

Pennsylvania Real Wages Are Rising and Above Pre-Pandemic and U.S. Levels

A central question in public discussion today is “how is the economy performing?” This workforce trends analysis addresses that issue with a focus on workers’ pay—wages adjusted for inflation.



➤ National data show average hourly earnings gains have outpaced inflation for about a year as of mid-2024.

➤ An early 2024 analysis by the PA Independent Fiscal Office found that wages have now increased slightly compared to before the pandemic.

➤ This report relies in the data source used most widely to track wages and reaches a similar conclusion: real wages throughout the Pennsylvania earnings distribution increased from 2019 to 2023, with the biggest gains for low-wage workers.

➤ In the bottom third of the distribution, real wages for those at the tenth, twentieth, and thirtieth percentiles (people earning more than 10, 20, and 30 percent of workers, respectively) rose substantially, by around 10%.

➤ From 2019 to 2023, Pennsylvanians earning at the median, right in the middle of the wage curve (also known as the 50th percentile), enjoyed a real wage hike of 5.4%.

Throughout most of the wage distribution, earnings rose faster in Pennsylvania than the United States from 2019 to 2023.

➤ One possible explanation: the Pennsylvania unemployment rate fell more than the U.S. rate from 2019 to 2023 and is now below the U.S. level.

➤ One exception to the generalization that wages grew faster in Pennsylvania occurred at the low end of the distribution. At the 10th percentile Pennsylvania wages rose 9.2% compared to a jump of 13.4% in the United States. This may reflect Pennsylvania’s minimum hourly wage of \$7.25 per hour, the same as the federal minimum wage. Thirty other states have increased their minimum wage above the federal level.

Looking over longer periods of time:

➤ The Pennsylvania median wage has now climbed to its highest level relative to the U.S. median since 1997. Since the late 1970s, Pennsylvania’s median wage has only exceeded the U.S. median by a bigger percentage than in 2023 in three years—1979, 1996 and 1997.

➤ In both Pennsylvania and the United States, even with the pandemic hiccup, the period 2014-2023 has been the second period of sustained wage growth at the median since 1979. The other period of sustained wage growth was 1995 to 2000.

Examining trends at the substate level:

➤ Inflation-adjusted weekly wages rose in 15 local workforce development areas and declined in seven, from first quarter of 2019 to the last quarter of 2023.

Pennsylvania Wage Increased From 2019 to 2023

In a presentation to a Business Leadership Summit in February of this year, the Director of Pennsylvania's Independent Fiscal Office reported that, using three different measures, Pennsylvania inflation-adjusted wages by 2023 had risen back to or just above their pre-pandemic level.¹ Similarly, the Bureau of Labor Statistics notes a nearly 4% increase in the average hourly earnings for both non-supervisory employees and nonfarm payroll from 2019 to mid-2024.² [A New York Times article](#) used this non-inflation adjusted data from BLS to show how earnings have been outpacing inflation for over a year now. These other analyses inspired this report's examination of Pennsylvania wage trends using the data source relied on most widely to track U.S. wages, the Current Population Survey (CPS).

The first table below shows wage increases throughout the wage distribution, from the 10th percentile (people who earn more than 10 percent of workers and less than 90 percent) to the 90th percentile (people who earn more than 90 percent of workers and less than 10 percent).

The two tables show that wages increased across-the-board from 2019 to 2023 and in the last year for which we have data, 2022 to 2023. The second table shows inflation-adjusted wages at each point in the distribution as a percent of what they were in 2019. The first column is 100 at every percentile shown because, by definition, wages in 2019 at each point were 100 percent of what they were in 2019. This partly resulted from big shares of low-wage workers (often employed in direct service jobs) losing jobs and staying at home as part of the effort to stem COVID's spread through worker-to-worker and worker-to-customer contact. Wages then fell or stagnated in 2021 and, for some groups, in 2022, as low-wage workers returned to jobs. From 2022 to 2023, wages increased at every decile and by over 3% at both the median and the 10th percentile.

Pennsylvania Wages Increased Over the Last Four Years

Percentile	Year			Percent Change	
	2019	2022	2023	2019-2022	2022-2023
10th	\$11.91	\$12.60	\$13.00	5.8%	3.2%
20th	\$14.38	\$15.71	\$16.05	9.2%	2.2%
30th	\$16.89	\$18.25	\$18.56	8.1%	1.7%
40th	\$20.10	\$20.78	\$21.02	3.4%	1.2%
50th	\$23.62	\$24.07	\$24.90	1.9%	3.4%
60th	\$27.46	\$28.27	\$28.81	2.9%	1.9%
70th	\$33.40	\$34.22	\$34.52	2.5%	0.9%
80th	\$41.87	\$43.05	\$43.16	2.8%	0.3%
90th	\$57.35	\$57.34	\$57.72	-0.02%	0.7%

Source: Keystone Research Center analysis of Current Population Survey Microdata provided by the Economic Policy Institute.

Pennsylvania Wages Increased Across the Board from 2019 to 2023, With Bigger Increases for Lower-Wage Workers

Percentile	Year				
	2019	2020	2021	2022	2023
10th	100	101.2	104.8	105.8	109.2
20th	100	106.5	109.1	109.2	111.6
30th	100	105.6	106.1	108.1	109.9
40th	100	105.0	101.3	103.4	104.6
50th	100	101.5	102.4	101.9	105.4
60th	100	107.0	102.8	102.9	104.9
70th	100	103.1	104.2	102.5	103.4
80th	100	103.9	103.5	102.8	103.1
90th	100	102.8	102.2	100.0	100.6

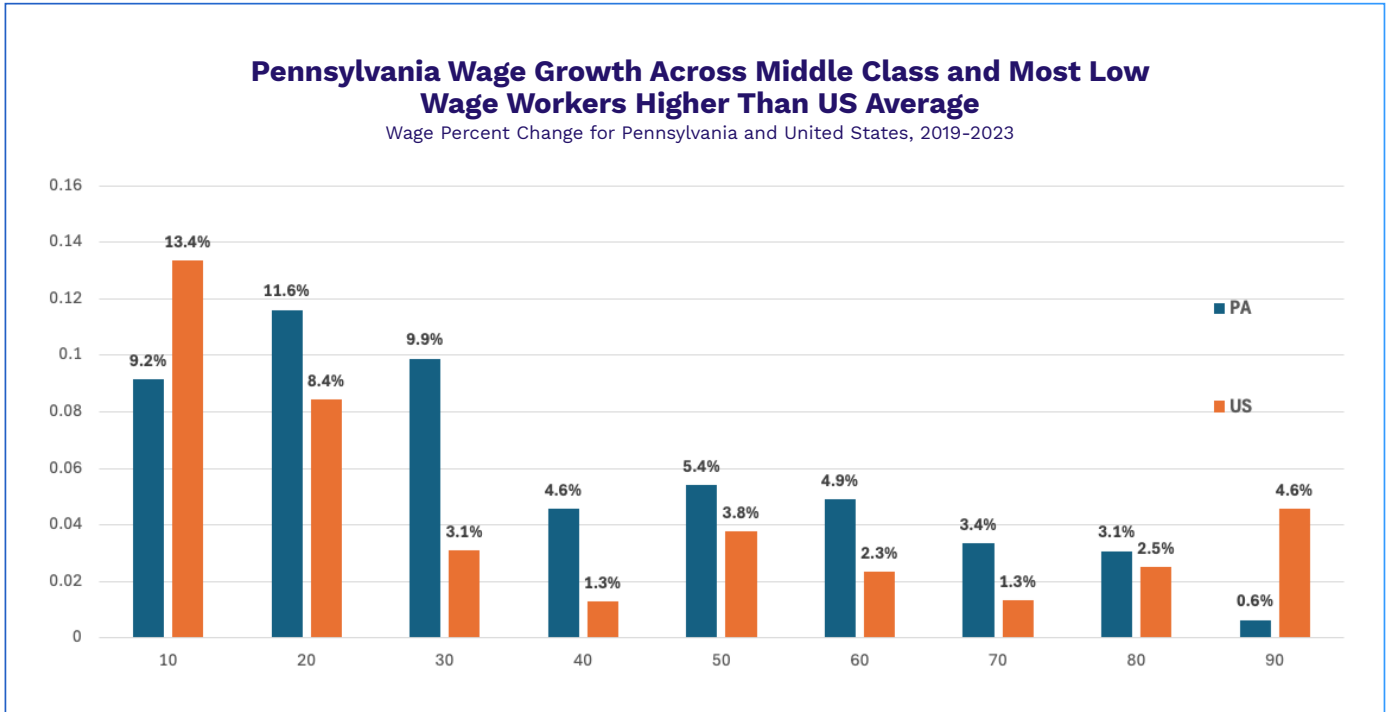
Source: Keystone Research Center analysis of Current Population Survey Microdata provided by the Economic Policy Institute.

¹The IFO reported the inflation-adjusted change in total wages, average hourly wages, and average weekly wages. See Matthew Knittel, "Economic Forecast and Business Leadership Summit," Independent Fiscal Office, February 2024; PPT presentation online at http://www.ifo.state.pa.us/download.cfm?file=Resources/Documents/Economic_Forecast_Business_Leadership_Summit_Feb_2024.pdf.

²This data is from the Bureau of Labor Statistics Establishment survey. Table B-3 shows the levels of average hourly wages for private nonfarm payroll workers. Table B-8 shows the increase for the non-supervisory employees.

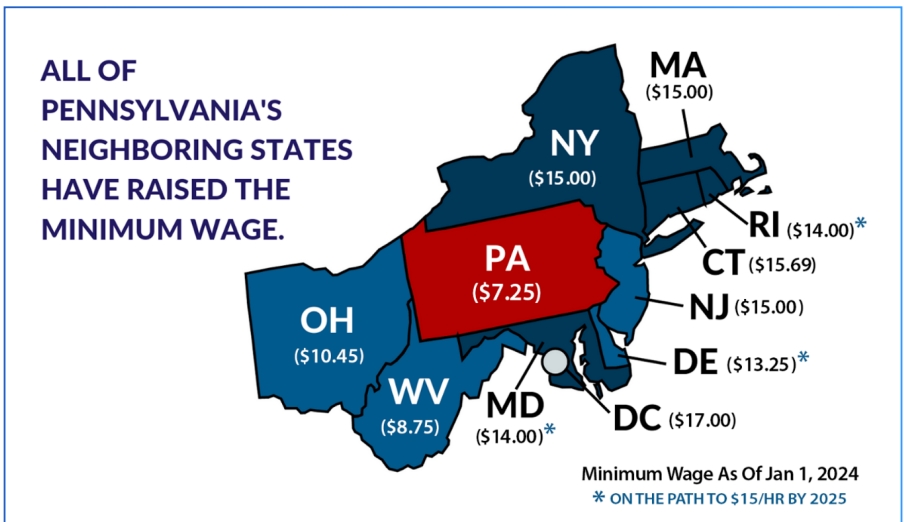
Pennsylvania Wages Increased Slightly Faster Than U.S. Wages

The next chart shows wage increases at each percentile shown from 2019 to 2023 in Pennsylvania and the United States. (Astute observers will notice that the blue PA bars match the data in the last column of the final table on p. 2 (i.e., 109.2 at the 10th percentile in 2023 in the last table becomes a 9.2% increase at the 10th percentile from 2019 to 2023 in the chart below). Except at the top (the 90th percentile) and the bottom (the 10th percentile), wages over this period grew more rapidly in Pennsylvania than nationally.



Source: Keystone Research Center analysis of Current Population Survey Microdata provided by the Economic Policy Institute.

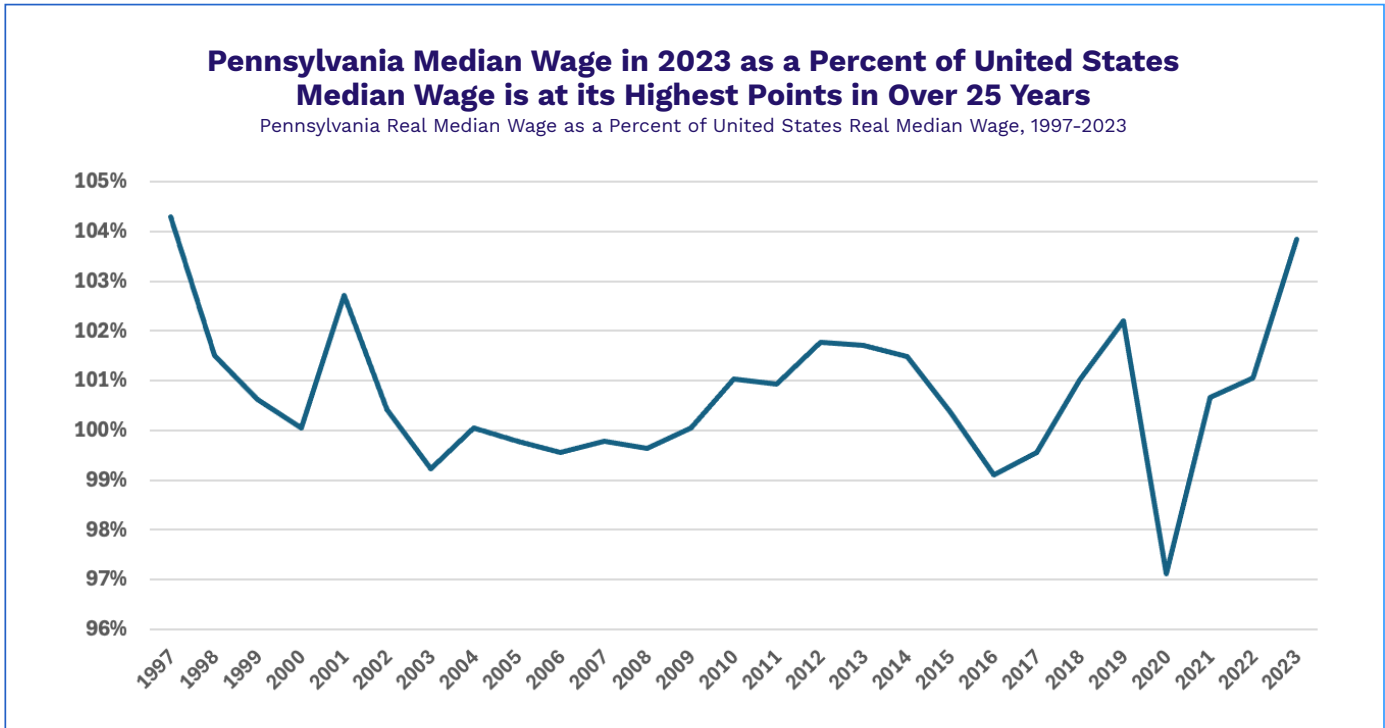
At the 10% percentile of the distribution U.S. wages grew 13.4% from 2019 to 2023 compared to 9.2% in Pennsylvania. One likely explanation: 30 other states have now increased their minimum wage above the federal government's \$7.25 minimum wage.³ Pennsylvania has not increased its minimum wage, even though, as the next figure shows, all our surrounding states have.



Source: State minimum wage data pulled from the Economic Policy Institute "Minimum Wage Tracker": <https://www.epi.org/minimum-wage-tracker>

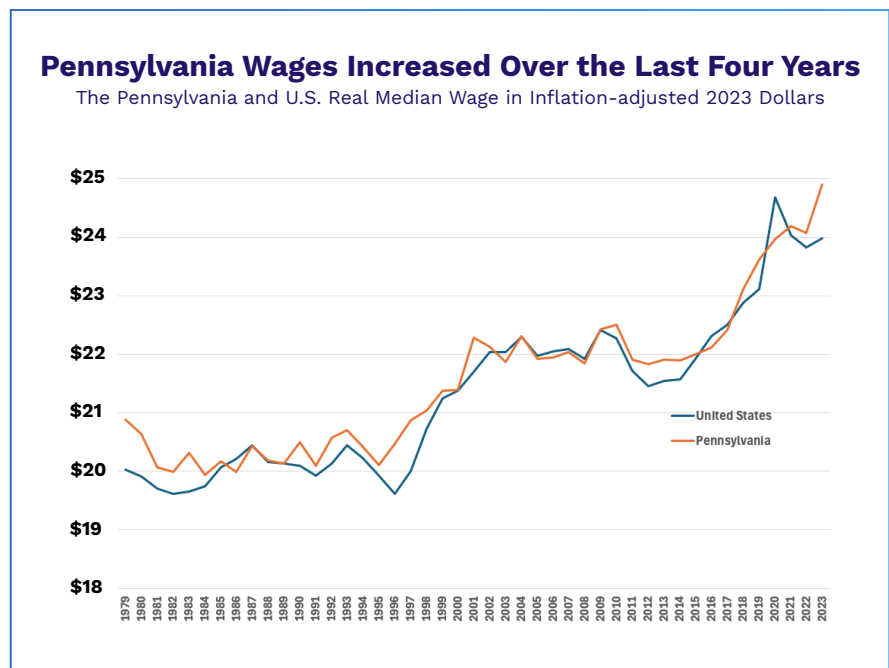
³Our source on the minimum wage in other states is the Economic Policy Institute's "Minimum Wage Tracker": <https://www.epi.org/minimum-wage-tracker/>

Pennsylvania's median wage expressed as a percent of the United States median spiked to its highest point in the last 26 years in 2023. Currently, the median wage in Pennsylvania is about 104% of the national median wage, its highest point since 1997. Looking back another 18 years, to 1979, the Pennsylvania median wage in 2023 reached its fourth highest point relative to the U.S. median wage over the entire 1979 to 2023 period. At least temporarily, we are a high-wage state again!



Source: Keystone Research Center analysis of Current Population Survey Microdata provided by the Economic Policy Institute.

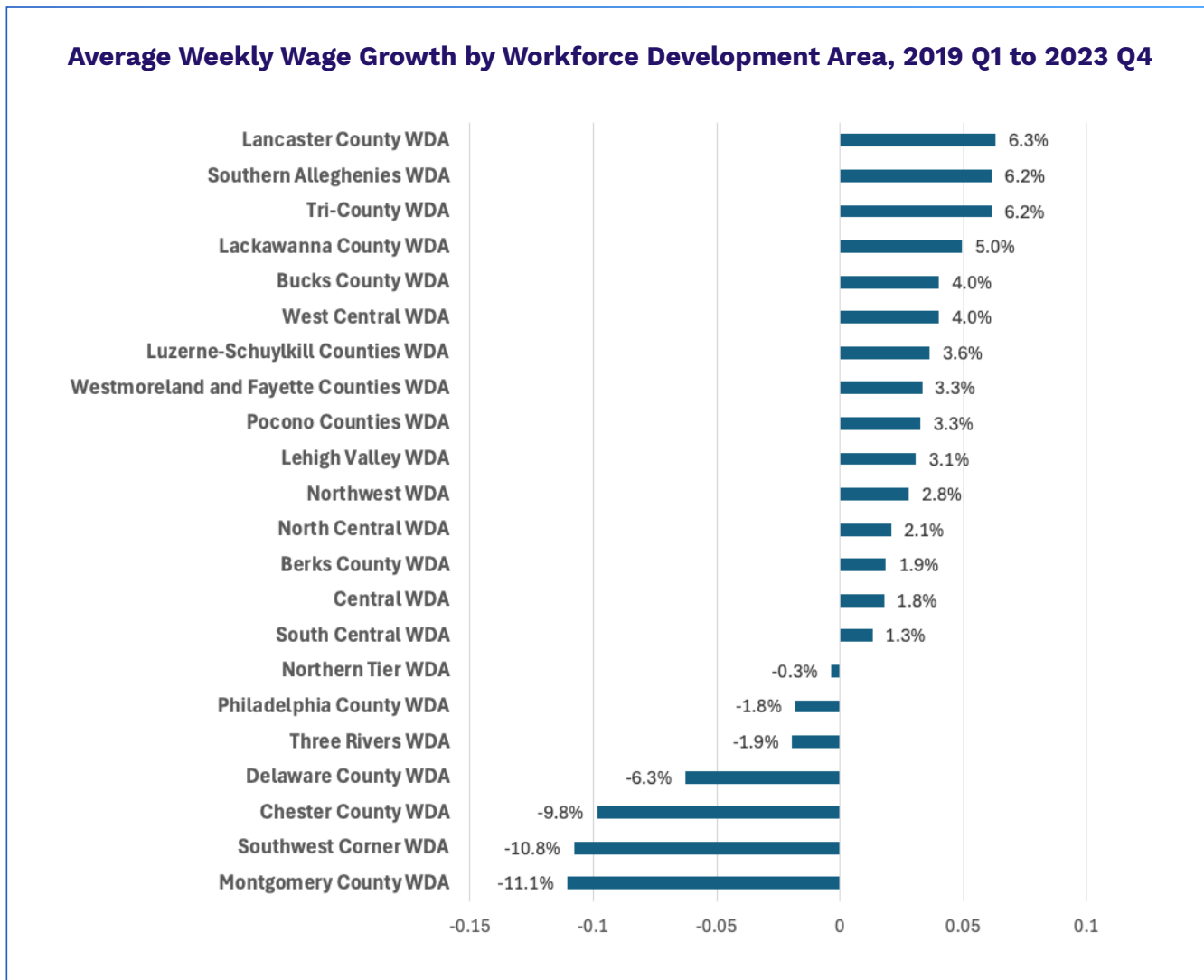
The next chart shows the Pennsylvania and U.S. median wage, in inflation-adjusted dollars, from 1979 to 2023. The chart shows that the period from about 2014 to 2023, except for the brief pandemic wage spike then decline, has been only the second sustained period of median-wage growth in the nation and our state since 1979. The first such period was the second half of the 1990s. With steady wage growth resuming across the board in 2023 and, knock-on-wood, continuing in 2024, this is now the longest period of sustained wage growth since the 1960s and 1970s.



Source: Keystone Research Center analysis of Current Population Survey Microdata provided by the Economic Policy Institute.

Wage Trends by Workforce Development Area

To examine wage trends for local workforce development areas (LWDAs), we have to switch to another data source, the Quarterly Census of Employment and Wages (QCEW), which reports average weekly wages. From the first quarter of 2019 to the fourth quarter of 2023, 15 of the 22 Pennsylvania Local Workforce Development Areas experienced growth in weekly wages. Lancaster County WDA enjoyed the highest average weekly wage growth from 2019:Q1 to 2023:Q4, 6.3%, possibly because it continued to experience an unemployment rate below the state average. Of the four LWDA's experiencing the largest declines in wages, three are in suburban Philadelphia: Montgomery, Delaware, and Chester Counties.



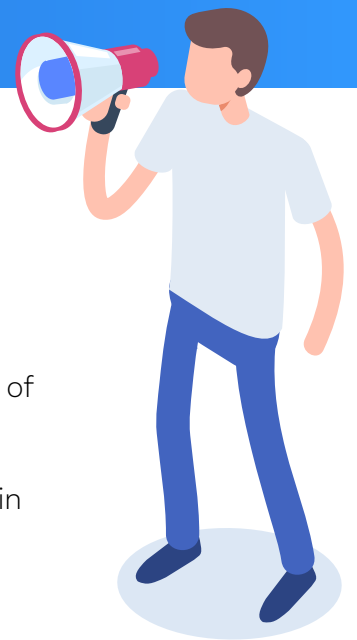
Source: Keystone Research Center analysis of QCEW data accessed through the Pennsylvania Department of Labor and Industry. QCEW nominal wage data converted to real 2023 dollars using the CPI-U Research Series accessed from the Bureau of Labor Statistics website.

Workforce Wonderings

Here are some questions to think about raised by this “Workforce Trends” report.



- Will recent real wage growth for most Pennsylvanians be sustained throughout the rest of 2024 and beyond? One factor that will impact this is whether and when the Federal Reserve Bank begins to lower interest rates back down.
- Will the recent wage growth in Pennsylvania relative to the nation continue? One variable that will influence this: the success of Pennsylvania state and local government, in partnership with other stakeholders including the workforce system, at drawing federal climate, infrastructure, and innovation dollars into the state. The LWDB's in Philadelphia and Allegheny County have been leading the way on this effort. Time to redouble our collective efforts to maximize PA's drawdown of unprecedented federal investments!
- With more robust wage growth at the lower end of the earnings distribution, can Local Workforce Development Areas help more Pennsylvanians access a living wage job? PWDA's new partnership with the [United Way of Pennsylvania](#) highlights the widespread challenges of Pennsylvania low-wage workers to cover the cost of basic necessities.
- Are rising wages still dependent on continued extremely low unemployment rates and likely to disappear if unemployment rises again (as happened in the early 2000s)? Can Pennsylvania find ways to make shared prosperity less vulnerable to short-run vagaries in the macroeconomy?



A Time of Opportunity for Pennsylvania's Workforce and Its Workforce System

Wage gains for Pennsylvania workers, especially at the low end, signal a time of opportunity for Pennsylvania workers. With employers demonstrating a willingness to pay more to attract and retain good workers, the field of workforce development has a chance to help more of its clients participate in shared prosperity.