.1%	\$3,015,388,507	\$4,296
119,978	10.8%	420,472	37.9%	25.8%	\$1,901,760,866	\$4,523
48,127	8.7%	111,403	20.0%	6.8%	\$401,909,992	\$3,608
59,827	3.0%	109,757	5.4%	6.7%	\$397,506,956	\$3,622
5,479	8.3%	22,883	34.5%	1.4%	\$123,247,309	\$5,386
16,635	5.9%	36,511	12.9%	2.2%	\$83,379,524	\$2,284
50,306	6.8%	110,908	15.0%	6.8%	\$279,919,649	\$2,524
12,886	7.7%	34,523	20.7%	2.1%	\$108,740,275	\$3,150

86,308	12.7%	342,032	50.2%	21.0%	\$1,141,532,392	\$3,338
26,024	7.7%	59,830	17.7%	3.7%	\$146,360,393	\$2,446
3,687	3.7%	11,961	12.0%	0.7%	\$34,135,056	\$2,854
15,293	4.2%	32,467	8.8%	2.0%	\$70,737,188	\$2,179
10,435	3.0%	21,426	6.1%	1.3%	\$42,025,252	\$1,961
25,882	12.2%	81,926	38.5%	5.0%	\$269,868,213	\$3,294
30,293	5.2%	98,237	16.9%	6.0%	\$246,456,312	\$2,509
99,985	9.8%	278,758	27.2%	17.1%	\$830,336,471	\$2,979
16,989	16.1%	57,600	54.6%	3.5%	\$335,467,934	\$5,824
8,182	16.3%	30,494	60.9%	1.9%	\$168,957,013	\$5,541
58,893	16.5%	288,761	80.8%	17.7%	\$2,423,842,548	\$8,394
36,081	15.1%	105,948	44.2%	6.5%	\$833,914,746	\$7,871
7,757	3.1%	16,163	6.4%	1.0%	\$30,555,172	\$1,890
430,898	9.5%	1,401,832	31.0%	86.0%	\$6,490,526,289	\$4,630
52,108	6.9%	152,209	20.1%	9.3%	\$473,582,977	\$3,111
28,109	4.3%	76,386	11.8%	4.7%	\$205,366,180	\$2,689
96,991	16.3%	434,688	73.1%	26.7%	\$2,184,259,061	\$5,025
158,287	14.6%	392,813	36.1%	24.1%	\$1,577,604,843	\$4,016
94,413	8.8%	265,595	24.6%	16.3%	\$1,081,481,433	\$4,072
62,208	6.8%	179,276	19.6%	11.0%	\$729,864,252	\$4,071
59,360	5.1%	181,531	15.5%	11.1%	\$789,479,416	\$4,349
34,077	3.4%	115,007	11.5%	7.1%	\$503,965,859	\$4,382
43,386	11.1%	321,850	82.6%	19.7%	\$1,779,417,087	\$5,529
134,134	19.5%	415,154	60.3%	25.5%	\$1,788,320,323	\$4,308
205,135	11.0%	535,393	28.8%	32.8%	\$2,174,097,891	\$4,061
128,459	4.3%	358,031	12.0%	22.0%	\$1,427,640,145	\$3,987
454,394	7.9%	1,468,499	25.5%	90.1%	\$4,658,936,662	\$3,173
56,721	35.0%	161,929	100.0%	9.9%	\$2,510,538,784	\$15,504
0	0.0%	15	2.7%	0.0%	\$87,175	\$5,898
0	0.0%	58	10.0%	0.0%	\$100,940	\$1,742
0	0.0%	64	38.8%	0.0%	\$120,340	\$1,887
40	4.5%	102	11.4%	0.0%	\$440,708	\$4,330
0	0.0%	13	3.4%	0.0%	\$26,622	\$2,061
18	2.0%	98	10.5%	0.0%	\$560,426	\$5,740
2,600	8.2%	5,494	17.3%	0.3%	\$21,963,621	\$3,998
0	0.0%	0	0.0%	0.0%	\$0	
103	3.5%	380	12.8%	0.0%	\$2,938,115	\$7,737
47	3.0%	97	6.3%	0.0%	\$127,232	\$1,306
0	0.0%	0	0.0%	0.0%	\$0	
0	0.0%	63	7.4%	0.0%	\$183,239	\$2,906
43	4.5%	148	15.4%	0.0%	\$260,893	\$1,767
42	18.3%	42	18.3%	0.0%	\$34,726	\$827

47	18.5%	47	18.5%	0.0%	\$25,044	\$533
248	23.1%	366	34.1%	0.0%	\$755,425	\$2,065
39	8.1%	91	19.1%	0.0%	\$187,238	\$2,049
0	0.0%	0	0.0%	0.0%	\$0	
957	5.8%	2,968	18.1%	0.2%	\$11,277,111	\$3,799
17	1.7%	92	9.0%	0.0%	\$186,820	\$2,022
0	0.0%	67	5.7%	0.0%	\$191,912	\$2,882
1	0.4%	242	66.0%	0.0%	\$371,911	\$1,535
0	0.0%	10	6.8%	0.0%	\$85,737	\$8,927
0	0.0%	97	19.1%	0.0%	\$273,926	\$2,819
0	0.0%	0	0.0%	0.0%	\$0	
0	0.0%	0	0.0%	0.0%	\$0	
42	14.5%	89	30.8%	0.0%	\$674,328	\$7,540
6,381	4.9%	15,692	12.0%	1.0%	\$78,165,633	\$4,981
0	0.0%	0	0.0%	0.0%	\$0	
1,698	10.3%	4,584	27.7%	0.3%	\$20,802,885	\$4,538
117	6.6%	354	20.0%	0.0%	\$1,065,597	\$3,011
0	0.0%	0	0.0%	0.0%	\$0	
1,628	7.9%	4,071	19.8%	0.2%	\$14,365,070	\$3,528
0	0.0%	0	0.0%	0.0%	\$0	
0	0.0%	0	0.0%	0.0%	\$0	
495,990	8.8%	1,591,985	28.1%	97.6%	\$6,999,185,941	\$4,397
0	0.0%	22	10.6%	0.0%	\$15,568	\$723
0	0.0%	5	0.9%	0.0%	\$52,842	\$9,704
0	0.0%	0	0.0%	0.0%	\$0	
0	0.0%	63	8.2%	0.0%	\$256,901	\$4,048
98	4.1%	439	18.5%	0.0%	\$5,215,545	\$11,890
0	0.0%	0	0.0%	0.0%	\$0	
0	0.0%	0	0.0%	0.0%	\$0	
57	2.8%	139	6.8%	0.0%	\$366,826	\$2,643
0	0.0%	48	13.3%	0.0%	\$91,189	\$1,906
900	6.8%	2,374	18.0%	0.1%	\$8,970,374	\$3,779
0	0.0%	9	3.1%	0.0%	\$47,586	\$5,062
0	0.0%	0	0.0%	0.0%	\$0	
0	0.0%	0	0.0%	0.0%	\$0	

Average change in hourly wages	Average annual wage of all affected workers in counterfactual	Total wage increase for directly affected workers	Average change in annual wages for year-round directly affected workers	Average annual wage of directly affected workers in counterfactual	Total wage increase for indirectly affected workers
\$2.94	\$23,005	\$6,320,426,120	\$5,647	\$19,325	\$849,049,326
\$2.65	\$24,293	\$2,232,943,362	\$5,215	\$20,196	\$334,049,788
\$3.13	\$22,189	\$4,087,482,757	\$5,914	\$18,785	\$514,999,538
\$4.92	\$13,815	\$1,590,720,610	\$5,921	\$12,920	\$26,709,467
\$2.51	\$25,008	\$4,729,705,510	\$5,560	\$21,348	\$822,339,859
\$3.95	\$18,850	\$3,301,194,760	\$6,073	\$16,666	\$162,844,332
\$2.56	\$27,132	\$1,674,527,229	\$6,066	\$23,297	\$355,773,662
\$2.10	\$26,748	\$730,475,624	\$5,038	\$22,338	\$214,154,264
\$1.93	\$22,554	\$614,228,506	\$3,970	\$18,754	\$116,277,068
\$2.96	\$22,300	\$3,925,929,650	\$5,417	\$18,297	\$627,086,744
\$2.73	\$24,039	\$963,013,582	\$5,644	\$20,832	\$73,811,372
\$2.79	\$25,288	\$939,727,556	\$6,118	\$22,321	\$70,936,136
\$3.71	\$24,436	\$328,670,461	\$7,996	\$20,658	\$52,111,562
\$3.43	\$21,758	\$163,084,871	\$5,572	\$18,387	\$25,103,512
\$2.96	\$22,300	\$3,925,929,650	\$5,417	\$18,297	\$627,086,744
\$2.91	\$24,403	\$2,394,496,470	\$6,068	\$21,212	\$221,962,582
\$2.27	\$26,100	\$577,024,547	\$5,323	\$22,126	\$145,672,339
\$2.67	\$25,813	\$833,608,398	\$6,075	\$22,417	\$96,349,577
\$2.04	\$24,477	\$688,634,225	\$4,685	\$20,530	\$165,288,397
\$3.38	\$21,416	\$4,221,158,950	\$5,808	\$18,079	\$441,739,013
\$4.06	\$9,535	\$1,211,902,381	\$3,627	\$8,736	\$67,667,462
\$3.52	\$19,782	\$2,248,699,275	\$6,278	\$17,877	\$229,831,182
\$1.99	\$32,185	\$2,859,824,463	\$6,698	\$28,826	\$551,550,682
\$3.82	\$20,030	\$1,393,151,542	\$5,962	\$17,335	\$59,757,583
\$2.69	\$24,270	\$2,692,057,791	\$5,704	\$20,689	\$323,330,716
\$3.14	\$21,741	\$1,681,067,599	\$5,594	\$18,270	\$220,693,267
\$2.24	\$25,533	\$318,353,298	\$5,031	\$21,278	\$83,556,694
\$2.26	\$24,967	\$235,795,890	\$4,723	\$19,613	\$161,711,066
\$2.52	\$28,490	\$119,394,187	\$6,860	\$26,343	\$3,853,122
\$1.22	\$29,475	\$72,488,679	\$3,647	\$26,075	\$10,890,845
\$1.39	\$28,826	\$245,475,653	\$4,051	\$24,681	\$34,443,996
\$1.72	\$26,842	\$100,325,515	\$4,637	\$23,726	\$8,414,760

\$2.44	\$20,561	\$1,081,711,932	\$4,230	\$17,750	\$59,820,460
\$1.41	\$27,073	\$130,547,597	\$3,862	\$22,883	\$15,812,796
\$2.18	\$20,677	\$32,097,379	\$3,879	\$16,750	\$2,037,677
\$1.36	\$25,846	\$60,026,221	\$3,495	\$21,928	\$10,710,968
\$1.29	\$24,604	\$36,310,871	\$3,304	\$20,069	\$5,714,381
\$1.93	\$25,341	\$252,445,015	\$4,504	\$22,392	\$17,423,198
\$2.28	\$18,011	\$232,021,484	\$3,415	\$14,601	\$14,434,828
\$1.86	\$24,888	\$764,317,664	\$4,275	\$21,509	\$66,018,807
\$4.09	\$20,457	\$253,528,254	\$6,243	\$15,489	\$81,939,680
\$3.32	\$24,378	\$141,935,735	\$6,362	\$20,848	\$27,021,277
\$5.92	\$19,871	\$2,099,041,264	\$9,132	\$16,728	\$324,801,283
\$4.70	\$24,052	\$672,661,517	\$9,628	\$19,956	\$161,253,229
\$1.30	\$24,694	\$26,097,154	\$3,104	\$20,272	\$4,458,018
\$3.07	\$23,194	\$5,706,682,158	\$5,878	\$19,527	\$783,844,131
\$2.30	\$21,644	\$426,677,952	\$4,262	\$17,768	\$46,905,024
\$1.96	\$22,251	\$187,066,010	\$3,875	\$18,496	\$18,300,171
\$3.13	\$22,282	\$2,066,960,104	\$6,121	\$20,369	\$117,298,957
\$2.46	\$26,072	\$1,288,011,907	\$5,492	\$21,473	\$289,592,936
\$2.69	\$23,804	\$928,043,143	\$5,421	\$19,716	\$153,438,290
\$2.82	\$22,900	\$624,768,319	\$5,337	\$18,832	\$105,095,933
\$3.14	\$21,944	\$678,332,109	\$5,552	\$17,744	\$111,147,307
\$3.50	\$20,730	\$437,757,459	\$5,409	\$16,168	\$66,208,401
\$3.94	\$17,810	\$1,735,516,439	\$6,232	\$16,697	\$43,900,648
\$2.55	\$25,321	\$1,622,448,317	\$5,773	\$22,507	\$165,872,006
\$2.64	\$24,739	\$1,785,666,016	\$5,407	\$20,095	\$388,431,875
\$2.95	\$22,396	\$1,176,795,348	\$5,126	\$17,509	\$250,844,797
\$2.16	\$22,907	\$4,389,083,130	\$4,328	\$19,484	\$269,853,533
\$10.04	\$23,890	\$1,931,342,990	\$18,357	\$17,790	\$579,195,793
\$3.78		\$87,175	\$5,898	\$17,502	
\$1.76		\$100,940	\$1,742	\$12,988	
\$0.91		\$120,340	\$1,887	\$29,313	
\$2.72	\$22,164	\$421,352	\$6,846	\$20,320	\$19,356
\$1.59		\$26,622	\$2,061	\$17,439	
\$4.06	\$18,889	\$555,958	\$7,000	\$15,217	\$4,468
\$2.47	\$26,770	\$16,422,891	\$5,676	\$21,496	\$5,540,730
\$3.83	\$22,589	\$2,858,447	\$10,336	\$21,324	\$79,668
\$0.91	\$30,907	\$98,699	\$1,954	\$17,156	\$28,533
\$3.32		\$183,239	\$2,906	\$13,638	
\$0.82	\$33,003	\$254,282	\$2,427	\$29,591	\$6,610
\$0.32					\$34,726

\$0.26					\$25,044
\$1.08	\$27,350	\$530,665	\$4,503	\$25,939	\$224,761
\$0.78	\$40,371	\$131,445	\$2,506	\$37,841	\$55,793
\$2.28	\$26,196	\$10,000,516	\$4,972	\$23,263	\$1,276,595
\$4.52	\$14,239	\$177,994	\$2,372	\$13,550	\$8,826
\$1.79		\$191,912	\$2,882	\$25,697	
\$0.74	\$29,691	\$370,962	\$1,540	\$29,721	\$948
\$2.86		\$85,737	\$8,927	\$37,873	
\$2.22		\$273,926	\$2,819	\$12,704	
\$4.74	\$27,897	\$643,420	\$13,623	\$15,365	\$30,908
\$3.00	\$26,775	\$58,675,516	\$6,302	\$22,026	\$19,490,117
\$2.86	\$26,577	\$17,869,648	\$6,192	\$21,333	\$2,933,237
\$2.74	\$22,572	\$980,838	\$4,145	\$13,205	\$84,759
\$2.28	\$26,911	\$11,909,702	\$4,874	\$20,783	\$2,455,368
\$2.95	\$22,917	\$6,183,324,773	\$5,642	\$19,271	\$815,861,168
\$0.87		\$15,568	\$723	\$11,757	
\$3.06		\$52,842	\$9,704	\$37,876	
\$3.19		\$256,901	\$4,048	\$17,726	
\$5.42	\$28,156	\$5,159,370	\$15,156	\$28,099	\$56,175
\$2.43	\$17,155	\$337,046	\$4,117	\$11,731	\$29,780
\$1.11		\$91,189	\$1,906	\$21,976	
\$2.28	\$27,758	\$8,168,618	\$5,541	\$22,545	\$801,756
\$2.43		\$47,586	\$5,062	\$26,138	

Average change in annual wages for year-round indirectly affected workers	Average annual wage of indirectly affected workers in counterfactual
\$1,661	\$31,064
\$1,635	\$32,880
\$1,679	\$29,855
\$1,153	\$24,208
\$1,685	\$31,390
\$1,450	\$29,417
\$2,080	\$33,321
\$1,761	\$32,006
\$1,095	\$28,094
\$1,746	\$30,377
\$1,133	\$32,434
\$1,223	\$33,144
\$2,734	\$32,587
\$2,577	\$31,886
\$1,746	\$30,377
\$1,461	\$32,689
\$1,752	\$31,281
\$1,455	\$32,852
\$1,449	\$29,563
\$1,783	\$31,205
\$952	\$13,292
\$2,117	\$26,065
\$1,664	\$36,513
\$1,124	\$31,874
\$1,406	\$31,615
\$1,839	\$30,437
\$1,736	\$31,127
\$2,703	\$29,435
\$703	\$35,310
\$655	\$33,539
\$685	\$33,821
\$653	\$32,073

\$693	\$28,888
\$608	\$32,515
\$553	\$29,490
\$700	\$30,245
\$548	\$29,381
\$673	\$31,726
\$477	\$25,657
\$660	\$30,930
\$4,823	\$32,334
\$3,302	\$34,005
\$5,515	\$32,142
\$4,469	\$31,983
\$575	\$29,486

\$1,819	\$31,457
\$900	\$29,090
\$651	\$28,702

\$1,209	\$28,942
\$1,830	\$32,886
\$1,625	\$31,216
\$1,689	\$30,555
\$1,872	\$30,588
\$1,943	\$31,565

\$1,012	\$24,956
\$1,237	\$31,217
\$1,894	\$32,215
\$1,953	\$31,130

\$594	\$30,548
\$10,211	\$35,204

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\$481	\$24,985
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\$245	\$34,899
\$2,131	\$32,638

\$772	\$25,979
\$608	\$45,699

\$154	\$41,333
\$827	\$41,544

\$533	\$33,747
-------	----------

\$906	\$28,021
-------	----------

\$1,433	\$43,779
---------	----------

\$1,334	\$32,361
---------	----------

\$508	\$17,212
-------	----------

\$731	\$23,987
-------	----------

\$732	\$41,921
-------	----------

\$3,055	\$33,704
---------	----------

\$1,727	\$35,488
---------	----------

\$723	\$41,475
-------	----------

\$1,508	\$36,110
---------	----------

\$1,645	\$30,975
---------	----------

\$572	\$28,355
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\$523	\$24,953
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\$891	\$36,300
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Independent Fiscal Office

ANALYSIS OF REVENUE PROPOSALS

APRIL 2020

FY 2020-21 EXECUTIVE BUDGET



About the Independent Fiscal Office

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

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The Independent Fiscal Office was created
by the Act of Nov. 23, 2010 (P.L.1269, No.120).

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INDEPENDENT FISCAL OFFICE

April 23, 2020

The Honorable Members of the Pennsylvania General Assembly:

This report provides an analysis of the tax and revenue proposals included in the *2020-21 Executive Budget* released in February 2020. 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,

MATTHEW J. KNITTEL
Director

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Introduction

This report provides revenue estimates for the tax and revenue proposals contained in the *2020-21 Executive Budget* released in February 2020. 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 the tax and revenue proposals included in the *2020-21 Executive Budget* and the corresponding impact on General Fund revenues over a five-year period. The text includes brief descriptions of the data sources and methodologies used to derive the revenue estimates, as well as an interstate comparison of corporate net income tax (CNIT) rates and filing methods. The second section analyzes the proposal to increase the state minimum wage from \$7.25 to \$12.00 per hour. It discusses potential employment effects, income effects and implications for General Fund revenues and expenditures. Currently, no state has a \$15.00 minimum wage that could be used to inform potential outcomes from further increasing the minimum wage to that level. Hence, the section provides only general comments on the proposed increase in the state minimum wage from \$12.00 to \$15.00 per hour over a six-year period.

The analyses contained in this report are based on descriptions from the *2020-21 Executive Budget* and, when available, technical language provided by the administration. For this year, the administration provided language for the proposed CNIT rate reduction and enactment of combined reporting, but language was not available for the proposed increase in the minimum wage or the newly proposed transfers.

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Tax and Revenue Proposals

The *2020-21 Executive Budget* proposes (1) changes to the corporate net income tax (CNIT), (2) new transfers from the personal income tax (PIT), sales and use tax (SUT) and cigarette tax to various funds and (3) a modification of the transfer from the Video Gaming Fund to the General Fund. This analysis projects that the proposals will reduce General Fund revenues by \$145 million in fiscal year (FY) 2020-21. The reduction is projected to increase to \$1.1 billion by FY 2024-25.

Table 1.1
General Fund Revenue Impact Summary

	20-21	21-22	22-23	23-24	24-25
Corporate Net Income Tax	-\$9	-\$12	-\$219	-\$534	-\$787
Sales and Use Tax	-5	-12	-12	-12	-12
Cigarette Tax	-115	-115	-115	-115	-115
Personal Income Tax	-14	-14	-13	-11	-176
Gaming Taxes	<u>-2</u>	<u>n.a.</u>	<u>n.a.</u>	<u>n.a.</u>	<u>n.a.</u>
Total	-145	-153	-359	-673	-1,091

Note: Figures in dollar millions. The need for reduced Video Gaming Fund transfers in future years is undetermined at this time.

Corporate Net Income Tax

The administration's proposal (1) reduces the CNIT rate from 9.99 percent to 8.99 percent for tax years beginning in 2021, 8.29 percent for tax years beginning in 2022, 7.49 percent for tax years beginning in 2023, 6.99 percent for tax years beginning in 2024 and 5.99 percent for tax years beginning in 2025 and thereafter and (2) requires corporations that are members of a unitary business group to apportion their income via a combined annual report for tax purposes, a filing method commonly known as combined reporting, effective for tax years beginning in 2021 and thereafter.¹

Background and Methodology

The CNIT proposal was analyzed in the following order: (1) combined reporting and (2) rate reduction. The stacking order does not affect the total net impact of the proposal, but it does change the relative magnitude of the individual combined reporting and rate reduction estimates. Previous IFO analyses scored the

¹ A unitary business is a single economic enterprise that is comprised of separate parts of a single business entity or of a commonly controlled group of business entities that are sufficiently interdependent, integrated and interrelated through their activities so as to provide a synergy and mutual benefit that produces a sharing or exchange of value among them and a significant flow of value to the separate parts. Source: "Allocation and Apportionment Regulations" Multistate Tax Commission (MTC) www.mtc.gov/uploadedFiles/Multistate_Tax_Commission/Uniformity/Uniformity_Projects/A_-_Z/AllocationandApportionmentReg.pdf.

impact of the rate reduction first, but the stacking order was reversed to facilitate a comparison to the Department of Revenue (DOR) estimate (utilized for the Executive Budget). Due to this reversal, the separate rate reduction and combined reporting estimates will appear larger than estimates published by the IFO in previous years.

Combined Reporting

Under mandatory combined reporting, multi-state businesses that form a unitary group are required to file a combined return as if the related entities were a single corporation. The combined return reflects the net income or loss associated with the business operations of all members of the unitary group and income is apportioned to the taxing jurisdiction based on the activity of the combined group in that jurisdiction. Supporters assert that this filing method reduces a firm's ability to shift profits to lower or no tax states through related-party transactions and is subject to less manipulation by firms. Supporters also note that the filing method will "level the playing field" because Pennsylvania-only firms cannot shift profits to other states. Opponents assert that it will subject profits to tax that have little or no economic connection to the state and constrain economic growth. They also assert that the filing method will introduce significant administrative complexity.

Determination of the unitary group is a key component of combined reporting and is generally based on the ownership of the group, as well as the relationships between the corporations within the group. Estimating the impact from the enactment of combined reporting is subject to uncertainty, largely because tax authorities lack full information regarding the characteristics of potential unitary groups. Compared to separate entity reporting, the overall taxable income and apportionment for each member of the group will change based on the group's composition, and some groups will realize an increase in tax liability, while others realize a reduction. The determination of the unitary group can be complicated, subjective and could be the subject of lengthy litigation.

Despite this uncertainty, tax administrators and most academics believe that combined reporting increases tax collections in high tax rate states because it eliminates various methods that can be used to shift profits to low or no tax states. The combined reporting methodology described later in this section relies on a basic statistical comparison and revenue trends from three states that have enacted combined reporting. The results from that comparison are corroborated by revenue estimates published by seven states that recently enacted combined reporting. Two other states did not publish an estimate due to the uncertainty of the revenue impact.

Rate Reduction

The estimate applies the proposed rate reduction to the IFO's most recent CNIT baseline projection after adjustment for combined reporting. It is noted that the baseline projection disregards the anticipated large reduction in calendar year (CY) 2020 profits due to COVID-19. Therefore, the estimate reflects the revenue impact that could be anticipated when the state economy operates close to full capacity. This assumption also facilitates a comparison to the estimates published in the Executive Budget released in February 2020 because those figures did not assume an economic downturn. The IFO estimate includes a behavioral impact that partially offsets the static revenue loss due to the lower tax rate. When fully phased in, the 40 percent reduction in the tax rate should be sufficient to have a positive impact on firms' location decisions.

Interstate Comparison

Table 1.2 provides a comparison of (1) state CNIT rates and (2) applicable reporting methods. Forty-four states currently levy a CNIT, with the highest statutory rate (12.00 percent) levied by Iowa and the third highest levied by Pennsylvania (9.99 percent).² Fourteen states use a graduated rate structure, while 30 levy a flat rate. Since 2008, 16 states and the District of Columbia have reduced their top CNIT rate.³

Table 1.2
States with Corporate Net Income Tax

State	Tax Rate	Method	State	Tax Rate	Method
Alabama ¹	6.50%	Separate	Minnesota	9.80%	Combined
Alaska	0.00 - 9.40%	Combined	Mississippi	3.00 - 5.00%	Multiple
Arizona	4.90%	Combined	Missouri ²	4.00%	Separate
Arkansas	1.00 - 6.50%	Separate	Montana	6.75%	Combined
California	8.84%	Combined	Nebraska	5.58 - 7.81%	Combined
Colorado	4.63%	Combined	New Hampshire	7.70%	Combined
Connecticut	7.50%	Combined	New Jersey	6.5 - 10.5%	Combined
Delaware	8.70%	Separate	New Mexico	4.80 - 5.90%	Combined
Florida	4.46%	Separate	New York	6.50%	Combined
Georgia	5.75%	Separate	North Carolina	2.50%	Multiple
Hawaii	4.40 - 6.40%	Combined	North Dakota	1.41 - 4.31%	Combined
Idaho	6.93%	Combined	Oklahoma	6.00%	Separate
Illinois	9.50%	Combined	Oregon	6.60 - 7.60%	Combined
Indiana	5.50%	Multiple	Pennsylvania	9.99%	Separate
Iowa ²	6.00 - 12.00%	Separate	Rhode Island	7.00%	Combined
Kansas	4.00 - 7.00%	Combined	South Carolina	5.00%	Multiple
Kentucky	5.0%	Combined	Tennessee	6.50%	Multiple
Louisiana ¹	4.00 - 8.00%	Separate	Utah	4.95%	Combined
Maine	3.50 - 8.93%	Combined	Vermont	6.00 - 8.50%	Combined
Maryland	8.25%	Separate	Virginia	6.00%	Multiple
Massachusetts	8.00%	Combined	West Virginia	6.50%	Combined
Michigan	6.00%	Combined	Wisconsin	7.90%	Combined

Notes: States designated as "multiple" generally require separate reporting, but either allow taxpayers to elect another form of reporting, or may require combined reporting based on audits. Indiana's rate decreases to 5.25% on July 1, 2020.

1 State allows corporation to deduct all federal taxes paid from state taxable income.

2 State allows corporation to deduct up to 50% of federal taxes paid from state taxable income.

Source: CCH State Tax SmartCharts (April 2020).

As of 2020, 27 states and the District of Columbia require combined reporting for businesses that meet unitary group standards. The most recent states to enact combined reporting were Kentucky and New Jersey (both in 2018) and New Mexico (2019). The remaining 17 states that levy a CNIT require separate

² However, Iowa allows a deduction for one-half of federal income tax paid so that the effective tax rate is $12.00 * (1 - 0.21 * 0.5) = 10.74$ percent.

³ Wolters Kluwer, Commerce Clearing House State Tax, 2020.

reporting. Six states that require separate reporting have processes in place where (1) a firm can elect to use a different filing method (e.g., consolidated) or (2) the state tax authority can require a firm to file a combined return based on audit results.

Combined Reporting Base Expansion Analysis

In 2013, the IFO issued a report which used research from states that implemented combined reporting during the previous decade to examine the revenue impact from the enactment of that filing method.⁴ The report found that combined reporting could increase revenues by roughly 9 to 13 percent when compared to control states that did not enact combined reporting. As an update to that analysis, the IFO reviewed CNIT collections and gross domestic product (GDP) data for three large states (Massachusetts, New York and Wisconsin) that implemented combined reporting since 2006 to determine the impact that filing method had on state tax collections.⁵

Table 1.3
Average Annual Growth Rate of Corporate Tax Revenues and State Economies

	U.S.	Control States	Enacted Combined Reporting		
			MA	NY	WI
CNIT Revenue ¹	2.2%	1.7%	4.2%	3.7%	3.5%
Private GDP	<u>3.2%</u>	<u>3.0%</u>	<u>3.8%</u>	<u>4.1%</u>	<u>3.1%</u>
Difference	-1.0%	-1.3%	0.5%	-0.4%	0.4%

Note: See footnote 7 for a description of the growth rate computation.

¹ Data through FY 2016-17 are from the U.S. Census Bureau's Annual Survey of State Government Tax Collections. Data for the U.S. is based on U.S. corporate domestic profits.

Sources: U.S. Census Bureau and U.S. Bureau of Economic Analysis.

The analysis uses a basic statistical comparison to estimate the net tax base expansion attributable to the enactment of combined reporting. The test compares the difference in average growth rates for private state GDP and CNIT revenues for three combined reporting states, 11 control states and the United States from 2006 to 2016 using a three-year average.^{6, 7} There should be a positive relationship between state economic growth and CNIT revenues over the 10-year period: higher state economic growth should be positively correlated with corporate profits and CNIT revenues. For the 11 control states and the U.S., the analysis finds that average CNIT revenue growth underperformed private GDP growth by an average of

⁴ See "Corporate Tax Base Erosion: Analysis of Policy Options," Independent Fiscal Office (March 2013) <http://www.ifo.state.pa.us/releases.cfm?id=103>.

⁵ For combined reporting and control states that also enacted a rate reduction during the period considered in the analysis, revenues were adjusted to account for the rate change.

⁶ The 11 control states are economically diverse states and are not highly dependent on natural resources or other particular sectors (e.g., high tech). Control states include Pennsylvania, Alabama, Florida, Georgia, Iowa, Indiana, Maryland, Minnesota, Missouri, New Jersey (prior to implementation of combined reporting) and Virginia.

⁷ The analysis used three-year averages at the start and end of the period due to the inherent volatility of CNIT revenues and, by extension, the tax base. For example, the starting point for CNIT revenues is the average of FY 2004-05 to FY 2006-07 and the end point is the average of FY 2014-15 to FY 2016-17. For GDP, the starting point is the average of CY 2005 to CY 2007 and the end point uses CY 2015 to CY 2017. The GDP computation excludes the government sector.

1.1 percentage points during the time period under consideration. (See **Table 1.3.**) By comparison, revenue growth for the three states that enacted combined reporting during this period outperformed private GDP growth by an average of 0.2 percentage points.⁸

This comparison suggests that the change in filing method may have expanded the tax base in combined reporting states and led to higher CNIT revenue growth rates than would otherwise be expected. Given average state GDP growth of 3.0 to 3.5 percent per annum, a reduction in the growth rate differential of 1.0 percentage point between state GDP and CNIT revenues is roughly equivalent to a 12 percent tax base expansion for combined reporting states.⁹ In other words, if combined reporting increases the average CNIT growth rate by 1.0 percentage point per annum, it is similar to a 12 percent base expansion for most states.

Combined Reporting Revenue Impacts in Other States

Since 2006, 11 states have adopted combined reporting and **Table 1.4** displays the revenue estimates related to the adoption of the reporting method in each state. The estimates only reflect the impact from combined reporting, and exclude other tax policy changes adopted simultaneously as part of larger tax reform packages across states. Estimates in Table 1.4 represent the first full fiscal year of revenue impacts except for Rhode Island, which was measured on a tax year (TY) basis.

The table illustrates state revenue estimators' consensus regarding the fiscal impact of adopting combined reporting. Since 2006, most states that adopted combined reporting estimated a base expansion between 5 to 10 percent. In 2003, Wisconsin's Department of Revenue employed an estimation methodology that used tax return data from Minnesota to match taxpayers based on federal taxpayer identification numbers.¹⁰ Using this method, Wisconsin estimated a base expansion of 4.2 percent for non-bank corporate taxpayers. In 2007, the Wisconsin Legislative Fiscal Bureau updated the combined reporting base expansion estimate to approximately 11 percent for all corporate taxpayers (including banks).

Maryland and Rhode Island analyzed *pro forma* reports to estimate the fiscal impact from the adoption of combined reporting. Both states enacted legislation that required corporate taxpayers that were part of a unitary group to file an additional return that showed the combined income of the unitary group and its state CNIT liability if combined reporting had been in effect. In Maryland, the results of the *pro forma* reports indicated that combined reporting could increase tax collections as much as 23 percent in TY 2006, falling to an increase of approximately 4 percent by TY 2010. In 2019, Maryland updated this estimate to reflect changes in the economy and CNIT revenues and estimated an 8 percent increase in fiscal year CNIT collections due to the adoption of combined reporting.¹¹ In 2014, Rhode Island used the results of its *pro*

⁸ The three states that enacted combined reporting effective for tax years are as follows: New York (2006), Massachusetts (2008) and Wisconsin (2008). Because the analysis tracks the impact many years following enactment of combined reporting, it reflects any long-term actions undertaken by firms in response to the new filing method. In the absence of any response, some firms would realize a doubling or tripling of their tax liability (or greater) and they would likely require several years to adjust their operations to the new state tax regime if they elected to do so.

⁹ The statistical analysis suggests a growth rate differential closer to 1.3 percentage points. The estimate uses a figure that is slightly lower to account for the recent Pennsylvania Corporation Tax Bulletin 2019-04 which provides guidance on economic nexus and clarifies the CNIT filing requirement for firms with more than \$500,000 in annual gross receipts sourced to Pennsylvania with or without a physical presence in the state. The revenue impact of this change has not been quantified, but it is assumed that it would reduce the size of a base expansion due to combined reporting.

¹⁰ This is similar to the approach utilized by DOR to produce the estimate published in the Executive Budget.

¹¹ Maryland S.B. 377, 2019, Fiscal Note. http://mqaleg.maryland.gov/2019RS/fnotes/bil_0007/SB0377.pdf.

forma study to estimate a CNIT increase of approximately 20 percent due to the adoption of combined reporting.¹² A post-implementation study completed in 2018 estimated that combined reporting increased CNIT revenues by 28 percent, or \$37.8 million after it became effective in TY 2015. However, Rhode Island’s size makes it an outlier with state CNIT collections totaling \$155.0 million in FY 2018-19.

Table 1.4
Combined Reporting Base Expansion Estimates in Other States

State	Tax Year CR Effective	Year Est. Prepared	Est. Impact (\$ Millions)	Est. Base Expansion	Comments
Pennsylvania	--	2020	\$989	29%	Est. uses Minnesota tax return data.
New York	2007	2008	315 - 420	6-8%	
Wisconsin	2008	2007	76	11%	2003 est. uses Minnesota tax return data. 2007 est. includes banks.
Massachusetts	2008	2007	188	9%	
West Virginia	2009	2007	24 - 28	8-10%	Based on experience of other states.
Rhode Island	2015	2018	38	28%	Post-implementation evaluation.
Connecticut	2016	2015	39	5%	
Kentucky	2018	2018	--	--	Unable to score revenue impact.
New Jersey	2018	2016	115 - 280	5-10%	Based on experience of other states.
New Mexico	2020	2019	--	--	Unable to score revenue impact.
Maryland	--	2019	90	8%	2010 <i>pro forma</i> reporting analysis updated for changes in economy.

Notes: Base expansion and dollar impact estimates relate to the first full fiscal year of tax impacts. The base expansion estimate relates to the impact of combined reporting only and does not incorporate impact of other simultaneous tax law changes. Vermont and Michigan adopted combined reporting after 2006 but were not included in this table because detailed revenue impact analyses could not be located. Texas also adopted mandatory combined reporting for its Margin Tax during this period, but this state is not included because it does not collect a traditional corporate income tax.

Sources: Pennsylvania base expansion estimate developed by the Pennsylvania Department of Revenue. Other state estimates from a survey of select states by the National Conference of State Legislatures, various state fiscal notes, analyses and reports.

¹² “Tax Administrator’s Study of Combined Reporting,” Rhode Island Department of Revenue, Division of Taxation (March 2014).

More recently, West Virginia and New Jersey based their revenue estimates of combined reporting on the experience of states that adopted the filing method. Kentucky and New Mexico were unable to score a revenue impact related to combined reporting. Both states assumed an indeterminable positive impact, and New Mexico estimators asserted that "it is impossible to estimate the impact or determine with certainty whether the total effect would be positive or negative."¹³

Revenue Impact and Estimate Comparison

Table 1.5 provides fiscal year detail for the estimated revenue impact of combined reporting and rate reduction developed by the IFO and DOR. As noted, the estimates assume normal profits growth and disregard the anticipated profits reduction in CY 2020 due to COVID-19. For the IFO, the proposal reduces revenue by \$9 million for FY 2020-21. By the end of the five-year window, the net impact of the proposal is a revenue reduction of \$787 million due to the CNIT rate reduction. The DOR anticipates that the proposal will require updates to the business tax system and additional staff training at a one-time cost of \$1 million (not included in table).

	20-21	21-22	22-23	23-24	24-25	Total
Independent Fiscal Office						
Combined Reporting	\$66	\$324	\$432	\$411	\$417	\$1,651
Rate Reduction	<u>-75</u>	<u>-336</u>	<u>-651</u>	<u>-945</u>	<u>-1,205</u>	<u>-3,212</u>
Total	-9	-12	-219	-534	-787	-1,561
Department of Revenue						
Combined Reporting	293	989	1,008	1,040	1,082	4,412
Rate Reduction	<u>-53</u>	<u>-573</u>	<u>-834</u>	<u>-1,171</u>	<u>-1,518</u>	<u>-4,148</u>
Total	240	416	174	-131	-435	264

Note: Figures in dollar millions. Both estimates assume combined reporting is enacted first, followed by a rate reduction.

Source: Department of Revenue Estimate as of February 2020.

Based on a request from the Senate Appropriations Committee, the analysis concludes with a comparison of the IFO revenue estimate and key assumptions to the same proposal included in the Executive Budget. The estimated base expansion due to combined reporting is the primary driver of the difference between the estimates. Because the DOR estimate of combined reporting is higher than IFO, the estimated revenue loss from rate reduction is commensurately higher too. For TY 2021, the IFO estimates a combined reporting base expansion of 12 percent while DOR estimates a base expansion of 29 percent. Four additional factors could impact the amount of revenue generated from the adoption of combined reporting: (1) the timing of payments, (2) proposed treatment of prior and future net operating losses (NOLs), (3) any pre-existing addback provisions and (4) taxpayer behavior related to changes in liability. The text that follows discusses the potential impact of these factors.

¹³ New Mexico, H.B. 6, 2019, Fiscal Impact Report. <https://nmlegis.gov/Sessions/19%20Regular/firs/HB0006.PDF>.

Timing of Payments

The IFO estimate assumes that only 15 percent of firms' net additional TY 2021 liability under combined reporting will be remitted with the March and June estimated payments in FY 2020-21. The switch to combined reporting creates uncertainty regarding final state tax liability, especially in the first tax year, as unitary group members and apportionable income are determined. The administration's proposal does not include language that requires taxpayers to remit estimated payments in equal installments and current law only requires that the safe harbor must be met prior to the end of the tax year.¹⁴

The DOR estimate assumes a different pattern of payments based on their analysis of 2018 tax returns after passage of the federal Tax Cuts and Jobs Act (TCJA). DOR observed that 62 percent of firms anticipating a higher tax liability due to the TCJA increased their March and June estimated payments by 26 percent overall. According to a DOR memorandum transmitted to the House Appropriations Committee, the 26 percent increase was used to apportion the revenue impact for firms with higher tax liability under combined reporting to the March and June payments.¹⁵ The memorandum does not discuss how firms with a tax liability reduction were treated, but it appears that more of the revenue loss hits in the latter part of the year (i.e., the September or December estimated payments or final payments).

Although the TCJA expanded both the federal and state tax base, it also enacted an immediate federal rate cut of 14 percentage points, a 40 percent reduction in corporate tax liability due to the rate change alone. Firms had a strong incentive to shift taxable income out of TY 2017 (taxed at 35 percent) into TY 2018 (taxed at 21 percent). Therefore, increased TY 2018 estimated payments could be attributable to the base expansion, but could also be attributable to profits shifting or simply normal profits growth during an economic expansion. The IFO estimate does not assume that firms will voluntarily remit significantly higher payments until they are required to do so.

Table 1.6 provides additional detail on the pattern of Pennsylvania estimated payments remitted by firms for TY 2017 (before the passage of the TCJA) and TY 2018 (after the passage of the TCJA). These payments largely correspond to the majority of corporations that have a tax year that begins in January and ends in December.

The table shows that while TY 2018 payments were 17.0 percent higher than TY 2017 payments, estimated payments grew only 9.0 percent year-over-year (YOY) in March and 5.5 percent YOY in June. Pennsylvania corporate taxpayers largely reflected the impact of the federal base expansion and any profits shifting in the September and December estimated payments, (20.0 and 25.7 percent YOY growth, respectively) and March through June final payments in 2019 (20.9 percent).

The IFO estimate assumes that firms would respond in a similar manner due to the adoption of combined reporting in Pennsylvania: the great majority would not be realized in the first fiscal year following enactment (i.e., the March and June estimated payments). Moreover, firms will likely know the impact of rate

¹⁴ The safe harbor is the total minimum amount of estimated payments that must be remitted during a tax year to avoid underpayment penalties. The current year safe harbor is the actual tax due from the second preceding tax year recomputed using current year rates and base. Prepayments for first-year corporations that have no safe harbor must be based on 90% of actual tax liability.

¹⁵ See pages 1 and 17 from DOR written responses to FY 2020-21 Budget Hearing Questions, February 28, 2020, https://www.pahouse.com/files/BudgetHearingTestimony/2020-21/03-09/REV_BdgHearingResponse_022820.pdf.

reduction immediately, and reflect that in payments, compared to the greater uncertainty of combined reporting.

Table 1.6
Impact of Tax Cuts and Jobs Act on CNIT Payments

Payments	March	June	Sept	Dec	Finals	Total
Tax Year 2017	\$277	\$414	\$413	\$376	\$671	\$2,151
Tax Year 2018	302	437	495	472	811	2,517
Growth Rate	9.0%	5.5%	20.0%	25.7%	20.9%	17.0%

Note: Figures in dollar millions. Payments largely correspond to firms with a tax year that ends in December. Payments for March, June, September and December are estimated payments only. Final payments include all final payments made March to June.

Source: Pennsylvania Department of Revenue, Corporate Net Income Tax Collections, TY 2017-2018.

Treatment of Net Operating Losses

The DOR estimates that the stock of prior-year NOL carryforwards is \$2 billion for firms that file a Pennsylvania CNIT return. Therefore, restrictions on NOL deductions for unitary group members can have a significant impact on the revenue estimate for combined reporting.

The administration’s proposal allows the same treatment of NOLs whether generated prior to or after the enactment of combined reporting for members of the new unitary group. At the unitary group level, total NOL deductions are capped at 40 percent of the unitary group’s taxable income after apportionment. At the individual member level, there is no restriction in the application of NOLs, but NOL deductions are limited to the “member’s share of combined unitary income after the apportionment.”¹⁶ This application of NOLs is generally more narrow than other states, and would likely have a positive impact on any revenue attributable to the enactment of combined reporting.

Addback Provision

Addback provisions are adopted predominately by separate reporting states to isolate and disallow deductions for intercompany transactions such as royalties, interest and management fees. Academic studies of addback provisions (both broad and narrow) generally find a weak to modest positive revenue impact in states that adopt these provisions.¹⁷

¹⁶ See Pennsylvania H.B. 1445, Sec. 4(h), 2020.

<https://www.legis.state.pa.us/cfdocs/billInfo/billInfo.cfm?sYear=2019&sInd=0&body=H&type=B&bn=1445>.

¹⁷ Gupta et al., (2009) find a weak positive impact from addback provisions on CNIT revenues, while Fox and Luna (2010) find addback provisions have a statistically significant positive impact on CNIT revenues. In the IFO’s (2013) analysis of combined reporting, addback provisions do not attain statistical significance, but the report notes these provisions could increase CNIT revenues by 2 to 5 percent.

For TY 2015, an addback provision for intangible expenses became effective for Pennsylvania CNIT filers. The DOR estimates that the addback provision generates roughly \$40 to \$50 million in additional CNIT revenue annually. The addback provision reverses certain tax shifting transactions that combined reporting is designed to prevent, thereby reducing the potential revenue impact from the enactment of mandatory combined reporting. Nine of the 11 states listed in Table 1.4 (page 9) enacted an addback provision prior to the enactment of combined reporting, the exceptions being New Mexico and West Virginia. Therefore, in this regard, these states are similar to Pennsylvania and the revenue estimates for combined reporting reflect the prior enactment of an addback provision.

Taxpayer Behavior

The IFO estimate includes behavioral adjustments that attempt to reflect taxpayer responses to increasing/decreasing Pennsylvania tax liability. This is accomplished in two ways. First, the combined reporting estimate considers the impact on states that enacted combined reporting over many years to gauge the long-term impact of that policy change on firm operations. Second, the negative rate reduction estimate is reduced from a pure “static” estimate to reflect that a lower tax rate should attract more economic activity and reduce any profit shifting not addressed through combined reporting. While the complete phase-in of the rate reduction will reduce net tax liability for some firms by 40 percent, combined reporting will increase tax liability for a relatively small group of firms by a factor of two, three, four or more. For combined reporting in particular, it is appropriate to assume that certain firms will attempt to adjust their long-term operations, to the extent they are able, in response to the policy change.

Table 1.7
Pennsylvania DOR Estimated Winners/Losers

Class	Count	Share of Firms	CNIT Liabilities			% Change CR Only
			Current	CR and 5.99%	CR Only	
Ties	74,427	62%	\$0	\$0	\$0	0%
Winners	40,650	34%	2,136	958	1,597	-25%
Losers	<u>5,863</u>	<u>5%</u>	<u>224</u>	<u>863</u>	<u>1,439</u>	<u>543%</u>
Total	120,940	100%	2,359	1,821	3,037	29%

Note: Figures in dollar millions. Combined Reporting (CR) Only and % Change CR Only columns do not reflect the impact of a rate reduction. The columns Share of Firms, CR Only, and % Change CR Only are IFO calculations based on data provided by DOR in its budget hearing responses. The figures for CR Only, were generated by undoing the rate reduction impact, or multiplying the CR and 5.99% column by 9.99/5.99.

Source: Pennsylvania Department of Revenue, Budget Hearing Responses, February 28, 2020.

Table 1.7 provides a summary of estimates from the DOR analysis of 2015 tax return data used to inform the administration’s net combined reporting and rate reduction estimate. The analysis examined the impact from the enactment of (1) combined reporting and (2) a rate reduction to 5.99 percent. These are the figures from the first four columns of the table. The final two columns reflect the impact of combined reporting only. The total liability of \$3,037 million and the 29 percent base expansion from combined

reporting as well as the distribution of winners and losers are referenced in the DOR budget hearing response letter to the House Appropriations Committee.¹⁸

For combined reporting only, the analysis finds that:

- 62 percent of firms would be unaffected because they had no tax liability for the tax year;
- 34 percent of firms would realize, on average, a 25 percent reduction in liability;
- 5 percent of firms would realize, on average, a 543 percent increase in Pennsylvania tax liability. Approximately \$1.2 billion of the estimated additional revenue from combined reporting is attributable to 5 percent of firms filing in Pennsylvania.

The DOR analysis illustrates that the potential revenue gains from combined reporting are very concentrated across a relatively small number of firms that will have significantly higher tax liability if they do not react to the new filing regime. The IFO estimate assumes that these firms would adjust their operations and will not voluntarily remit payments that, on average, are four or five times greater than their current tax bill. Although a rate reduction is also proposed, the reduction is phased-in over five years and it is common for states to temporarily or permanently delay scheduled rate reductions if revenues are needed. An example of this outcome is the long-delayed phase-out of the capital stock and franchise tax. Therefore, while combined reporting is effective immediately and will not be reversed, rate reduction is phased-in over five years and there exists a precedent that it would not occur as scheduled.

Table 1.8 concludes the analysis with detail from a recent DOR presentation at the Federation of Tax Administrators conference regarding changes in Pennsylvania tax liability across selected industries due to combined reporting. As noted, the DOR analysis finds that the CNIT base would expand by 29 percent under combined reporting. Tax liabilities increase for most industries other than agriculture and transportation/warehousing. The analysis finds that the mining, manufacturing and retail trade industries would realize the largest percentage increase in tax liability (49, 43 and 43 percent, respectively). These estimates reflect the impact of combined reporting only, and exclude any proposed rate reduction.

¹⁸ See pages 15 and 18 of DOR written responses to FY 2020-21 Budget Hearing Questions, February 28, 2020, https://www.pahouse.com/files/BudgetHearingTestimony/2020-21/03-09/REV_BdgHearingResponse_022820.pdf.

Table 1.8
PA DOR Estimated Combined Reporting Impact by Industry

Industry	Current	Combined	Difference	% Change
Agriculture	\$6	\$5	-\$1	-19%
Mining	33	49	16	49
Utilities	116	144	28	24
Construction	60	67	7	12
Manufacturing	328	468	141	43
Wholesale Trade	418	570	152	36
Retail Trade	238	342	103	43
Transportation/Warehousing	79	71	-8	-10
Information	208	216	8	4
Finance/Insurance/Real Estate	216	238	22	10
Services	361	464	103	29
Other/Miscellaneous	<u>297</u>	<u>403</u>	<u>106</u>	<u>36</u>
Total	2,359	3,037	677	29

Note: Figures in dollar millions.

Source: Pennsylvania Department of Revenue, presentation to the Federation of Tax Administrators Revenue Estimating Conference, September 24, 2019.

Sales and Use Tax

Transfer to Commonwealth Financing Authority

The administration's proposal increases the SUT transfer to the Commonwealth Financing Authority for school construction (PlanCon) debt service payments. This provision is expected to reduce FY 2020-21 non-motor SUT revenues by \$5 million. See **Table 1.9** for this transfer and the transfers that follow.

Cigarette Tax

Transfer to Tobacco Settlement Fund

The administration's proposal creates a cigarette tax transfer to the Tobacco Settlement Fund for debt service payments. This provision is expected to reduce FY 2020-21 cigarette tax revenues by \$115 million.

Personal Income Tax

Transfer to Environmental Stewardship Fund

The administration's proposal creates a PIT transfer to the Environmental Stewardship Fund for Growing Greener debt service payments. This provision is expected to reduce FY 2020-21 PIT withholding revenues by \$14 million.

Transfer to Workers' Compensation Security Fund

The administration's proposal creates a one-time PIT transfer to the Workers' Compensation Security Fund in repayment of a FY 2016-17 transfer to the General Fund. This transfer will occur in FY 2024-25 and will not impact FY 2020-21 revenues.

Gaming Taxes

Transfer from the Video Gaming Fund

Video gaming terminal tax revenues are transferred annually to the General Fund from the Video Gaming Fund. The administration's proposal reduces this transfer by an amount equal to the appropriation for administration and reimbursement of startup costs (net of regulatory assessments). This provision is expected to reduce FY 2020-21 gaming revenues by \$2 million.

Table 1.9
General Fund Transfer Detail

	20-21	21-22	22-23	23-24	24-25
Commonwealth Financing Authority	-\$5	-\$12	-\$12	-\$12	-\$12
Tobacco Settlement Fund	-115	-115	-115	-115	-115
Environmental Stewardship Fund	-14	-14	-13	-11	-11
Workers' Compensation Security Fund	0	0	0	0	-165
Video Gaming Fund	<u>-2</u>	<u>n.a.</u>	<u>n.a.</u>	<u>n.a.</u>	<u>n.a.</u>
Total	-137	-141	-140	-138	-304

Note: Figures in dollar millions. Estimates provided by the Office of Budget. The need for reduced Video Gaming Fund transfers in future years is undetermined at this time.

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Raising the Minimum Wage

The administration proposes to raise the state minimum wage from the federal minimum of \$7.25 to \$12.00 per hour on July 1, 2020 and increase that amount by \$0.50 every year until the minimum wage is \$15.00 beginning on July 1, 2026. On July 1, 2027 and every year thereafter, the minimum wage would increase by an annual cost-of-living adjustment based on the Consumer Price Index for All Urban Consumers (CPI-U) for the Pennsylvania, New Jersey, Delaware and Maryland region. For tipped workers, the proposal does not change the base hourly wage rate of \$2.83, but employers must ensure that tipped workers effectively receive the new, higher minimum wage once tips are included (referred to as the tip credit).

Since 2015, the IFO has published five analyses of various minimum wage proposals, with the most recent analysis released March 2019. The following bullets list major changes from last year's analysis that will impact the updated estimates:

- The analysis uses data from the U.S. Bureau of Labor Statistics' (BLS) Occupational Employment Statistics (OES) survey of employers for 2019.¹⁹ Last year, the analysis used survey data from the U.S. Census Bureau's Current Population Survey. Because the OES is a large, rolling survey of 1.2 million establishments, as opposed to smaller survey of individuals, the IFO believes the new data source provides a more accurate snapshot of workers affected by a higher minimum wage. The new data source also provides more detailed occupation data, median and mean wage levels and wage distributions for each occupation at the 10th, 25th, 75th and 90th percentiles. Based on these data points, the analysis constructs a Pennsylvania-specific wage distribution for each occupation.
- The data set used for last year's analysis did not include secondary jobs.²⁰ The OES dataset includes both primary and secondary jobs, so an imputation for secondary jobs is not necessary.
- Consistent with last year's report, tipped workers are not included in the general analysis. Because many tipped jobs are secondary (e.g., food service workers), a large share of those jobs were imputed last year. The OES dataset should provide a more accurate snapshot of tipped workers in Pennsylvania. The IFO did not include tipped workers in the general analysis because the impact of a higher minimum wage (including tips) on those workers is much less clear.
- Despite recent disruptions due to COVID-19 and consistent with the prior analysis, this analysis assumes that the labor market in Pennsylvania is characterized by low unemployment in the absence of a higher minimum wage. Therefore, the analysis reflects longer-term outcomes and does not reflect what might occur if a higher minimum wage were enacted under current conditions.

The analysis begins with a comparison of state minimum wage rates and a review of recent minimum wage studies. The analysis then examines the characteristics of lower-wage workers based on hourly wage rates, part- or full-time status, gender, age and marital/child status. Following these descriptive statistics, the

¹⁹ The OES program conducts a semiannual survey designed to produce estimates of nonfarm employment and wages for about 800 specific occupations. Data from self-employed persons are not collected and are not included in the estimates. The OES program produces these occupational estimates for the nation as a whole, by state, by metropolitan or nonmetropolitan area, and by industry or ownership.

²⁰ A secondary job reflects multiple jobs held by a single person. The secondary job is part-time and/or pays a lower wage than the primary job.

analysis computes the impact of the higher proposed minimum wage on employment, incomes and General Fund revenues and expenditures. The analysis concludes with sections that examine tipped workers and the proposed phased-in increase from \$12.00 to \$15.00 per hour.

The focus of this analysis is on the immediate movement to a \$12.00 minimum wage, and it provides only a brief discussion for the phased-in increase to \$15.00 over the six years that follow. This approach is used to keep the analysis tractable and focused on near-term outcomes. Moreover, no state has increased its current minimum wage to \$15.00 per hour. Hence, no state data exist that could be used to inform possible outcomes.

Minimum Wage Across States

As of January 1, 2020, Pennsylvania and 20 other states do not require employers to pay a wage that exceeds the federal minimum of \$7.25 per hour. (See **Table 2.1** on next page.) By contrast, 17 states and the District of Columbia require employers to pay an hourly wage of \$10.00 or more. By January 1, 2024, 14 states and the District of Columbia will require employers to pay an hourly wage of \$12.00 or more under current law.

Currently, all border states have a minimum wage that exceeds Pennsylvania by at least \$1.45 per hour, and four states (New York, Maryland, New Jersey and Delaware) have a minimum wage that is at least \$2.00 higher. If Pennsylvania increases the minimum wage to \$12.00 in 2020, it would be exceeded only by three states (Washington, California and Massachusetts) and the District of Columbia, and tied with three other states (Arizona, Colorado and Maine) for the fifth highest minimum wage. If Pennsylvania continues to increase the minimum wage to \$15.00 over the subsequent six years, on January 1, 2027, it would join six other states (Washington, California, Massachusetts, Connecticut, New Jersey and Illinois) and the District of Columbia with a minimum wage that meets or exceeds \$15.00.

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

State	2020 Rank	2020	2021	2022	2023	2024
Washington D.C. ¹	1	\$14.00	\$15.00	\$15.30	\$15.60	\$15.90
Washington ¹	2	13.50	13.77	14.05	14.33	14.62
California ¹	3	13.00	14.00	15.00	15.30	15.60
Massachusetts	4	12.75	13.50	14.25	15.00	15.00
Arizona ¹	5	12.00	12.25	12.50	12.75	13.00
Colorado ¹	6	12.00	12.24	12.48	12.73	12.98
Maine ¹	7	12.00	12.25	12.50	12.75	13.00
New York ¹	8	11.80	12.50	12.75	13.01	13.27
Oregon ¹	9	11.25	12.00	12.75	13.50	13.75
Connecticut ¹	10	11.00	12.00	13.00	14.00	15.30
Maryland	11	11.00	11.75	12.50	13.25	14.00
New Jersey	12	11.00	12.00	13.00	14.00	15.00
Vermont ¹	13	10.96	11.18	11.40	11.63	11.86
Rhode Island	14	10.50	10.50	10.50	10.50	10.50
Alaska ¹	15	10.19	10.39	10.60	10.81	11.03
Hawaii	16	10.10	10.10	10.10	10.10	10.10
Arkansas	17	10.00	11.00	11.00	11.00	11.00
Minnesota ¹	18	10.00	10.20	10.40	10.61	10.82
Michigan	19	9.65	9.87	10.10	10.33	10.56
Missouri ¹	20	9.45	10.30	11.15	12.00	12.25
South Dakota ¹	21	9.30	9.50	9.70	9.90	10.10
Delaware	22	9.25	9.25	9.25	9.25	9.25
Illinois	23	9.25	11.00	12.00	13.00	14.00
Nebraska	24	9.00	9.00	9.00	9.00	9.00
New Mexico	25	9.00	10.50	11.50	12.00	12.00
West Virginia	26	8.75	8.75	8.75	8.75	8.75
Ohio ¹	27	8.70	8.85	9.05	9.25	9.45
Montana ¹	28	8.65	8.80	9.00	9.20	9.40
Florida ¹	29	8.56	8.73	8.90	9.08	9.26
Nevada	30	8.25	9.00	9.75	10.50	11.25
Pennsylvania	31	7.25	7.25	7.25	7.25	7.25
Other	31	7.25	7.25	7.25	7.25	7.25

Note: Over 50 localities have adopted a minimum wage above their state's minimum wage. Shaded states border Pennsylvania.

¹ Inflation adjustments in this table use a 2.0% growth rate to estimate inflation adjustments for future years.

Source: The Economic Policy Institute. Minimum Wage Tracker (updated January 3, 2020).

Recent Minimum Wage Studies

The text that follows provides the main findings and results from prominent minimum wage studies that have been published recently. The studies appear in chronological order. In order to interpret the results, it is necessary to define the term “employment elasticity.” The employment elasticity is the percentage change in employment divided by the percentage change in the statutory minimum wage. For example, an elasticity of -0.1 implies that a 10.0 percent increase in the minimum wage would reduce employment by 1.0 percent (-1.0 / 10.0). It is noted that for some studies, the employment elasticity applies to all workers, while for others, it only applies to affected workers (i.e., workers currently earning less than the new, higher minimum wage) and sometimes only affected workers in a particular industry or sector (e.g., fast food).

Neumark (2015)²¹

Based on a review of existing studies, this research note from the Federal Reserve Board of San Francisco finds that “the overall body of recent evidence suggests that the most credible conclusion is a higher minimum wage results in some job loss for the least-skilled workers — with possibly larger adverse effects than earlier research suggested.” Neumark notes that “(a)mong the studies that find job loss effects, estimated employment elasticities of -0.1 to -0.2 are at the lower range but are more defensible than the estimates of no employment effects (p. 4).”

Institute for Research on Labor and Employment (2015)²²

The authors examine recent studies and find general agreement on an employment elasticity for restaurant workers that ranges from -0.06 to 0.04, with consensus towards a small, negative value. However, they find substantial disagreement for teen employment. The authors make allowance for certain state-specific trends and find a negative bias in traditional minimum wage studies. The authors find that correction of that bias implies teen employment elasticities that are not significantly different than zero (i.e., no impact from a higher minimum wage).

Dube et al. (2016)²³

The authors use U.S. data for teens and restaurant workers from the Quarterly Workforce Indicators database and focus on the period from 2000 to 2011. The paper exploits differences between border counties in states that did and did not raise their minimum wage. The authors “find striking evidence that separations, hires, and turnover rates for teens and restaurant workers fall substantially following a minimum wage increase — with most of the reductions coming within the first three quarters of the higher minimum (p. 2).” For both teens and restaurant workers, the authors could not identify a statistically significant negative effect on employment from a higher minimum wage.

²¹ “The Effects of Minimum Wage on Employment,” FRBSF Economic Letter 2015-37 (December 2015).

²² Allegretto et al. “Credible Research Designs for Minimum Wage Studies: A Response to Neumark, Salas and Wascher,” University of California Berkeley, IRL Working Paper No. 116-15 (September 2015).

²³ Dube et al. “Minimum Wage Shocks, Employment Flows and Labor Market Frictions,” *Journal of Labor Economics*, Vol. 34(3) (2016).

University of Washington I (2016)²⁴

The first of three studies that examine the impact of raising the minimum wage in Seattle. The report analyzes the increase from \$9.47 to \$11.00 per hour for most employers.²⁵ The study finds that low-wage workers' median wage increased by \$1.18, and that \$0.73 was due to the higher minimum wage and \$0.45 was due to favorable economic conditions. The 16.2 percent increase in the statutory minimum wage (or a 10.3 percent increase relative to the median affected wage of \$9.97) resulted in a 1.2 percent reduction in employment, and a modest reduction in hours worked per quarter. (Note: these results apply to all affected workers, not just teens or restaurant workers.) The strength of this study is that it utilizes detailed administrative data that tracked actual wages, hours worked and outcomes for individual workers affected across all age groups and industries. However, the analysis only includes single location establishments and excludes multi-location establishments because it was not possible to determine the exact location of workers for multi-location firms (i.e., it was not clear if the workers were employed within the city limits). Those firms employed roughly 40 percent of the workforce in Seattle.

Meer and West (2016)²⁶

The authors find that the main impact of higher minimum wages on employment operates through the growth of employment, as opposed to the immediate employment level. If that hypothesis is true, then the authors find that many traditional minimum wage studies that use a difference-in-difference methodology will not accurately capture that impact and will understate the negative impact of higher minimum wages in the years following enactment. The authors use three administrative data sets and find an employment elasticity of -1.2 for all directly affected workers. The employment impacts are concentrated in lower-wage industries, younger workers and those with lower levels of education.

Center on Wage and Employment Dynamics (2017)²⁷

This study also examines the increase in the Seattle minimum wage to \$11.00 per hour but uses the Quarterly Census of Employment and Wages (QCEW) dataset and only examines the food service/restaurant industry because it employs a high proportion of low-wage workers and the aggregated QCEW data cannot separately identify workers directly affected by a higher minimum wage. For all types of restaurants, the analysis finds employment elasticities that are not significantly different than zero (i.e., the higher minimum wage had no discernable impact on employment). The authors note several reasons for that outcome: (1) the labor market is not perfectly competitive (i.e., firms have wage-setting power), (2) higher wages increase productivity, (3) it is difficult to replace labor in low-paid service occupations, (4) affected workers comprised a relatively small portion of total employer costs and (5) lower-wage workers spend nearly all extra income, thereby increasing overall demand.

²⁴ The Seattle Minimum Wage Study Team. "Report on the Impact of Seattle's Minimum Wage Ordinance and Wages, Workers, Jobs and Establishments Through 2015," University of Washington (July 2016).

²⁵ For employers with less than 500 employees who offer health insurance or the employees earn tips, the minimum wage increased to \$10.00 per hour.

²⁶ Meer, Jonathan and Jeremy West. "Effects of the Minimum Wage on Employment Dynamics," *Journal of Human Resources*, Volume 51 (2) (November 2016).

²⁷ Reich et al. "Seattle's Minimum Wage Experience 2015-16," Institute for Research on Labor and Employment, Center on Wage and Employment Dynamics, University of California, Berkeley (June 2017).

University of Washington II (2017/2018)²⁸

The second (revised) study on the Seattle minimum wage examines raising the level from \$11.00 to \$13.00 per hour for certain employers. The authors find much larger negative employment effects from the second minimum wage hike and note that the effects appear to be non-linear: negative employment impacts become progressively stronger as the minimum wage increases. Similar to the first study, administrative data allow the authors to identify actual wages earned, hours worked and industry of employment, but the study excludes roughly 37 percent of workers employed by multi-location firms. The authors find that traditional employment elasticities are substantially understated, largely because previous studies based the percentage increase in the wage rate on the statutory floor (e.g., \$7.25 for Pennsylvania) due to lack of specific data, versus what employees actually earned. The authors believe that the relatively high level of the minimum wage in Seattle, the smaller locality (i.e., a city and not a state) and inclusion of non-restaurant employees in the dataset also contributed to the much higher negative employment response. The authors conclude that the movement to a \$13.00 minimum wage yielded lower incomes of \$74 per month for the average low-wage worker (reflects lower employment and reduced hours). It should be noted that some researchers strongly disagree with these findings and believe methodological issues drive much of the result.²⁹

Cengiz et al. (2019)³⁰

The authors employ a new methodology to examine 138 state-level minimum wage changes from 1979 to 2016 where the mean real increase in the minimum wage was 10.1 percent. The analysis uses the Merged Outgoing Rotation Group dataset from the U.S. Census Bureau's Current Population Survey. The authors discuss three main results. First, higher minimum wages do not appear to impact employment, assuming that the ratio of the new minimum wage to the state median wage does not exceed 55 percent. The study found that job gains at or slightly above the new minimum wage closely matched those lost that were below the new minimum wage. Second, impacts varied across sectors: employment in the manufacturing and retail/wholesale trade sectors could be adversely impacted, while workers in all other sectors are largely unaffected. Third, positive wage "spillovers" extend up to \$3 above the new minimum wage and can account for up to 40 percent of the overall income gains from a higher minimum wage.

Congressional Budget Office (2019)³¹

Based on a review of a large body of research, a recent CBO study used the following median estimates for elasticities for workers directly affected by a minimum wage increase to \$12.00 per hour: (1) -0.234 (adults), (2) -0.721 (teenagers) and (3) -0.25 (all workers). It is noted that these elasticities apply only to workers that earn less than the new minimum wage. If phased in by 2025 in six annual increments starting in January 2020 (roughly 80 cents per increment), the analysis found that a \$12.00 minimum wage would (1) reduce employment by 0.2 percent (0.3 million jobs), (2) boost earnings for 5.0 million directly affected

²⁸ Jardim et al. "Minimum Wage Increases, Wages and Low-Wage Employment: Evidence from Seattle," NBER Working Paper 23532 (May 2018).

²⁹ For example, see Zipperer, Ben and J. Schmidt. "The 'high road' Seattle labor market and the effects of the minimum wage increase," Economic Policy Institute (June 2017).

³⁰ Cengiz et al. "The Effect of Minimum Wages on Low-Wage Jobs: Evidence from the United States Using a Bunching Estimator," NBER Working Paper 25434 (January 2019).

³¹ "The Effects on Employment and Family Income of Increasing the Federal Minimum Wage," Congressional Budget Office (July 2019). See Tables 1, A-1 and A-2.

workers, (3) provide a modest wage boost for 6.4 million workers earning just above \$12.00 per hour and (4) reduce the number of people in poverty by 0.4 million. It is noted that many states will already have minimum wages that are \$12.00 or higher by 2025, which greatly mutes the national employment impact of a higher federal minimum wage.

Border County Comparison

Many minimum wage studies compare employment trends for border counties in states that do and do not raise the minimum wage. Because economic and demographic variables are generally similar in the border counties, the higher minimum wage offers researchers a “natural experiment” that allows them to isolate the impact of the higher minimum wage. In nearly all cases, these comparisons focus on the food service sector, because that sector has a relatively large share of workers that would be directly affected by a higher minimum wage.

In September 2019, the Federal Reserve Bank of New York published an article that compared employment trends in the border counties of Pennsylvania and New York.³² The gradual phase-in of a considerably higher minimum wage in New York facilitates the natural experiment noted above. The article compared employment and wage trends for the leisure-hospitality and retail trade sectors. For this analysis, the IFO updated and reproduced the methodology used by the article with the following modifications:

- Instead of using the leisure-hospitality sector, this analysis used the food service subsector only. The larger leisure-hospitality sector includes hotels, motels, theatres and casinos.
- This analysis excludes Orange County (New York) because it is a clear outlier in terms of population growth and shares a very short border with Pike County.
- This analysis did not include the retail trade sector due to the significant contraction of that sector from internet sales.
- Both analyses use data through 2018 because county-level data are not yet available for 2019.

Starting in 2014, New York State (NYS, excludes New York City) and New York City (NYC) started to phase in a higher minimum wage for all workers. For recent years, the schedule for fast food workers (these workers have a separate schedule) was as follows (base wage for non-tipped, non-fast-food workers is shown in parenthesis):

- January 2015: NYS \$8.75 (\$8.75) | NYC \$8.75 (\$8.75)
- January 2016: NYS \$9.00 (\$9.00) | NYC \$10.50 (\$9.00)
- January 2017: NYS \$10.75 (\$9.70) | NYC \$12.00 (\$11.00)
- January 2018: NYS \$11.75 (\$10.40) | NYC \$13.50 (\$13.00)
- January 2019: NYS \$12.75 (\$11.10) | NYC \$15.00 (\$15.00)

³² Bram et al. “Minimum Wage Impacts Along the New York-Pennsylvania Border,” Liberty Street Economics Blog (September 25, 2019).

Figure 2.1 displays the average annual employment growth of the food services and drinking places sub-sector (NAICS 722) for 2013 through 2018 in the border counties of Pennsylvania and New York.^{33,34} Overall, employment in New York counties grew at an average rate of 1.2 percent per annum, while Pennsylvania counties grew at a slightly slower rate (1.0 percent). Across both states, Tioga (NY, 3.5 percent), Cattaraugus (2.6 percent) and Pike (4.0 percent) counties recorded the strongest employment growth.

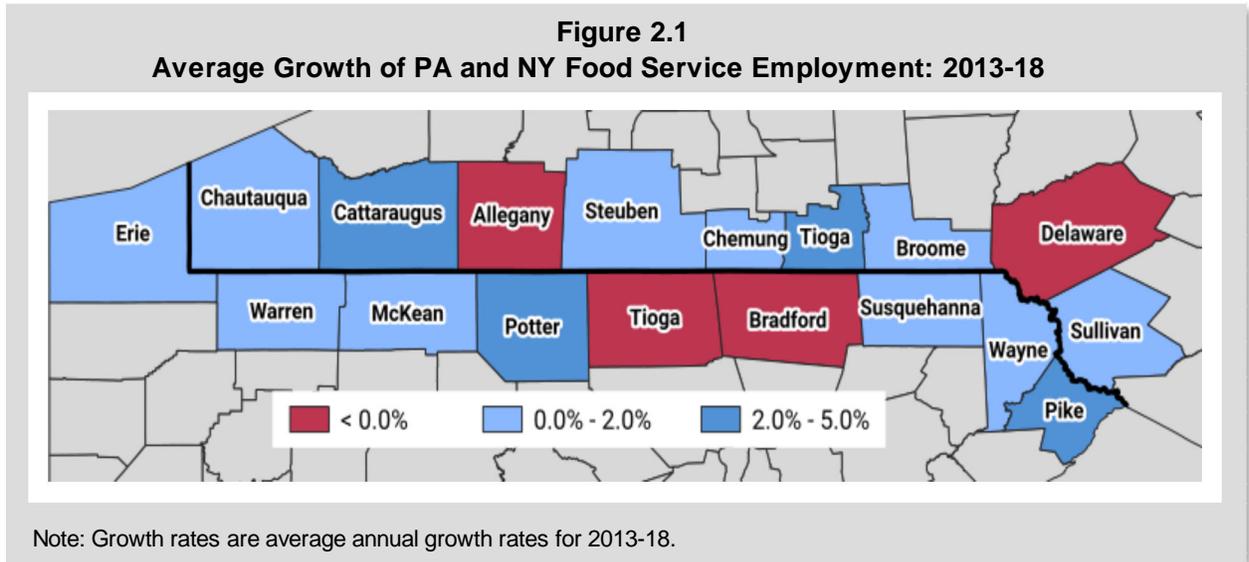


Table 2.2 displays the average annual growth rates for population, personal income, food service employment and average wages for the relevant counties in both states. These data illustrate the similar general economic and demographic conditions in the two sets of border counties, which allows the analysis to isolate the impact of a higher minimum wage. For both sets of counties, population declined at a rate of 0.6 percent per annum, while (nominal) personal income increased by 2.4 percent. Presumably largely due to the higher minimum wage, average weekly wages for employees in New York grew nearly twice as fast as Pennsylvania, while employment growth was comparable. It should be noted that the higher minimum wage in New York was phased-in over multiple years, while the current budget proposal enacts an immediate increase to \$12.00 per hour on July 1, 2020.

³³ Data for 2019 are not yet available and will be released in May 2020.

³⁴ In March 2013, the governor signed a state budget which raised the minimum wage over three years for all non-tipped workers from \$7.25 to \$9.00 by 2016. In September 2015, a phased-in higher wage to \$15.00 by 2021 for fast food workers was enacted. In April 2016, the \$15.00 phased-in wage rate was extended to all workers.

Table 2.2
Average Annual Growth Rates: 2013-18

	County Population	Personal Income	Food Sector Employment	Avg. Weekly Wage
New York	-0.6%	2.4%	1.2%	4.1%
Pennsylvania	-0.6%	2.4%	1.0%	2.3%

Note: A higher minimum wage in New York was phased in over multiple years, while the current budget proposal enacts an immediate increase to \$12.00 per hour on July 1, 2020.

Source: U.S. Bureau of Economic Analysis and U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages.

Workers Affected by a \$12 per Hour Minimum Wage

This analysis uses data from the 2019 Occupational Employment Statistics (OES) dataset from the U.S. Bureau of Labor Statistics. The OES is a semi-annual survey sent to a sample of non-farm establishments across all industries and produces estimates for employment and wages for specified occupations by state. Additional detail on hours worked and demographic characteristics are from the Merged Outgoing Rotation Group dataset from the 2018 Current Population Survey (CPS).³⁵

Table 2.3
Workers Affected by a \$12 Minimum Wage for 2019

	Employment Status (000s)		Employee Gender (000s)		Total
	Part-Time	Full-Time	Male	Female	
\$7.25 to \$7.99	56	22	35	42	78
\$8.00 to \$9.99	241	188	196	232	428
\$10.00 to \$10.99	119	141	113	147	260
\$11.00 to \$11.99	109	169	109	168	278
\$12.00 to \$14.99	150	615	350	414	764
\$15.00 or more	<u>324</u>	<u>3,592</u>	<u>2,169</u>	<u>1,747</u>	<u>3,916</u>
Total	998	4,727	2,973	2,752	5,725
Directly Affected	525	520	453	589	1,044
Indirectly Affected	150	615	350	414	764

Note: Data do not include tipped workers. Indirectly affected workers earn \$12.00 to \$14.99 per hour.

Source: U.S. Bureau of Labor Statistics, Occupational Employment Statistics 2019. Detail for part-time/full-time and gender calculated by IFO using data from U.S. Census Bureau, Current Population Survey and Merged Outgoing Rotation Group dataset (2018) compiled by the National Bureau of Economic Research.

³⁵ The CPS is a survey sponsored jointly 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.

For 2019, the OES dataset for Pennsylvania represents 5.90 million jobs, including secondary jobs.^{36,37} The majority of workers affected by an increase in the minimum wage are hourly-paid workers. The dataset also includes workers employed in occupations that typically receive tips. The impact of the higher minimum wage on those workers is discussed in a later subsection.

Table 2.3 provides a breakdown based on wage level for all non-tipped jobs.^{38,39} For 2019, the analysis includes 5.73 million non-tipped jobs. For employment status, 998,000 were part-time (less than 35 hours per week) and 4.73 million were full-time jobs. For “directly affected” workers who earn less than \$12.00 per hour, half of the primary jobs were part-time, and 56 percent were female workers.

For both categories, the analysis finds that 1.04 million non-tipped workers would be impacted by a \$12.00 minimum wage (i.e., directly affected) and another 764,000 workers earning between \$12.00 to \$14.99 would likely also be affected due to wage compression or spillovers (indirectly affected). Researchers find that workers earning just above the minimum wage will likely also receive a higher hourly wage rate as employers attempt to maintain some wage differentials.

Table 2.4
Workers Affected by a \$12 Minimum Wage for 2019

	Age (000s)				Type of Household (000s)			
	16-19	20-24	25-39	40+	Single no kids	Single kids	Married no kids	Married kids
\$7.25 to \$7.99	28	19	12	18	59	2	9	8
\$8.00 to \$9.99	105	96	95	132	284	34	51	60
\$10.00 to \$10.99	27	60	74	100	153	25	44	39
\$11.00 to \$11.99	15	35	92	136	130	29	66	52
\$12.00 to \$14.99	19	111	267	367	349	80	181	154
\$15.00 or more	5	202	1,290	2,419	1,340	245	1,233	1,098
Total	200	522	1,830	3,172	2,316	414	1,583	1,411
Directly Affected	175	210	273	386	626	90	170	159
Indirectly Affected	19	111	267	367	349	80	181	154

Note: Data do not include tipped workers. Indirectly affected workers earn \$12.00 to \$14.99 per hour.

Source: U.S. Bureau of Labor Statistics, Occupational Employment Statistics 2019. Detail for age and type of household calculated by IFO using data from U.S. Census Bureau, Current Population Survey and Merged Outgoing Rotation Group dataset (2018) compiled by the National Bureau of Economic Research.

³⁶ Excludes independent contractors and self-employed individuals.

³⁷ The OES data reflect the number of jobs in Pennsylvania as opposed to the number of residents employed. Secondary jobs are typically part-time jobs held by persons who also have a primary job.

³⁸ Wages for certain occupations are suppressed in the OES dataset. For primary and secondary school employees, wage data from the Pennsylvania Department of Education was used to calculate the wage distribution. For all other occupations with suppressed wages, this analysis assumed that the employees earned above \$15.00 per hour.

³⁹ For this analysis, tipped occupations include: bartenders, wait staff, food servers, hosts/hostesses, barbers, hair-dressers, miscellaneous personal appearance workers, miscellaneous personal care and service workers, baggage handlers and gaming service workers.

Table 2.4 provides similar breakdowns based on age and marital/child status. The data show that 200,000 (3 percent) jobs were held by workers between the ages of 16 and 19, and 88 percent earned a wage under \$12.00 per hour. College age workers (20 to 24) held 522,000 jobs, and 40 percent earned less than \$12.00 per hour. For workers age 40 and older, most (76 percent) earned \$15.00 or more per hour.

The columns to the right provide detail on marital and child status. For jobs, roughly 60 percent of workers directly affected by a \$12.00 minimum wage are single with no children. An additional 16 percent are married with no children.

Employment Impact from a \$12 per Hour Minimum Wage

Table 2.5 displays the projected employment impact due to the enactment of a \$12.00 minimum wage. The top third of the table shows the average wage by wage group and part/full-time status, and the percentage change if the minimum wage increases to \$12.00 per hour. For the lowest paid workers, the proposal increases the hourly wage by nearly 60 percent. For the highest paid workers affected, the increase is nearly seven percent. While not directly affected by the proposal, the analysis assumes that workers earning \$12.00 to \$14.99 per hour would also realize a modest wage increase of five percent.

The middle portion of the table displays the number of workers and the employment response parameters, based on a review of minimum wage studies. For very low-wage workers who are mostly high school and college age, the analysis assumes an elasticity of -0.175, which implies a 1.75 percent employment reduction for a 10.0 percent increase in the (average) wage paid for that group. Research finds that employment of this age cohort is more sensitive to wage changes because they are part-time, less experienced and have a high degree of turnover. Moreover, the percentage increase in the wage is very large for this group, and employers would be especially sensitive to their employment compared to other groups under a \$12.00 minimum.

The analysis assumes that the elasticities (1) are slightly higher for part-time workers and (2) would decline for each group as the percentage increase in the wage paid declines. The projected employment impact is then equal to: number employed * percent change in wage * responsiveness parameter or elasticity. The analysis finds a reduction in part-time jobs of 18,000 (3.4 percent of directly affected part-time workers) and 9,000 for full-time jobs (1.7 percent), and an overall reduction of 27,000 (2.6 percent). The proposal disproportionately affects part-time jobs because they comprise a greater share of low-wage workers. The analysis also assumes a reduction in total hours worked. Recent studies find that some of the negative employment impact would manifest itself in reduced work hours, as opposed to fewer jobs. This effect is included in the computation of the income gains in the subsection that follows. The net impact on labor is the same as reduced employment levels, but the manifestation is different.

It is noted that the projected employment contraction would not all occur at the same time or in the same manner. While some part-time workers might be released, other firms may simply defer filling vacant positions over an extended period of time. Research finds that new entrants to the labor market will be affected more than current employees.

Table 2.5
Employment Impact: \$12 Minimum Wage in 2019

	Average Wage		Percent Change from Increased Wage	
	Part-Time	Full-Time	Part-Time	Full-Time
\$7.25 to \$7.99	\$7.54	\$7.68	59.2%	56.2%
\$8.00 to \$9.99	\$8.90	\$9.26	34.9%	29.7%
\$10.00 to \$10.99	\$10.37	\$10.44	15.7%	14.9%
\$11.00 to \$11.99	\$11.22	\$11.27	6.9%	6.4%
\$12.00 to \$14.99	\$13.29	\$13.66	5.0%	5.0%

	Number of Workers (000s)		Response Parameter	
	Part-Time	Full-Time	Part-Time	Full-Time
\$7.25 to \$7.99	56	22	-0.175	-0.150
\$8.00 to \$9.99	241	188	-0.125	-0.100
\$10.00 to \$10.99	119	141	-0.075	-0.050
\$11.00 to \$11.99	109	169	-0.025	-0.025
\$12.00 to \$14.99	<u>150</u>	<u>615</u>	0.000	0.000
Total	675	1,135		

	Projected Reduction (000s)		Retain Employment (000s)	
	Part-Time	Full-Time	Part-Time	Full-Time
\$7.25 to \$7.99	-6	-2	50	20
\$8.00 to \$9.99	-11	-6	230	182
\$10.00 to \$10.99	-1	-1	118	140
\$11.00 to \$11.99	0	0	109	169
\$12.00 to \$14.99	<u>0</u>	<u>0</u>	<u>150</u>	<u>615</u>
Total	-18	-9	657	1,126

Note: Data do not include tipped workers. Indirectly affected workers earn \$12.00 to \$14.99 per hour.

Source: U.S. Bureau of Labor Statistics, Occupational Employment Statistics 2019. Detail for part-time/full-time calculated by IFO using data from U.S. Census Bureau, Current Population Survey and Merged Outgoing Rotation Group dataset (2018) compiled by the National Bureau of Economic Research.

Income Effects for Affected Workers

Table 2.6 provides the analysis for the projected impact on income levels from the higher minimum wage for affected workers. The top portion of the table displays the current wage distribution, number of workers and total income of those workers. For the income computations, the analysis assumes that part-time employees work 20 hours per week for 50 weeks per year while full-time employees work 40 hours per week for 50 weeks per year. Total wage income for all workers shown is \$34.4 billion.

The middle portion of the table adjusts the minimum wage to \$12.00 per hour and includes the projected employment contraction from Table 2.5. Based on recent studies, the computations also assume that workers who previously earned less than \$11.00 per hour would work roughly six to seven hours less per quarter (0.5 hours per week). As noted, the analysis also assumes a five percent wage increase for workers earning between \$12.00 to \$14.99 per hour. Total wage income increases to \$37.7 billion.

The bottom portion of the table displays the differential. Total wage income increases by \$3.3 billion. If federal payroll tax is deducted (7.65 percent, employee share only), the increase declines to \$3.1 billion. The bottom of the table shows an average annual net income gain of \$1,764 for part-time workers (\$34 per week) and \$2,843 for full-time workers (\$55 per week). (Note: these figures are for directly affected workers only. They do not include the modest gains for indirectly affected workers.)

It is noted that the presentation in Table 2.6 is an oversimplification because it assumes that all workers under \$12.00 per hour would receive exactly \$12.00 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 wage. Therefore, the estimates in Table 2.6 could be viewed as a lower bound. However, to the extent those wages are raised above \$12.00 per hour, it would also imply a larger negative employment response.

Table 2.6
Income Impact of a \$12 Minimum Wage in 2019

	Number of Jobs (000s)			Total Income (\$ millions)		
	Part-Time	Full-Time	Total	Part-Time	Full-Time	Total
Current Minimum Wage						
\$7.25 to \$7.99	56	22	78	\$422	\$338	\$760
\$8.00 to \$9.99	241	188	429	2,144	3,480	5,624
\$10.00 to \$10.99	119	141	260	1,234	2,945	4,179
\$11.00 to \$11.99	109	169	278	1,223	3,811	5,034
\$12.00 to \$14.99	<u>150</u>	<u>615</u>	<u>765</u>	<u>1,994</u>	<u>16,803</u>	<u>18,796</u>
Total	675	1,135	1,810	7,017	27,376	34,394
\$12.00 Minimum Wage						
\$7.25 to \$7.99	50	20	70	578	464	1,042
\$8.00 to \$9.99	230	182	413	2,683	4,247	6,930
\$10.00 to \$10.99	118	140	258	1,383	3,292	4,675
\$11.00 to \$11.99	109	169	278	1,306	4,049	5,355
\$12.00 to \$14.99	<u>150</u>	<u>615</u>	<u>765</u>	<u>2,093</u>	<u>17,643</u>	<u>19,736</u>
Total	657	1,126	1,783	8,043	29,695	37,738
Change Based on Current Wage Levels						
\$7.25 to \$7.99	-6	-2	-8	156	126	282
\$8.00 to \$9.99	-11	-6	-16	539	767	1,306
\$10.00 to \$10.99	-1	-1	-2	149	346	495
\$11.00 to \$11.99	0	0	0	82	239	321
\$12.00 to \$14.99	<u>0</u>	<u>0</u>	<u>0</u>	<u>100</u>	<u>840</u>	<u>940</u>
Total	-18	-9	-27	1,026	2,319	3,344
Average Gain per Directly Affected Worker				1,764	2,843	2,301

Note: Data do not include tipped workers. Indirectly affected workers earn \$12.00 to \$14.99 per hour.

Source: U.S. Bureau of Labor Statistics, Occupational Employment Statistics 2019. Detail for part-time/full-time calculated by IFO using data from U.S. Census Bureau, Current Population Survey and Merged Outgoing Rotation Group dataset (2018) compiled by the National Bureau of Economic Research.

General Price Impact

The analysis projects that the net wage income of low-wage workers will increase by \$3.3 billion under the proposal. A pertinent question is the source of that extra income and how it will impact consumers and businesses. Potential sources include higher consumer prices, lower business profits, reduced employee benefits and business savings due to reduced employee turnover and higher productivity.⁴⁰ As discussed further in the subsection that follows, the analysis assumes that 60 percent of the higher wages is passed forward to Pennsylvania consumers through higher prices, or \$2.0 billion of wage costs ($\$3.3 \text{ billion} * 0.60$).

Due to a lack of detailed data, it is not possible to estimate the exact increase in prices for the sectors and products/services that would be affected by a higher minimum wage. However, general data and reasonable assumptions can provide an order of magnitude regarding the potential impact on statewide price levels:

- For 2019, total wages paid to all Pennsylvania workers was \$355 billion, and the analysis projects that will increase by \$3.3 billion (0.9 percent) due to the higher minimum wage for non-tipped workers.⁴¹
- For 2019, total personal consumption expenditures (i.e., spending by all final consumers, excludes business and government) will be roughly \$596 billion. If all higher wage costs were passed forward to consumer purchases, economy-wide price levels would increase by roughly 0.6 percent ($\$3.3 / \596 billion) if the same mix and quantity of goods and services were purchased. If higher employer payroll taxes are included, the figure increases slightly.
- However, the analysis assumes that only 60 percent of the cost would be passed forward in higher prices, so the economy-wide price level would increase by 0.3 percent (rounded).

This illustration is an oversimplification of the true price adjustment process and is meant only to provide a general order of magnitude for the potential impact on statewide price levels in the year the higher minimum wage is enacted.

The impact on prices would vary across the state economy depending on the sector, consumer responsiveness to prices of specific goods and services and local market conditions. Due to the relatively high proportion of lower-wage workers, the food service and retail trade sectors would be most affected by a \$12.00 minimum wage. Other data can be used to gauge the potential price implications for those sectors. For example, the analysis finds that roughly 20 percent of the higher wage income/costs (\$3.3 billion) would flow to the food service sector, or \$670 million ($\$3.3 \text{ billion} * 0.20$). Data from the U.S. Department of Labor show total wages for that sector of \$6.3 billion (excludes special food services, such as caterers), so that wage income would increase by 11 percent ($\$670 \text{ million} / \6.3 billion).⁴² Federal tax data show that wage compensation comprises roughly 20 percent of total costs for the food service sector, and if so, prices would need to increase by 2.1 percent ($0.11 * 0.20$) if all higher wage costs were passed forward and quantity purchased did not change. If employer payroll taxes on the higher wages are included, the figure increases to 2.3 percent. Allowing for a reduction in sales due to higher prices roughly doubles the price

⁴⁰ The higher productivity would arise from the retention of more productive workers, the implementation of cost cutting and efficiency measures and greater job satisfaction of workers who retain employment.

⁴¹ Wages include the U.S. Bureau of Economic Analysis adjustment for residence. Excludes self-employed and independent contractors. Includes bonuses and some tips.

⁴² These data are from the Quarterly Census of Employment and Wages.

increase required to fully fund higher wages to 4.6 percent. Finally, the analysis assumes that only 60 percent of the costs are passed forward, which implies a price increase across the entire sector of 2.8 percent.⁴³

For the retail trade sector, the analysis finds that 25 percent of the higher wage income/costs would flow to that sector, or \$830 million ($\$3.3 \text{ billion} * 0.25$). Using the same methodology as the food service sector implies a price increase of 0.8 percent for the sector due to the higher minimum wage. If retailers purchase goods from other industries that are also affected by the higher minimum wage, those costs would also get pushed forward into final consumer prices and the price increase would be greater.

Due to higher price levels, all consumers would lose a small amount of real purchasing power to fund most of the higher wages paid to low-wage workers under a higher minimum wage. Research finds that other funding sources include lower business profits, reduced employee benefits, productivity gains and lower costs related to employee turnover.

Impact on General Fund Revenues

In order to estimate the impact from the higher minimum wage on General Fund revenues, the analysis must specify the source of the income gains to low-wage workers. Based on recent studies, this analysis makes the following assumptions regarding the source of the wage gains:

- 5 percent is exported to out-of-state consumers;
- 15 percent is from higher worker productivity and lower turnover (i.e., business savings);
- 10 percent is from lower profits of pass-through entities (partnerships, S corporations and sole proprietors);
- 10 percent is from lower profits of C corporations; and
- 60 percent is from higher prices paid by Pennsylvania consumers.

The first and second bullets represent pure revenue gains because those effects do not need to be offset by less spending or lower incomes elsewhere in the state economy. However, the last three bullets do require offsets. Therefore, the gains from the additional taxable income that now flows to low-wage workers must be reduced for the taxable income that would have flowed to other residents or businesses in the absence of the higher minimum wage. For pass-through entities, the lower profits would have been taxed at the personal income tax (PIT) rate of 3.07 percent. For C corporations, the lower profits would have been taxed at 9.99 percent, but the analysis assumes an effective rate of 8.0 percent due to losses and loss carryforwards. Finally, the \$2.0 billion spending shift from higher prices (60 percent of the \$3.3 billion in higher incomes for low-wage workers) would have been spent on other goods and services throughout the state economy, and a portion of that spending would have translated into taxable income. Overall, the net effect from the shift in spending patterns and income distribution yields \$30 million in higher PIT revenues. The main causes of the increase are the higher productivity/lower turnover from retained workers

⁴³ This example and the one that follows assume a general price elasticity of demand of -0.5 (i.e., quantity demanded falls by 5 percent if price increases by 10 percent). Both computations exclude any impact of a higher minimum wage for tipped workers. It is noted that the price increase would be higher for fast food establishments compared to the entire food service sector.

and the fact that most of the redirected spending is funneled to Pennsylvania labor, as opposed to spending on general goods and services where some amounts would flow to out-of-state residents or businesses.

Other General Fund revenue effects from the higher minimum wage include the following:

- The higher wages for low-income filers reduces net claims for Tax Forgiveness (+\$10 million).⁴⁴
- Employers must remit the employer share of payroll tax (7.65 percent) on the higher employee wages, which reduces taxable profits. The analysis assumes half would be paid by pass-through entities and half by corporations (-\$10 million).
- Overall spending and economic output will increase under the proposal because low-wage workers have a higher marginal propensity to spend any income they receive. This result is noted in nearly all minimum wage studies. This extra spending also has “multiplier effects” that increase the size of the state economy and increases PIT, sales and use tax (SUT) and other consumption tax revenues (+\$25 million).
- A general cutback due to a potential shift to underground economic activity. Given the higher wage rate, some firms might elect to pay employees under the table (negative, but not quantified).

Overall, the analysis finds a \$55 million increase in General Fund revenues. However, it is noted that the revenue impact from the multiplier effects would not materialize fully in the first year following enactment.

Impact on State and Local Government Expenditures

Due to the increase in the minimum wage, many low-income families would be pulled above the federal poverty level (FPL) and would be eligible for less state assistance. **Table 2.7** details the number and share of families at various ratios of income to FPL in 2018. For that year, the FPL was \$16,460 for a family of two, \$20,780 for a family of three, \$25,100 for a family of four, and an extra \$4,320 for each additional dependent above that size. The top half of the table shows that roughly eight percent (263,075) of all Pennsylvania families had income below the FPL and likely qualified for certain state and federal programs. An additional 13 percent (424,550) of families had incomes between 100 and 200 percent of the FPL and likely also qualified for certain state programs (e.g., subsidized child care). The lower half of the table details the number of families within various income groups. Roughly 11 percent of all Pennsylvania families (359,114) earned less than \$25,000 and most likely qualified for state and federal subsidy programs depending on the number of family members.

⁴⁴ The simulation used the 2016 Personal Income Tax micro data file for filers who claimed Tax Forgiveness and reported compensation income.

Table 2.7
Families in Pennsylvania by Poverty Level and Income (2018)

	Number of Families	Share of Families
<u>Income to Poverty Level Ratio</u>		
Under 0.50	111,243	3.4%
0.50 to 0.74	71,048	2.2
0.75 to 0.99	80,784	2.5
1.00 to 1.24	97,296	3.0
1.25 to 1.49	99,835	3.1
1.50 to 1.74	109,245	3.4
1.75 to 1.84	48,895	1.5
1.85 to 1.99	69,279	2.1
2.00 to 2.99	488,494	15.1
3.00 to 3.99	473,619	14.6
4.00 to 4.99	399,127	12.3
5.00 and over	<u>1,186,392</u>	<u>36.7</u>
Total	3,235,257	100.0
<u>Family Income</u>		
Less than \$10,000	113,234	3.5%
\$10,000 to \$14,999	64,705	2.0
\$15,000 to \$24,999	181,174	5.6
\$25,000 to \$34,999	236,174	7.3
\$35,000 to \$49,999	368,819	11.4
\$50,000 to \$74,999	595,287	18.4
\$75,000 to \$99,999	488,524	15.1
\$100,000 to \$149,999	627,640	19.4
\$150,000 to \$199,999	271,762	8.4
\$200,000 or more	<u>287,938</u>	<u>8.9</u>
Total	3,235,257	100.0

Note: Income excludes capital gains.

Source: U.S. Census Bureau. 2018 American Community Survey.

Higher Minimum Wage Impacts on Various Prototype Households

Although a higher minimum wage increases gross household income (assuming the same hours worked), it is unclear if it directly translates, dollar-for-dollar, into a higher standard of living for households. Certain tax credits and many safety-net programs (e.g., Supplemental Nutrition Assistance Program (SNAP) benefits, child care subsidies and subsidized healthcare) will phase out as incomes increase.

To illustrate this point, the analysis creates three prototype households at hourly wage rates of \$10.00 and \$12.00. The prototype households are as follows:

- (1) Single adult with no children, works full-time (40 hours/week for 52 weeks/year).

- (2) Single adult works full-time with a six-year old child (enrolled in child care).
- (3) Married couple with two children, ages three and seven (both enrolled in child care). Both parents work full-time.

Table 2.8 displays the results for the prototype households using the two wage rates.

- The first household (single adult with no children) has gross income of \$20,800 (\$10.00 hourly wage) and \$24,960 (\$12.00 hourly wage), a 20.0 percent increase. After deduction of federal and state income taxes, and Social Security and Medicare payroll taxes, the household's net income is \$17,730 (\$10.00 hourly wage) and \$20,975 (\$12.00 hourly wage), a gain of \$3,245 (18.3 percent). All other listed benefits are the same under both wage rates.
- The second household (single adult with one child) also has gross income of \$20,800 and \$24,960 under the two wage rates. The household qualifies for the Earned Income Tax Credit, Child Tax Credit and Child Care Tax Credit for both wage rates. After deduction of the taxes noted, the household's net income increases from \$23,919 (\$10.00) to \$26,969 (\$12.00), a gain of \$3,050 (12.8 percent).⁴⁵ At a \$10.00 hourly wage, the household qualifies for SNAP (estimated \$1,222 annual benefit) and the child care subsidy with an annual family co-payment of \$1,508. However, if the hourly wage is \$12.00, the household's annual SNAP benefit declines \$780 (-63.9 percent) to \$442 and the annual child care subsidy family co-payment increases by \$728 (48.3 percent) to \$2,236. Hence, nearly one-half of the net income gain is eliminated due to reduced benefits. Also note that this household is no longer eligible for Medicaid, but is eligible for subsidized health care through the Children's Health Insurance Program (CHIP). This type of program eligibility shift affects state safety net program costs described in the next section.
- The third household (married couple with two children) has gross income of \$41,600 and \$49,920 under the two wage rates. The household qualifies for the Earned Income Tax Credit, Child Tax Credit and Child Care Tax Credit for both wage rates. After deduction of the taxes noted, this household's net income increases from \$43,611 (\$10.00) to \$49,286 (\$12.00), a gain of \$5,675 (13.0 percent).⁴⁶ At a \$10.00 hourly wage, the household also qualifies for SNAP (estimated \$370 annual benefit) and the child care subsidy with an annual family co-payment of \$3,536. It also qualifies for Women, Infant and Children (WIC) benefits. However, if the hourly wage is \$12.00, the household no longer qualifies for SNAP or WIC. Additionally, the annual child care subsidy family co-payment increases by \$1,404 (39.7 percent) to \$4,940.

These simple examples illustrate the impact of various credit and benefit phase-outs on households. Due to the credit phase-outs, the net income of affected households does not always increase by the same percentage as the increase in the hourly wage rate. Various benefit phase-outs also reduce the overall gains from the higher wage rate.

⁴⁵ The Child Tax Credit and Earned Income Tax Credit are refundable, which means the tax filer receives the tax credit as a refund if they have no tax liability. As a result, the tax filer's after-tax net income can exceed their gross income.

⁴⁶ See previous footnote.

Table 2.8
Impact of Increase in Hourly Wage Rate on Households

	Hourly Wage	Single, no children	Single, w/6 yr old child	Married, w/3 & 7 yr old children
Gross annual income ¹	\$10.00	\$20,800	\$20,800	\$41,600
	\$12.00	\$24,960	\$24,960	\$49,920
Total federal taxes ²	\$10.00	\$840	-\$5,349	-\$6,470
	\$12.00	\$1,310	-\$4,684	-\$4,718
Income after federal, state & SS/Medicare payroll taxes ³	\$10.00	\$17,730	\$23,919	\$43,611
	\$12.00	\$20,975	\$26,969	\$49,286
CHIP or Medical Assistance ⁴	\$10.00	Not Eligible	Medical Assistance	Free CHIP
	\$12.00	Not Eligible	Free CHIP	Free CHIP
WIC benefits ⁵	\$10.00	n.a.	Not Eligible	Eligible
	\$12.00	n.a.	Not Eligible	Not Eligible
Annual SNAP benefits ⁶	\$10.00	Not Eligible	\$1,222	\$370
	\$12.00	Not Eligible	\$442	Not Eligible
Annual child care subsidy	\$10.00	n.a.	\$1,508	\$3,536
	\$12.00	n.a.	\$2,236	\$4,940
LIHEAP ⁸	\$10.00	Crisis	Cash & Crisis	Crisis
	\$12.00	Crisis	Cash & Crisis	Crisis
Subsidized housing ⁹	\$10.00	Yes	Yes	Yes
	\$12.00	Yes	Yes	Yes

Note: Assumes all families live in Dauphin County and all adults in the household make the same wage. All children in the prototype households are in child care. Unless otherwise noted, all calculations are based on 2020 tax/calendar year.

1 Assumes all adults work 40 hours per week, 52 weeks per year and do not have any unearned income.

2 Assumes married couple files jointly, families with children have the child care subsidy copay as their only qualifying child care expense. This line includes the Earned Income Tax Credit, Child Tax Credit and Child Care Tax Credit. Negative values indicate a refund. Source: U.S. Internal Revenue Service (<https://apps.irs.gov/app/tax-withholding-estimator/tax-credits>).

3 State taxes are calculated by multiplying gross income by 3.07%. None of the prototype households qualify for state tax forgiveness. Social Security (SS)/Medicare payroll taxes are calculated by multiplying gross income by 7.65%.

4 CHIP benefits are determined using 2020 federal income guidelines for determining CHIP eligibility. If the child falls below CHIP guidelines, it is assumed that they qualify for Medical Assistance.

5 WIC benefits are based on the FY 2019-20 income guidelines. It serves new mothers and infants and children under 5 years old.

6 SNAP benefits are based on the federal fiscal year 2019-20 income guidelines. For the prototype households with children, the qualifying child care expenses are based on the child care subsidy family co-pay. All prototype households are assumed to have \$250 in excess of shelter expenses/month.

7 Based on FY 2019-20 published data in 49 Pa.B. 3160; June 15, 2019.

8 Based on FY 2019-20 income guidelines. Cash grants are used to help pay for monthly heating bills. Crisis Interface Program assists families who need repairs to their heating systems as well as help those who are in danger of losing their heating source or do not have heat.

9 All prototype households qualify for subsidized housing (i.e., Section 8 Housing). However, there are significant waiting lists and many who qualify do not actually receive this housing.

Impact on State Safety Net Programs

For the Executive Budget, the Department of Human Services (DHS) estimated the budgetary impact of a \$12.00 minimum wage. All savings and costs presented in this subsection pertain to the state programs, and any federal net savings for Medical Assistance, Temporary Assistance for Needy Families (TANF) and

SNAP are not included. For FY 2020-21, DHS projects that the department would incur net costs of \$10.7 million, which increase to \$100.4 million by FY 2022-23 (reflecting the proposed minimum wage increases up to \$13.00 in July 2022). (See **Table 2.9**.) This analysis does not account for changes in the federal matching rate or program eligibility impacts resulting from the recent COVID-19 disruptions and enactment of federal stimulus bills.

Table 2.9
Impact of Minimum Wage on DHS Program Expenditures

Program	20-21	21-22	22-23
CHIP	\$3.5	\$17.5	\$21.8
Medical Assistance - Capitation	-20.5	-105.0	-129.2
Community HealthChoices	25.6	50.5	81.5
ICF/ID	0.0	1.4	3.0
Child Care Services ¹	0.0	56.2	69.8
Child Care Assistance ¹	0.1	41.3	51.3
County Child Welfare	<u>2.1</u>	<u>2.1</u>	<u>2.2</u>
Total	10.7	64.2	100.4

Note: Amounts in dollar millions. Estimates are for state expenditures only. Estimates reflect the proposed minimum wage increases to \$12 in 2020, \$12.50 in 2021 and \$13.00 in 2022. ICF/ID is intermediate care facilities and intellectual disabilities.

¹ It is assumed that federal funds will be used to cover \$74.2 million in child care program costs in FY 2020-21.

Source: Pennsylvania Department of Human Services.

The largest state savings result from individuals who are no longer eligible for Medical Assistance. DHS estimates that roughly 48,400 adults and 19,000 children would no longer qualify for Medical Assistance based on income eligibility at the \$12.00 minimum wage level. Those savings are offset by an increase in CHIP spending and higher reimbursement rates to child care and direct care workers. For community-based programs for persons with physical disabilities and seniors, DHS assumed that direct care workers receive an average wage of \$11.51 per hour and utilized 2018 consumer data to compute the impact. For the child care subsidy programs, DHS assumed that (1) the average wage of child care workers is \$10.42 and (2) 40 percent of children in child care receive a subsidy.

Due to staggered eligibility screenings and payment processing timeframes, the FY 2020-21 estimate does not represent a full year of impacts. It is also assumed that federal funds can be used to cover \$74.2 million in child care program costs in FY 2020-21. In future fiscal years, state funds will be needed to pay for these additional costs for child care services and child care assistance.

Compared to prior estimates, net DHS program costs have increased because those individuals who transition off of Medical Assistance tend to have a higher federal matching rate resulting in less state savings. In addition, the federal matching rate for children who are no longer eligible for Medical Assistance benefits but transition to the CHIP program has been reduced, which increases state costs for those children compared to prior years.

Impact on Tipped Workers

Many hourly-paid workers report compensation that falls below the federal minimum and most are employees who earn tips, such as food servers and bartenders. Under current law, employers may pay less than the federal minimum if a tipped worker earns at least \$30 per month in tips or commissions and total compensation yields an hourly wage rate of \$7.25 or more. For Pennsylvania, such employees can be paid a wage as low as \$2.83 per hour.

Table 2.10 details the minimum wages for tipped workers by state as of January 1, 2020. The table contains three groups of states:

- Eight states (Washington, California, Oregon, Alaska, Hawaii, Minnesota, Montana and Nevada) set their tipped minimum wage at the regular state minimum wage and do not allow employers to include tips in the calculation of the minimum wage. For those eight states, four have a lower tipped wage for small businesses (California, Minnesota and Montana) and/or businesses that provide health insurance to their employees (Nevada).
- Twenty-six states and Washington D.C. have tipped minimum wages above the federal minimum cash wage of \$2.13, including Pennsylvania and all border states. All of these states require employers to pay a cash wage between \$2.23 (Delaware) and \$9.00 (Arizona).
- The remaining 16 states only require employers to pay the federal minimum tipped cash wage (\$2.13). One state (Nebraska) has a combined cash and tipped minimum wage greater than the federal minimum of \$7.25 per hour.

Table 2.11 lists the employment status and gender for all tipped Pennsylvania workers. For the purpose of the table, tipped workers include the following occupations: bartenders, wait staff, food servers, hosts/hostesses, barbers, hairdressers, miscellaneous personal appearance workers, miscellaneous personal care and service workers, baggage handlers and gaming service workers. It is noted that the figures do not include independent contractors, such as those working for Uber or Lyft. Other workers may also receive tips (e.g., counter service workers), but those jobs are included with non-tipped workers. Various sales personnel who may receive commissions are also included with non-tipped workers because the data do not allow the analysis to separately identify those workers.

Table 2.10
State Minimum Wages for Tipped Employees (as of January 1, 2020)

Jurisdiction	Combined Cash & Tip Min. Wage	Min. Cash Wage
State requires employers to pay tipped employees full state minimum wage before tips		
Washington	\$13.50	\$13.50
California	13.00	13.00
Oregon	11.25	11.25
Alaska	10.19	10.19
Hawaii	10.10	10.10
Minnesota	10.00	10.00
Montana	8.65	8.65
Nevada	8.25	8.25
State requires employers to pay tipped employees a min. cash wage above the federal min. (\$2.13/hr)		
Arizona	12.00	9.00
Colorado	12.00	8.98
New York	11.80	7.85
Connecticut	11.00	6.38
Maine	12.00	6.00
Illinois	9.25	5.55
Florida	8.56	5.54
Vermont	10.96	5.48
Massachusetts	12.75	4.95
North Dakota	7.25	4.86
Missouri	9.45	4.73
South Dakota	9.30	4.65
Washington D.C.	14.00	4.45
Iowa	7.25	4.35
Ohio	8.70	4.35
Rhode Island	10.50	3.89
Michigan	9.65	3.67
Maryland	11.00	3.63
Idaho	7.25	3.35
New Hampshire	7.25	3.26
New Jersey	11.00	3.13
Pennsylvania	7.25	2.83
Arkansas	10.00	2.63
West Virginia	8.75	2.63
New Mexico	9.00	2.35
Wisconsin	7.25	2.33
Delaware	9.25	2.23
State minimum cash wage payment is the same as the federal Fair Labor Standards Act (\$2.13/hr)		
Nebraska	9.00	2.13
Other	7.25	2.13

Note: Other includes Alabama, Georgia, Indiana, Kansas, Kentucky, Louisiana, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Utah, Virginia and Wyoming. Shaded states border Pennsylvania.

Source: The Economic Policy Institute. Minimum Wage Tracker (updated January 3, 2020).

Table 2.11
Tipped Workers Affected by a \$12 Minimum Wage for 2019

	Employment Status (000s)		Employee Gender (000s)		Total
	Part-Time	Full-Time	Male	Female	
Total Jobs	111	66	50	127	177

Source: U.S. Bureau of Labor Statistics, Occupational Employment Statistics 2019. Detail for part/full-time and gender calculated by IFO using data from U.S. Census Bureau, Current Population Survey and Merged Outgoing Rotation Group dataset (2018) compiled by the National Bureau of Economic Research.

Recently, New York City increased the cash wage for tipped food service workers from \$7.50 per hour (2017) to \$8.65 (2018) and \$10.00 (2019). When combined with the credit for tips received, the overall wage rate was \$11.00 (2017), \$13.00 (2018) and \$15.00 (2019).⁴⁷ Tipped food service workers are generally employed by full-service restaurants and data from the U.S. Bureau of Labor Statistics reveal an employment reduction for that subsector in New York City for 2018 (-1.5 percent) and 2019 (-1.6 percent). (See **Table 2.12.**)⁴⁸ For New York State excluding New York City, the combined hourly wage rate (cash plus tip credit) increased from \$9.70 (2017) to \$10.40 (2018) to \$11.10 (2019). Employment at full-service restaurants also declined in 2018 (-0.4 percent) and 2019 (-2.1 percent).

Table 2.12
New York Food Service and Total Employment Growth Rates

Calendar Year	New York City (NYC)		
	Limited Food Service	Full Food Service	Total Employment
2015	6.4%	5.5%	3.0%
2016	4.8	1.7	2.2
2017	6.2	3.5	2.0
2018	3.8	-1.5	2.1
2019	2.9	-1.6	2.2
Calendar Year	New York State (excludes NYC)		
	Limited Food Service	Full Food Service	Total Employment
2015	1.9%	1.8%	0.8%
2016	2.4	1.6	1.0
2017	2.5	1.4	0.7
2018	1.0	-0.4	0.7
2019	0.5	-2.1	0.2

Notes: For NYC, applies to full food service establishments with more than 10 employees. For tipped workers and base minimum wage, rates are higher in Westchester County and Long Island than New York State excluding NYC: 30 cents higher (2017), 60 cents (2018) and 90 cents (2019).

Source: State and Area Employment, U.S. Bureau of Labor Statistics, non-seasonally adjusted data.

⁴⁷ Applies to employers with 11 or more employees.

⁴⁸ See <https://www.bls.gov/sae/>. Data are for non-seasonally adjusted payroll employment.

For New York City and New York State, the minimum wage rate for tipped workers (cash plus tip credit) was the same as the base hourly minimum wage rate for non-fast food workers. The data from Table 2.12 show that employment patterns at full-service restaurants diverged notably from overall employment patterns. For fast food workers, despite hourly minimum wage rates increasing by \$1.00 (New York State) or \$1.50 (New York City) in each of the past three years, employment at limited-service restaurants posted moderate to strong gains.

Moving from a \$12 to \$15 per Hour Minimum Wage

Following the enactment of a \$12.00 minimum wage, the proposal increases the minimum wage by 50 cents per annum beginning July 1, 2021. By July 1, 2026, the minimum wage reaches \$15.00 and is indexed to inflation annually thereafter. Currently, no state has a \$15.00 per hour minimum wage, so it is not possible to assess the potential implications for Pennsylvania. However, a few items can be noted:

- For 2019, there were 1.81 million positions that paid less than \$15.00 per hour. That figure represents 30.6 percent of all payroll jobs (tipped and non-tipped) in the state.
- For those workers, the phased-in increase would represent a significant wage gain. For example, for the first year the increase would be 4.2 percent (\$0.50 / \$12.00). By the final year, the increase would be 3.4 percent (\$0.50 / \$14.50).
- Similar to the increase to \$12.00, much of any negative employment impact would likely be borne by new entrants to the labor market, and existing workers would reap most of the gains.
- Firms might respond to higher wages through a reduction in benefits such as healthcare and retirement plans. Low-wage workers earning under \$12.00 per hour likely receive few benefits, but workers earning \$12.00 to \$14.99 per hour likely receive some form of healthcare or retirement savings benefits.

Revenue Estimate Comparison

Based on a request from the Senate Appropriations Committee, the analysis concludes with a comparison of the IFO revenue estimate and key assumptions to the same proposal included in the Executive Budget. Based on a letter sent from the Department of Revenue to the House Appropriations Committee, the administration projects the following impacts on General Fund revenues for FY 2020-21 due to a \$12.00 minimum wage:⁴⁹

- Wage income for low-income workers increases by roughly \$4.7 billion and PIT for those workers increases by \$144 million. (The comparable figures for IFO are \$3.3 billion and \$102 million.) Due to the higher wage, profits of pass-through entities decline by \$3.2 billion and PIT remittances of those owners fall by \$99 million. Therefore, lower profits finance 69 percent of the higher wages for low-income workers. Additionally, Tax Forgiveness falls by \$11 million. The net PIT impact is a gain of \$54 million.

⁴⁹ See DOR written responses to FY 2020-21 Budget Hearing Questions, February 28, 2020, https://www.pahouse.com/files/BudgetHearingTestimony/2020-21/03-09/REV_BdgHearingResponse_022820.pdf.

- Sales and use tax revenues increase due to higher wage income and spending of low-income workers (\$124 million). That is partially offset by lower taxable spending of small business owners due to lower profits (-\$41 million). The net gain of \$80 million (includes a negative impact of -\$3 million for lower employment growth) is largely driven by the assumption that low-income workers spend a much higher share of their new income on taxable items as compared to the income lost by business owners.
- The administration's net revenue impact is **\$133 million**, compared to the IFO estimate of **\$55 million**. Three factors motivate the administration's higher revenue estimate: (1) the inclusion of wage gains for tipped workers, (2) the assumption that 31 percent of the wage gains do not need to be financed or offset (20 percent for IFO) and (3) a higher differential in the share of income gains (losses) spent on taxable items by low-wage workers (business owners and other consumers).

Summary

Similar to other policy changes, policymakers face tradeoffs from a higher minimum wage. There will be many who benefit from the change, but a smaller group will be adversely impacted too. Policymakers will need to decide whether the projected gains outweigh the drawbacks.

The analysis found the following gains from a \$12.00 per hour minimum wage for non-tipped workers:

- Roughly 1.02 million payroll jobs would be directly affected and net wage income for low-wage workers would increase by \$2.4 billion, roughly \$34 per week for part-time workers and \$55 per week for full-time.
- There would be spillover effects for workers earning \$12.00 to \$15.00 per hour. The analysis assumes a five percent wage increase, which yields \$940 million of gains for 765,000 payroll jobs.
- The size of the state economy would expand because low-wage workers will spend nearly all of the new income they receive. General Fund revenues would increase by roughly \$55 million per annum once all economic multiplier effects have been fully realized.
- Although businesses would incur higher labor costs, they should also realize cost savings through an increase in worker productivity and reduced labor turnover.

The analysis also found the following drawbacks from the proposal:

- An employment reduction of 27,000 positions, 18,000 part-time and 9,000 full-time (excludes tipped workers).
- More difficult entry into the labor market for inexperienced workers, especially high school and college students who work part-time.
- The Department of Human Services projects that state expenditures would increase by \$10.7 million in FY 2020-21 as a result of a \$12.00 minimum wage. Prior year estimates reported a savings, but the current year estimates reflect a higher federal matching rate for individuals leaving Medical Assistance (less state savings) and a lower federal matching rate for children moving to CHIP (higher state costs). State safety net program costs are estimated to increase to \$100.4 million in FY 2022-23.

- Higher price levels for sectors affected by the higher minimum wage, in particular the food service and retail trade sectors.
- Stronger negative employment effects for rural areas that have a lower cost of living and a greater share of small, regional employers.
- Lower profit levels that can be reinvested into business operations.

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Increasing the Minimum Wage to \$15/Hour by 2027 Raises Wages for More Than 1.6 Million Workers in Pennsylvania

Who Are They?

February 2021
by
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The Demographic Impacts of a Minimum Wage Increase¹

Governor Wolf’s budget includes a plan to raise the current \$7.25 per hour minimum wage to \$12 in July 2021, followed by 50-cent increases yearly until July 2027, where it will be set at \$15 per hour. This proposal also aims to eliminate the tipped minimum wage, allowing currently tipped workers to join the climb to \$15 starting with \$12 in July 2021. In this report, we outline the demographic characteristics of workers who will benefit from this plan to increase the minimum wage.

Table 1

Summary of minimum wage increases under proposed increase of Pennsylvania minimum wage and numbers of workers affected by the increases, 2021–2027						
Date	Minimum wage	Total estimated state wage-earning workforce	Directly affected	Indirectly affected	Total affected	Affected workers' share of state workforce
1-Dec-20	\$7.25					
1-Jul-21	\$12.00	5,870,254	919,072	499,153	1,418,225	24.2%
1-Jul-22	\$12.50	5,877,533	989,565	470,099	1,459,665	24.8%
1-Jul-23	\$13.00	5,885,273	1,026,795	489,595	1,516,390	25.8%
1-Jul-24	\$13.50	5,893,484	1,052,338	504,277	1,556,615	26.4%
1-Jul-25	\$14.00	5,902,174	1,076,579	508,355	1,584,934	26.9%
1-Jul-26	\$14.50	5,911,353	1,098,817	509,132	1,607,949	27.2%
1-Jul-27	\$15.00	5,921,032	1,119,313	511,115	1,630,427	27.5%

Notes: Values reflect the result of the proposed change in the state minimum wage. Wage changes resulting from existing state and local minimum wage laws are accounted for by EPI's Minimum Wage Simulation Model. Totals may not sum due to rounding. Shares are calculated from unrounded values. Directly affected workers will see their wages rise as the new minimum wage rate exceeds their existing hourly pay. Indirectly affected workers have a wage rate just above the new minimum wage (between the new minimum wage and 115 percent of the new minimum). They will receive a raise as employer pay scales are adjusted upward to reflect the new minimum wage. Wage increase totals are cumulative of all preceding steps.

Source: Economic Policy Institute Minimum Wage Simulation Model using data from the Census Bureau, Bureau of Labor Statistics, and Congressional Budget Office. See EPI Minimum Wage Simulation Model 2020. Dollar values adjusted by projections for CPI-U in CBO August 2020 projections.

A minimum wage increase will benefit workers all across Pennsylvania. The first increase proposed for July 2021 would affect more than 1.4 million workers in Pennsylvania, either directly or indirectly, with the final \$15 wage reaching more than 1.6 million people. Of the 1.6 million workers estimated to be affected by a \$15 minimum wage, 1.1 million would be directly affected and more than 500,000 would be indirectly affected. Directly affected workers currently earn less than \$15 per hour while indirectly affected workers make slightly more than \$15. However, our projections show that they would see a slight wage increase as pay scales are adjusted upward because employers would raise wages to retain workers who would have more employment

Special thanks to Stephanie Frank for producing the graphs for this report.

¹ This report is based on the Economic Policy Institute’s (EPI) Minimum Wage Simulation Model, which uses data from the Census Bureau, the Bureau of Labor Statistics, and the Congressional Budget Office. EPI provided us with state-level estimates that serve as the template for this state-level report.

alternatives that pay \$15 an hour or slightly more. By July 2027, 27.5 percent of Pennsylvania’s workforce would be affected by this minimum wage increase.

Table 2 shows the wage impacts of raising the minimum wage. The average affected worker would see a \$2.09 per hour increase in July 2021, or \$3,100 a year for full-time, year-round workers. This change represents a 16.6% increase in their income. By 2027, when the minimum wage has reached \$15 per hour, the average affected worker would see a \$2.56 per hour increase, or \$3,800 increase for full-time, year-round work. In all, Pennsylvania workers would see a \$6.2 billion increase in yearly wages, which would provide a significant stimulus to the Pennsylvania economy.

Table 2

Wage impacts of increasing the Pennsylvania minimum wage to \$15 by 2027 (2021Q1\$)						
Date	Minimum wage (nominal \$)	Minimum wage (2021Q1\$)	All (directly & indirectly) affected workers			
			Total wage increase (thousands 2021Q1\$)	Change in average hourly wage (2021Q1\$)	Change in avg. annual income (year-round workers) (2021Q1\$)	Real percent change in average annual income
1-Dec-20	\$7.25	\$7.25				
1-Jul-21	\$12.00	\$11.89	\$4,338,000	\$2.09	\$3,100	16.6%
1-Jul-22	\$12.50	\$12.16	\$4,773,250	\$2.22	\$3,300	17.5%
1-Jul-23	\$13.00	\$12.37	\$5,117,860	\$2.28	\$3,400	17.7%
1-Jul-24	\$13.50	\$12.57	\$5,426,782	\$2.35	\$3,500	18.0%
1-Jul-25	\$14.00	\$12.74	\$5,720,754	\$2.43	\$3,600	18.4%
1-Jul-26	\$14.50	\$12.91	\$5,994,382	\$2.50	\$3,700	18.8%
1-Jul-27	\$15.00	\$13.07	\$6,244,645	\$2.56	\$3,800	19.1%

Notes: See Table 1.

Source: Economic Policy Institute Minimum Wage Simulation Model using data from the Census Bureau, Bureau of Labor Statistics, and Congressional Budget Office. See EPI Minimum Wage Simulation Model 2020. Dollar values adjusted by projections for CPI-U in CBO August 2020 projections.

Who benefits? Demographics of affected workers

Conventional ideas paint the average low-wage worker as someone just starting out in the work force, maybe a teenager with a first job, or someone working for pocket money as a secondary earner in a household. Contrary to this belief, most minimum-wage workers in Pennsylvania are not teenagers, and many have significant work experience. Of all workers in Pennsylvania, 27.5 percent earn wages that would be impacted by this minimum wage increase. The following analysis shows who would be directly impacted by a minimum wage increase (those earning less than \$15 per hour) and those who would be indirectly affected (those who earn between the new minimum and 115 percent of the new minimum). The underlying data that supports the claims of each section of this report can be found in Appendix 1.

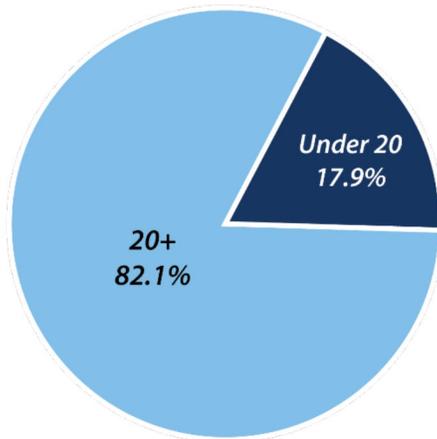
Age

Only 17.9 percent of workers who benefit from a \$15 minimum wage are teenagers—the vast majority are older. Figure 3 shows that 82.1 percent of workers who would see a wage increase are 20 or older.

Figure 1

Most Workers Who Would Benefit From a \$15 Minimum Wage Increase Are Not Teens

Share of those who would benefit from an increase to \$15 in 2027 by age category



Source: Keystone Research Center based on data from the Economic Policy Institute.

Figure 2 breaks down the age distribution of affected workers.

Workers under age 25 make up 40.2 percent of those who would benefit. People aged 25-39 are 27.4 percent of those benefited. Middle-aged workers (40-54) make up 16.3 percent of the share of workers who would benefit. Older workers (age 55+) are 16 percent of affected workers. This chart, along with Figure 3, show that 32.3 percent of those who would benefit are age 40 or older, while only 17.9 percent are teenagers. This is contrary to mainstream ideas of low-wage workers being primarily younger entry workers.

Figure 2

Share of Affected Workers Who Are in Each Age Category



Source: Keystone Research Center based on data from the Economic Policy Institute.

Gender

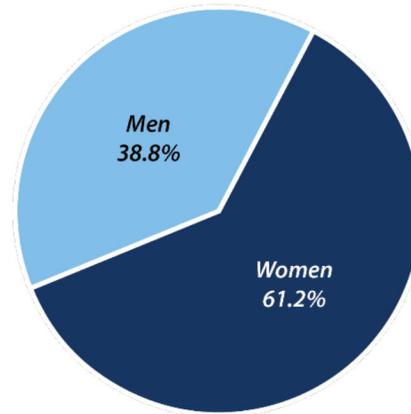
The minimum wage increase would benefit all low-wage workers, but women disproportionately work low-wage jobs. Figure 3 shows that of all the workers who would benefit from a minimum wage increase to \$15 by 2027, 61.2 percent of them are women. In fact, by 2027, 34 percent of all women in the Pennsylvania workforce would benefit from a minimum wage increase, while 21.2 percent of all men would benefit. (See Appendix 1.)

Race/Ethnicity

White, non-Hispanic workers in Pennsylvania make up 66.5 percent of those who benefit from the proposed minimum wage increase. Out of all workers benefited, 14.5 percent of them are Black and 13 percent Hispanic, with smaller shares for workers who identify as Asian or as another race/ethnicity.

Figure 3

Women Make Up Over 60% of Workers Who Would Benefit From a Minimum Wage Increase to \$15/Hour by 2027



Source: Keystone Research Center based on data from the Economic Policy Institute.

Figure 4

White Workers Make Up Most of Those Who Would Benefit From a 2027 Raise to \$15/Hour; Larger Shares of Workers of Color Would Benefit

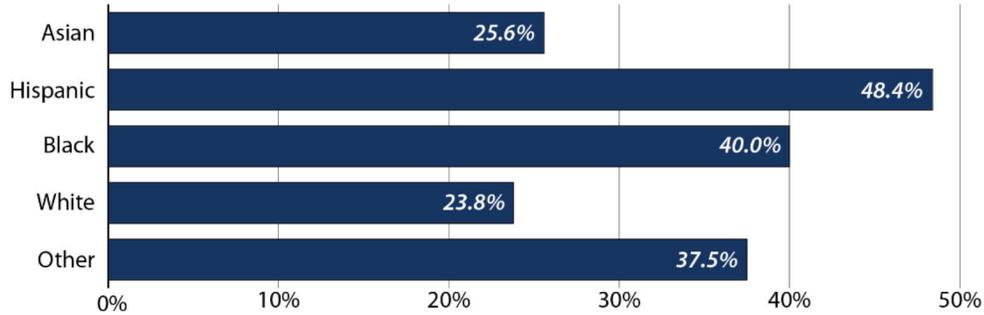


Source: Keystone Research Center based on data from the Economic Policy Institute.

Whites make up the largest share of workers who would benefit from a higher minimum wage, but other racial and ethnic groups benefit at higher rates. Figure 5 shows that 48.4 percent of all Hispanic workers in Pennsylvania would benefit from a 2027 raise in the minimum wage to \$15/hr. 40 percent of Black workers in the state would see a wage increase, and over a quarter of all Asian workers would benefit.

Figure 5

Share of Workers in Each Racial/Ethnic Group That Would Benefit From a \$15 Wage in 2027



Source: Keystone Research Center based on data from the Economic Policy Institute.

Education

High school graduates make up the largest education group who would benefit from a \$15 minimum wage by 2027. Of those who benefit, 17.6 percent have less than a high school education. One common misconception about low-wage work is that is overwhelmingly done by people with low education levels. However, Figure 6 shows that almost 40 percent of those who would benefit have at least some college experience.

Figure 6

Of Those Workers Who Would Benefit From a Minimum Wage Increase to \$15 by 2027, Four in Ten Have Some College Experience



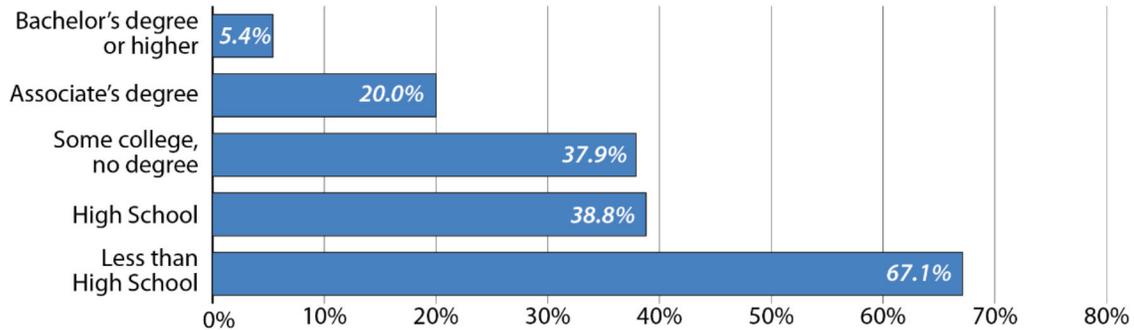
Source: Keystone Research Center based on data from the Economic Policy Institute.

Figure 7 shows the share of workers who would benefit from a minimum wage increase in each educational category: 67.1 percent of workers with less than a high school education would see a wage increase. More than a third of workers with either a high school degree or some college would get a increase. One fifth of workers

with an associate degree would see a wage increase, and 5.4 percent of workers with a bachelor’s degree or higher would get a raise with a \$15 per hour minimum wage by 2027.

Figure 7

Share of Workers in Each Educational Attainment Group That Would Benefit From a 2027 Minimum Wage Raise to \$15



Source: Keystone Research Center based on data from the Economic Policy Institute.

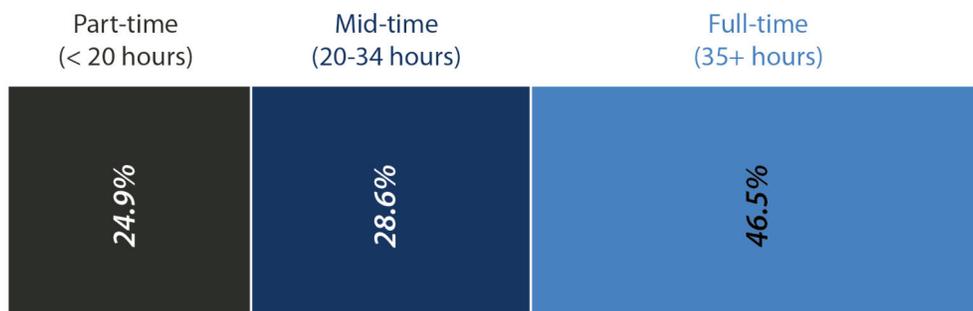
Hours of Work

Almost half of workers who would benefit from a 2027 minimum wage increase to \$15 per hour are full-time workers who work 35 or more hours a week. Workers who work 20-34 hours per week (mid-time) make up 28.6 percent of those who would benefit. Those working less than 20 hours per week make up about a quarter of those who would benefit.

Figure 8

Full-time Workers Would Benefit the Most From a Minimum Wage Increase to \$15 by 2027

Share of affected workers by hours worked



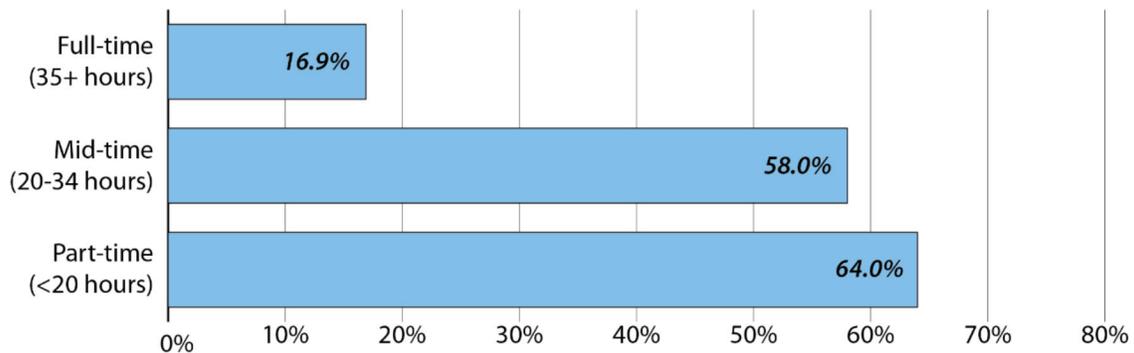
Source: Keystone Research Center based on data from the Economic Policy Institute.

While full-time workers are the plurality of workers who benefit from a wage increase, Figure 9 shows that only 16.9 percent of all full-time workers would see a wage increase. Higher shares of mid-time (58 percent) and

part-time (64 percent) workers would benefit. While many people work part-time voluntarily, many others work multiple part-time jobs, or work part-time involuntarily because of other responsibilities like child care, elder care or school.

Figure 9

Share of Each Employment Group That Would Benefit From a \$15 Minimum Wage by 2027



Source: Keystone Research Center based on data from the Economic Policy Institute.

Family Income

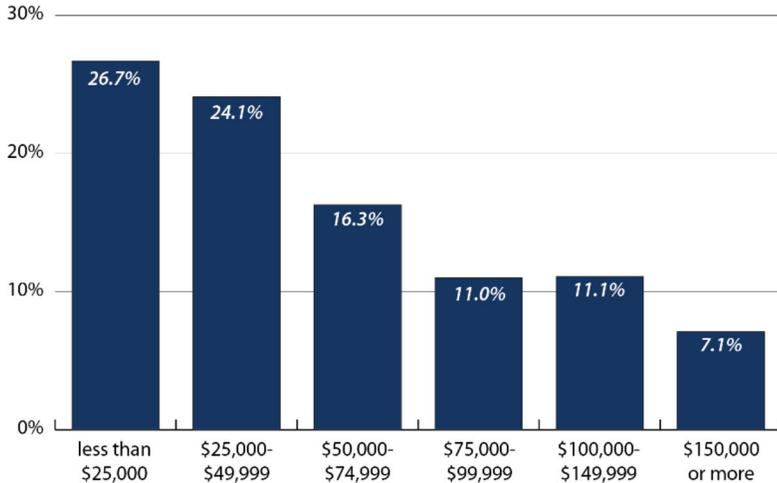
Another misconception about low-wage workers is that their income isn't needed to help their family make ends meet because their wages are in addition to a larger paycheck from parents or a spouse. Figure 10 shows that this is not necessarily the case in most households. More than half of all workers who would benefit from a \$15 per hour minimum wage by 2027 live in families whose total family income is \$49,999 or less. A minimum wage increase doesn't just help workers from lower-income families, though, as about half of the remaining workers who benefit come from families who earn more than \$50,000 a year. A wage increase impacts workers all across the family-income range. It is still important for those with higher incomes because it reduces worker exploitation for all, regardless of family income levels.²

² ["Raising the federal minimum wage to \\$15 by 2024 would lift pay for nearly 40 million workers" | Economic Policy Institute \(epi.org\).](https://www.epi.org/raising-the-federal-minimum-wage-to-15-by-2024-would-lift-pay-for-nearly-40-million-workers/)

Figure 10

Most Workers Who Would Benefit From a \$15 Minimum Wage Increase by 2027 Come From Families With Modest Incomes

Share of affected workers who are in each family income group



Source: Keystone Research Center based on data from the Economic Policy Institute.

Poverty Status

The COVID-19 pandemic has worsened poverty and hardship issues in the United States. Employment has not recovered since the unemployment spike in spring 2020³, and even those who have found new jobs may be struggling to catch up on bills that accumulated while they were unemployed. The Census Bureau has conducted weekly Pulse surveys in an attempt to track these hardship experiences, and have found that food scarcity, housing insecurity, essential expense hardships, and the likelihood of being evicted or foreclosed on are high across Pennsylvania and the United States as a whole.⁴

Raising the minimum wage to \$15 per hour by 2027 in Pennsylvania would help reduce the poverty rate. Figure 11 shows that 45.2 percent of workers who would benefit have a family income that is below 200 percent of the poverty line. Almost 20 percent of these workers live in families with incomes below the poverty line.

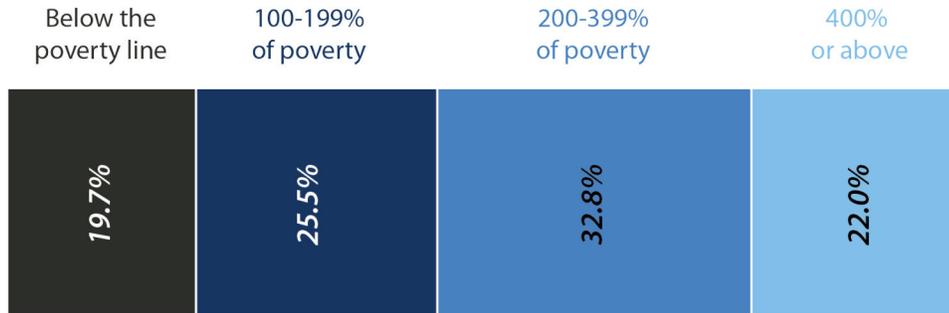
Figure 11

³ <https://www.bls.gov/charts/employment-situation/employment-levels-by-industry.htm>.

⁴ <https://www.census.gov/data/experimental-data-products/household-pulse-survey.html>.

Raising the Wage to \$15 by 2027 Would Help Workers in Poverty

Share of affected workers by their family's income to poverty ratio

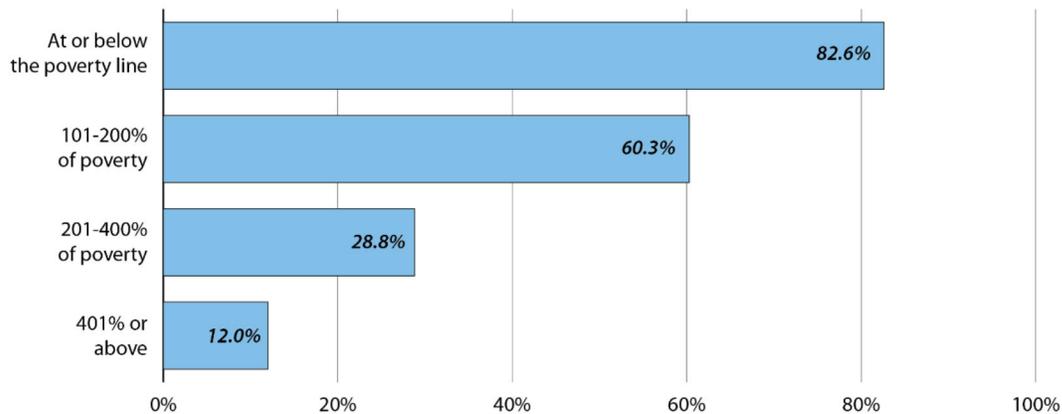


Source: Keystone Research Center based on data from the Economic Policy Institute.

Of all Pennsylvania workers, those with a lower family income have a much higher chance of benefitting from the minimum wage increase (Figure 12). More than 80 percent of people living in families who earn at or below the poverty line would see a wage increase. Nearly 71 percent of workers from “near poor” families—those earning up to 200 percent of the poverty line—would benefit from a \$15 per hour wage in 2027. Fewer percentages of workers from higher-income families would benefit from the change.

Figure 12

Share of Workers in Each Family Income-to-Poverty Group That Would Get a Raise With a \$15/hour 2027 Increase in the Minimum Wage



Source: Keystone Research Center based on data from the Economic Policy Institute.

Family Status and Children

Nearly a quarter of Pennsylvania workers who would benefit from the proposed minimum wage increase are parents—12.5 percent are single parents. While single parents make up a relatively small share of the group benefitting from a minimum wage increase, overall, nearly 40 percent of all single parents in Pennsylvania would see a wage increase under this proposal (Figure 13).

Figure 13

Share of Affected Workers in Each Family Status Group



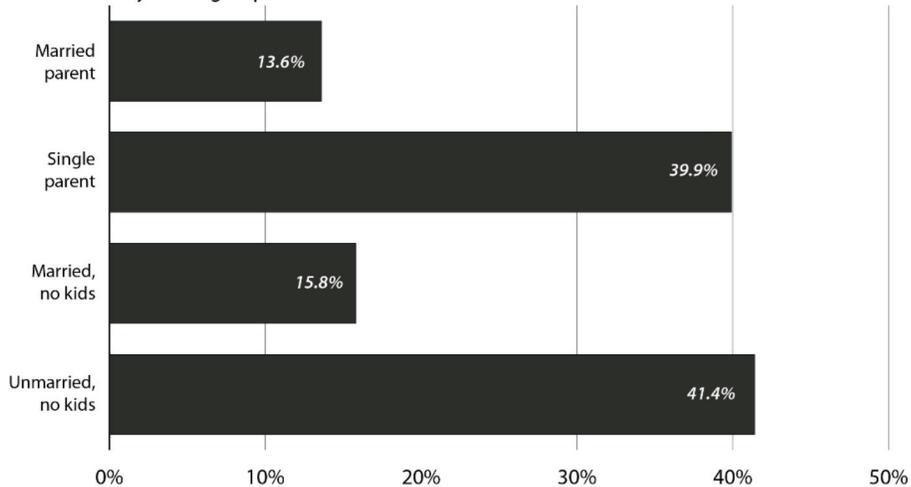
Source: Keystone Research Center based on data from the Economic Policy Institute.

Of workers who are married parents, 13.6 percent would benefit from the proposed wage increase. About 16 percent of workers who are married with no children would benefit, and over 40 percent of workers who are unmarried with no children would benefit.

Figure 14

Single Parents Would Disproportionately Benefit From an Increase in the Minimum Wage

Share of each family status group that would benefit



Source: Keystone Research Center based on data from the Economic Policy Institute.

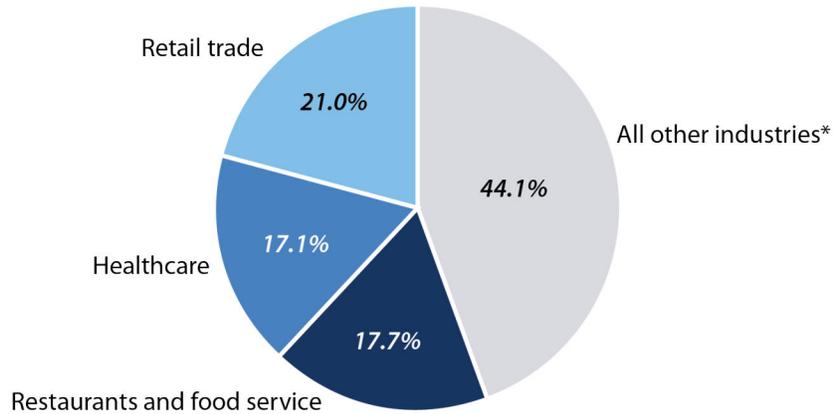
Industry

Workers from many different industries would benefit from the proposed \$15 per hour wage by 2027. Almost 56 percent of these workers are in three service industries that are vital to our economy, especially in the wake of a pandemic: retail trade (21 percent), health care (17.1 percent), and restaurants and food service (17.7 percent). The workers in these industries have been hit especially hard by COVID-19, and while some were lucky enough to receive some extra hazard pay during the ongoing pandemic, those wage increases are likely not permanent and certainly benefit fewer workers than would a \$15 per hour minimum wage.

Figure 15

More Than Half of Workers Who Would Benefit Are in Service Industries and Healthcare

Share of affected workers who are in each industry



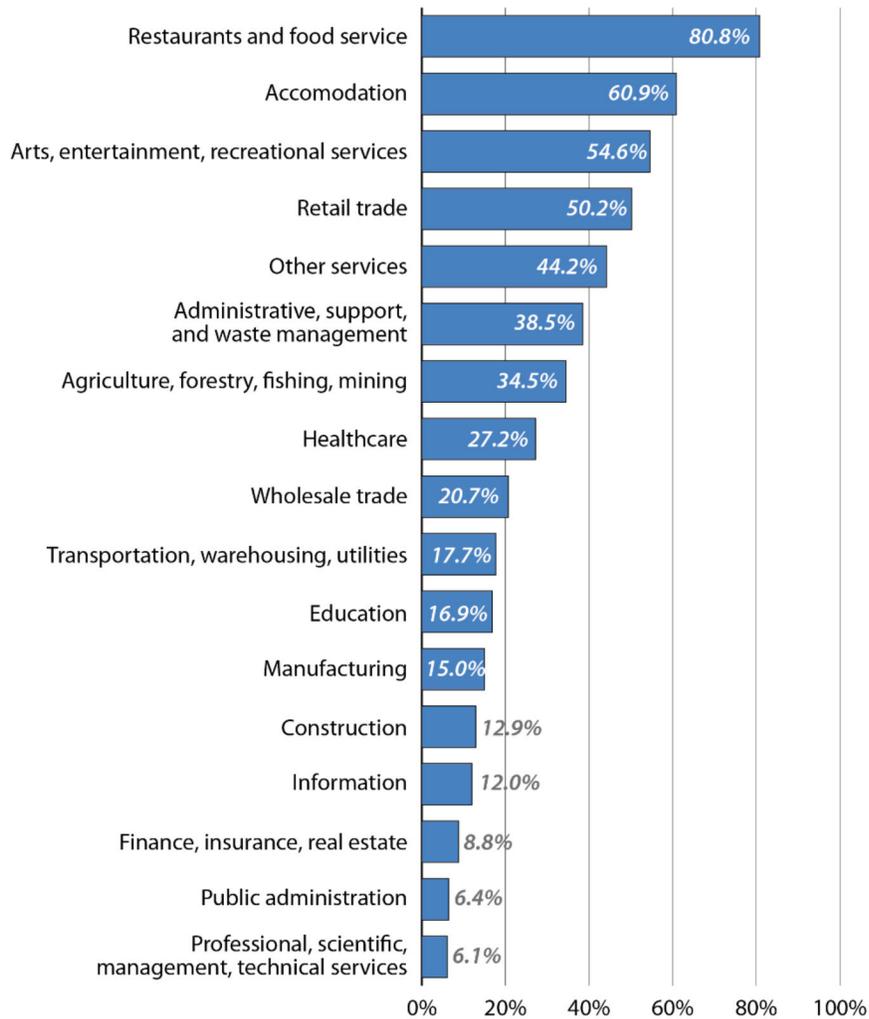
* All other industries includes: Manufacturing (6.8%); Education (6.0%); Other services (6.5%); Administrative, support, and waste management (5.0%); Transportation, warehousing, utilities (3.7%); Arts, entertainment, recreational services (3.5%); Construction (2.2%); Finance, insurance, real estate (2.0%); Wholesale trade (2.1%); Accommodation (1.9%); Professional, scientific, management, technical services (1.3%); Agriculture, forestry, fishing, mining (1.4%); Public administration (1.0%); and Information (0.7%).

Source: Keystone Research Center based on data from the Economic Policy Institute.

Figure 16 shows the share of workers in each industry that would benefit. Those most likely to benefit work in service industries like restaurants (80.8 percent), accommodation (60.9 percent), arts/entertainment/recreational services (54.6 percent), and retail trade (50.2 percent), with smaller shares of other industries being affected. Notably, 27 percent of all Pennsylvania health care workers would see a wage increase.

Figure 16

Share of Workers in Each Industry That Would Benefit From a \$15 Minimum Wage



Source: Keystone Research Center based on data from the Economic Policy Institute.

Conclusion

The establishment of the minimum wage in 1938 played a significant role in ensuring that workers could receive adequate wages for their work—wages that could help provide for them and their families. However, because the United States and Pennsylvania have not continued to update the minimum wage to keep up with inflation, low-wage workers today find themselves earning a lower and lower wage each year, even if they’re working the same job. As the costs of goods and services have changed, many have fortunately decreased in price. But some essentials like the cost of housing, gasoline, and education have far outpaced inflation, taking larger and larger shares of low-wage workers’ paychecks.

At its start, Pennsylvania’s minimum wage was 43 percent of the average worker’s wage—but today, it is only

around 25 percent of the average wage⁵. Raising the wage to \$15 per hour by 2027 would raise Pennsylvania workers' wages back up to the level they were in the 1950s and 1960s—around half of the average Pennsylvania wage.

Wages would increase directly due to the minimum wage increase and indirectly due to employers' shifting pay scales. And its impact would be significant—more than 27 percent of Pennsylvania's workforce would see an increase in their wages by 2027.

As this report shows, workers across demographic boundaries would benefit. With this policy change, there would be: more than 1.6 million workers across the state with higher wages; a reduction in poverty across the state; the elimination of disparities between tipped and untipped workers; and a decrease in existing gender and race disparities. A pay increase for low-wage workers would directly inject more money into our state economy, which is much needed as we weather and recover from this public health crisis. And with annual wage adjustments linked to inflation, Pennsylvania's workers of the future wouldn't have to worry about their wages lagging. It's time to raise the minimum wage.

5

<https://www.workstats.dli.pa.gov/Documents/Minimum%20Wage%20Reports/Minimum%20Wage%20Report%202020.PDF>

Appendix 1.

Demographic characteristics of workers who would benefit if the Pennsylvania minimum wage were raised to \$15 in July 2027			
Category	Total affected directly or indirectly	Share affected directly or indirectly	Share of the total affected in this group
Total	1,630,427	27.5%	100.0%
Sex			
Male	632,488	21.2%	38.8%
Female	997,940	34.0%	61.2%
Age			
Teenager	291,814	90.4%	17.9%
Ages 20 and older	1,338,613	23.9%	82.1%
Ages 16 to 24	655,872	71.2%	40.2%
Ages 25 to 39	447,078	24.1%	27.4%
Ages 40 to 54	266,573	14.4%	16.3%
Ages 55 and older	260,904	20.2%	16.0%
Race / ethnicity			
White, non-Hispanic	1,083,859	23.8%	66.5%
Black, non-Hispanic	235,801	40.0%	14.5%
Hispanic, any race	211,601	48.4%	13.0%
Asian, non-Hispanic	60,161	25.6%	3.7%
Other race/ethnicity	39,006	37.5%	2.4%
Not person of color	1,083,859	23.8%	66.5%
Person of color	546,569	40.0%	33.5%
Family status			
Married parent	191,544	13.6%	11.7%
Single parent	203,430	39.9%	12.5%
Married, no children	261,037	15.8%	16.0%
Unmarried, no children	974,417	41.4%	59.8%
Usual weekly work hours category			
Part time (<20 hours per week)	405,224	64.0%	24.9%
Mid time (20-34 hours)	466,784	58.0%	28.6%
Full time (35+ hours)	758,420	16.9%	46.5%
Educational attainment			
Less than high school	286,856	67.1%	17.6%
High school	701,939	38.8%	43.1%
Some college, no degree	420,472	37.9%	25.8%
Associate degree	111,403	20.0%	6.8%
Bachelor's degree or higher	109,757	5.4%	6.7%

Appendix 1 continued:

Major Industry			
Agriculture, fishing, forestry, mining	22,883	34.5%	1.4%
Construction	36,511	12.9%	2.2%
Manufacturing	110,908	15.0%	6.8%
Wholesale trade	34,523	20.7%	2.1%
Retail trade	342,032	50.2%	21.0%
Transportation, warehousing, utilities	59,830	17.7%	3.7%
Information	11,961	12.0%	0.7%
Finance, insurance, real estate	32,467	8.8%	2.0%
Professional, science, management services	21,426	6.1%	1.3%
Administrative, support, waste services	81,926	38.5%	5.0%
Educational services	98,237	16.9%	6.0%
Health care, social assistance	278,758	27.2%	17.1%
Arts, entertainment, recreational services	57,600	54.6%	3.5%
Accommodation	30,494	60.9%	1.9%
Restaurants	288,761	80.8%	17.7%
Other services	105,948	44.2%	6.5%
Public administration	16,163	6.4%	1.0%
Sector			
For profit	1,401,832	31.0%	86.0%
Nonprofit	152,209	20.1%	9.3%
Government	76,386	11.8%	4.7%
Family income category			
Less than \$25,000	434,688	73.1%	26.7%
\$25,000 - \$49,999	392,813	36.1%	24.1%
\$50,000 - \$74,999	265,595	24.6%	16.3%
\$75,000 - \$99,999	179,276	19.6%	11.0%
\$100,000 - \$149,999	181,531	15.5%	11.1%
\$150,000 or more	115,007	11.5%	7.1%
Family income-to-poverty status			
In Poverty	321,850	82.6%	19.7%
100 -199% poverty	415,154	60.3%	25.5%
200 - 399% poverty	535,393	28.8%	32.8%
400%+ poverty	358,031	12.0%	22.0%
Tipped occupations			
Not tipped	1,468,499	25.5%	90.1%
Tipped workers	161,929	100.0%	9.9%
<i>Source: Economic Policy Institute Minimum Wage Simulation Model using data from the Census Bureau, Bureau of Labor Statistics, and Congressional Budget Office. See EPI Minimum Wage Simulation Model 2020.</i>			



**2021 – 2022
Pennsylvania General Assembly
Appropriations Hearing Materials**

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Appropriation

General Government

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Mission Statement

The Pennsylvania Department of Banking and Securities regulates financial services and works to ensure consumers and businesses are well-informed about the marketplace.

Department Statement

The Pennsylvania Department of Banking and Securities is an innovative agency that effectively regulates, informs, and protects to ensure integrity in an ever-changing financial services marketplace.

The Department of Banking and Securities derives its authority from the:

- Banking Code of 1965
- Check Cashier Licensing Act
- Consumer Credit Code
- Consumer Discount Company Act
- Credit Services Act
- Credit Union Code
- Debt Management Services Act
- Debt Settlement Services Act
- Department of Banking and Securities Code
- Loan Interest and Protection Law
- Chapter 5 of the Mortgage Bankers and Brokers and Consumer Equity Protection Act
- Money Transmitter Act
- Mortgage Licensing Act
- Pawnbrokers License Act
- Investment Company Act
- Pennsylvania Securities Act of 1972
- Takeover Disclosure Law

The work and personnel enforcing the Pennsylvania Securities Act of 1972; Takeover Disclosure Law; and Investment Company Act are funded via industry licensing and assessment fees – approximately three-quarters of which are paid into the General Fund with the remainder going into the Securities Operation Fund to fund department operations. The work and personnel engaged in enforcing the authority outlined in all other statutes are funded through the Banking Fund. All monies of the Banking Fund are derived from licensing fees, assessments, penalties, and fines on regulated entities.

Program Narrative

The Pennsylvania Department of Banking and Securities works to preserve and protect the integrity of the financial services marketplace and promotes public confidence in the commonwealth's financial services through:

- Conducting examinations to ensure the safety and soundness of Pennsylvania's state-chartered financial institutions;
- Conducting examinations to ensure that non-depository financial service providers are operating in accordance with applicable state and federal laws and regulations;
- Conducting examinations to ensure that securities registrants and firms are operating in accordance with applicable securities laws;
- Reviewing proposed securities offerings to ensure that such offerings made to Pennsylvania investors comply with all applicable securities laws;
- Working to inform and protect Pennsylvania consumers and investors from unlawful and usurious financial products and offerings; and
- Assisting consumers and investors with financial matters that fall under the purview of the Department.

As of June 30, 2020, the Department supervised 176 financial institutions including 50 credit unions, 74 banks, 39 banks with trust powers, and 13 independent trust companies.

As of June 30, 2020, the Department licensed and regulated 25,393 non-depository financial service providers including 16,394 mortgage loan originators; 2,772 installment sellers; 2,229 mortgage lenders; 1,150 sales finance companies; 681 check cashers; 740 mortgage brokers; 281 mortgage servicing companies; 139 debt management services; and 17 mortgage discount companies. The remaining 990 license categories include money transmitters, loan correspondents, collector-repossessors, pawnbrokers, debt settlement services, and consumer discount companies.

As of June 30, 2020, the Department registered 210,292 broker-dealer agents; 22,805 investment adviser representatives; 3,553 investment advisers and notice filers; and 1,897 broker-dealers.

The Department has made transparency and accessibility a priority. The Department recently released its fifth annual [Consumer Services Report](#). In addition, anyone can contact the Department to ask questions or file complaints about financial transactions, companies, or services by using a toll-free telephone number (1-800-PA-BANKS) or by submitting a complaint form via the Department's website (www.dobs.pa.gov).

Consumers and investors can learn more about fraud, scams, and investing through the Department's Facebook page:

<https://www.facebook.com/PABankingAndSecurities>.

Businesses and consumers can learn about the work of the Department, its initiatives, as well as financial news and trends through social media, including Facebook, Twitter, YouTube, and LinkedIn.

Program Performance and Goals

In January 2019, a Performance-Based Budget Plan was presented by the Independent Fiscal Office on the performance of the Department. The review was broken out into five activities: (1) Depository Applications and Examinations; (2) Non-Depository Licensing, Registration and Examinations; (3) Securities Licensing, Registration and Examinations; (4) Education and Outreach; and (5) Administration.

Depository Applications and Examinations:

The Department strives to be the charter of choice for financial institutions headquartered in the commonwealth. Pennsylvania regulators are uniquely qualified to understand local markets. Additionally, the Department is successful in providing more timely examination reports; enhanced, personalized service; quicker application response times; greater accessibility to Department senior management; and a more cost-effective assessment structure.

In FY2019-20, independent depository examinations were completed in approximately 24.80 days.

The Department strives for 90% of depository examiners to have the highest certification available for their level of experience. In FY2019-20, 98% of depository examiners held the highest certification available for their level of experience.

Non-Depository Licensing, Registration and Examinations:

In FY2019-20, the Non-Depository Compliance Office and Bureau of Non-Depository Examination:

- Completed 1,232 examinations of licensed and unlicensed entities, which identified 1,089 compliance violations;
- Issued 41 enforcement actions; and
- Levied total fines in the amount of \$1,303,000 and restitution in the amount of \$488,911.

In FY2019-20, 100% of non-depository examiners held the highest certification available for their level of experience.

Securities Licensing, Registration and Examinations:

In FY2019-20, the Corporation Finance Office:

- Cleared for sale in Pennsylvania 60 registrations and 23 offerings that qualified as exempt from Pennsylvania's registration requirements;
- Received and docketed 3,641 mutual fund filings;
- Received and docketed 3,831 Form D (non-public offerings pursuant to Federal Rule 506) filings;
- Received and docketed 20 Crowdfunding filings; and
- Received and docketed 46 Reg A plus filings.

In FY2019-20, the Bureau of Securities Licensing and Bureau of Compliance and Examinations:

- Conducted 153 examinations (16.77% of investment advisor registrants);
- Executed seven Orders which resulted in costs and administrative assessments totaling \$4,630,500; and
- Issued five Orders to Show Cause from complaints against registrants and non-registrants.

Education and Outreach:

In FY2019-20, the Consumer Services Office fielded and resolved 4,970 inquiries and complaints from consumers. On average, a response was provided within 3.83 days of receipt of inquiry.

In addition, the Department's Financial Services for Consumers and Business expanded Governor Tom Wolf's Consumer Financial Protection initiative by:

- Participated in or facilitated 320 events reaching 27,981 consumers, investors, professionals, including over 74 presentations to 2,740 reentrants and inmates.
- Presented in 56 counties to audiences including students, working adults, seniors, professionals and many others.
- Launched the Investing in Women initiative, highlighting key findings from a statewide quantitative study.
- Collaborated with Department of Aging to train professionals on how to detect Elder Financial Exploitation.
- Continued partnership with AARP on the "Campaign for Wise and Safe Investing."
- Launched a longitudinal study of reentrants to measure efficacy of financial capability efforts with data collection beginning in FY20-21.

Administration:

The Department is funded solely by assessments, fees, licenses, fines, and penalties paid by entities under its jurisdiction.

The Department continues to encourage and apply Continued Process Improvements (CPI), or LEAN processes, to its operations. CPI techniques have been applied to various program processes to streamline existing methods. The Department is in the final stages of its largest project of converting six of its legacy databases and processes into a single case management system. This long overdue technology update establishes a single platform for the department's regulatory work files, payments, licenses, applications, exams and other documents. The project is being rolled out in segments, examining all programs areas to develop new workflows, business processes, and streamline how we do business. The Department is focused on eliminating paper processes by creating an internal and external portal for institutions and entities to securely transfer information. This project also demonstrates the Department's commitment to LEAN practices and incorporates key components of the Governor's Customer Service Transformation and GreenGov initiatives by providing improved paperless online government services.

The Department was swift to adjust all its operations offsite as a result of the COVID-19 pandemic with no impact to effectively and efficiently continuing to carry out its mission and core functions. In addition to home headquartered staff, all employees were capable or outfitted with commonwealth equipment in order to work in a full-time teleworking capacity.

In 2019, the Department achieved re-accreditation by the Conference of State Bank Supervisors, the American Association of Residential Mortgage Regulators, and the National Association of State Credit Union Supervisors. The Department continues to assess its performance reflecting on the results of the performance-based budget review that was conducted by the Independent Fiscal Office and assess its operations annually via the internal controls assessment process.

Program Initiatives

The Department is committed to adapting to change, including but not limited to marketplace, legislative, and regulatory changes; in addition to efficiently and effectively transitioning all its operations remotely during the COVID-19 pandemic.

The Department's new case management system is currently the focal point of its initiatives. This self-service web portal will provide for a more efficient, cost-effective, and secure digital process for the professionals, institutions, and businesses regulated by the agency. In addition, it provides: increased security protections of information; greater efficiency with documentation, communication, and records retention; increased cost-savings by going paperless; environmental sustainability with fewer paper forms, documents, and checks; and convenient online payments.

The Department is committed to improving diversity, equity, and inclusion within its work, both internally and externally. This includes developing strategies on how the department can take intentional action to promote inclusive and equitable programs and services, and recruit and retain a diverse workforce. The Department is engaging staff to discuss ways to eliminate barriers for underrepresented people within the agency, as well as those underserved by our programs and services. This initiative

will seek to examine the impacts of diversity, equity, and inclusion in the Department's work and work environment.

Regulatory

The Department will finalize review of Banking regulations in Title 10 of the Pennsylvania Code. This review was precipitated by the enactment of the "Banking Law Modernization Package" in 2012. A final-omitted regulation to eliminate obsolete provisions affecting non-depository licensees will be resubmitted and, once approved, published in the PA Bulletin and will immediately take effect. A statement of policy addressing check cashers will be reviewed for possible updating amendments. The Department will propose a new chapter of the Banking and Securities regulations to set forth procedural rules for matters before the Department or Commission. The proposed litigation procedures will be published in the PA Bulletin for comments prior to approval. Lastly, Title 10 regulation updates are being considered, and any updates will also follow the normal rulemaking process.

Summary Financial Data

	2019-20 Actual	2020-21 Available	2021-22 Budget
BANKING FUND:			
General Government:			
General Government Operations	24,848	23,786	23,786
Transfer to Restricted Inst. Resolution Account	<u>3,000</u>	<u>3,000</u>	<u>3,000</u>
Total - General Government	<u>27,848</u>	<u>26,786</u>	<u>26,786</u>
BANKING FUND TOTAL	<u>27,848</u>	<u>26,786</u>	<u>26,786</u>
GENERAL FUND:			
General Government:			
Securities Operations (Restricted)	<u>10,006</u>	<u>9,477</u>	<u>9,477</u>
DEPARTMENT TOTAL - ALL FUNDS			
Special Funds	27,848	26,786	26,786
Restricted	<u>10,006</u>	<u>9,477</u>	<u>9,477</u>
TOTAL ALL FUNDS	<u>37,854</u>	<u>36,263</u>	<u>36,263</u>

Complement Information

	2019-20 12/30/2019 Actual	2020-21 12/28/2020 Available	2021-22 7/1/2021 Budget
State Funds			
Authorized	168	168	168
Filled	145	139	N/A
Other Funds			
Authorized	50	50	50
Filled	<u>45</u>	<u>40</u>	<u>N/A</u>
Totals			
Authorized	218	218	218
Filled	<u>190</u>	<u>179</u>	<u>N/A</u>
Benefit Factor			
Banking Fund	73.61%	70.86%	66.29%
Securities Operations	71.29%	67.53%	64.55%

Detail by Major Object

	2019-20 Actual	2020-21 Available	2021-22 Budget	Change Budgeted vs. Available	Percentage Change
Personnel					
Banking Fund-GGO	17,194	18,220	17,620	(600)	-3.29%
Securities Operations	<u>6,650</u>	<u>6,853</u>	<u>6,670</u>	<u>(183)</u>	-2.67%
Total Personnel	23,844	25,073	24,290	(783)	-3.12%
Operating					
Banking Fund	6,439	5,566	6,166	600	10.78%
Securities Operations	<u>2,835</u>	<u>2,624</u>	<u>2,807</u>	<u>183</u>	6.97%
Total Operating	9,274	8,190	8,973	783	9.56%
Fixed Assets					
Banking Fund	1,215	-	-	-	100.00%
Securities Operations	<u>521</u>	<u>-</u>	<u>-</u>	<u>-</u>	100.00%
Total Fixed Assets	1,736	-	-	-	
Restricted Institution Resolution Account					
Banking Fund	3,000	3,000	3,000	-	0.00%
Securities Operations	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	0.00%
Total Rest. Inst. Res. Acct.	3,000	3,000	3,000	-	
Budgetary Reserve					
Banking Fund	-	-	-	-	-
Securities Operations	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	-
Total Budgetary Reserve	-	-	-	-	-
Total Funds	<u>37,854</u>	<u>36,263</u>	<u>36,263</u>	<u>-</u>	0.00%

Explanation of Changes

	2020-21	2021-22	Increase (Decrease)	% Change
Personnel				
Banking Fund	18,220	17,620	(600)	-3.29%
Securities Operations	6,853	6,670	(183)	-2.67%

FY2021-22 budget contains funding for salaries and benefits for a total department complement of 218 positions. A decrease in the requested funding is due to vacant positions not funded.

Operating

Banking Fund	5,566	6,166	600	10.78%
Securities Operations	2,624	2,807	183	6.97%

FY2021-22 budget contains funding to continue cost-to-carry operations. The related agency operating expenses have been split between the two funds. The increase is associated with information technology services and enhancements related to the new case management system, additional hardware/software and upgrades in financial services.

Fixed Assets

Banking Fund	-	-	-	100.00%
Securities Operations	-	-	-	100.00%

FY2021-22 budget request contains no funding.

Restricted Institution Resolution Account

Banking Fund	3,000	3,000	-	0.00%
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This restricted account is funded through transfers from the Banking Fund and would be used to pay for costs associated with unexpected trust solvency issues of financial institutions. The act authorizes the Secretary of the Department of Banking and Securities to determine the amount to be transferred from the Banking Fund each fiscal year based upon available funds and economic conditions.

Cost Assumptions

Personnel

The department's budget request includes total personnel funding (salaries and benefits) of \$24,290,000. Nineteen of the vacant positions as of the date of this report were budgeted at 26.1 pay periods due to action in process or already filled position.

Operating

The department's budget request consists of total operational funding of \$8,973,000.

Fixed Assets

The department's budget request consists of no fixed assets.

Restricted Institution Resolution Account

The department's budget request consists of a transfer of \$3,000,000.

Non-Recurring

There are no program revision requests.

Lapsed Funds

The department does not anticipate a lapse in the current fiscal year.

Litigation

The department is not engaged in any litigation that meets materiality thresholds.

Total

For FY2021-22, the department's overall budget request is \$36,263,000.

Banking Fund

The Banking Fund is a special revenue fund composed of monies received from fees, assessments, licenses, fines, and penalties collected or recovered from financial entities under the supervision of the Department of Banking and Securities. It provides for the administration of the Department of Banking and Securities and regulation of the financial services industry. The Institution Resolution Account was established within the Banking Fund to be used at the discretion of the Secretary of Banking and Securities in the event of a seizure or liquidation of a financial institution.

Statement of Cash Receipts and Disbursements

(Dollar Amounts in Thousands)

	2019-20 Actual	2020-21 Available	2021-22 Estimated
Restricted Cash Balance, Beginning	\$ 11,500	\$ 16,500	\$ 19,500
Institution Resolution:			
Receipts	5,000	3,000	3,000
Disbursements - Banking	-	-	-
Restricted Cash Balance, Ending	\$ 16,500	\$ 19,500	\$ 22,500
Unrestricted Cash Balance, Beginning	\$ 25,360	\$ 9,913	\$ 10,757
Receipts:			
Licenses and Fees.....	\$ 28,882	\$ 28,509	\$ 25,722
Fines and Penalties.....	1,539	809	400
Interest.....	913	418	500
Total Receipts	<u>31,334</u>	<u>29,736</u>	<u>26,622</u>
Total Funds Available	<u>\$ 56,694</u>	<u>\$ 39,649</u>	<u>\$ 37,379</u>
Disbursements:			
Banking and Securities.....	\$ 20,781	\$ 25,892	\$ 23,786
Transfer to Institution Resolution Account.....	5,000	3,000	3,000
Transfer to Environmental Programs.....	21,000	-	-
Total Disbursements	<u>(46,781)</u>	<u>(28,892)</u>	<u>(26,786)</u>
Unrestricted Cash Balance, Ending	<u>\$ 9,913</u>	<u>\$ 10,757</u>	<u>\$ 10,593</u>
Total Cash Balance	36,860	26,413	30,257
Receipts.....	36,334	32,736	29,622
Disbursements.....	(46,781)	(28,892)	(26,786)
Total Cash Balance, Ending	<u>\$ 26,413</u>	<u>\$ 30,257</u>	<u>\$ 33,093</u>

**2021-22 BUDGET REQUEST
DEPARTMENT OF BANKING AND SECURITIES**

LIST OF CONTRACTS

*Department 005
SAP Business Area 75*

General Government Operations - Department of Banking and Securities (075)
 Appropriation Number - 10558 (Banking Fund)

Vendor/Contractor/Grantee	State	Actual 2019-20	Available 2020-21	Budget 2021-22	Purpose
CDW Government LLC	Illinois	\$ 29,361.99	\$ 30,074.63	\$ 31,000.00	Multiple software programs
Conference of State Bank Supervisors	Maryland	\$ 170,047.00	\$ 174,047.00	\$ 185,000.00	Membership dues, training, accreditation and national online licensing system
Eplus Technology Inc.	Pennsylvania	\$ 11,027.81	\$ 49,537.55	\$ 13,000.00	Audio visual equipment, network hardware and Smartnet
Federal Reserve Bank of Philadelphia	Pennsylvania	\$ 1,803.70	\$ 5,250.00	\$ 3,000.00	Training
Financial Information Systems	Texas	\$ 6,000.00	\$ 6,000.00	\$ 6,000.00	Subscription - Credit Union Analyst & Bank Analyst
HP Inc.	California	\$ 276,212.23	\$ -	\$ -	Desktops/Laptops and docking stations
Insight Public Sector Inc.	Arizona	\$ 1,878,644.79	\$ 138,000.00	\$ -	New Case Management System
Jacobson LLC	Pennsylvania	\$ 21,000.00	\$ -	\$ -	Consulting Services - Communications
Market Square Plaza Associates LP	Pennsylvania	\$ 1,025,118.14	\$ 1,095,000.00	\$ 1,100,000.00	Lease - Building and parking (Harrisburg Office)
NASCUS	Virginia	\$ 37,161.00	\$ 28,708.00	\$ 29,000.00	Membership dues and accreditation
OST INC	Washington DC	\$ 114,472.49	\$ 94,348.02	\$ -	IT Project - Business Analyst and Project Manager
RELX INC	Ohio	\$ 7,009.73	\$ 7,068.00	\$ 1,962.00	Online legal research services
Ricoh USA Inc.	Pennsylvania	\$ 26,209.19	\$ 30,210.84	\$ 17,000.00	Lease - Copiers and Software
SFP East Shore Associates Inc.	Pennsylvania	\$ 7,712.28	\$ -	\$ -	All-staff Meeting
SourceMedia	New York	\$ 31,360.00	\$ -	\$ -	Subscription - American Banker (4-yr)

Inter-Agency Agreements	State	Actual 2019-20	Available 2020-21	Budget 2021-22	Purpose
Department of General Services	Pennsylvania	\$ 8,952.30	\$ 9,000.00	\$ 10,000.00	Parking - Chestnut Street Garage
Department of General Services-Publications	Pennsylvania	\$ 17,364.32	\$ 20,000.00	\$ 20,000.00	Mail/Print Services
Executive Offices	Pennsylvania	\$ 20,959.46	\$ 21,000.00	\$ 21,000.00	Annual EDC Support

General Government Operations - Department of Banking and Securities (075)

Appropriation Number - 26385 (General Fund)

Vendor/Contractor/Grantee	State	Actual 2019-20	Available 2020-21	Budget 2021-22	Purpose
Bellevue Associates	Pennsylvania	\$ 142,672.29	\$ 84,380.59	\$ 151,000.00	Lease - Building (Philadelphia Office)
CCH Incorporated	Illinois	\$ 13,280.00	\$ 13,280.00	\$ 13,280.00	Subscription - Accounting Research Manager
CDW Government LLC	Illinois	\$ 11,644.87	\$ 11,702.24	\$ 12,000.00	Multiple software programs
E-Plus Technology Inc.	Pennsylvania	\$ 4,726.20	\$ 21,230.39	\$ 6,000.00	Audio visual equipment, network hardware and Smartnet
HP Inc	California	\$ 133.50	\$ 118,243.17	\$ -	Desktops/Laptops and docking stations
INSIGHT PUBLIC SECTOR INC	Arizona	\$ 439,084.12	\$ 233,829.54	\$ -	New Case Management System
Jacobson LLC	Pennsylvania	\$ 9,000.00	\$ -	\$ -	Consulting Services - Communications
Market Square Plaza Associates LP	Pennsylvania	\$ 422,696.68	\$ 463,000.00	\$ 465,000.00	Lease - Building and parking (Harrisburg Office)
OST Inc.	Washington DC	\$ 49,059.67	\$ 40,434.86	\$ -	IT Project - Business Analyst and Program Manager
Parkway Corporation	Pennsylvania	\$ 36,960.00	\$ 39,330.00	\$ 40,000.00	Lease - parking (Philadelphia Office)
Penn Lodge Partners LP	Pennsylvania	\$ 16,091.30	\$ -	\$ 15,000.00	Compliance Conference Venue
Public Parking Authority	Pennsylvania	\$ 39,060.00	\$ 40,960.00	\$ 42,000.00	Lease - parking (Pittsburgh Office)
RELX Inc.	Ohio	\$ 10,970.28	\$ 9,432.00	\$ 2,031.00	Online legal research services
Ricoh USA Inc.	Pennsylvania	\$ 13,995.72	\$ 14,079.72	\$ 10,351.72	Lease - Copiers and Software
SFP East Shore Associates Inc.	Pennsylvania	\$ 7,627.48	\$ -	\$ -	All-staff Meeting
SourceMedia	Pennsylvania	\$ 4,480.00	\$ -	\$ -	Subscription-American Banker (4-yr)

Inter-Agency Agreements	State	Actual 2019-20	Available 2020-21	Budget 2021-22	Purpose
Department of General Services	Pennsylvania	\$ 189,854.55	\$ 195,222.28	\$ 200,050.00	Lease - Building (Pittsburgh Office)
Department of General Services	Pennsylvania	\$ 84,870.00	\$ 3,836.70	\$ 4,000.00	Parking - Chestnut Street Garage
Executive Offices	Pennsylvania	\$ 9,013.28	\$ 9,500.00	\$ 9,500.00	Annual EDC Support