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MINNESOTA MINIMUM-WAGE REPORT

Research report: Understanding the minimum wage in Minnesota

By David Berry, DLI Research and Statistics, June 7, 2019

Contents

- Introduction and summary
- Actual minimum wages for Minnesota, Minneapolis and St. Paul
- Inflation-adjusted minimum wages
- Inflation-adjusted annual earnings at the minimum wage
- The minimum wage relative to the poverty line
- The minimum wage relative to hourly earnings in manufacturing
- The minimum wage relative to hourly wages of nonfarm workers
- The percentage of jobs at or below the minimum wage
- Contact

Introduction and summary

With the recent introduction of municipal minimum wages in Minneapolis and St. Paul (all slated to reach \$15.00 an hour at various points in the 2020s), the topic of the minimum wage in Minnesota has become more complex. To understand the minimum wage in Minnesota, it is essential to consider the federal and state minimum wage levels along with the levels in Minneapolis and St. Paul, and to consider how these levels have changed, and will be changing, relative to prices and other wages over time. This report presents data that speaks to these questions.

Throughout, it should be kept in mind that at any place and time, the effective minimum wage – the level employers are required to pay to covered employees – is the highest of the federal, the state and any local levels.

The following is a summary of findings.

Actual minimum wages for Minnesota, Minneapolis and St. Paul – The
 Minnesota minimum wage – \$9.86 an hour for large employers in 2019 – is
 adjusted annually for inflation. The minimum wages for employers of different

sizes in Minneapolis and St. Paul will reach \$15.00 in various years from 2022 to 2027 and will be adjusted for inflation thereafter. After an initial transition period, employers of all sizes in the two cities will have the same minimum wage (Figure 1).

- Inflation-adjusted minimum wages Adjusting for inflation, the 2019 Minnesota large-employer minimum wage of \$9.86 an hour is somewhat below the average level of the federal minimum wage for 1960 through 1980, \$10.32. When the Minneapolis and St. Paul minimum wages have reached \$15.00, they will be higher, adjusting for inflation, than the roughly \$12.00 peak reached by the federal minimum in 1968 (Figure 2).
- Inflation-adjusted annual earnings at the minimum wage At the 2019 Minnesota large-employer minimum of \$9.86, a full-time worker would earn about \$20,500 annually. After the transition periods in Minneapolis and St. Paul, full-time earnings at the minimum wages in the two cities will be about \$29,000 in 2019 dollars (Figure 3).
- The minimum wage relative to the poverty line At the Minnesota largeemployer minimum wage, full-time annual earnings are about equal to the poverty threshold for a household of three. At the Minneapolis and St. Paul minimum wages for 2028, full-time annual earnings will fall about midway between the poverty thresholds for households of four and five (Figure 4).
- The minimum wage relative to hourly earnings in manufacturing Relative to average hourly earnings (AHE) of production workers in Minnesota manufacturing, the federal minimum wage peaked at 55% in 1968. After the transition periods in Minneapolis and St. Paul, the \$15.00 minimum wages in the two cities will stand at roughly 66% of manufacturing AHE (Figure 5).
- The minimum wage relative to hourly wages of nonfarm workers The 2019 Minnesota large-employer minimum of \$9.86, as adjusted for inflation in future years, is running at somewhat less than the 10th percentile of hourly wages of nonfarm wage-and-salary workers in Minnesota. After the transition periods in Minneapolis and St. Paul, the minimum wages in those cities will be at about the 25th percentile of overall nonfarm wages in the state (Figure 6).
- The percentage of jobs at or below the minimum wage For 2019, the number of Minnesota jobs paying at or below the minimum wage is estimated at between 244,000 and 260,000, or between 8.3% and 8.8% of all jobs. For

Minneapolis in 2024, when all of its employers (as of July 1 of that year) will be paying a projected \$15.35 minimum wage, an estimated 17.7% of jobs will pay this rate or less. For St. Paul in 2028, when all of its employers (as of July 1 of that year) will be paying a projected \$16.33 minimum wage, an estimated 21.2% of jobs will pay this rate or less (Figure 7).

Actual minimum wages for Minnesota, Minneapolis and St. Paul

Figure 1 shows the minimum wage levels for Minnesota, Minneapolis and St. Paul for 2018 to 2028 for employers of different sizes. The federal minimum wage, \$7.25 since 2009, is not shown because it is less than the minimums for the three jurisdictions shown.

Figure 1
Minimum wages in Minnesota, Minneapolis and St. Paul, 2018-2028 [1]

Minnesota [2]

	ı							
	employers	employers	Large	Small	Macro	Large		
	(at least	(less than	employers	employers	employers	employers	Small	Micro
	\$500,000	\$500,000	(more	(100 or	(more than	(101 to	employers	employers
Effective	in annual	in annual	than 100	fewer	10,000	10,000	(6 to 100	(5 or fewer
date	revenue)	revenue)	employees)	employees)	employees)	employees)	employees)	employees)
1/1/2018	\$9.65 [5]	\$7.87 [5]	\$10.00					
7/1/2018			\$11.25	\$10.25				
1/1/2019	\$9.86 [5]	\$8.04 [5]						
7/1/2019			\$12.25	\$11.00				
1/1/2020					\$12.50			
7/1/2020			\$13.25	\$11.75		\$11.50	\$10.00	\$9.25
7/1/2021			\$14.25	\$12.50		\$12.50	\$11.00	\$10.00
7/1/2022			\$15.00 [6]	\$13.50	\$15.00 [6]	\$13.50	\$12.00	\$10.75
7/1/2023				\$14.50		\$15.00	\$13.00	\$11.50
				Equal		Equal		
7/1/2024				to large		to macro	\$14.00	\$12.25
				employers		employers		
7/1/2025							\$15.00	\$13.25
							Equal	
7/1/2026							to macro	\$14.25
							employers	
7/1/2027								\$15.00
								Equal
7/1/2028								to macro
								employers

- In each jurisdiction shown, a lower minimum wage applies in various situations involving youth or youth who are in training programs.
- Data for Minnesota is from Minnesota Statutes §177.24, subd. 1 and www.dli.mn.gov/business/ employment-practices/minimum-wage-minnesota.
- Data for Minneapolis is from Minneapolis Code of Ordinances, Title 2, Chaper 40 (library.municode.com/mn/minneapolis/codes/code_of_ordinances?nodeId=COOR_TIT2AD_CH40WORE_ARTIVMUMIWA) and minimumwage.minneapolismn.gov.
- Data for St. Paul is from St. Paul Legislative Code, Chapter 224 (stpaul.legistar.com/ LegislationDetail.aspx?ID=3699492&GUID=F0F09B00-71EB-471D-A774-3B7C33938767&Options= ID%7CText%7C&Search=wage&FullText=1).
- Adjusted for inflation annually. As provided by statute, the inflation adjustment index is the implicit price deflator for personal consumption expenditures produced by the U.S. Department of Commerce, Bureau of Economic Analysis (Minnesota Statutes §177.24, subd. 1(f)).
- Adjusted for inflation annually beginning January 1, 2023. Both the Minneapolis and St. Paul ordinances
 provide that the respective city minimum wages shall be adjusted by the same adjustment used by DLI for
 the state minimum wage. (In both cities, the initial adjustment on January 1, 2023 is half the adjustment
 calculated by DLI for the state minimum.)

As of Jan. 1, 2019, the Minnesota minimum wage was \$9.86 for large employers (see figure for definition) and \$8.04 for small employers. These levels are adjusted every Jan. 1 for inflation. As of Jan. 1, 2019, these levels applied everywhere in the state outside of Minneapolis because the St. Paul minimum wage first takes effect in 2020.

The Minneapolis minimum wage for large employers rises from \$10.00 as of Jan. 1, 2018, to \$15.00 as of July 1, 2022, and is adjusted for inflation every Jan. 1 thereafter. The Minneapolis minimum for small employers has a more delayed phase-in than for

large employers, but will attain the same level as for large employers as of July 1, 2024.

The St. Paul minimum wage takes effect in 2020. For large (non-macro) employers, it reaches \$15.00 on July 1, 2023; small and micro employers reach the \$15.00 level in 2025 and 2027, respectively. All employers will have reached the same level as macro employers (an indexed \$15.00 minimum) by 2028.

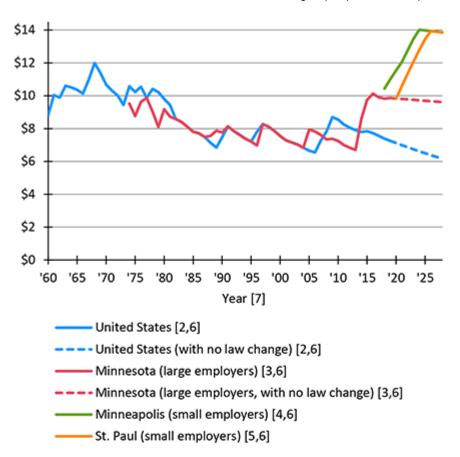
Because (1) the large-employer minimum in Minneapolis and the macro-employer minimum in St. Paul both reach \$15.00 on July 1, 2022, (2) the provisions for inflation-indexing are the same in the two cities and (3) the minimums for all employers in the two cities will eventually reach the large-employer level in Minneapolis and the macro-employer level in St. Paul, employers of all sizes in the two cities will be paying the same indexed minimum wage as of July 1, 2028.

Note that the definition of "small employer" is different for Minnesota than for either Minneapolis or St. Paul. For Minnesota, small employers are those with less than \$500,000 in annual revenue. For Minneapolis and St. Paul, small employers are those with 100 or fewer employees (and more than five employees for St. Paul). According to data from the U.S. Small Business Administration, businesses in 2012 with one to four employees had an average of \$406,000 in annual revenues. Extrapolating from this, a business with five employees would have an average of more than \$406,000 in annual revenues. Thus, the \$500,000 dividing line between "small" and "large" for Minnesota is at the lower end of "small" for Minneapolis or St. Paul (and near the line between "small" and "micro" for St. Paul). In other words, many employers that would be "large" for Minnesota would be "small" for Minneapolis or St. Paul.

Inflation-adjusted minimum wages

Figure 2 shows the minimum wages for the United States, Minnesota, Minneapolis and St. Paul for 1960 to 2028, adjusted for inflation (in 2019 dollars). In 2019 dollars, the federal minimum wage reached a peak of roughly \$12.00 an hour in 1968. The current federal minimum of \$7.25 (its level since 2009) is not indexed for inflation. Therefore, in 2019 dollars, the value of the federal minimum is projected to decline to \$6.15 by 2028 in the absence of any statutory increases.

Figure 2
Minimum wage, inflation-adjusted (2019 dollars), United States,
Minnesota, Minneapolis and St. Paul, 1960-2028 [1]



- In each jurisdiction shown, a lower minimum wage applies in various situations involving youth or youth who are in training programs.
- Minimum-wage data for the United States is from the U.S. Department of Labor, www.dol.gov/whd/minwage/chart.htm.
- 3. Minimum-wage data for Minnesota is from internal records at DLI and Minnesota Statutes §177.24, subd. 1. Minnesota's first minimum wage took effect Jan. 1, 1974. The large-employer minimum wage is shown for Minnesota because it applies to employers with annual revenues as low as \$500,000. The values for 2020 to 2028 are projected using a projection of the implicit price deflator for personal consumption expenditures (see note 5 of Figure 1), from the U.S. Department of Commerce, Bureau of Economic Analysis, apps.bea.gov/iTable/ iTable.cfm?reqid=19&step=2#reqid=19&step=2&isuri=1&1921=survey.
- 4. See note 3 in Figure 1 for source of Minneapolis minimum wage data. The small-employer minimum wage is shown for Minneapolis because it applies to employers with up to 100 employees. The values for 2024 to 2028 are projected using a projection of the implicit price deflator for personal consumption expenditures (see note 6 of Figure 1 and note 3 in this figure).
- 5. See note 4 in Figure 1 for source of St. Paul minimum-wage data. The small-employer minimum wage is shown for St. Paul because it applies to employers with up to 100 employees. The value for 2028 is projected using a projection of the implicit price deflator for personal consumption expenditures (see note 6 of Figure 1 and note 3 in this figure).





In 2019 dollars, the current large-employer Minnesota minimum of \$9.86 was higher than the U.S. and Minnesota levels of any year from 1980 through 2015, and somewhat below the average level of the federal minimum wage for 1960 through 1980, \$10.32. Although the state minimum wage is currently indexed for inflation, the constant-dollar value of the state minimum is projected to decrease slightly through 2028. This is because the index used under statute to increase the state minimum – the implicit price deflator for personal consumption expenditures – is projected to increase less rapidly than the index used in Figure 2 to express the trends in constant-dollar terms – the consumer price index for urban consumers (see notes 3 and 6 in Figure 2).

The minimum wages shown in Figure 2 for Minneapolis and St. Paul are the small-employer minimums. This is because, in contrast to the provision for the state minimum, the small-employer categories for the Minneapolis and St. Paul minimums include employers with up to 100 employees (see Figure 1 and related discussion). In 2019 dollars, the Minneapolis and St. Paul small-employer minimums are projected at somewhat less than \$14.00 an hour for 2028. These values are less than \$15.00 because they are adjusted for projected inflation between 2019 and 2028. Nonetheless, these inflation-adjusted values are higher by roughly \$2.00 an hour than the inflation-adjusted value of roughly \$12.00 reached by the federal minimum in 1968. As noted above, after the initial transition period, employers of all sizes in the two cities will have the same minimum wage (Figure 1).

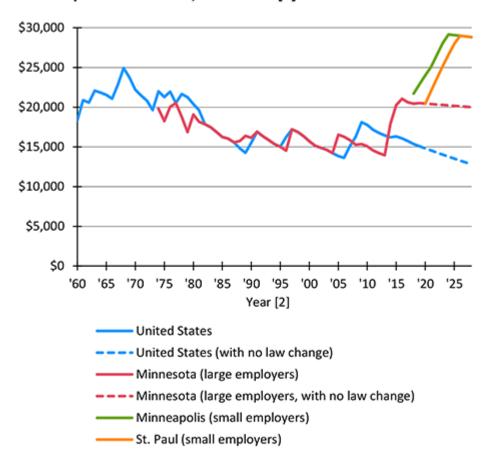
As with the state minimum wage, the constant-dollar values of the Minneapolis and St. Paul minimum wages are projected to decrease slightly over time once inflation-indexing has begun (after 2024 and 2026, respectively, for the small-employer minimums in the two cities). The reason is the same as with the state minimum wage (see above).

Inflation-adjusted annual earnings at the minimum wage

Figure 3 shows full-time annual earnings at the minimum wages for the United States, Minnesota, Minneapolis and St. Paul for 1960 to 2028, adjusted for inflation (in 2019 dollars). This figure is identical to Figure 2 except for the scaling of the left axis (see note 1 in Figure 3).

Figure 3

ruii-time annual earnings at the minimum wage, inflation-adjusted (2019 dollars), United States, Minnesota, Minneapolis and St. Paul, 1960-2028 [1]



- Data from Figure 2. The notes in that figure apply. The inflation-adjusted minimum wage was translated to inflation-adjusted full-time annual earnings using an annual hours figure of 2080.
- The minimum wage used for each year is the level in effect as of Dec. 31 of that year.



Where the federal and state minimum wages are concerned, inflation-adjusted full-time annual earnings reached a peak of roughly \$24,900 in 1968 at the federal minimum. At the state minimum (for large employers), full-time inflation-adjusted

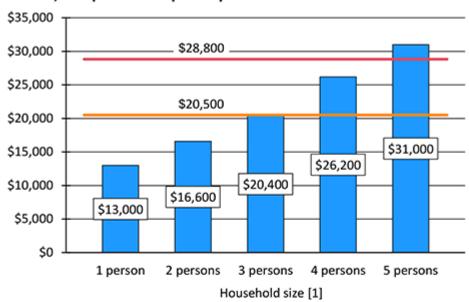
annual earnings are currently somewhat more than \$20,500. At the small-employer minimums in Minneapolis and St. Paul, full-time annual earnings, in 2019 dollars, are projected to reach about \$29,000 in 2024 and 2026, respectively.²

The minimum wage relative to the poverty line

Figure 4 compares minimum-wage earnings to the poverty line. It shows full-time annual earnings at the minimum wages for Minnesota (as of 2019) and Minneapolis and St. Paul (as of 2028, expressed in 2019 dollars) relative to the official United States poverty thresholds (projected to 2019) for households of different sizes (see note 1 in the figure). In 2019 dollars, the poverty threshold ranged from \$13,000 for a one-person household to \$31,000 for a household of five.

Figure 4
Full-time annual earnings at the minimum wage,
Minnesota for 2019 and Minneapolis/St. Paul for 2028 in 2019

dollars, compared with poverty threshold for 2019



2019 poverty threshold [2]

- Full-time annual earnings at 2019 MN large-employer minimum wage [3]
- Full-time annual earnings at 2028 Mpls/StP minimum wage, 2019 dollars [4]
- Poverty thresholds exist for households larger than five persons but are not shown here.
- The 2018 poverty thresholds are from the U.S. Census Bureau at www.census.gov/data/tables/time-series/demo/income-poverty/ historical-poverty-thresholds.html. These thresholds were adjusted to 2019 using a projection of the nationwide Consumer Price Index for All Urban Consumers (CPI-U), available from the U.S. Bureau of Labor Statistics (www.bls.gov/data/#prices).
- 3. Computed as \$9.86 x 2,080.
- 4. As of July 1, 2028, the minimum wage will be the same for employers of all sizes in Minneapolis and St. Paul. This minimum wage was projected as \$16.17 using the provisions of the Minneapolis and St. Paul ordinances along with a projection of the Implicit Price Deflator for Personal Consumption Expenditures (see notes 3, 4, and 5 in Figure 2). This minimum wage then was adjusted to 2019 dollars using a projection of the Consumer Price Index for Urban Consumers for the Minneapolis-St. Paul metropolitan area for 2019 to 2028. The value in 2019 dollars was \$14.01. This was multiplied by 2,080 to derive the equivalent full-time annual earnings figure.



At the Minnesota large-employer minimum wage for 2019, full-time annual earnings – \$20,500 in 2019 dollars – were roughly equal to the poverty line for a household of three. At the 2028 minimum wage for Minneapolis and St. Paul (see note 4 in Figure

4), full-time annual earnings are projected to be about midway between the poverty thresholds for four- and five-person households.³

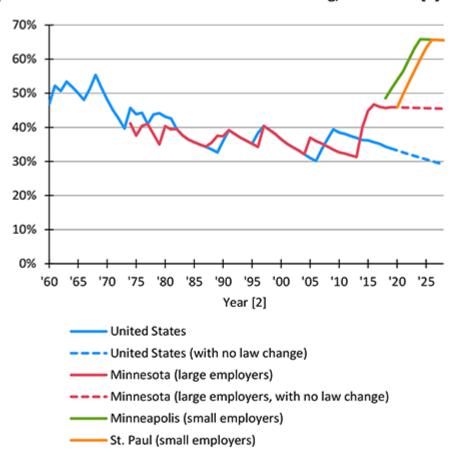
The minimum wage relative to hourly earnings in manufacturing

It is also relevant to gauge the level of the minimum wage relative to other wages. Figure 5 expresses the minimum wages of the United States, Minnesota, Minneapolis and St. Paul as percentages of average hourly earnings (AHE) of production workers in Minnesota manufacturing for 1960 to 2028.⁴



Figure 5
Minimum wages of United States, Minnesota, Minneapolis and St. Paul as percentages of average hourly earnings of

production workers in Minnesota manufacturing, 1960-2028 [1]



- Data from Figure 2. The notes in that figure apply. Average hourly earnings
 of production workers in manufacturing is from the Current Employment
 Statistics survey of the U.S. Bureau of Labor Statistics (www.bls.gov/ces)
 and the Minnesota Department of Employment and Economic
 Development. A three-year moving average is used. Minnesota data is not
 available before 1970. That data was projected for 1960 through 1969
 using the trend in average hourly earnings of production workers in
 manufacturing for the U.S. Earnings data for 2019 through 2028 was also
 projected.
- The minimum wage used for each year is the level in effect as of Dec. 31 of that year.

As a percentage of manufacturing AHE, the federal minimum wage reached a peak of roughly 55% in 1968. The Minnesota minimum wage (large employers) has been less than that level for its entire history; at its current level, the Minnesota minimum is about 46% of manufacturing AHE.

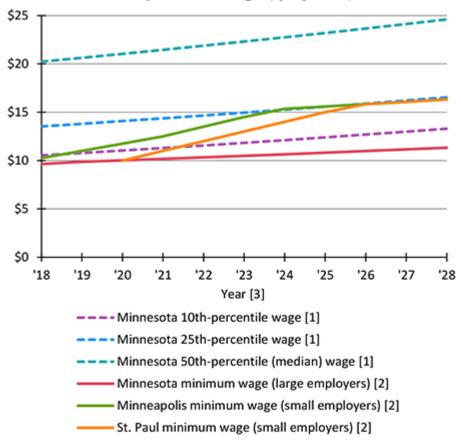
Where the Minneapolis and St. Paul minimum wages (small employers) are concerned, a pattern arises similar to those in Figures 2 and 3. The initial levels of these minimum wages (for 2018 and 2020) are less than 50% of manufacturing AHE.

However, by the time the Minneapolis and St. Paul minimums reach \$15.00, they will be about 66% of manufacturing AHE, substantially above the 55% level reached by the federal minimum in 1968.

The minimum wage relative to hourly wages of nonfarm workers

Figure 6 gives another perspective on minimum wages relative to other wages in Minnesota. It shows the minimum wages for Minnesota, Minneapolis and St. Paul against different percentile hourly wages for Minnesota nonfarm wage-and-salary workers for 2018 to 2028.

Figure 6
Minnesota, Minneapolis and St. Paul minimum wages and selected Minnesota percentile wages, projected, 2018-2028



- These percentile wages, for Minnesota nonfarm wage-and-salary workers, are from the Occupational Employment Statistics survey of the U.S. Bureau of Labor Statistics (www.bls.gov/oes). The values for 2018 to 2028 were projected from the trends for prior years.
- Minimum-wage data is from Figure 2. The notes in that figure apply. Values were projected for 2019 to 2028 using the provisions in statute and
- ordinance. The minimum wage used for each year is the level in effect as of Dec. 31 of that year.





For the entire period shown, the Minnesota large-employer minimum wage is somewhat less than the 10th-percentile wage of Minnesota nonfarm wage-and-salary workers. The story is different for the Minneapolis and St. Paul small-employer minimums: both of these minimums begin at levels below the 10th percentile and then rise until they are about equal to the 25th percentile in 2024 for Minneapolis and 2026 for St. Paul.

The percentage of jobs at or below the minimum wage

Another perspective, similar to that of Figure 6, directly considers what percentage of jobs pay the minimum wage or less. Figure 7 shows the percentages of jobs at or below the minimum wage for Minneapolis, St. Paul and the balance of state. It shows the percentages for 2019 for all three areas and, for Minneapolis and St. Paul, the years in which the new, higher, minimum wages in those cities will become equal for employers of all sizes.

Figure 7
Projected percentages of jobs at or below minimum wage,
Minneapolis, St. Paul and balance of state [1]

	I		Jobs at or below	
	Total		minimum wage	
	number	Minimum		Pctg. of
	of jobs [2]	wage	Number [3]	total [4]
2019				
Minneapolis				
Lower-bound [5]	340,000	\$11.00	27,000	7.8%
Upper-bound [5]	340,000	\$12.25	43,000	12.5%
St. Paul	185,000	\$9.86	13,000	6.9%
Balance of state	2,418,000	\$9.86	205,000	8.5%
State total				
Lower-bound [6]	2,943,000	\$11.00, \$9.86	244,000	8.3%
Upper-bound [6]	2,943,000	\$12.25, \$9.86	260,000	8.8%
2024 — Minneapolis [7]	378,000	\$15.35 [9]	67,000	17.7%
2028 — St. Paul [8]	197,000	\$16.33 [10]	42,000	21.2%

- Includes hourly and salaried jobs.
- Projected from the Quarterly Census of Employment and Wages (QCEW). QCEW
 data is available from the Labor Market Information Office of the Minnesota
 Department of Employment and Economic Development
 (mn.gov/deed/data/data-tools/qcew).
- Computed as the product of the total number of jobs and the percentage at or below the minimum wage.
- Projected from the Wage Detail database of the Minnesota Unemployment Insurance system. Computations performed by the Minnesota Department of Employment and Economic Development according to specifications from DLI.
- 5. For Minneapolis for 2019, it was not possible to readily determine employer size with accuracy for purposes of the Minneapolis minimum-wage ordinance. Therefore, the estimation approach was to determine upper and lower bounds on the percentage and number of minimum-wage jobs given the different minimum wages for large and small employers. The upper bound was computed assuming the large-employer minimum wage applied to all employers; the lower bound was computed assuming the small-employer minimum wage applied to all employers; the true number and percentage of minimum-wage jobs, given the different minimums for the different sizes of employers, are between the respective upper and lower bounds.
- For the state total for 2019, the lower and upper bounds were calculated using the respective lower- and upper-bound results for Minneapolis in combination with the results for St. Paul and the balance of state.
- The year 2024 was chosen for this row because it is the first year in which the Minneapolis minimum wage is equal for large and small employers.
- The year 2028 was chosen for this row because it is the first year in which the St. Paul minimum wage is equal for employers of all sizes.
- The 2024 Minneapolis minimum wage was projected using the provisions of the Minneapolis ordinance. The actual 2024 Minneapolis minimum wage will probably be different.
- 10. The 2028 St. Paul minimum wage was projected using the provisions of the St. Paul





For 2019, because of the different minimum wages for large and small employers in Minneapolis, the estimates for that city consist of upper and lower bounds corresponding to the large- and small-employer minimum wages (see note 5 in Figure 7). For Minneapolis for 2019, the percentage of jobs estimated to be at or below the minimum wage is 12.5% at the upper bound and 7.8% at the lower bound. Combining this with the results for St. Paul and the balance of state gives upper- and lower-bound estimates of 8.8 and 8.3% for the overall state. The number of jobs at or below the minimum wage for the state for 2019 is estimated to be between 244,000 and 260,000.

For Minneapolis for 2024, when all of its employers (as of July 1 of that year) will be paying a projected \$15.35 minimum wage, an estimated 17.7% of jobs will pay this rate or less. For St. Paul for 2028, when all of its employers (as of July 1 of that year) will be paying a projected \$16.33 minimum wage, an estimated 21.2% of jobs will pay this rate or less. The percentage at or below the minimum wage is lower in Minneapolis than in St. Paul because general wages are higher in Minneapolis. For 2010 to 2017, the average weekly wage was about 20% higher in Minneapolis than St. Paul.⁵

One issue with the wage detail data, from which these estimates are derived (see note 4 in Figure 7), concerns the computation of hourly wages for individual jobs. The hourly wage is computed by calendar quarter as earnings for the quarter divided by hours worked for the quarter, both reported by the employer. An examination of the data reveals that hours worked are often underreported, in many cases apparently because the employer mistakenly reports weekly hours rather than quarterly hours. To the degree that this occurs, hourly wages are overstated, and so the number and percentage of workers at or below the minimum wage (or any wage threshold) are understated. The degree of understatement is unknown.

Contact

For more information, contact David Berry at david.berry@state.mn.us or 651-284-5208.

²As in Figure 2, there is a slight downward drift in the constant-dollar values of the

¹www.sba.gov/advocacy/firm-size-data

Minnesota minimum wage after 2019 and of the Minneapolis and St. Paul minimum wages once inflation-indexing has begun for them. As in Figure 2, the reason is that the index used to increase the state and city minimums is projected to increase less rapidly than the index used in Figure 3 to express the trends in constant-dollar terms.

³The comparison would be the same if the poverty thresholds and earnings amounts were expressed in 2028 dollars.

⁴It would be preferable to use a broader wage measure, ideally the average or median wage of the overall state economy, as the basis for comparison, but such a measure is not available for the period concerned.

⁵Computed from the Quarterly Census of Employment and Wages, available from the Labor Market Information Office of the Minnesota Department of Employment and Economic Development (mn.gov/deed/data/data-tools/qcew).

443 Lafayette Road N. St. Paul, MN 55155

Phone: 651-284-5005 Toll-free: 800-342-5354

