

It's Time to Raise the Minimum Wage in Texas

Analysis of Who Would Benefit from a Minimum Wage Increase in Texas

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Texans pride themselves on working hard and being self-sufficient. But too few workers and their families earn enough to escape poverty. Texas ranks near the worst states for working families, with 38 percent earning less than \$47,000 per year for a family of four.¹ If we want to live in a state where hard work means real self-sufficiency, then we need to raise the minimum wage in Texas.

Several bills filed during the 84th Texas Legislative Session propose raising the state's minimum wage to \$10.10 per hour in 2016. To help lawmakers and concerned Texans understand the impact of those legislative proposals, the Center for Public Policy Priorities conducted new analysis to identify the Texans who would benefit from raising the current federal minimum wage of \$7.25 per hour to a new statewide minimum wage of \$10.10 per hour in 2016.²

Key Finding:

- Nearly 2.4 million Texans, or 1 in 4 for-profit and non-profit workers, would receive a pay increase if the state adopted a minimum wage of \$10.10 per hour in 2016.³

Who Benefits from a Minimum Wage Increase?

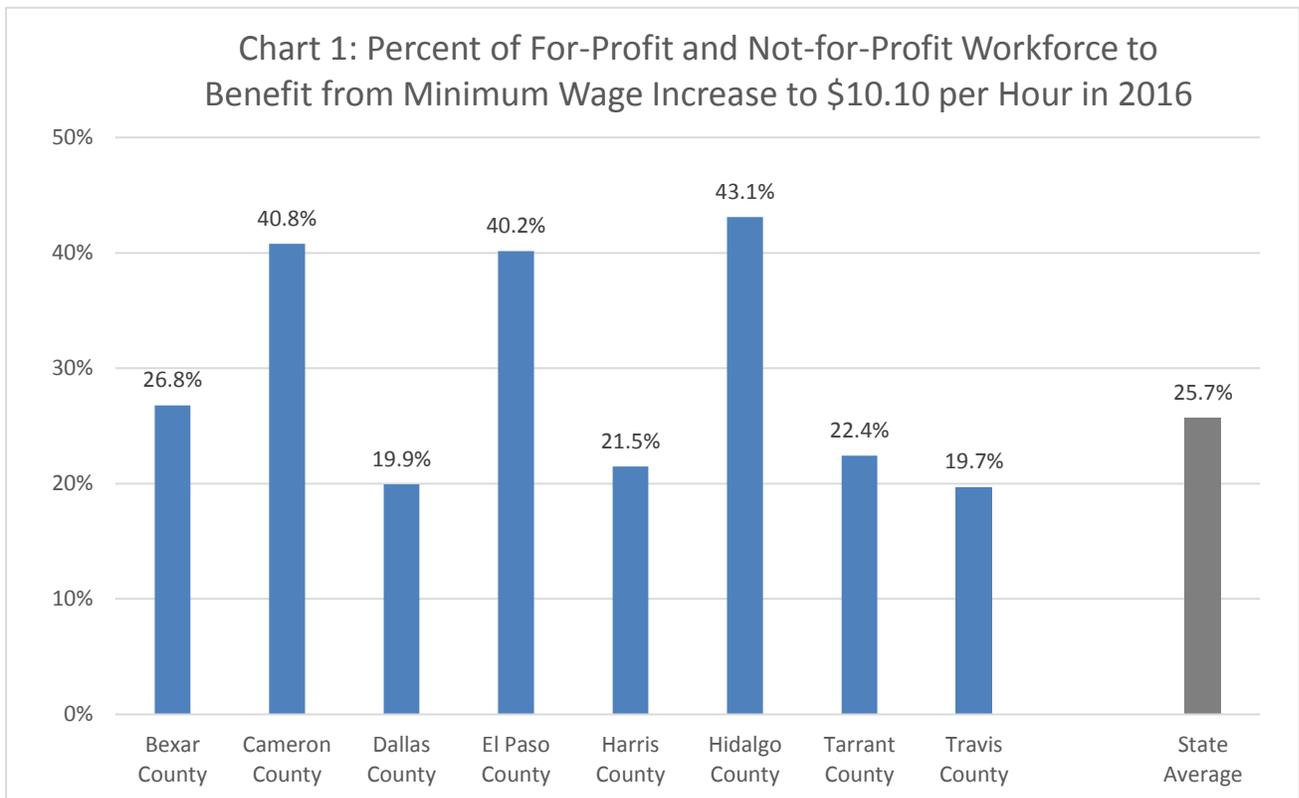
Of the nearly 2.4 million Texans who would benefit from an increase in the state minimum wage to \$10.10 per hour in 2016:⁴

- **Age:** 60 percent are in their prime working years (25-54). Only 3.1 percent are teenagers between the ages of 16-18.
- **Families with children:** Nearly fifty percent live in households with children, and 14.7 percent of all workers who benefit are single mothers.
- **Race and ethnicity:** 1 in 3 are Non-Hispanic White, and over half are Hispanic or Latino, even though they only make up a little more than a third of the for-profit and not-for-profit workforce.
- **Education level:** 43 percent have at least some college education, and 15 percent have completed a postsecondary degree.
- **Industry:** Nearly half are concentrated in three industry sectors: the retail trades; accommodation and food services; and the health care and social assistance industry. However, workers in nearly every industry would benefit from an increase in the minimum wage.

Policy Recommendations:

The Center for Public Policy Priorities recommends that the 84th Texas Legislature:

- Raise the minimum wage to \$10.10 per hour.
- Adjust the minimum wage annually by tying it to the consumer price index. The state should also consider a clearly defined small business exemption from the new minimum wage that protects workers as well as the state's smallest employers.
- Repeal the state law that prohibits localities from setting wage standards.
- Encourage municipalities to create living wage standards for their own employees that are in line with their cost of living.



Source: CPPP analysis of 1-year 2013 American Community Survey Public-Use Microdata Sample (PUMS) for Texas.⁵

Minimum Wage Context

It's tempting in Texas to believe that our thriving economy protects us from rising poverty and growing inequality. It's true that of the 5 million jobs created in the U.S. during the 21st century, more than 2 million were created here in Texas.⁶

But it's also true that the Texas economy relies on a larger share of minimum- and low-wage jobs than most other states. There are 400,000 workers in Texas who make at or below the current federal minimum wage of \$7.25 per hour – more than any other state – and all of them need a raise.⁷ Working full-time at a minimum wage job provides \$15,080 at the end of the year, an amount that is clearly insufficient to support a family, yet alone a single working individual.

Texas also has a higher share of working poor families than other states. In 2013, 38 percent of working families in Texas earned less than twice the federal poverty rate, or \$47,248 per year for a family of four.⁸ In total that's almost 1.2 million Texas families who are making difficult choices about forgoing necessities such as housing, food or transportation despite working hard to make a living.

Twenty-nine other states, including Arkansas, Ohio, Arizona, and West Virginia raised their minimum wage above the federal minimum of \$7.25 per hour.⁹ Many municipalities across the country have done the same, but not in Texas. While the cost of living varies greatly across Texas, state law currently prohibits local regulation of wage standards with the exception of wages paid to government employees or contractors.¹⁰ In addition to raising the state minimum wage, removing the prohibition of local minimum wage rates would give municipalities the flexibility to decide the right wage floor for their local economies.

Growing evidence from leading economists indicates that higher minimum wage standards may have positive economic effects on communities and a minimal or neutral effect on job growth. The issue is also receiving growing private sector support. In addition to several large employers such as Wal-Mart, Target, Starbucks and McDonalds all publicly committing to raising their minimum wage in 2015, a poll of small businesses last year found that 61 percent of business owners support an increase to \$10.10 per hour, along with adjusting the minimum wage annually to keep pace with the cost of living.¹¹

Those business owners recognize that employees are also customers. As the cost of living rises faster than wages do, workers become unable to spend enough to help drive economic activity. Businesses also know that when workers are paid a higher wage, they are more likely to remain on the job, reducing costs in hiring and training for new employees.

What It Means to Live on the Minimum Wage

According to the CPPP [Family Budget Calculator](#), the federal minimum wage of \$7.25 per hour does not provide enough to cover an individual's most basic living expenses in Texas. In fact, a worker in Houston or Austin would need two full-time minimum wage jobs to cover the nearly \$30,000 a year he or she needs for food, housing, health care and transportation expenses. And the situation becomes even more challenging for workers trying to support a family. A two parent family in Houston with two children needs a combined full-time hourly income of \$30.07, or \$62,546 a year, in order to meet basic expenses without room for savings of any kind.¹²

The figures below show the hourly wages that are necessary for Texas families to meet basic living expenses according to family size and location. These calculations assume that 1) all adults are full time workers, 2) their employer(s) do not cover monthly health insurance premiums, and 3) they have no emergency savings — which means that a simple car repair or significant illness could be financially ruinous.

Table 1: Hourly Wages Needed to Meet Basic Living Expenses in Texas Cities

| City | Single Person | 1 Parent, 1 Child | 2 Parents, 2 Children | 2 People with No Children |
|------------------|---------------|-------------------|--------------------------|------------------------------|
| Austin | \$14.09 | \$21.68 | \$31.51 | \$20.57 |
| Brownsville | \$11.78 | \$16.69 | \$25.06 | \$18.03 |
| Dallas/Ft. Worth | \$13.84 | \$20.83 | \$30.37 | \$20.44 |
| El Paso | \$11.60 | \$16.88 | \$23.89 | \$17.84 |
| Houston | \$14.05 | \$20.84 | \$30.07 | \$20.66 |
| Lubbock | \$12.15 | \$18.20 | \$26.34 | \$18.40 |
| McAllen/Edinburg | \$11.88 | \$17.28 | \$25.64 | \$18.10 |
| San Antonio | \$12.86 | \$20.21 | \$29.67 | \$19.75 |

Source: www.familybudgets.org. 2012 data, not adjusted for inflation to 2015.

Note: Hourly wage data for two-parent families is per household, not per person.

Recent Evidence Shows Raising the Minimum Wage Not Connected to Job Loss

In 2014 more than 600 economists, including seven Nobel Prize winners, sent a letter to Congress and the president requesting a minimum wage increase to \$10.10 per hour by 2016. They cited developments in the research showing that a minimum-wage increase could stimulate the economy as low-wage workers spend their additional earnings, raising demand and job growth.

One of the first case studies to challenge the assumption that an increase in wages results in businesses employing fewer workers was published by David Card and Alan Krueger in 1993. They studied over 400 restaurants in the competitive fast food industry along the New Jersey and Pennsylvania state border after a state minimum wage increase in New Jersey. They found that there was no evidence of reduced employment in New Jersey or of a reduction in the number of establishments. In fact, their study showed the exact opposite, that increasing the minimum wage led to an increase in employment.¹³

Card and Krueger followed up their case study with a meta-analysis of over 30 long-term studies on the effects of minimum wage increases in 1995. Again, they found that minimum wage increases did not decrease employment.¹⁴ That meta-analysis was updated by Hristos Doucouliagos and T.D. Stanley in 2008, and again by John Schmitt in 2013. Both analyses confirmed that there were little or no decreases in employment with modest increases in the minimum wage.¹⁵

There is some conflicting evidence on the impact of raising wages on the availability of jobs. A 2015 study by Jonathan Meer and Jeremy West at Texas A&M University found that while employers are not likely to fire employees due to a minimum wage increase, they may be less likely to hire new employees in the ensuing years.¹⁶ After reviewing the existing research in 2014, the Congressional Budget Office reported to the U.S. Congress that their best assessment of the effects of a national minimum wage increase to \$10.10 per hour would result in a 0.3 percent reduction in employment, or about 500,000 workers across the country, once fully implemented by the second half of 2016.¹⁷ However, their assessment also included a likely range from a negligible reduction in employment to a reduction of one million workers.

The larger issue, however, is not simply determining the effect of a minimum wage increase on job growth, but to understand if the benefits to low-wage workers outweigh the costs. And here there may be greater consensus among researchers. In a 2013 survey of leading economists across the country, 34 percent stated that raising the minimum wage would make it harder for low-wage workers to find employment, and 32 percent stated the opposite with 27 percent remaining undecided. But when the same experts were asked if the benefits to low-skilled workers for raising the minimum wage outweighed any adverse effects on employment, only 11 percent disagreed.¹⁸

Best Practices and Policy Recommendations

As of 2015, the majority of U.S. states have some form of minimum wage policy that sets a wage minimum, or floor, above the federal minimum. Each has tailored its wage laws to fit its own unique economic needs. Some of the most common policies and practices are described below.

Consumer Price Index and Incremental Change

Of the 29 states and the District of Columbia that have a minimum wage above the federal floor of \$7.25 per hour, 14 have tied increases in pay to the Consumer Price Index (CPI) to ensure that wages will keep pace with increases in the cost of living. Tying the minimum wage to CPI also prevents the need for repeated legislative efforts to raise the minimum wage floor as inflation erodes its value.

Six states are currently raising their minimum wages in annual increments, or stages. Based in part on evidence that small increases in the minimum wage have little or no discernable effect on employment numbers or consumer prices, we recommend moving toward a higher state minimum wage in annual stages and indexing the final wage target to CPI once fully implemented.

Small Business Exemptions

Some policymakers have argued that raising the minimum wage may place an undue burden on very small businesses that do not have large enough annual revenues to sufficiently cover new costs. The federal Fair Labor Standards Act (FLSA), which sets the national minimum wage at \$7.25, does not apply to small businesses with annual gross revenue under \$500,000 unless they engage in interstate commerce or work for the federal, state or local government.¹⁹ Eleven states also have an exemption from higher minimum wages for small businesses. Six of those states define a small business by the number of employees, with a range from 1 employee in Michigan to 10 employees in Florida. The other five states define a small business by annual gross revenue, with a range from \$150,000 in Ohio to \$500,000 in Minnesota and Arizona.

Minnesota's small business exemption creates a separate wage floor for small businesses that is \$1.50 less than the full minimum wage floor for larger businesses. This two-tiered system helps ensure small businesses remain competitive while also boosting wages for their employees. As of August of 2014, companies with annual gross revenue of more than \$500,000 per year in Minnesota are classified as large employers and pay \$8.00 per hour, which will be increased to \$9.00 in August and \$9.50 the following year. Small employers with gross annual revenue under \$500,000 will be increased incrementally from \$6.50 to \$7.25 per hour over the next few years. These minimum wage scales are similar to those used by the federal government, but differ on two key issues: 1) they include tipped workers, for whom the federal minimum is currently set at \$2.13 per hour, and 2) they will be indexed to the inflation rate as of 2018.²⁰

In order to protect the smallest businesses in Texas, we recommend a two-tiered minimum wage that reduces the hourly minimum wage by \$1.50 for small businesses with less than \$500,000 of annual gross revenue.

Local Control and Removing State Pre-emption Laws

A growing number of cities are setting their own minimum wages in response to rising costs of living in their regions.²¹ These local wage rates, which have been increasingly common since the first was established in 2003, vary from \$8.50 per hour in Bernalillo County, New Mexico, to \$15 per hour in San Francisco and Seattle.

Texas is one of 19 states with a law that prohibits cities from setting their own minimum wage standards, effectively suppressing wages across the state. To view minimum wage fact sheets for Texas' eight largest counties, visit bit.ly/MinWageTXblog.

Policy Recommendations

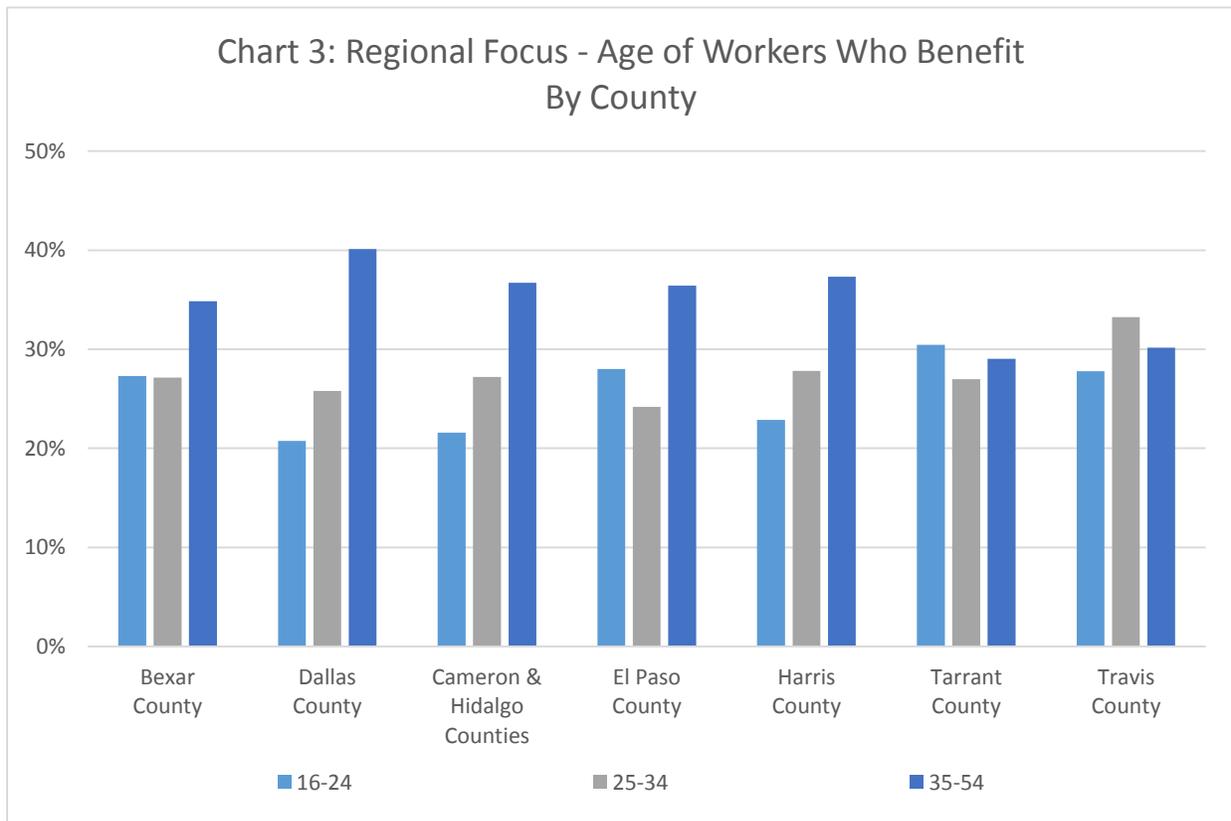
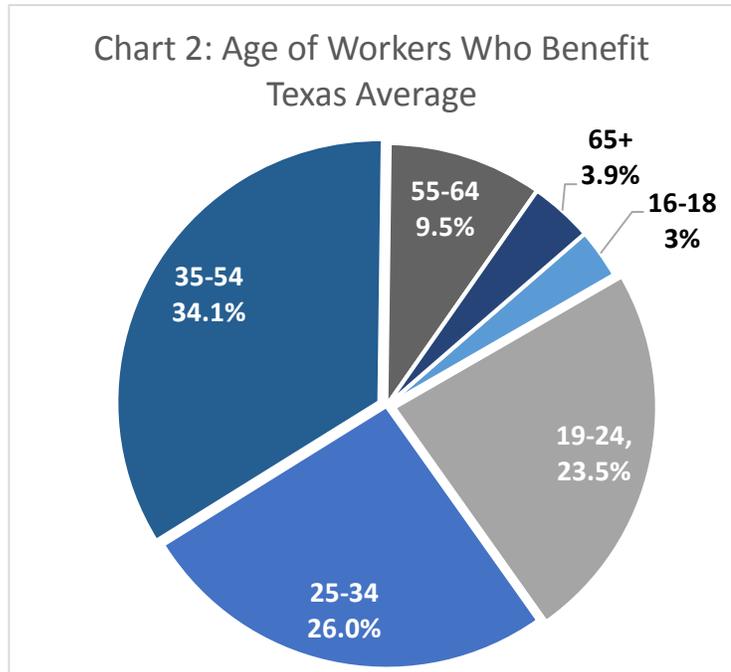
CPPP recommends that the 84th Texas Legislature:

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Appendix A: Demographic Information

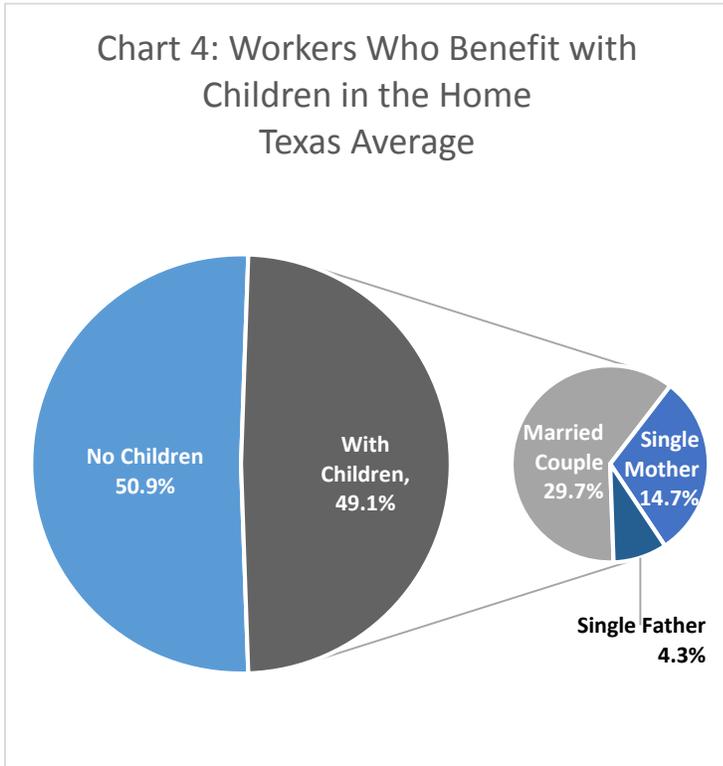
Age of Workers Who Benefit

There is a widely held assumption that minimum wage jobs are filled with low skilled young people, who with little debt or family obligations can afford to be paid the federal minimum wage. However, seventy percent of all workers who benefit in Texas from a minimum wage increase are between the ages of 25 and 64, and only three percent of workers affected by a minimum wage increase are between the ages of 16-18.

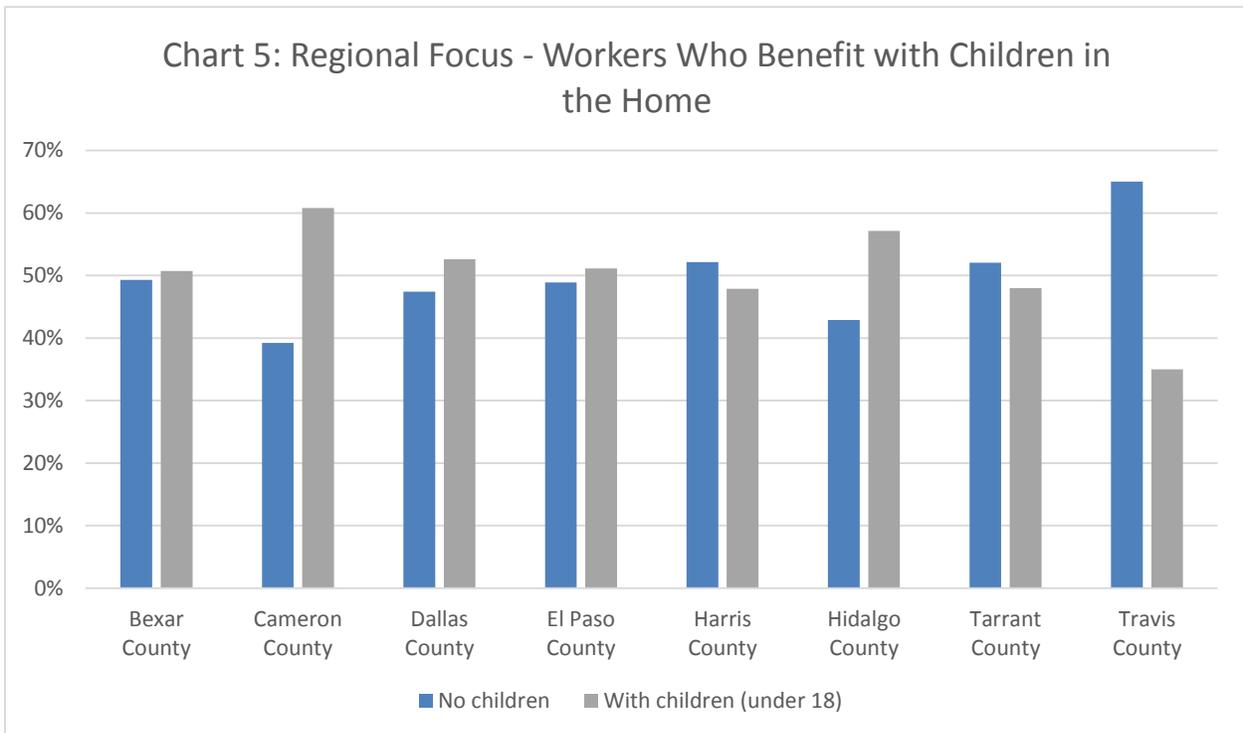


Source: CPPP analysis of 1-year 2013 American Community Survey Public-Use Microdata Sample (PUMS) for Texas.²²

Workers Who Benefit with Children in the Home



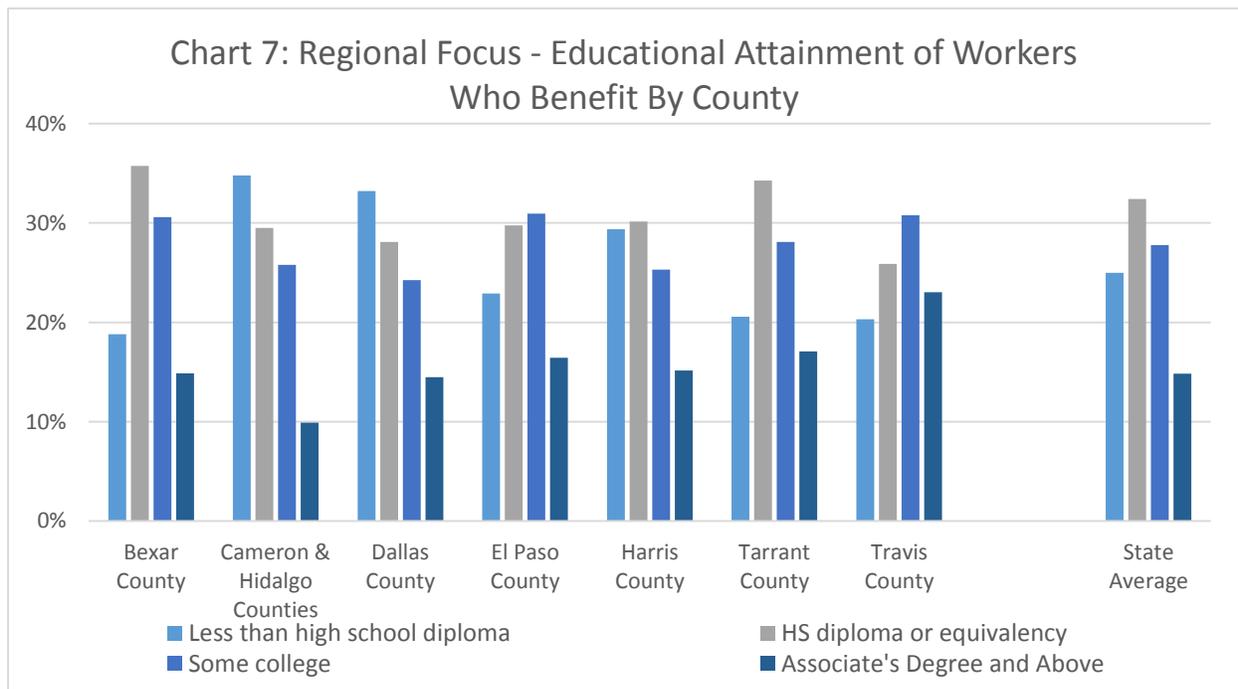
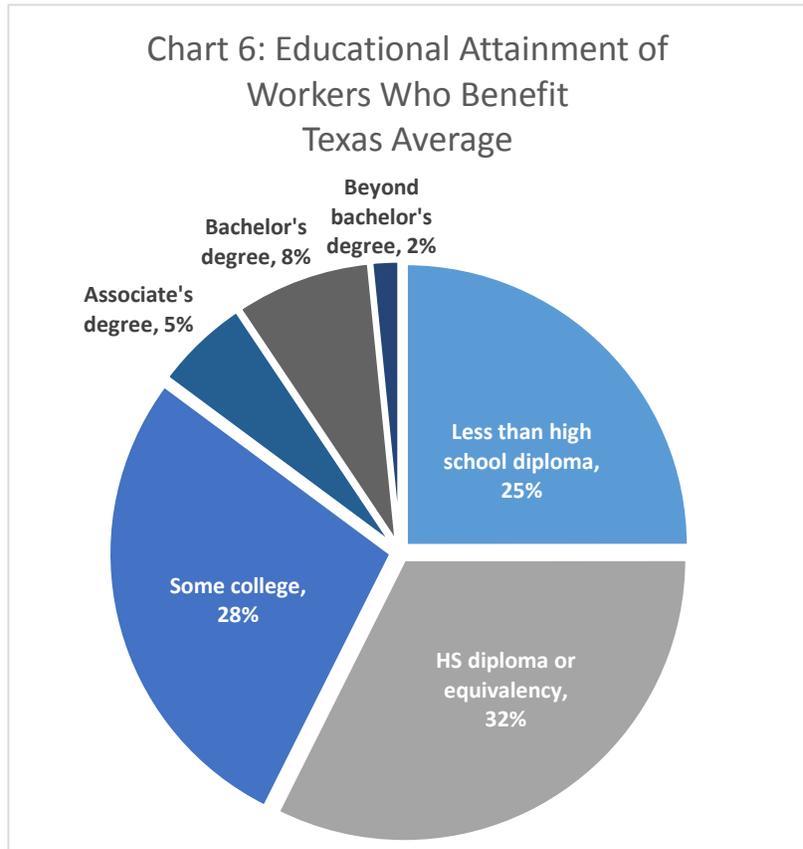
Nearly 49 percent of workers who benefit from a \$10.10 minimum wage have children at home. In fact, one in five workers who benefit are single parents. A total of 344,000 workers, or 14.7 percent of all workers who benefit are single mothers, while another 102,000 or 4.3 percent, are single fathers.



Source: CPPP analysis of 1-year 2013 American Community Survey Public-Use Microdata Sample (PUMS) for Texas.²³

Educational Attainment of Workers Who Benefit

Workers who benefit from a minimum wage increase represent every level of educational attainment, including graduate level degree holders. However, a quarter did not complete high school, and another third stopped their education after receiving their diplomas or high school equivalent.



Source: CPPP analysis of 1-year 2013 American Community Survey Public-Use Microdata Sample (PUMS) for Texas.²⁴

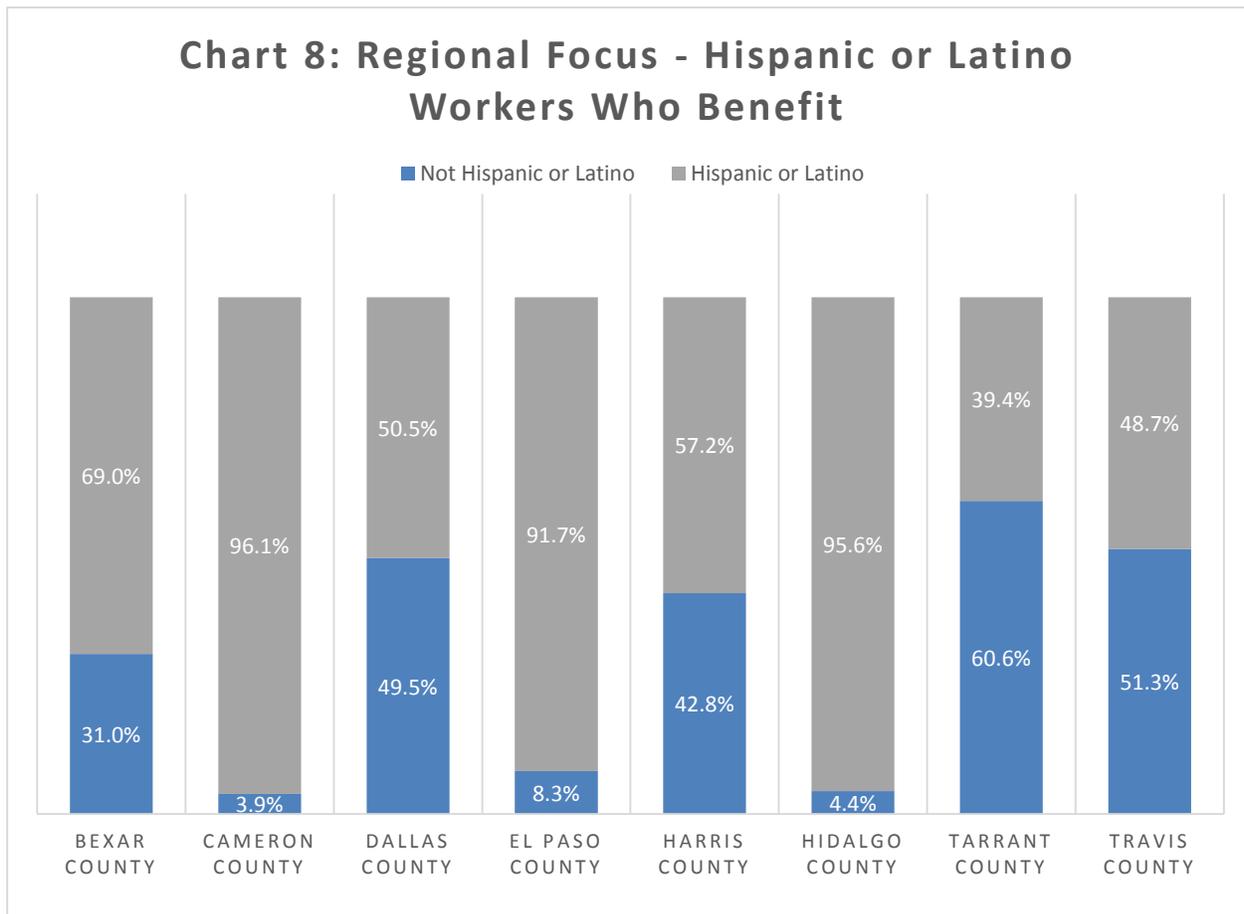
Race and Ethnicity of Workers Who Benefit

Raising the minimum wage to \$10.10 would benefit workers across racial lines, though not always in equal measure. Hispanic and African Americans workers represent a larger share of workers who benefit than their share of the for-profit and not-for-profit sectors. Alternately, White and Asian workers represent a smaller share of workers who benefit than their share of the private and not-for-profit sector workforce.

Table 2: Race and Ethnicity of Workers Who Benefit

| | Percent of Workers Who Benefit | Percent of For-Profit and Not-for-Profit Sector Workforce |
|----------------------------------|--------------------------------|-----------------------------------------------------------|
| <i>Hispanic or Latino</i> | 51.5% | 35.3% |
| <i>Non-Hispanic White Alone</i> | 32.4% | 47.7% |
| <i>Black or African American</i> | 11.4% | 10.7% |
| <i>Asian Alone</i> | 3.2% | 4.7% |
| <i>Other</i> | 1.5% | 1.5% |

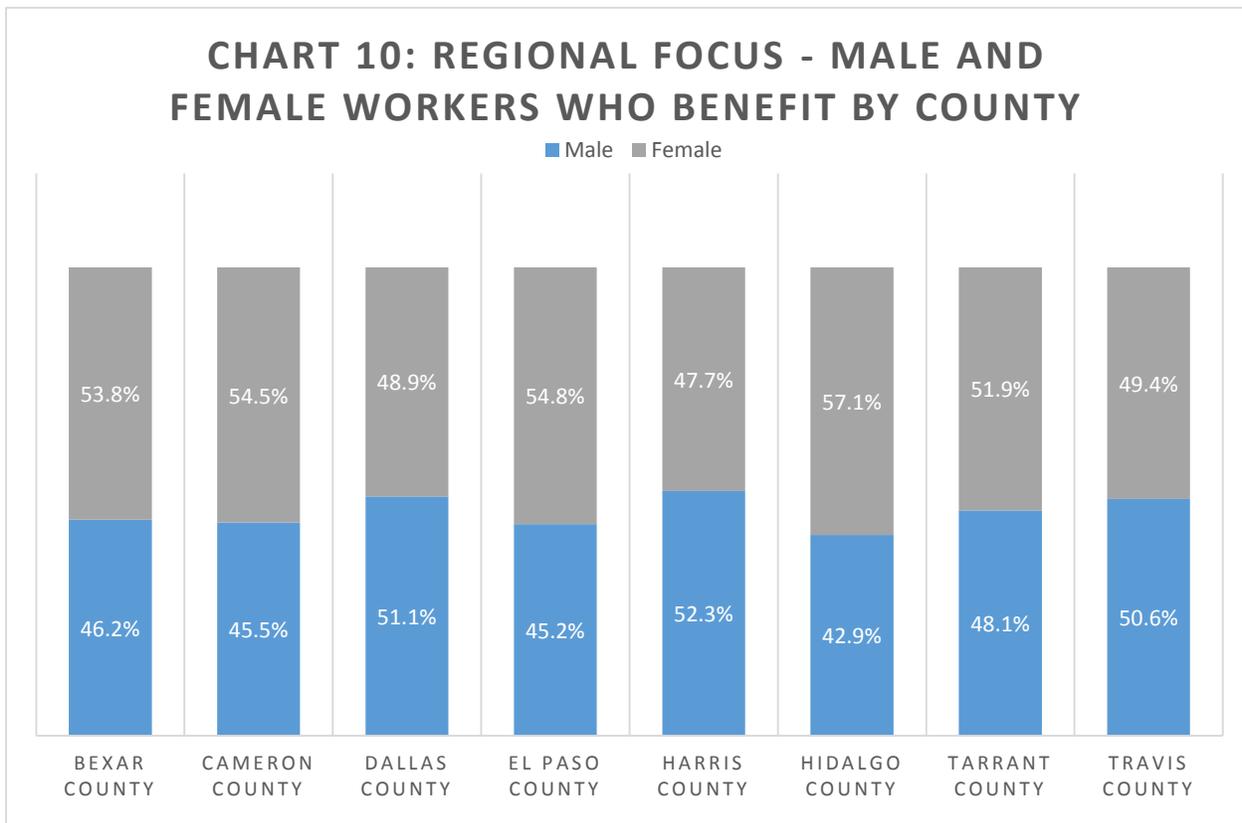
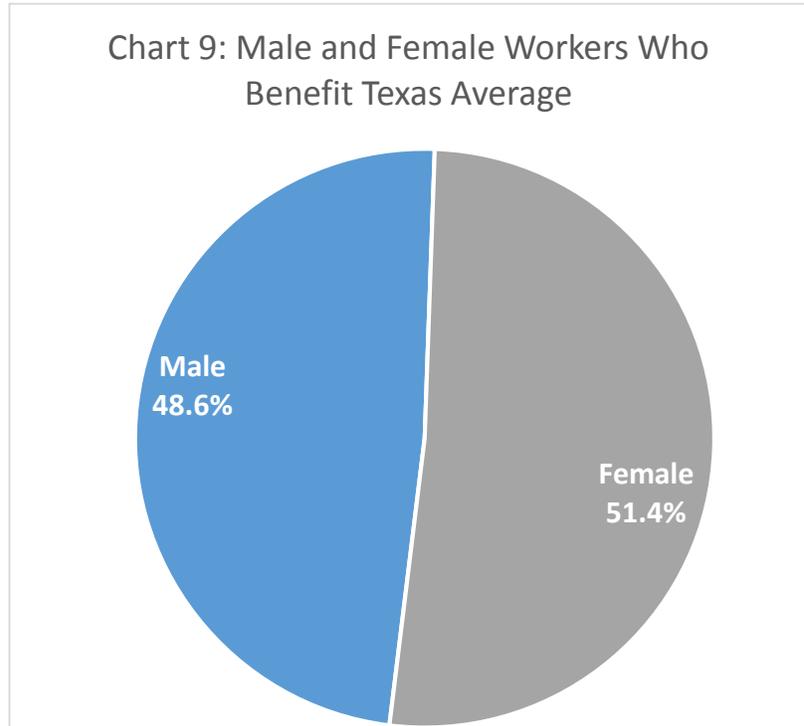
Chart 8: Regional Focus - Hispanic or Latino Workers Who Benefit



Source: CPPP analysis of 1-year 2013 American Community Survey Public-Use Microdata Sample (PUMS) for Texas.²⁵

Male and Female Workers Who Benefit

While more Texas women than men would benefit from an increase in the minimum wage to \$10.10 per hour, the margin is thin; 51.4 percent are female, while 48.6 percent are male. It is important to note that while there is a near equal number of male and female workers who benefit, jobs that pay close or equal to the minimum wage are more likely to be dominated by women. The Bureau of Labor Statistics reports that, as of 2013, 63 percent of Texans working at or below the minimum wage were women.²⁶



Source: CPPP analysis of 1-year 2013 American Community Survey Public-Use Microdata Sample (PUMS) for Texas.²⁷

Workers Who Benefit by Industry

Nearly half are concentrated in three industry sectors: the retail trades; accommodation and food services; health care and social assistance industry. However, workers in nearly every industry would benefit from an increase in the minimum wage.

Table 3: Workers Who Benefit by Industry

| | Number of Workers Who Benefit | Percent of Total Workers Who Benefit |
|----------------------------------------------------------|----------------------------------|-----------------------------------------|
| Retail Trade | 435,099 | 20.0% |
| Accommodation and Food Services | 358,830 | 16.5% |
| Health Care and Social Assistance | 269,067 | 12.4% |
| Manufacturing | 175,908 | 8.1% |
| Construction | 168,822 | 7.8% |
| Administrative and support and waste management services | 150,561 | 6.9% |
| Other Services, Except Public Administration | 137,718 | 6.3% |
| Educational Services | 77,059 | 3.5% |
| Transportation and Warehousing | 74,733 | 3.4% |
| Finance and Insurance | 59,427 | 2.7% |
| Wholesale Trade | 52,801 | 2.4% |
| Professional, Scientific, and Technical Services | 51,084 | 2.4% |
| Real Estate and Rental and Leasing | 39,377 | 1.8% |
| Arts, Entertainment, and Recreation | 34,107 | 1.6% |
| Agriculture, Forestry, Fishing, and Hunting | 31,520 | 1.5% |
| Information | 25,980 | 1.2% |
| Mining, Quarrying, and Oil and Gas Extraction | 23,683 | 1.1% |
| Utilities | 5,712 | 0.3% |

Source: CPPP analysis of 1-year 2013 American Community Survey Public-Use Microdata Sample (PUMS) for Texas.²⁸

Appendix B: Workers Who Benefit by County

Regional analyses were conducted by county. Cities have been listed as an additional point of reference. Information is provided only for those counties with sufficient sample sizes to provide statistical significance.

| County | Major City within the County | Percent of Private and Not-for-Profit Workforce Affected by Increase to \$10.10 | 2016 Estimated Number of Workers |
|----------------------------------------------|------------------------------|---------------------------------------------------------------------------------|----------------------------------|
| Hidalgo County | McAllen | 43.1 | 67,317 |
| Cameron County | Brownsville | 40.8 | 34,490 |
| El Paso County | El Paso | 40.2 | 77,819 |
| Webb County | Laredo | 38.9 | 24,027 |
| Taylor County | Abilene | 33.0 | 14,658 |
| Brazos County | College Station | 32.7 | 17,981 |
| San Patricio, Bee, Refugio, Aransas & Nueces | Corpus Christi | 32.0 | 47,703 |
| Lubbock County | Lubbock | 31.8 | 30,292 |
| Tom Green County | San Angelo | 31.1 | 11,614 |
| McLennan | Waco | 29.0 | 23,415 |
| Gregg County | Longview | 28.9 | 16,485 |
| Wichita County | Wichita Falls | 28.4 | 12,333 |
| Smith County | Tyler | 27.2 | 20,308 |
| Bexar County | San Antonio | 26.8 | 167,441 |
| Montgomery County | Conroe, The Woodlands | 26.1 | 34,043 |
| Potter & Randall | Amarillo | 26.0 | 19,906 |
| Jefferson County | Beaumont | 24.8 | 23,653 |
| Ector County | Odessa | 24.4 | 12,427 |
| Tarrant County | Fort Worth | 22.4 | 155,617 |
| Denton County | Denton, Flower Mound | 22.3 | 40,186 |
| Bell County | Temple, Belton, Killeen | 22.0 | 18,314 |
| Harris County | Houston | 21.5 | 394,771 |
| Williamson County | Round Rock, Georgetown | 21.3 | 26,642 |
| Collin County | Plano, McKinney | 20.7 | 63,227 |
| Dallas County | Dallas | 19.9 | 232,754 |
| Travis County | Austin | 19.7 | 99,894 |
| Midland County | Midland | 18.7 | 12,945 |

Source: CPPP analysis of 1-year 2013 American Community Survey Public-Use Microdata Sample (PUMS) for Texas.

Data and Methods

The analysis used in this paper is modeled after the methodology of the Institute for Research on Labor and Employment at the University of California at Berkeley found in *Data and Methods for Estimating the Impact of Proposed Local Minimum Wage Laws*²⁹, with guidance and input from researchers Annette Bernhardt and Ian Perry.

Data source

The data source for the analysis is the 1-year 2013 American Community Survey Public-Use Microdata Sample (PUMS) for Texas.³⁰

Sample definition

The sample consists of individuals at least 16 years old, working at least 14 weeks in the prior year, and with positive earnings from wages or salaries. Individuals excluded from the analysis are the unemployed, self-employed workers, unpaid family workers, and public-sector employees who would not be affected by a state minimum wage law. Additionally, household-level characteristics such as presence of children in the household and family type were included in the analysis.

Geography

The analysis uses data for residents of Texas. The level of analysis is at the state and the local level. We base local-area analysis on place-of-work, not place-of-residence, as workers may not live in the areas they work.

We define local areas using Place-of-Work Public Use Microdata Areas (POWPUMAs), statistical geographic areas that contain at least 100,000 people and are built on counties. The Amarillo area is comprised of two POWPUMAs that cover Potter and Randall counties. We combine Potter and Randall counties to analyze the impact on Amarillo-area workers. The Corpus Christi area is comprised of two POWPUMAs that cover Nueces, San Patricio, Bee, Refugio, and Aransas counties. We combine these counties to analyze the impacts on Corpus Christi-area workers.

Estimating hourly wages

The American Community Survey asks individuals to report their income in the prior year, weeks worked in the prior year, and usual hours worked per week. We compute an hourly wage variable using these three variables. For example, if an individual reported earning \$30,000 in the prior year, working 50 weeks, and 35 hours per week, we calculate the hourly wage as:

$$\$30,000 / (50 \text{ weeks} * 35 \text{ hours per week}) = \$17.14 \text{ per hour}$$

Survey respondents report weeks worked in the prior year in intervals, such as 50-52 weeks or 40 to 47 weeks worked. We use the midpoint of each interval as the weeks worked value for each respondent.

To account for measurement error, we dropped data for respondents with a computed hourly wage of \$6.525 or less (90 percent or less of the current minimum wage). This dropped approximately 15.9 percent of the sample.

Using the computed hourly wage variable, we estimate that approximately 330,000 working Texans were earning minimum wage or less in 2013. For comparison, the Bureau of Labor Statistics estimates 400,000 Texas workers earned minimum wage or less in 2013.

Estimating wage growth

Because any proposed minimum wage increase would not take effect until 2016, we needed to project worker's wages in 2016 to accurately estimate who would be affected by an increase. We used a two-step process to project 2016 wages. First, because the ACS data were collected during 2013, we adjusted estimated wage growth to the present year (2015) using the Consumer Price Index (CPI) in the Texas Comptrollers' Biennial Revenue Estimate between 2013 and 2015.³¹ Second, we project wages from the present year to 2016 using the CPI between 2015 and 2016. For example, see Table 1 below.

Table 1. Example of hourly wage adjustments

| | |
|------------------------------------------|--------|
| Computed hourly wage using 2013 ACS data | \$8.00 |
| Hourly wage adjusted to 2015 | \$8.40 |
| Projected hourly wage in 2016 | \$8.78 |

State analysis of workers affected by minimum wage increase

Estimating percentages of workers affected by minimum wage increase

Using projected hourly wages in 2016, we calculate the percentage of workers in the sample whose projected hourly wage would be less than \$10.10. We calculate all percentages out of the sample universe, which includes individuals at least 16 years old, working at least 14 weeks in the prior year in the private or not-for-profit sectors, and with positive earnings from wages or salaries. We exclude individuals who are unemployed, self-employed, unpaid family workers, and public-sector employees.

We include in our analysis workers earning slightly above the expected minimum wage increase to \$10.10 because employers typically increase the wages of workers slightly above newly mandated minimum wages to maintain a hierarchy of wages. This group of workers are indirectly affected by the minimum wage increase, and the effect on workers earning just above the minimum wage is referred to as the "spillover" or "ripple" effect.

Estimates of the magnitude of "spillover" effects range within a relatively narrow band. The Institute for Research on Labor and Employment (IRLE) at UC Berkeley used two scenarios. The first scenario assumed a spillover effect on workers earning between 100 and 115 percent of the new minimum wage. (In the case of a new minimum wage of \$10.10, indirectly affected workers would be those earning between \$10.10 and \$11.615 per hour). The second scenario assumed a slightly larger spillover effect on workers earning up to the value of the new minimum wage plus the difference between the new and

old minimum wages. (In the case of a new minimum wage of \$10.10, indirectly affected workers would be those earning between \$10.10 and \$12.95 per hour.)

Jeannette Wicks-Lim from the Political Economy Research Institute at the University of Massachusetts Amherst, used Current Population Survey (CPS) data from 1983-2002 to empirically estimate the magnitude of the spillover effect from past minimum wage increases. She found minimum wage increases indirectly affected workers earning up to 123 percent of the new minimum wage, but the largest number of workers affected were those who earned 115 percent of the new minimum wage.³² In its most recent report, the Congressional Budget Office (CBO) estimates that workers earning up to \$11.50 per hour would be affected by a minimum wage increase to \$10.10.³³

Using methods above, we considered the range of spillover effects on a minimum wage increase to \$10.10 to be between \$11.50 and \$12.95. With input from researchers at IRLE, we assume the spillover effect goes up to workers earning 115 percent of the new minimum wage, or \$11.615 per hour.

Table 2. Texas workers directly and indirectly affected by a minimum wage increase

| Group of Workers | Definition |
|---------------------------------------------------------|----------------------------------------------|
| Directly affected | Earning less than \$10.10/hr in 2016 |
| Indirectly affected ("spillover" or "ripple" effect) | Earning between \$10.10 and \$11.615 in 2016 |
| Total affected | Earning less than \$11.615/hr in 2016 |

Estimating numbers of minimum wage workers affected by minimum wage increase

In addition to calculating natural wage growth before estimating the impact of the minimum wage increase, we also estimate the natural employment growth over the same period so that we can better estimate the number of workers affected by a minimum wage change in 2016.

Similar to adjusting wages, we use a two-step process to adjust for employment growth. First, we adjust the 2013 estimates to 2015 using the rate of employment growth between 2013 and 2015 as indicated in the Comptroller's Biennial Revenue Estimate. We then project estimates to 2016, the year of the proposed minimum wage increase, using estimates of employment growth between 2015 and 2016.

We did not make adjustments for either positive or negative changes in employment growth *prior* to implementation of a minimum wage increase. There has been much conflicting research on the employment effects that occur *after* implementation of a minimum wage increase. (For more, see the state report.) However, there is no evidence to suggest that employment growth would be affected prior to implementation of a minimum wage increase.

Table 3. Employment growth adjustments to statewide estimates

| | |
|-----------------------------------------------------------------------------------------------------------|-----------|
| Estimated number of workers affected by minimum wage increase to \$10.10 based on 2013 data | 2,171,966 |
| Adjustment for employment growth that occurred between 2013 and present year (2015) | 2,281,570 |
| Adjustment for projected employment growth between 2015 and 2016 (year of proposed minimum wage increase) | 2,383,554 |

Demographic characteristics of workers affected by minimum wage increase

We analyze key demographic variables in the individual-level PUMS files: age, sex, race/ethnicity, educational attainment, and veteran status. We also analyze the reported occupation and industry of workers. Finally, we link the household-level PUMS file to the individual-level PUMS file to analyze two household characteristics of individuals potentially affected by a minimum wage increase: household/family type and household presence of children.

Local Area Analysis of Workers Affected by Minimum Wage Increase

We define local areas using Place-of-Work Public Use Microdata Areas (POWPUMAs), statistical geographic areas that contain at least 100,000 people and are built on counties. The Amarillo area is comprised of two POWPUMAs that cover Potter and Randall counties. We combine Potter and Randall counties to analyze the impact on Amarillo-area workers. The Corpus Christi area is comprised of two POWPUMAs that cover Nueces, San Patricio, Bee, Refugio, and Aransas counties. We combine these counties to analyze the impacts on Corpus Christi-area workers.

Approximately 9.5 percent of the state sample is not included in the data for local-area analysis. This occurs because survey respondents report place-of-work based on work during the week prior to taking the survey. Approximately 9.5 percent of individuals who worked at least 14 weeks in the prior year (and are thus considered “workers” in the state analysis) did not work the week prior to the survey. Therefore, they did not report a place-of-work and are not included in the local-area analysis.

Estimating percentages and numbers of workers affected by minimum wage increase in local areas

Percentages and numbers of minimum wage workers affected in local areas used the same methodology as state estimates. We assume employment growth in local areas is the same as employment growth for the state.

Demographic characteristics of workers affected by minimum wage increase in local areas

We analyze key demographic variables in the individual-level PUMS files: age, sex, race/ethnicity, and educational attainment. We link the household-level PUMS file to the individual-level PUMS file to analyze two household characteristics of individuals potentially affected a minimum wage increase: household/family type and household presence of children.

Because of the smaller sample sizes and differing demographics in local areas, we are able to report a limited number of demographic characteristics for selected local areas. Furthermore, for each local area,

the demographic characteristics that we are able to report with confidence differ according to the makeup of that area. For example, in Webb County, we are able to estimate the percent of workers affected by a state minimum wage law who are Hispanic because of the county's large Hispanic population. However, because of the county's relatively small population, we are not able to provide estimates of the age distribution of those affected with the same level of confidence.

We calculate margins of error using generalized standard error formulas with design factors³⁴ and present margins of error at 90 percent confidence intervals. We do not report local estimates with moderately high levels of statistical inaccuracy due to small sample size (defined as estimates where the coefficient of variation is higher than 10).

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- ¹ Working Poor Families Project Data, ACS 2013 release.
- ² Workers who benefit include those currently earning less than the proposed minimum wage of \$10.10 per hour and those earning between \$10.10 and \$11.62 per hour. Workers earning between \$10.10 and \$11.62 per hour are considered indirectly affected by a minimum wage increase because of ‘spillover’ effects because their wages would likely rise if the minimum wage rose. The spillover band is defined as between 100 and 115 percent of the proposed minimum wage. The sample consists of individuals at least 16 years old, working at least 14 weeks in the prior year, and with positive earnings from wages or salaries. Individuals excluded from the analysis are the unemployed, self-employed workers, unpaid family workers, and public-sector employees who would not be affected by a state minimum wage law.
- ³ CIPP analysis of 1-year 2013 American Community Survey Public-Use Microdata Sample (PUMS) for Texas. U.S. Census Bureau. (2015). 2013 American Community Survey Public Use Microdata Sample [Data file]. Retrieved from http://www2.census.gov/acs2013_1yr/
- ⁴ Additional information can be found in the appendix.
- ⁵ U.S. Census Bureau. (2015). 2013 American Community Survey Public Use Microdata Sample [Data file]. Retrieved from http://www2.census.gov/acs2013_1yr/
- ⁶ LoPalo, M. & Orrenius, P. (2014). Texas Leads Nation in Creation of Jobs at All Pay Levels. Southwest Economy, Federal Reserve Bank of Dallas. <http://bit.ly/1MNtoAW>
- ⁷ The Federal Fair Labor Standards Act sets the national minimum wage at \$7.25 per hour. Workers that make below the federal minimum wage may include tipped workers and small firms that are not subject to the Fair Labor Standards Act. Governing Data. (2014). Minimum Wage Workers by State: Statistics, Totals. <http://bit.ly/1ML3hc0>
- ⁸ Working Poor Families Project Data, ACS 2013 release.
- ⁹ Raise the Minimum Wage. (2015). What’s the Minimum Wage in Your State? <http://bit.ly/1MNudcX> This data was confirmed and analyzed by the Worker’s Defense Project in Austin, Texas
- ¹⁰ Center for Public Policy Priorities family budgets calculator. www.familybudgets.org
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- ¹² These numbers were calculated using the tool at [familybudgets.org](http://www.familybudgets.org).
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