Minimum Wage Non-Compliance in New Mexico

Report by Jake Barnes, Daniel J. Galvin, Jenn Round, and Janice Fine

February 2024

RUTGERS
School of Management and Labor Relations

workplace justice lab@RU

Table of Contents

EXECUTIVE SUMMARY **1**

ANNUAL TRENDS **2**

Chart 1. Minimum Wage Violations by Year, New Mexico, 2003-2022 2

INDUSTRY **3**

Chart 2. Minimum Wage Violations by Industry, New Mexico, 2003-2022 3

OCCUPATION **4**

Chart 3. Minimum Wage Violations by Select Occupation, New Mexico, 2003-2022 4

IDENTITY **5**

Chart 4. Minimum Wage Violations by Race/Ethnicity, New Mexico, 2003-2022 5
Chart 5. Min. Wage Violations by Identity vs. Reference Group, New Mexico, 2003-2022 5

AGE **6**

Chart 6. Minimum Wage Violations by Age, New Mexico, 2003-2022 6

OTHER CHARACTERISTICS **6**

Chart 7. Min. Wage Violations, Other Characteristics (vs. Reference Group), New Mexico, 2003-2022 6

CONCLUSION **6**

Chart 8. Employment Projections (High-Violation Industries), New Mexico, 2020-2030 7

ABOUT THE AUTHORS **8**

ABOUT WJL@RU **8**

APPENDICES **9**

Appendix I. CPS data 9
Appendix II. Minimum Wage Rates in New Mexico, 2003-2022 12
Appendix III. Highly-Represented Occupations in High-Violation Industries 13
Appendix IV. Minimum Wage Violation Rate by Industry, New Mexico, 2003-22 15
Appendix V. New Mexico Tribal Area Statistics 16

ENDNOTES **17**

Executive Summary

Measuring minimum wage violations in New Mexico is particularly challenging because there has been so much activity in the past decade and a half. The minimum wage for most New Mexicans changed four separate times between July 2007 and January 2009 due to scheduled state and federal increases. The cities of Santa Fe and Albuquerque enacted local minimum wage laws in 2003 and 2006, respectively.[1] Bernalillo County, Santa Fe County, and the city of Las Cruces followed suit in the years following the Great Recession.[2] In April 2019, the first state minimum wage increase since 2009 was signed into law by Govenor Michelle Lujan Grisham, raising the wage from $7.50 to $12.00 by 2023.[3] The state minimum wage today has either surpassed the local wage or been adopted by all municipalities that had formerly passed minimum wage laws with the dual exception of Santa Fe and Santa Fe County, where the minimum wage as of March 2023 is $14.03, among the highest in the nation.[4] The problem of minimum wage violations crosses lines of race, ethnicity and gender, but as we will see, some constituencies bear the brunt of the problem more than others, and the same is true for industries and occupations.

This memo uses Current Population Survey (CPS) Outgoing Rotation Group data—widely considered the best publicly available survey data on hours and earnings—to estimate the incidence of minimum wage violations in New Mexico over the past twenty years (see **Appendix I** for more on our methods).

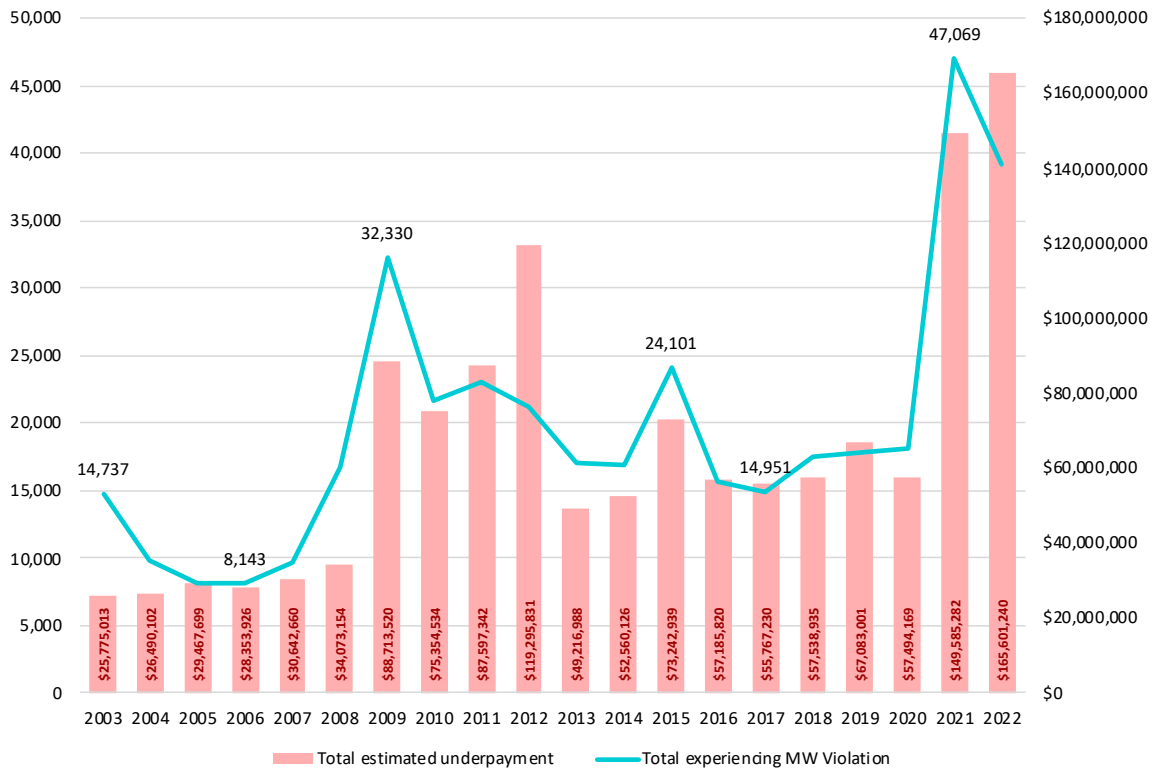
Key findings include:

- **Minimum wage violations have cost New Mexicans over $1.3 billion over the past twenty years.**
- **Minimum wage violations cost New Mexicans over $300 million between 2021-2022.**
- New Mexicans working in food services and drinking places, agriculture, personal and laundry services, and social assistance are particularly likely to experience minimum wage violations.
- Workers employed by private households are amongst those who experience the highest violation rates, even when using the applicable federal minimum wage rate in the years before they were extended minimum wage rights under state law in 2019.
- Waiters, waitresses and bartenders are paid below the minimum wage at particularly high rates compared to other occupations for which estimates could be derived.
- Native American females are over twice as likely—and Latinx female non-citizens over thrice as likely—to experience a minimum wage violation compared to white male citizens.
- Both older and particularly younger workers are more likely than mid-career workers to experience minimum wage theft.
- Part-time workers, non-hourly workers, and workers without a high school diploma are particularly likely to be paid under the minimum wage.
- Eleven of the twelve identified high-violation industries are projected to grow by 2030, five of which are projected to grow faster than the overall New Mexico workforce.

We provide more on our findings below.

Annual Trends

Chart 1. Minimum Wage Violations by Year, New Mexico, 2003-2022



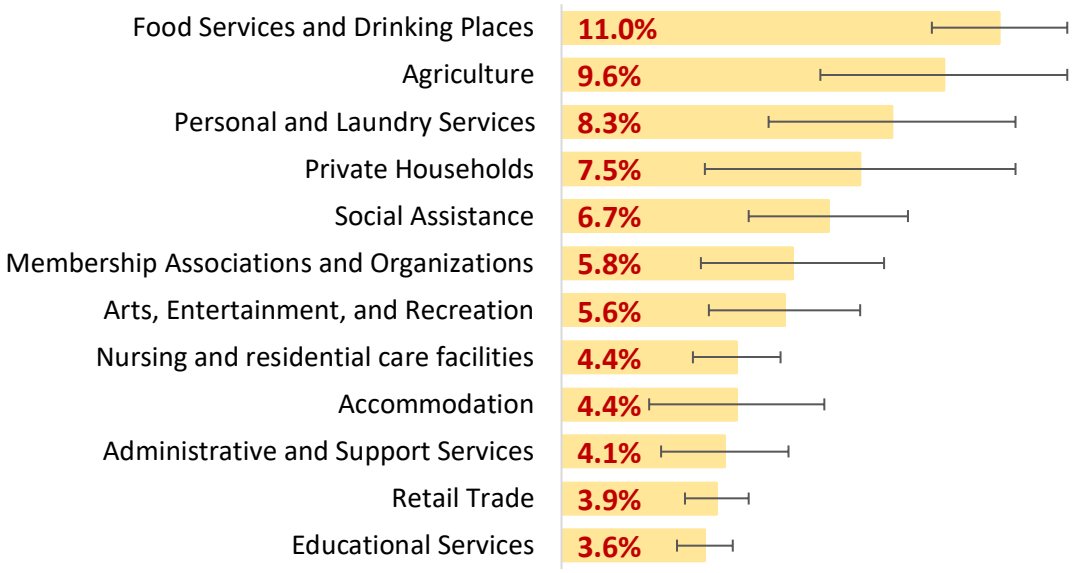
Minimum wage violations have cost New Mexicans more than $1.3 billion over the past twenty years. The number of workers experiencing minimum wage theft rose dramatically between 2007 and 2009. This may be linked in part to both the economic impact of the Great Recession—as increases in state unemployment rates have been linked to increases in minimum wage violations—[5]as well as the notable complexity in federal, state and local minimum wage rates during these years (see **Appendix II**).[6]

While the state's minimum wage rate rose in January 2020 for the first time since 2009—increasing from $7.50 in December 2019 to $9.00 in January 2020, $10.50 in 2021, and $11.50 in 2022—violation rates do not rise significantly until a year after the initial raise went into effect in 2021, when more than 47,000 workers are estimated to have experienced a minimum wage violation. Our finding that total underpayment decreased between 2019 and 2020 is particularly interesting given the beginning of the COVID-19 pandemic in March 2020.[7]

Most pressing here is the finding that while the number of workers experiencing violations decreased between 2021 and 2022, as the minimum wage rate continued to increase, so too did total underpayment, climbing from nearly $150 to over $165 million.[8] More workers were impacted by minimum wage violations in 2022 than at the height of the Great Recession.

Industry

Chart 2. Minimum Wage Violations by Industry, New Mexico, 2003-2022



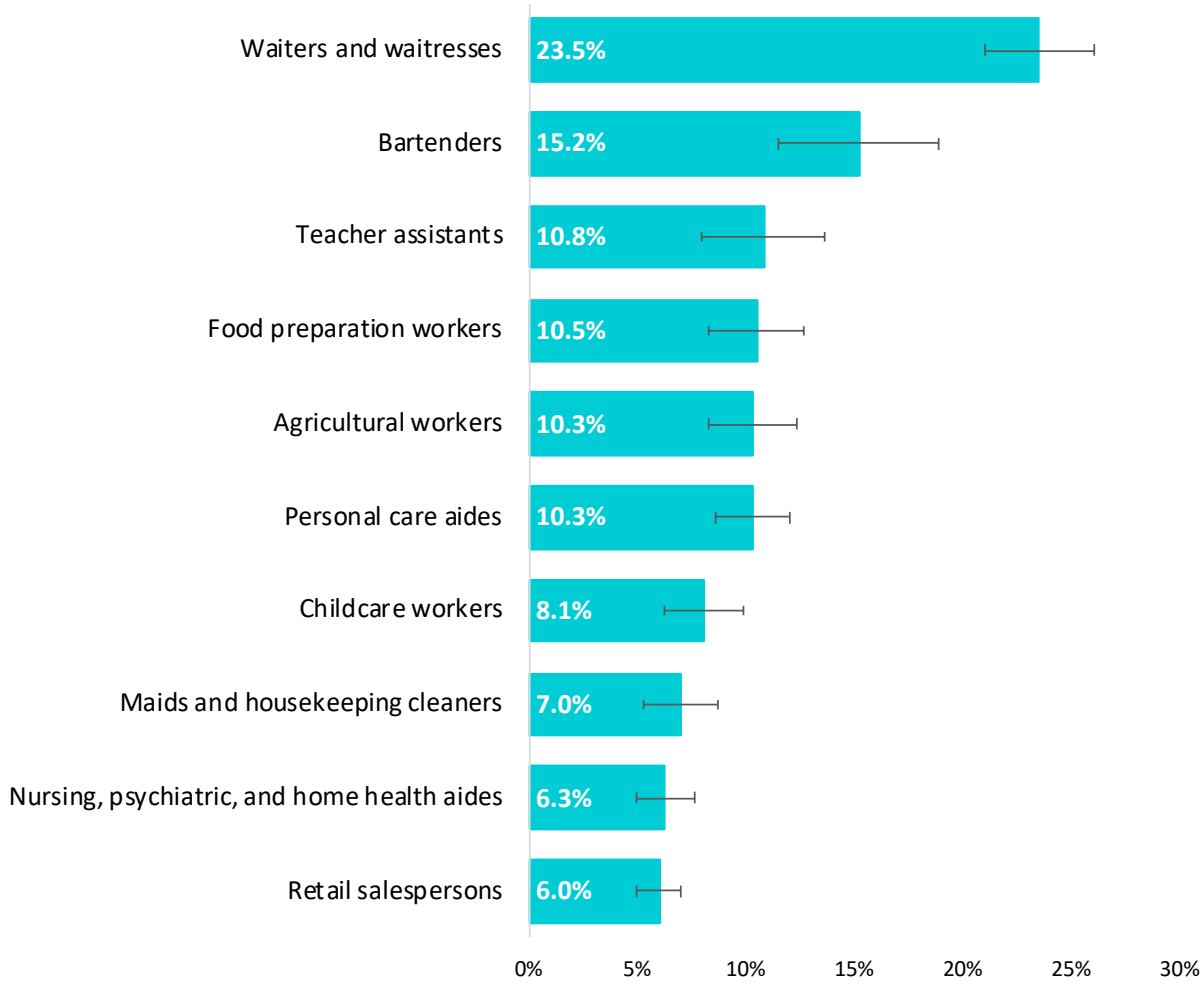
Note: Estimates present predicted probabilities. 95% confidence intervals are shown. Overall violation rate = 3.4%

Chart 2 shows the twelve industries with the highest rate of minimum wage violations in New Mexico. An estimated 11 percent of workers in the food services industry have experienced a violation; this equates to nearly 1 out of every 9 workers in the industry facing a minimum wage violation each year. Other industries with particularly high rates of violations include agriculture (9.6%); personal and laundry services, including beauticians, massage therapists, animal caretakers, parking attendants, and other services (8.3%); and social assistance, including personal aides, childcare workers, and others (6.7%). Private households—which predominantly includes domestic workers employed in private homes—were excluded from the state minimum wage (and other local laws that included exemptions based on the state minimum wage act) until 2019. Even when using the federal minimum wage rate for private household workers in the years prior to their inclusion, workers in this industry are amongst those experiencing the highest violation rates (7.5%). See **Appendix III** for full industry estimates and **Appendix IV** for example low-wage occupations in high-violation industries.

Occupation

Chart 3 below shows the occupational groups with the highest rates of minimum wage violations for which estimates could be derived.[9] Several of these high-violation jobs are primarily found within the food services industry—including waiters and waitresses (23.5%), bartenders (15.2%), and food preparation workers (10.5%)—while others such as personal care aides (10.3%) and childcare workers (8.1%) are largely found within the social assistance sector. Other high-violation occupations for which estimates could be derived include teacher assistants (10.8%), agricultural workers (10.3%), maids and housekeeping cleaners (7.0%), nursing, psychiatric, and home health aides (6.3%), and retail salespersons (6.0%).

Chart 3. Minimum Wage Violations by Select Occupation, New Mexico, 2003-2022

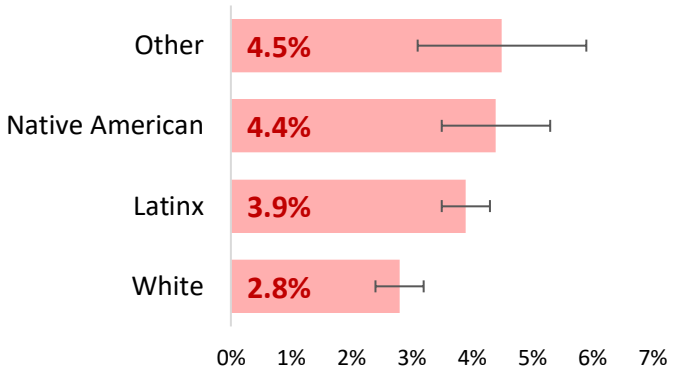


Note: Estimates represent predicted probabilities. 95% confidence intervals shown.

Identity

These data do not tell us *why* some industries and occupations have more or fewer violations. Still, it is worth noting that the industries with the highest estimated violation rates tend to employ many women, people of color, and immigrant workers, while industries with lower violation rates often employ more men and/or historically have been more unionized; these patterns point to discrimination and occupational segregation as potential explanations.

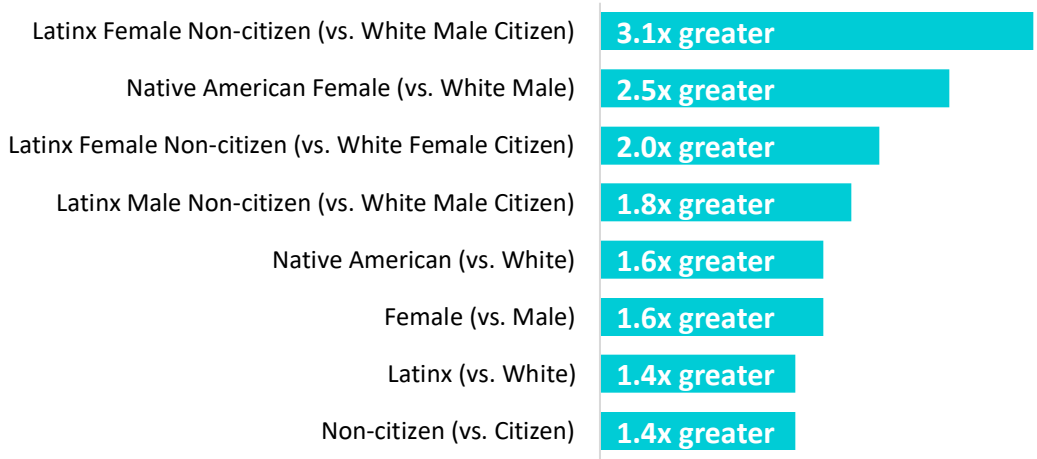
Chart 4. Minimum Wage Violations by Race/Ethnicity, New Mexico, 2003-2022



Note: Estimates represent predicted probabilities. 95% confidence intervals shown.

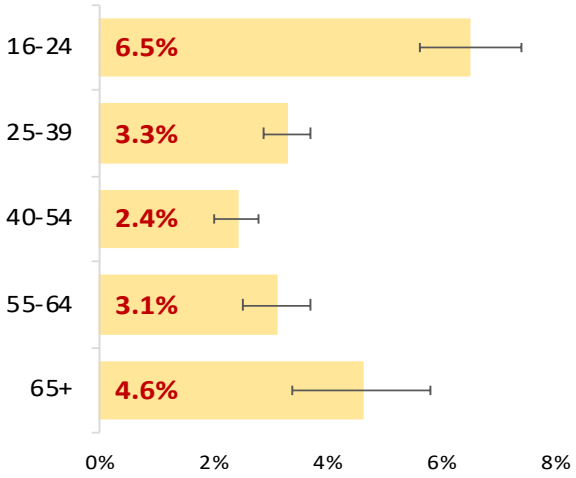
Chart 4 shows the predicted percentage of workers experiencing minimum wage violations by racial-ethnic identity. Workers that identify as Latinx (3.9%) or Native American (4.4%) are more likely to suffer a minimum wage violation than white workers (2.8%). **Chart 5** below begins to compare race and ethnicity with other identifiers. Non-citizens are 40 percent more likely than citizens to experience a minimum wage violation in New Mexico, while women have 60 percent greater odds than men. It is critical to note the multiplicative impact of wage violations experienced by persons with intersecting identities. While Latinx workers as a whole are 40 percent more likely to experience a minimum wage violation than white workers, Latinx female non-citizens are twice as likely as white female citizens and more than thrice as likely as white male citizens to experience a violation. Native American female workers are also particularly likely to face minimum wage violations in New Mexico, experiencing them at well over double the rate of white males.

Chart 5. Min. Wage Violations by Identity vs. Reference Group, New Mexico, 2003-2022



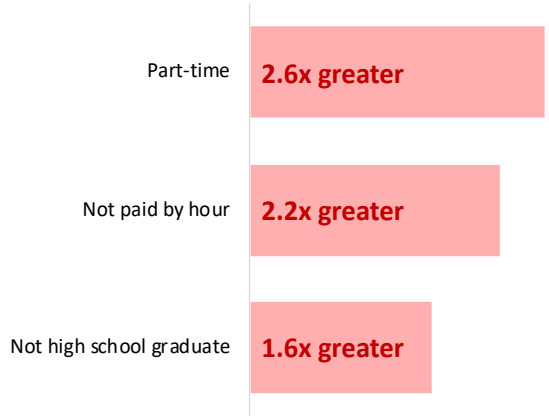
Note: Estimates represent predicted probabilities.

Chart 6. Minimum Wage Violations by Age, New Mexico, 2003-2022



Note: Estimates represent predicted probabilities. 95% confidence intervals shown.

Chart 7. Min. Wage Violations, Other Characteristics (vs. Reference Group), New Mexico, 2003-2022



Note: Estimates represent predicted probabilities.

Age

Both younger and older workers appear to be impacted by minimum wage violations at higher rates than mid-career workers (see **Chart 6**). Younger workers (16-24) are impacted by minimum wage violations at the highest rate (6.5%), followed by workers over the age of 65 (4.6%). Mid-career workers are significantly less likely to experience a violation than younger workers.

Other Characteristics

Chart 7 below shows the relative impact of minimum wage violations with respect to other key identifiers. Part-time workers are 2.6 times more likely than full-time workers to experience these violations. Workers that aren't paid by the hour are more than twice as likely to experience a violation than hourly workers (likely because they were paid in flat daily/weekly payments, by project, or by piece-rate), and those that didn't graduate high school are 60 percent more likely to be paid below the minimum wage than those with a high school degree.

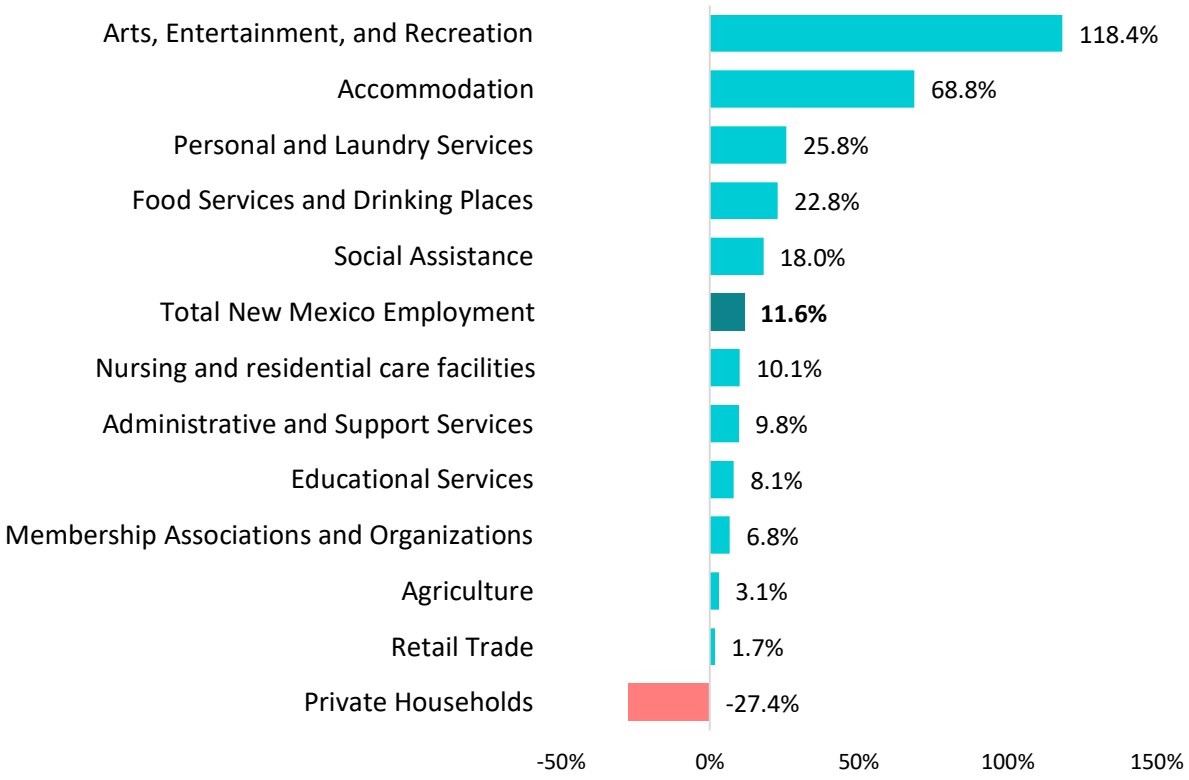
Conclusion

Minimum wage violations take a high toll on workers and society at large that goes beyond the dollar amount of wages stolen. Studies find that high rates of minimum wage violations increase the percentage of workers living in poverty.[10] Likewise, as women, immigrants, and racial/ethnic minorities are more likely to suffer minimum wage violations in New Mexico—particularly when these identities intersect—we can expect violations to perpetuate earning and income inequality.[11] Violators hurt law-abiding businesses that are forced to compete with artificially low labor costs, giving employers who underpay their workers a competitive advantage while suppressed wages weaken consumer demand.[12] In addition to low-wage workers and compliant employers, violations also negatively impact the greater public, who a) lose out on payroll and income

tax revenue and b) absorb the cost of public assistance programs that victims of minimum wage theft are forced to rely on to supplement their decreased wages.[13]

Several of the industries identified above as experiencing particularly high rates of minimum wage violations are also projected to be amongst the fastest-growing sectors over the coming years (see **Chart 8**). Based on data analyzed by the New Mexico Department of Workforce Solutions, eleven of the twelve industries facing the highest rates of violations in New Mexico are expected to grow by 2030, and five of these industries—social assistance, food services and drinking places, personal and laundry services, accommodation, and arts, entertainment, and recreation—are projected to grow at a faster rate than the overall state workforce. These high-violation industries together are projected to generate roughly 54,000 new jobs by 2030, accounting for over half of all projected growth in the New Mexico workforce over the decade.

Chart 8. Employment Projections (High-Violation Industries), New Mexico, 2020-2030



For the above reasons, we recommend that the state of New Mexico move urgently to address these issues. We believe the mission of NMDWS to "educate, empower, employ, and enforce" provides a mandate for undertaking more strategic, proactive, and well-resourced enforcement. In conjunction with effective education of both workers (on their rights) and employers (on their obligations), strategic enforcement holds the potential to empower high-road employers, increase tax revenue for the state, and ultimately promote improved conditions for many New Mexican workers and their families.

About the Authors

Jake Barnes is a Ph.D. candidate at the Rutgers School of Management and Labor Relations (SMLR) and an Affiliated Scholar with the Workplace Justice Lab@Rutgers University. He holds a M.S. from SMLR and a B.S. from the Cornell University ILR School.

Janice Fine is the Director of the Workplace Justice Lab@Rutgers University. She holds a Ph.D. from MIT in political science and is a professor of labor studies and employment relations at Rutgers SMLR.

Daniel Galvin is the Workplace Justice Lab@Rutgers University's Senior Affiliated Scholar working on strategic enforcement initiatives. He holds a Ph.D. from Yale University and is a professor of political science and faculty fellow at the Institute for Policy Research at Northwestern University.

Jenn Round is the Director of the Beyond the Bill program at the Workplace Justice Lab@Rutgers University. She holds a J.D. from George Washington University Law School and a LL.M. from the University of Washington School of Law.

About WJL@RU

The workplace justice lab@RU exists to address economic inequality through supporting and strengthening grassroots organizing and democratic governance. We do this through building dynamic communities of learning and practice, carrying out cutting edge research, and offering specialized training and in-depth one-on-one consultations.

At the lab, we go beyond talking about what government should do, to focusing on how government should do it. Through our strengthening labor standards enforcement program, we work to reimagine the public enforcement of workers' rights laws. By proactively targeting the sectors with the worst problems and involving those directly impacted in enforcement, we help agencies realize the intended impact of innovative labor standards legislation.

Appendices

Appendix I. CPS data

The empirical literature on labor standards violations and their predictors remains limited due to the difficulty of obtaining accurate and reliable data. Employers that intentionally violate are unlikely to provide honest nor complete depictions of their practices. The hesitance of many aggrieved workers to submit a complaint to a public entity—whether due to immigration status, fear of retaliation, general distrust of government, or otherwise—leaves enforcement agency complaint data also unable to paint an accurate portrait of the complex and varied forms of wage and hour violations.

Wage violations must therefore be estimated using survey data. Most useful is the Current Population Survey's Merged Outgoing Rotation Groups (CPS MORG) data, which the U.S. Department of Labor's Wage and Hour Division has used to identify "priority industries" for investigations and which remains the top choice of every social scientist who has sought to develop national or industry-specific estimates of FLSA noncompliance since the 1970s.[14]

The CPS-MORG data has many advantages: it is gathered via extensive interviews with around 60,000 households per month; it is representative at the state and national levels (unlike other survey data, such as the Survey of Income and Program Participation [SIPP]); and its individual-level responses permit us to estimate earnings and minimum wage violations relatively easily. The biggest downside is measurement error, as with any survey.

The methodological approach we have employed here is fully consistent with previous research.[15] CPS-MORG data from 2003 through 2022 were used to develop the minimum wage violation estimates presented. Data was limited to respondents who were currently employed at the time of the survey. Many of the same workers excluded from FLSA protections are also excluded from New Mexico state law and were removed from the analysis, including bona fide executive, administrative and professional employees. Other exempt workers under the New Mexico Minimum Wage Act (MWA) that were removed from the sample include forepersons, superintendents and supervisors; employees 18 years of age or under who are not graduates of a secondary school or students in a primary, secondary, vocational or training school; and food packers. Some exemptions were unable to be accounted for given the structure of the data, including some agricultural workers;[16] students working after school hours or on vacation; apprentices; "salespersons or employees compensated upon piecework, flat rate schedules or commission basis;" Employees of charitable, religious or nonprofit organizations who reside on premises; volunteers; and certain seasonal employees.[17]

For hourly wages, we use variables that include wages earned from overtime, tips, and commissions (OTC) for both hourly and non-hourly workers.[18] Wage estimates are therefore conservative over-estimates that effectively downward-bias the estimated minimum wage violation rates. This is preferable to the alternative, however, which excludes OTC for hourly workers while including it for non-hourly workers (for whom different sources of wages are not distinguished). Efforts to estimate and subtract OTC from non-hourly workers adds unknown quantities of additional measurement error to this key variable and is not recommended.[19] To ensure our estimates of wage violations are conservative *underestimates*, we follow Cooper and Kroeger (2017) in taking the higher of the reported wage (hourly wage or weekly pay divided by hours worked) for hourly workers who reported both.

To correct for measurement error, we follow ERG (2014), Galvin (2016), and Cooper and Kroeger (2017) and exclude all observations of workers not specifying weekly earnings, hourly/non-hourly status, usual hours worked; observations of non-hourly workers with weekly earnings less than $10; and all observations of workers with hourly wages less than $1.

Minimum wage violations are dichotomous measures of whether an individual's estimated hourly wage was lower than the applicable legal minimum. We use the applicable statutory minimum wage rate as of the date effective for each respondent (see **Appendix II**). Given the geographic indicators included within the CPS, we were able to account for local minimum wage rates in Albuquerque,[20] Bernalillo County, Las Cruces (2021-2023), Santa Fe (2014-), and Santa Fe County. We were unable to account for local minimum wage rates in Las Cruces prior to 2021 and Santa Fe prior to 2014; in these cases, the next highest applicable rate—generally the state wage—is used. Minimum wage exemptions for Albuquerque, Bernalillo County, and Las Cruces follow the exemptions of the MWA, while both Santa Fe and Santa Fe County include few exemptions within their laws. A robustness check was performed using only the applicable state minimum wage rate for all respondents and, while rates were slightly lower, there were no significant changes in the results. All analyses, including population estimates, use survey weights suggested by Davern et. al (2007), which are necessary given the sampling method of the CPS.[21]

Minimum wage violation estimates were unable to be generated for several industries due to lack of sufficient data, including forestry, mining, rental and leasing services, utilities, waste management and remediation services, and ambulatory health care services.

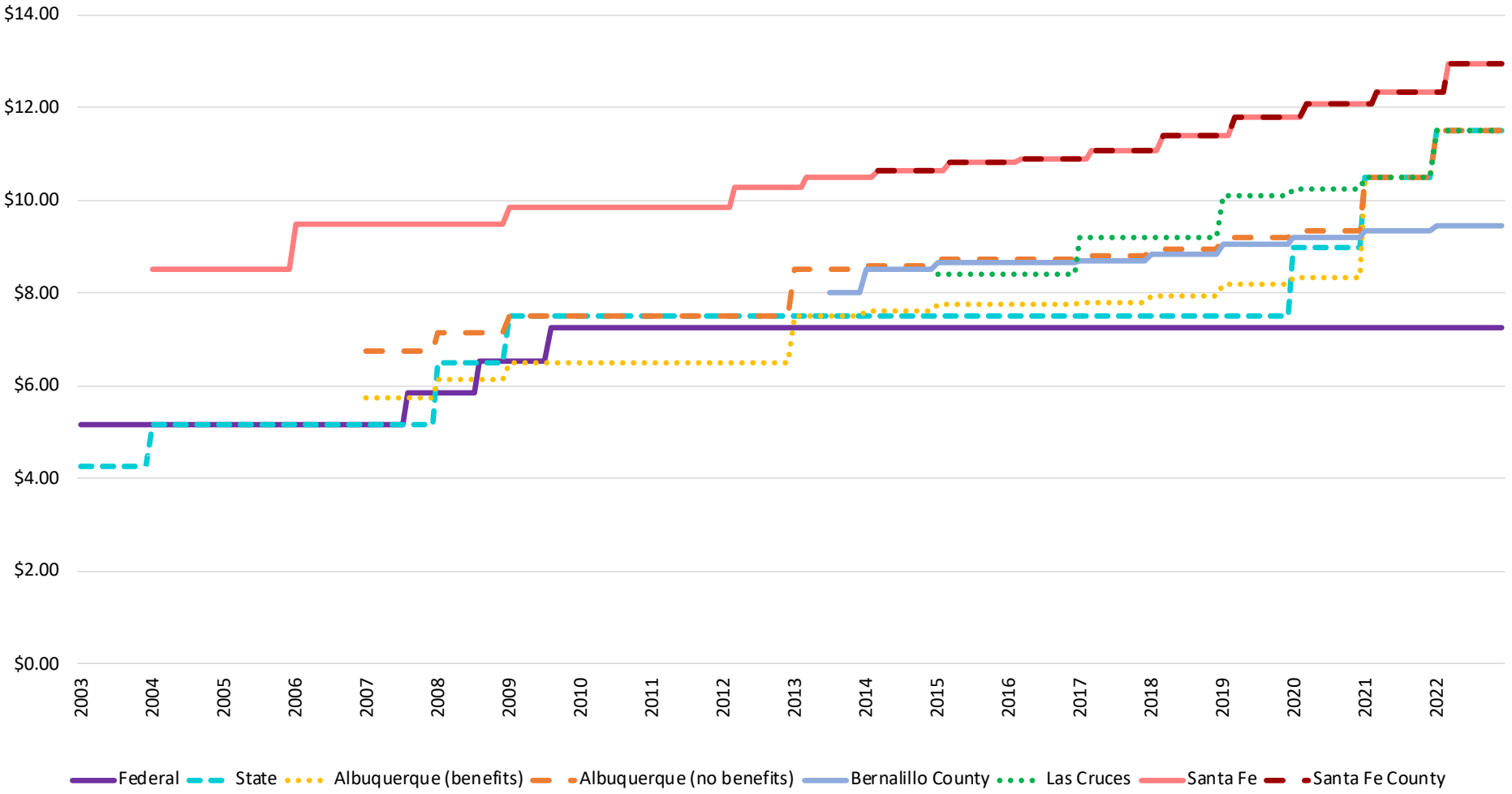
Although tribal lands could not be accounted for in the analysis, there is little reason to believe the inclusion of workers on tribal lands (for whom state minimum wage laws are not enforced)[22] biases the reported results, as the labor force on tribal lands in New Mexico accounts for just 2 percent of the total state civilian labor force (see **Appendix V**).

To account for potential rounding errors biasing the data, a sensitivity test was performed where a minimum wage violation was instead defined as a case in which the calculated hourly wage was at least $.25 lower than the applicable minimum wage. While these rates were slightly lower, the relative rates across industry and occupational groups were not significantly changed.

There is reason to believe that the measurement error in the CPS may actually bias *downward* the reported estimates of minimum wage violations.[23] First, despite going to great lengths to reach them, both Latinx households and undocumented immigrants are underrepresented in the CPS.[24] Because workers in these groups are at higher risk of experiencing minimum wage violations, the estimates of violations reported here should in this sense be considered conservative estimates.[25] Second, in Bollinger's study of measurement error in the CPS, he finds a "high overreporting of income for low-income men" driven by "about 10% of the reporters who grossly overreport their income," thus potentially biasing estimates downward even further.[26] Third, CPS data have a shortage of low-wage workers and an excess of high-wage workers relative to comparable survey data like SIPP; one effect of this imbalance could be to underestimate minimum wage violations.[27] Roemer does find that the CPS reaches more "underground" workers than other large-scale surveys and is less biased than alternatives.[28] These considerations notwithstanding, the fact that measurement error surely exists recommends using caution when working with the point estimates reported.

Racial and ethnic categories are mutually exclusive. "Native American" includes those who identify as American Indian, Aleut, or Eskimo. "Other" includes those who identify as Black only; Asian only; Hawaiian/Pacific Islander only; or of mixed race/ethnicity.

Appendix II. Minimum Wage Rates in New Mexico, 2003-2022



Appendix III. Highly-Represented Occupations in High-Violation Industries[29]

Industry	Occupation examples (Occupation code)
Agriculture (NAICS 11)	Farmworkers and laborers (45-2092) Logging equipment operators (45-4022) Agricultural equipment operators (45-2091) Heavy and tractor-trailer truck drivers (53-3032) Packers and packagers (53-7064) Graders and sorters (45-2041)
Retail trade (NAICS 44-45)	Retail salespersons (41-2031) Cashiers (41-2010) Laborers and material movers (53-7060) Stockers and order fillers (53-7065) Driver/sales workers and truck drivers (53-3030) Rental clerks and parts salespersons (41-2020) Customer service representatives (43-4051)
Educational Services (NAICS 611)	Teaching assistants (25-9040) Elementary and middle school teachers (25-2020) Secondary school teachers (25-2030) Secretaries and administrative assistants (43-6010) Special education teachers (25-2050)
Administrative and support services (NAICS 561)	Janitors and cleaners, except maids and housekeeping cleaners (37-2011) Security guards (33-9032) Laborers and freight, stock, and material movers, hand (53-7062) Landscaping and groundskeeping workers (37-3011) Customer service representatives (43-4051) Office clerks (43-9061) Packers and packagers (53-7064)
Nursing and residential care facilities (NAICS 623)	Home health and personal care aides (31-1120) Nursing assistants (31-1131) Licensed practical and licensed vocational nurses (29-2061)
Social assistance (NAICS 624)	Home health and personal care aides (31-1120) Preschool teachers (25-2011) Childcare workers (39-9011) Social and human service assistants (21-1093) Teaching assistants, except postsecondary (25-9045) Child, family, and school social workers (21-1021)

Arts, entertainment, and recreation (NAICS 71)	Amusement and recreation attendants (39-3091) Exercise trainers and group fitness instructors (39-9031) Food preparation and serving related occupations (30000) Office and administrative support occupations (43-0000) Arts, design, entertainment, sports, and media occupations (27-0000) Building and grounds cleaning and maintenance occupations (37-0000)
Accommodation (NAICS 721)	Maids and housekeeping cleaners (37-2012) Hotel, motel, and resort desk clerks (43-4081) Waiters and waitresses (35-3031) Maintenance and repair workers, general (49-9071) Cooks (35-2014) Gambling dealers (39-3011)
Food services and drinking places (NAICS 722)	Fast food and counter workers (35-3023) Waiters and waitresses (35-3031) Cooks (35-2014) Food preparation workers (35-2021) Bartenders (35-3011) Dishwashers (35-9021) Hosts and hostesses (35-9031) Cashiers (41-2011) Dining room and cafeteria attendants and bartender helpers (35-9011) Driver/sales workers (53-3031)
Personal and Laundry Services (NAICS 812)	Hairdressers, hairstylists, and cosmetologists (39-5012) Manicurists and pedicurists (39-5092) Laundry and dry-cleaning workers (51-6011) Animal caretakers (39-2021) Parking attendants (53-6021) Receptionists and information clerks (43-4171) Massage therapists (31-9011) Counter and rental clerks (41-2021) Skincare specialists (39-5094) Funeral attendants (39-4021) Morticians, undertakers, and funeral arrangers (39-4031)
Membership associations and organizations (NAICS 813)	Labor relations specialists (13-1075) Secretaries and administrative assistants, except legal, medical, and executive (43-6014) Office clerks (43-9061) General and operations managers (11-1021)

Appendix IV. Minimum Wage Violation Rate by Industry, New Mexico, 2003-22

Industry	MW Violation Estimate (95% CI)
Accommodation	**4.4%** (2.2, 6.6)
Administrative and support services	**4.1%** (2.5, 5.7)
Agriculture	**9.6%** (6.6, 12.7)
Arts, entertainment, and recreation	**5.6%** (3.7, 7.5)
Construction	**1.9%** (1.2, 2.5)
Educational services	**3.6%** (2.8, 4.3)
Finance and Insurance	**0.9%** (0.2, 1.5)
Food services and drinking places	**11.0%** (9.4, 12.7)
Hospitals	**1.3%** (0.7, 2.0)
Information	**1.3%** (0.4, 2.2)
Manufacturing	**1.6%** (0.9, 2.4)
Membership associations and organizations	**5.8%** (3.5, 8.1)
Nursing and residential care facilities	**4.4%** (3.3, 5.5)
Personal and Laundry Services	**8.3%** (5.2, 11.4)
Private households	**7.5%** (3.6, 11.4)
Professional, Scientific, and Technical Services	**1.3%** (0.6, 1.9)
Public Administration	**1.3%** (0.7, 1.9)
Real estate	**2.8%** (0.8, 4.7)
Repair and maintenance	**3.0%** (1.2, 4.7)
Retail trade	**3.9%** (3.2, 4.7)
Social assistance	**6.7%** (4.7, 8.7)
Transportation and warehousing	**2.1%** (1.1, 3.1)
Wholesale trade	**1.5%** (0.5, 2.5)

Appendix V. New Mexico Tribal Area Statistics

Title	Total population	%Male	Median age (years)	%American Indian	% in labor force	Unemploy-ment Rate	%Service occupations	Civilian employed population ≥16 y/o	%Gov workers	Median household income (dollars)	Percent high school graduate or higher	Percent bachelor's degree or higher
Acoma Pueblo	3223	46.4%	38.1	93.2%	54.4%	5.7	32.8%	1350	36.2%	56063	88.8	10.5
Isleta Pueblo	4075	50.9%	34.9	90.2%	54.9%	6.9	27.9%	1621	36.6%	51964	89.2	13.7
Jemez Pueblo	2042	43.0%	33.6	99.5%	61.4%	2.3	40.0%	850	45.8%	49700	86	10.1
Jicarilla Apache Nation	3108	49.9%	31.5	81.9%	62.4%	18.7	27.4%	1097	67.7%	46595	89.4	10.9
Laguna Pueblo	4514	46.7%	36.7	95.4%	48.9%	9.5	36.9%	1573	42.2%	39079	90.5	7.8
Mescalero Reservation	4005	43.9%	32.4	89.0%	48.5%	11.4	49.0%	1301	60.1%	34963	80.2	15.1
Nambe Pueblo	2026	50.5%	46.7	26.7%	44.2%	10.1	21.5%	661	43.4%	35714	89	20.3
Navajo Nation (NM)	49969	47.6%	33.5	96.5%	47.5%	N/A	29.3%	19209	32.8%	37003	73.2	6.9
Ohkay Owingeh	6861	54.1%	36	21.6%	51.4%	5.8	26.3%	2578	33.9%	42314	89.2	14.9
Picuris Pueblo	2340	54.7%	41.8	9.2%	48.1%	6.5	23.3%	837	44.8%	37222	86.2	13.2
Pueblo de Cochiti	1465	50.9%	47.7	46.6%	51.9%	7.5	22.0%	581	38.2%	44732	95.3	24.5
Pueblo of Pojoaque	3608	48.5%	42.1	18.0%	60.2%	4.7	21.5%	1673	36.8%	57277	90	28.2
San Felipe Pueblo	3590	51.9%	36.4	72.5%	53.5%	10.7	32.4%	1310	30.8%	42500	76.8	11.6
San Ildefonso Pueblo	2261	51.0%	37.1	34.7%	60.7%	3.3	20.1%	1074	37.2%	52424	96.1	20.7
Sandia Pueblo	5306	50.7%	42.7	13.3%	56.6%	7.6	29.7%	2286	20.6%	39364	75.5	11.7
Santa Ana Pueblo	1131	54.1%	34.5	95.1%	61.9%	10.2	34.4%	508	38.8%	53977	86.8	8.4
Santa Clara Pueblo	11893	51.6%	40.3	10.9%	52.9%	4	24.9%	4711	28.7%	45313	84.7	22
Santo Domingo Pueblo	2792	47.4%	31	70.2%	58.3%	6.8	23.2%	1163	29.7%	38836	83.6	5.2
Taos Pueblo	5180	47.0%	51.3	27.2%	51.7%	12.2	20.4%	2032	32.5%	40833	90.6	25.9
Tesuque Pueblo	1156	50.3%	34	49.7%	54.3%	15	36.2%	398	30.9%	50625	81.6	19.6
Ute Mountain Reservation	1744	39.0%	19.8	95.8%	49.3%	1.7	35.1%	513	59.6%	27946	81.5	9.6
Zia Pueblo	873	45.9%	27.7	98.7%	67.4%	14.8	19.4%	345	21.4%	48125	83.2	5
Zuni Reservation	8445	47.9%	32.3	97.4%	56.5%	14.2	31.1%	3105	38.9%	45731	76.5	5.6

All data based on 2017-2021 American Community Survey 5-Year Estimates retrieved using the U.S. Census Bureau's My Tribal Area tool (https://www.census.gov/tribal/) except for the Navajo Nation, which were retrieved from the Navajo Nation Division of Community Development (https://navajoprofile.wind.enavajo.org).

Endnotes

[1] Albuquerque sets separate (lower) wages for employers that provided at least $2,500 in healthcare and/or childcare benefits to workers. For more on Albuquerque's minimum wage, see https://www.cabq.gov/legal/albuquerque-minimum-wage-information. For more on Santa Fe's minimum wage, see https://santafenm.gov/economic-development/business-resources/living-wage-information.

[2] For more on the Bernalillo County minimum wage, see https://library.municode.com/nm/bernalillo_county/codes/code_of_ordinances?nodeId=BECOCO_CH2AD_ARTIIIOFEM_DIV6MIWAOR; for more on Santa Fe County, see https://www.santafecountynm.gov/livingwage; and for more on Las Cruces, see the ordinance at https://www.lascruces.gov/DocumentCenter/View/1453/Minimum-Wage-Ordinance-PDF?bidId=.

[3] Office of the Governor, "Gov. Lujan Grisham authorizes first statewide minimum wage increase since 2009" (Press release), April 2, 2019. Retrieved from governor.state.nm.us.

[4] For a visual representation of applicable minimum wage rates in New Mexico since 2003, see Appendix II.

[5] See Janice Fine, Daniel J. Galvin, Jenn Round, and Hana Shepherd (September 2020) *Maintaining effective U.S. labor standards enforcement through the coronavirus recession* (Washington Center for Equitable Growth), available at https://smlr.rutgers.edu/sites/default/files/Documents/Centers/WJL/LaborEnforcementRpt_090320.pdf

[6] The federal and state minimum wage rose from $5.15 at the beginning of 2007 to $7.25 and $7.50 in 2009, respectively, while differences in the dates of the increases caused the rate to change four separate times by the beginning of 2010. Moreover, the city of Albuquerque's municipal minimum wage went into effect in January 2007 with both a) a separate schedule for employers providing healthcare and/or childcare benefits and b) multiple wage increases for both schedules by 2010. While the number of workers experiencing violations decreased most years between 2009 and 2017, underpayment was notably higher in 2012 relative to total violations, while 2015 saw another spike in violations.

[7] While there is no clear reason for this phenomenon, several factors may play a role. The median hourly wage of employed U.S. workers increased from roughly $21 in January 2020 to over $23 in April 2020 and remained higher than pre-pandemic levels through 2021, likely in many cases raising workers above the minimum wage. However, these elevated wages during the first years of the pandemic are due not only to increased worker power, but also the disproportionate job losses experienced by low-wage workers; In a similar sense, violations may have remained relatively low through the beginning of the pandemic as many of those who would had been experiencing them were laid off. See Elise Gould and Melat Kassa, "Low-wage, low-hours workers were hit hardest in the COVID-19 recession," *Economic Policy Institute*, https://www.epi.org/publication/swa-2020-employment-report/; Rakesh Kochhar and Jesse Bennett (September 7, 2021), "Despite the pandemic, wage growth held firm for most U.S. workers, with little effect on inequality," *Pew Research Center,* https://www.pewresearch.org/short-reads/2021/09/07/despite-the-pandemic-wage-growth-held-firm-for-most-u-s-workers-with-little-effect-on-inequality/; Jaison R. Abel and Richard Deitz (February 2021), "Some Workers Have Been Hit Much Harder Than Others by the Pandemic," *Liberty Street Economics,* Federal Reserve Bank of New York, https://libertystreeteconomics.newyorkfed.org/2021/02/some-workers-have-been-hit-much-harder-than-others-by-the-pandemic/.

[8] While average annual underpayment per employee dropped from $3,763 to $3,177 in 2020, the number of workers experiencing violations remained relatively constant at around 18,000 workers annually. However, while the average annual underpayment remained roughly $3,200 in 2021, the number of workers experiencing violations skyrocketed to more than 47,000, a 160% increase from 2020. Although this number appears to have declined the following year to under 40,000 workers, the average underpayment jumped to over $4,000 per worker for the first time since 2012.

[9] Reliable estimates are unable to be produced given limited data for many detailed occupational groups. All predicted probabilities shown were significant at the p<0.001 level.

[10] David Cooper and Teresa Kroeger, "Employers Steal Billions from Workers' Paychecks Each Year," *Economic Policy Institute*, May 10, 2017, https://www.epi.org/publication/employers-steal-billions-from-workers-paychecks-each-year/.

[11] *See* Janice Fine, Daniel J. Galvin, Jenn Round & Hana Shepherd, "Maintaining Effective U.S. Labor Standards Enforcement Through The Coronavirus Recession," *Washington Center for Equitable Growth*, Sept. 16, 2020.

[12] *See* Janice Fine & Jenn Round, "Federal, State, and Local Models of Strategic Enforcement and Co-Enforcement across the U.S.*," Center for Urban Economic Development: Worker Centers in Retrospect and Prospec*t, 2021, https://workercenterlibrary.org/wp-content/uploads/2022/03/Report-2-Federal-State-and-Local-Models-of-Strategic-Enforcement-and-Co-Enforcement-across-the-U.S.pdf.

[13] Cooper and Kroeger, "Employers Steal Billions".

[14] Orley Ashenfelter and Robert S. Smith, "Compliance with the Minimum Wage Law," *Journal of Political Economy* 87, no. 2 (1979); Ronald G. Ehrenberg and Paul L. Schumann, "Compliance with the overtime pay provisions of the Fair Labor Standards Act," *The Journal of Law and Economics* 25, no. 1 (1982); Brigitte Sellekaerts and Stephen W. Welch, "Noncompliance with the Fair Labor Standards Act: Evidence and Policy Implications," *Labor Studies Journal* 8 (1984); Eastern Research Group, *The Social and Economic Effects of Wage Violations: Estimates for California and New York*, Prepared for the U.S. Department of Labor

(Lexington: Eastern Research Group, 2014); Daniel J. Galvin, "Deterring Wage Theft: Alt-Labor, State Politics, and the Policy Determinants of Minimum Wage Compliance," *Perspectives on Politics* 14, no. 2 (2016); David Cooper and Teresa Kroeger, "Employers steal billions from workers' paychecks each year," *Economic Policy Institute*, May 10, 2017, https://www.epi.org/publication/employers-steal-billions-from-workers-paychecks-each-year/.

[15] In particular, Galvin (2016); Eastern Research Group (2014); and Cooper and Kroeger (2017).

[16] "Any employee employed in agriculture: (a) if the employee is employed by an employer who did not, during any calendar quarter during the preceding calendar year, use more than five hundred man-days of agricultural labor; (b) if the employee is the parent, spouse, child or other member of the employer's immediate family; for the purpose of this subsection, the employer shall include the principal stockholder of a family corporation; (c) if the employee: 1) is employed as a hand-harvest laborer and is paid on a piece-rate basis in an operation that has been, and is customarily and generally recognized as having been, paid on a piece-rate basis in the region of employment; 2) commutes daily from the employee's permanent residence to the farm on which the employee is so employed; and 3) has been employed in agriculture less than thirteen weeks during the preceding calendar year; (d) if the employee, other than an employee described in Subparagraph (c) of this paragraph: 1) is sixteen years of age or under and is employed as a hand-harvest laborer, is paid on a piece-rate basis in an operation that has been, and is generally recognized as having been, paid on a piece-rate basis in the region of employment; 2) is employed on the same farm as the employee's parent or person standing in the place of the parent; and 3) is paid at the same piece-rate as employees over age sixteen are paid on the same farm; or (e) if the employee is principally engaged in the range production of livestock or in milk production." Note also that "an employer furnishing food, utilities, supplies or housing to an employee who is engaged in agriculture may deduct the reasonable value of such furnished items from any wages due to the employee" (Sec. 50-4-21 NMSA), which further is unable to be accounted for given the structure of the data; however, according to the 2019-2020 National Agricultural Worker Survey, only 14 percent of agricultural workers lived in employer-provided housing, and just 3 percent paid for housing either directly or through payroll deduction. For more on this, see JBS International, *Findings from the National Agricultural Workers Survey (NAWS) 2019-2020*, Research Report No. 16, available at https://www.dol.gov/agencies/eta/national-agricultural-workers-survey/research.

[17] For more, see Sec. 50-4-21 NMSA, https://www.dws.state.nm.us/Portals/0/DM/LaborRelations/New_Mexico_Minimum_Wage_Act.pdf

[18] http://ceprdata.org/cps-uniform-data-extracts/cps-outgoing-rotation-group/.
See also Cooper and Kroeger's 2017 preference for this method of estimating wages.

[19] U.S. Department of Labor 2014.

[20] Albuquerque sets a lower minimum wage rate for employers "who provide healthcare and/or childcare benefits to an employee ". . . equal to or in excess of an annualized cost of $2,500" (Sec. 13-12-3 AMWO)—we use this rate here (as opposed to the higher rate for employers that do *not* provide these benefits) to again ensure the provision of conservative estimates.

[21] Davern, Michael, et al, "Estimating Regression Standard Errors with Data from the Current Population Survey's Public Use File," *Inquiry* 44: 211-224 (Summer 2007).

[22] See https://www.dws.state.nm.us/Portals/0/DM/LaborRelations/LRD_Manual_Final_11-14-19.pdf?ver=2020-02-03-170003-853 at pg. 114.

[23] For an excellent discussion of the advantages and limitations of using the CPS data to estimate minimum wage violations given the existence of measurement error and other issues, see Eastern Research Group (2014), Appendix B.

[24] As Bernhardt et al. (2009) write: ". . . standard surveying techniques—phone interviews or census-style door-to-door interviews—rarely are able to fully capture the population that we are most interested in: low-wage workers who may be hard to identify from official databases, who may be vulnerable because of their immigration status, or who are reluctant to take part in a survey because they fear retaliation from their employers. Trust is also an issue when asking for the details about a worker's job, the wages they receive, whether they are paid off the books or not, and their personal background." Annette Bernhardt et al., *Broken Laws, Unprotected Workers: Violations of Employment and Labor Laws in America's Cities* (New York: National Employment Law Project), 56.

[25] Bernhardt et al. (2009); Eastern Research Group (2014).

[26] Christopher R. Bollinger, "Measurement error in the Current Population Survey: A nonparametric look," *Journal of Labor Economics* 16, no. 3 (1998).

[27] Marc Roemer, Using administrative earnings records to assess wage data quality in the March Current Population Survey and the Survey of Income and Program Participation (Washington, DC: Center for Economic Studies, US Census Bureau, 2002); Eastern Research Group (2014).

[28] Roemer 2002.

[29] Information obtained from the U.S. Bureau of Labor Statistics Occupational Employment and Wage Statistics database, accessible at: https://www.bls.gov/oes/current/oessrci.htm.