

A Road map for Strategic Enforcement Targeting: Complaints and Compliance with Los Angeles County’s Minimum Wage

Report by Jacob Barnes • Janice Fine • Daniel J. Galvin • Jenn Round

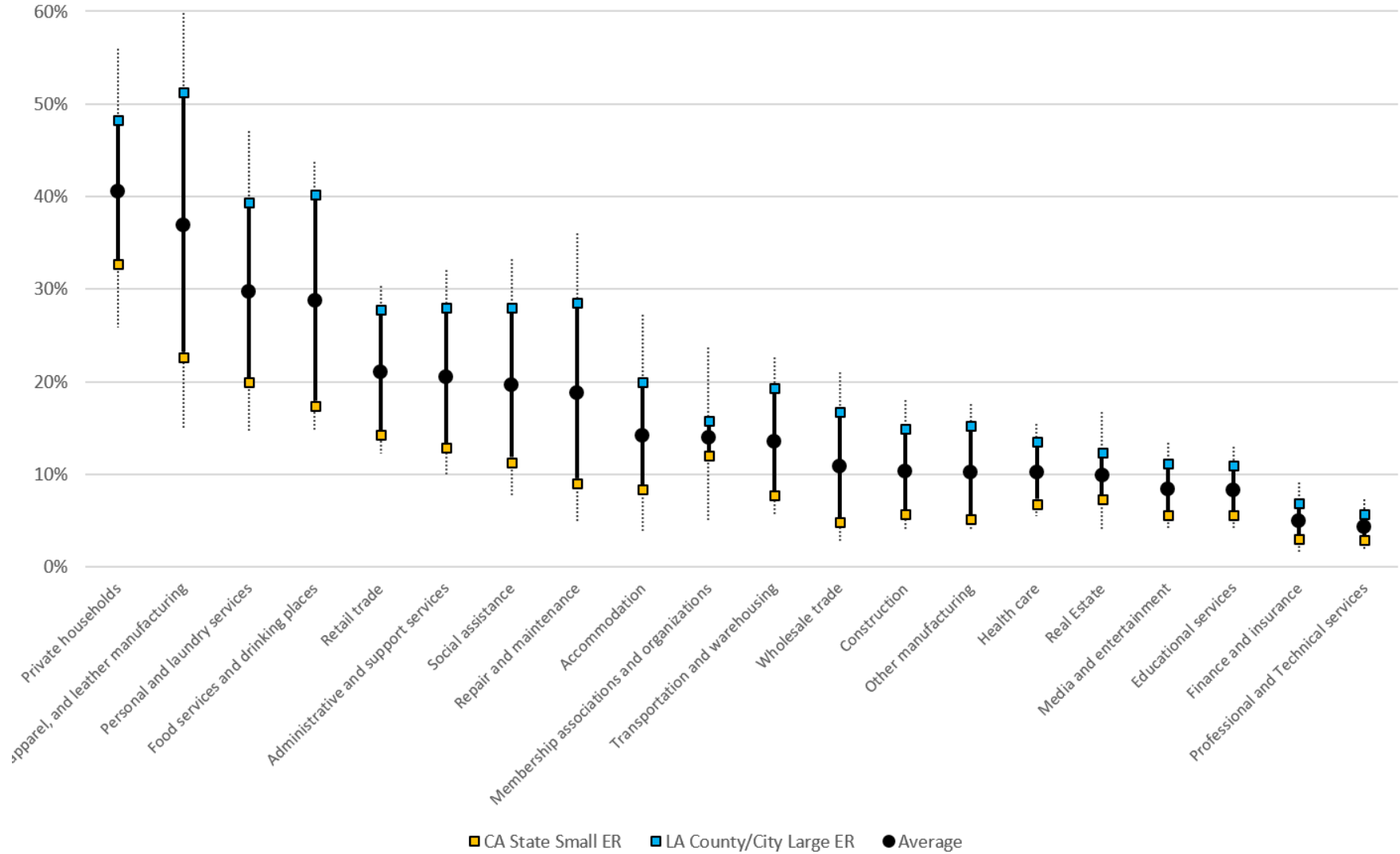
Introduction

In 2015, Los Angeles County passed legislation to increase the minimum wage for workers in unincorporated parts of the county to \$15 by 2021. The Los Angeles County Department of Consumer and Business Affairs (LA DCBA) was subsequently tasked with implementing and enforcing the new county minimum wage. In the years since the law went into effect, the Department has relied on a complaint-based enforcement approach. However, studies have increasingly demonstrated that there is a mismatch between industries with the highest underlying rates of labor standards violations and complaint rates.¹ This research demonstrates that traditional complaint-based models of enforcement are often ineffective for vulnerable workers who fear retaliation.

In order to determine the degree to which complaints made to the LA DCBA match overall industry violation rates, this memo analyzes the relationship between minimum wage complaints (LA DCBA complaint data) and estimates of minimum wage violations (using CPS-MORG data) in Los Angeles County. *Our most important finding is that significant numbers of violations of Los Angeles County’s minimum wage ordinance are in fact going unreported.* Several industries with the highest estimated violation rates have among the lowest complaint rates according to LA DCBA data.²

It is important to note that the minimum wage violation estimates presented here are for the entirety of Los Angeles (LA) County, including both incorporated and unincorporated areas. It is unfortunately impossible to isolate unincorporated areas using government data sources such as the CPS and QCEW. It is also not possible within these data to determine the size of the employer for which each respondent worked. In order to provide the most meaningful information possible using available resources, we have chosen to calculate minimum wage violation estimates using an “upper/lower bound” method, using the lowest applicable minimum wage within certain incorporated areas of the county—i.e., the California state minimum wage rate for small businesses—and the highest applicable minimum wage, i.e., the LA County/LA City/Santa Monica minimum wage rate for large businesses. By deriving both estimates, we can create a potential range of estimated violations for each industry group for which we may be confident the true number of violations falls somewhere within.³ This method still reveals important variance in estimated violation rates across industries that may begin to inform proactive enforcement strategies and investigatory efforts. We hope that these findings serve as a helpful guide for the LA DCBA as it seeks to optimize resources and maximize impact.

Chart 1. Estimated Minimum Wage Violation Rates by Industry, LA County, 2016-2019



Violation Rates by Industry

Chart 1 above shows estimated minimum wage violation rates for each industry group for which estimates could be derived (see Appendix II for full estimates and Appendix III for details on the CPS-MORG data from which the estimates were obtained). Industries with the highest violation rates include private households (40.5%); textile, apparel, and leather manufacturing (36.9%); personal and laundry services (29.7%); food services and drinking places (28.8%); and retail trade (21%).

To put these numbers into perspective, we estimate that over two in five LA County workers employed in private households—i.e., domestic workers—have experienced a minimum wage violation. While domestic work has a history of exemption from labor standards after being left out of major New Deal labor and employment legislation,⁴ these workers are covered under the state and LA County’s minimum wage laws. Likewise, nearly two in five LA workers employed within textile, apparel, and leather manufacturing or personal and laundry services have experienced minimum wage violations. The garment industry in LA County has long been characterized by sweatshop conditions and wage theft.⁵ The personal and laundry services industry includes a number of low-wage service occupations that have been previously identified as having high levels of wage theft,⁶ including but not limited to: manicurists and pedicurists; laundry and dry-cleaning workers; hairdressers, hairstylists, and cosmetologists; and parking attendants (see Appendix IV and [here](#) for further examples). These estimates suggest that three in ten of these workers have experienced minimum wage violations within LA County. A similar share of LA County food service workers have experienced minimum wage violations, including fast food workers, waiters and waitresses, cooks, bartenders, dishwashers, hosts and hostesses, and other workers involved in food preparation and delivery.

Over one in five workers in the retail sector—including customer service representatives, cashiers, laborers and movers, stockers and order fillers, and the like—are facing minimum wage violations. According to data from the US Bureau of Labor Statistics (BLS), these two industry sectors combined account for nearly 20 percent of employment in LA County; food service and retail together employ over four times as many workers as private households, apparel manufacturing, and personal and laundry services *combined*.

Those with the lowest estimated violation rates include professional and technical services (4.3%); finance and insurance (5%); educational services (8.3%); media and entertainment (8.3%); and real estate (9.9%).

Complaint Rates by Industry

The following tables compare the minimum wage violation estimates presented in Chart 1 above with relative complaints to the LA DCBA (i.e., complaints per 10,000 industry workers in unincorporated LA County).⁷ **Table 1** compares industries with the *highest* levels of complaints to those with the highest estimated violation rates. Industries with the highest levels of relative complaints include food services and drinking places; repair and maintenance; accommodation; retail trade; and administrative and support services.

Table 1. Highest Complaint and Violation Rates by Industry, 2016-2020

Industry	Complaints per 10,000 workers	Industry	Estimated violations per 10,000 workers
Food services and drinking places	32	Private households	4052
Repair and maintenance	27	Textile, apparel, and leather manufacturing	3695
Accommodation	19	Personal and laundry services	2970
Retail trade	14	Food services and drinking places	2880
Administrative and support services	14	Retail trade	2104
Other manufacturing	11	Administrative and support services	2048
Wholesale trade	5	Social assistance	1967
Transportation and warehousing	4	Repair and maintenance	1876

Table 2. Lowest Complaint and Violation Rates by Industry, 2016-2020

Industry	Complaints per 10,000 workers	Industry	Estimated violations per 10,000 workers
Professional and Technical services	0	Professional and Technical services	432
Finance and insurance	0	Finance and insurance	496
Educational services	0	Educational services	831
Membership associations and organizations	0	Media and entertainment	835
Real estate	0	Real estate	986
Social assistance	0	Health care	1018
Private households	0	Other manufacturing	1021
Construction	1	Construction	1036
Media and entertainment	2	Wholesale trade	1080
Personal and laundry services	3	Transportation and warehousing	1354
Textile, apparel, and leather manufacturing	3	Membership associations and organizations	1392
Health care	3	Accommodation	1417

Table 2 meanwhile compares industries with the *lowest* levels of complaints to those with the lowest estimated violation rates. There were no complaints from seven of the twenty industry groups: professional and technical services; finance and insurance; educational services; real estate; membership associations and organizations; social assistance; and most notably, private households, which also has the highest estimated wage violation rate.

Comparing Violation and Complaint rates

Using the above violation estimates and complaint data, we can begin to fill in the 2 x 2 matrix in **Table 3** below. The most “dysfunctional” industries are listed in quadrant 2; these are the industries that, while having relatively high estimated levels of minimum wage violations, have registered a low number of complaints to the LA DCBA. These industries include social assistance; personal and laundry services; textile, apparel, and leather manufacturing; and private households. The estimates presented here suggest that the LA DCBA currently receives one complaint for roughly every 960 violations occurring in the personal and laundry services industry and 1,180 violations in the apparel manufacturing industry within unincorporated LA County. While we estimate that over two in five domestic workers employed in LA County have faced minimum wage violations—meaning around 2,110 domestic workers facing violations within unincorporated areas—not a single one has submitted a complaint to the LA DCBA.

Table 3. Complaint/Compliance Matrix, L.A. County

	High noncompliance	Low noncompliance
High complaint rate	<p>Quadrant 1</p> <ul style="list-style-type: none"> • Food services and drinking places • Retail trade • Administrative and support services 	<p>Quadrant 3</p> <ul style="list-style-type: none"> • Other manufacturing
Low complaint rate	<p>Quadrant 2</p> <ul style="list-style-type: none"> • Private households • Textile, apparel, and leather manufacturing • Personal and laundry services • Social assistance 	<p>Quadrant 4</p> <ul style="list-style-type: none"> • Professional and technical services • Finance and insurance • Educational services • Real estate • Health care

Health care and social assistance should also be highlighted in this sense. Each of these industries notably include home health care and personal aids, both one of the fastest growing occupations in recent years and one that is frequently noted as having high rates of wage theft. While the violation rate in health care is estimated to be among the lowest across industries, the size of the sector and relatively low number of complaints still lead to an estimated 307 wage violations for every complaint to the LA DCBA. And in social assistance—a relatively large industry with above average estimated violation rates—we

estimate that nearly 2,000 workers in unincorporated LA have faced wage violations, without a single complaint to the LA DCBA yet.

Also important to note are the industries that have high estimated wage violation rates and relatively high levels of complaints (i.e., quadrant 1). These industries include food services and drinking places, retail trade, and administrative and support services (including, e.g., janitors, groundskeepers, and security guards). Given the size of these sectors as noted above and the high levels of estimated violations, it is important that these workers continue to be a key focus of the LA DCBA’s enforcement efforts in addition to the “dysfunctional” industries mentioned above. Although these industries together represent well over half of all complaints that have been received by the LA DCBA to date, these estimates suggest that there are still roughly 90 violations per complaint in food services; 147 in retail trade; and 148 in administrative and support services within unincorporated LA County.

Table 4. Summaries of Select Industries, LA County

Industry	Estimated violation rate, LA County	Complaints (LA DCBA)	Estimated violations per complaint	Percent of total LA County employment
Private households	40.5%	0	2110	1.32%
Textile, apparel, and leather manufacturing	36.9%	2	1184	1.62%
Personal and laundry services	29.7%	2	957	1.63%
Food services and drinking places	28.8%	94	91	7.53%
Retail trade	21.0%	65	147	11.47%
Administrative and support services	20.5%	24	148	4.39%
Social assistance	19.7%	0	1953	2.50%
Health care	10.2%	15	307	11.39%

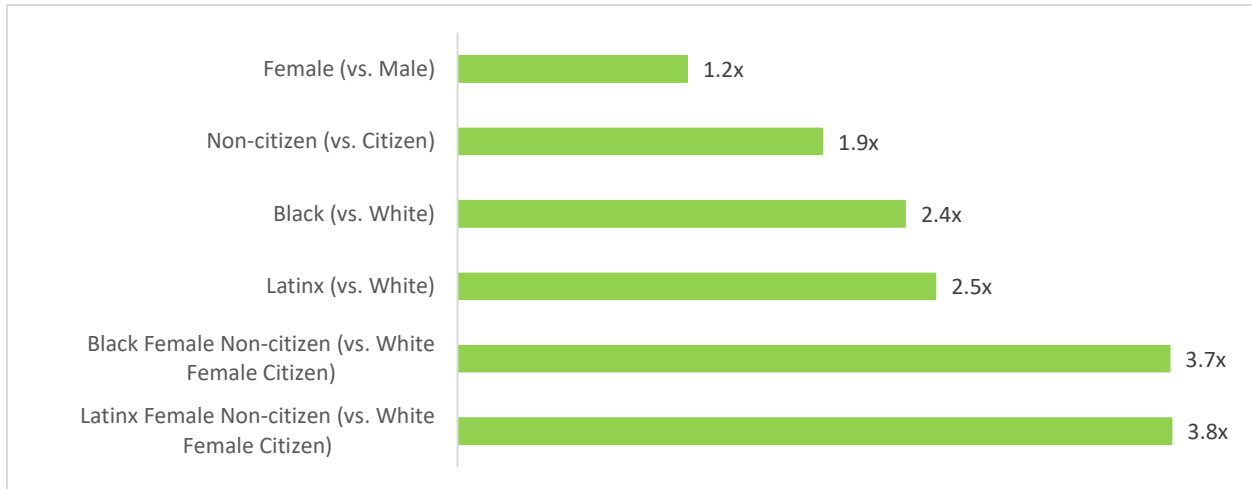
Importance of Demographic Factors

These data do not tell us exactly *why* some industries have more or fewer complaints and violations. Still, it is worth noting that the industries with the highest estimated violation rates and relatively low complaints tend to employ many women, Blacks, Latinx and immigrant workers, while industries with lower violation rates often employ more men and/or historically have been more unionized.

Chart 2 below shows the relative probabilities of demographic groups facing minimum wage violations based on analysis of the CPS-MORG data.⁸ As shown, female workers in LA County are roughly 20 percent more likely than male workers to face a minimum wage violation, while non-citizens are nearly twice as likely to face violations as citizens. Black and Latinx workers in LA County are over twice as likely as White workers to face minimum wage violations. The bottom two categories in Chart 2 show the importance of intersectionality to the experience of wage theft; Black, female noncitizen workers in LA

County are 3.7 times more likely than White female citizens and Latinx female noncitizens are 3.8 times as likely than White female citizens to face minimum wage violations.

Chart 2. Probability of Minimum Wage Violation by Demographic Group in LA County (Relative to Reference Group), 2016-2019



In sum, comparing complaint data from the LA DCBA with minimum wage violation estimates derived from the CPS-MORG data leads to our conclusion that minimum wage violations continue to go under-reported across LA County. This issue is particularly vital to address in industries such as domestic work, apparel manufacturing, and other low-wage service industries where wage theft is pervasive and complaints are few.

Data Notes

- Complaint data was provided by the LA DCBA to Jenn Round.
- Minimum wage violations and industry employment are estimated using the Current Population Survey's Merged Outgoing Rotation Groups (CPS-MORG) data, 2016-2019, including employees working in Los Angeles County (stfips == 6, county == 37).
- To better illustrate how violations by industry and occupation overlap, the table in Appendix III provides examples of high risk occupations employed at the highest levels and/or concentration in each sector.

About the Authors

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About CIWO

The Center for Innovation in Worker Organization (CIWO) is a “think and do tank” launched in 2014 and housed at Rutgers SMLR. CIWO's mission is to promote strong workers' organizations and shift the balance of power towards greater economic and social equity. CIWO leverages the resources of a highly respected research university to create a centralized go-to institution for strategic and organizational development. CIWO's primary objectives are to facilitate the generation and dissemination of ideas, strategies, and programs for worker centers, community organizations, labor unions and their local, state and national networks.

Appendix I. Analytical approach

We replicate the analytic approach used by former Department of Labor (DOL) Wage and Hour Division Administrator David Weil and Amanda Pyles in their 2005 article “Why Complain?”.⁹ As they explain, regulators typically want to know that the workers who complain are voicing genuine grievances and that the workers who are not being paid what they are legally owed are complaining. That is, regulators wish to minimize both false positives (complaints without violations) and false negatives (violations that go unreported). False negatives are, of course, the most worrisome in complaint-driven regulatory systems, as they likely include the most vulnerable and exploited workers who are fearful of complaining or are unable to complain, and are therefore falling through the cracks. *Quiet* industries should be *compliant* industries, not industries where workers are suffering silently.

Following Weil and Pyles (2005), we conceptualize the relationship between compliance and complaints as a 2 x 2 matrix (**Figure 1**).

Figure 1. Complaint/Compliance Matrix

	High noncompliance	Low noncompliance
High complaint rate	<i>Quadrant 1</i> High complaints High violations	<i>Quadrant 3</i> High complaints Low violations
Low complaint rate	<i>Quadrant 2</i> Low complaints High violations	<i>Quadrant 4</i> Low complaints Low violations

Ideally, all workers will be found in quadrants 1 and 4. Those working in industries with high violation rates should have unimpeded access to the complaint process, and complaint rates should be commensurate with violation rates. Likewise, in industries with low violation rates, complaint rates should be equally low. In those two ideal-type quadrants, OLSE’s enforcement resources will be well-applied.

Ideally, no workers will be found in quadrant 2—low-complaint industries that are rife with violations—and few workers will be found in quadrant 3—high complaints despite low violations. The existence of workers in quadrants 2 and 3 would indicate “significant problems in terms of enforcement resources reaching the right workplaces” (Weil and Pyles).

Using the DCBA complaint data in conjunction with estimates generated using CPS-MORG data, we can begin to fill out the 2 x 2 matrix and answer the following questions: “Are

industries with the most frequent and severe violations also those that show the highest frequency of worker complaints? Are there industries that we know to be serious violators that [the LA DCBA is] not hearing from? Do investigators spend a disproportionate amount of time on industries that are less egregious violators?" (Weil and Pyles).

Appendix II. Estimated Minimum Wage Violations Rates by Industry, LA County, 2016-2019

Industry	CA State Small ER (95% CI)	LA County/City Large ER (95% CI)
Private households	32.7% (25.9, 40.0)	48.3% (40.6, 56.0)
Textile, apparel, and leather manufacturing	22.6% (14.9, 30.3)	51.3% (42.7, 60.0)
Personal and laundry services	20.0% (14.5, 25.5)	39.4% (31.8, 47.1)
Food services and drinking places	17.4% (14.7, 20.1)	40.2% (36.7, 43.8)
Retail trade	14.3% (12.3, 16.4)	27.8% (25.2, 30.3)
Administrative and support services	12.9% (9.9, 16.0)	28.0% (24.0, 32.1)
Social assistance	11.3% (7.7, 14.9)	28.1% (22.8, 33.3)
Repair and maintenance	9.0% (4.8, 13.3)	28.5% (21.0, 36.1)
Accommodation	8.4% (3.9, 13.0)	19.9% (12.6, 27.3)
Membership associations and organizations	12.1% (4.9, 19.2)	15.8% (7.8, 23.7)
Transportation and warehousing	7.8% (5.6, 9.9)	19.3% (16.0, 22.6)
Wholesale trade	4.9% (2.6, 7.1)	16.8% (12.5, 21.1)
Construction	5.8% (4.0, 7.5)	15.0% (11.9, 18.0)
Other manufacturing	5.2% (3.8, 6.6)	15.2% (12.8, 17.6)
Health care	6.8% (5.5, 8.2)	13.5% (11.6, 15.4)
Real Estate	7.3% (3.9, 10.8)	12.4% (8.0, 16.8)
Media and entertainment	5.6% (4.0, 7.2)	11.1% (8.8, 13.5)
Educational services	5.6% (4.2, 7.0)	11.0% (9.0, 13.0)
Finance and insurance	3.0% (1.5, 4.5)	6.9% (4.7, 9.2)
Professional and Technical services	3.0% (1.8, 4.1)	5.7% (4.1, 7.3)

Appendix III. CPS data

The actual number of minimum wage violations is unknown. Employer-provided data is not reliable, and state agency data on complaint- and agency-initiated investigations are not necessarily representative of the actual violation rate. Minimum 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 WHD uses 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.¹⁰

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.

It is important to note that these estimates are for the entirety of Los Angeles (LA) County, including both incorporated and unincorporated areas. It is unfortunately impossible to isolate unincorporated areas using government data sources such as the CPS and QCEW. It is also not possible within these data to determine the size of the employer for which each respondent worked. In order to provide the most meaningful information possible using available resources, we have chosen to calculate minimum wage violation estimates using an "upper/lower bound" method, using the lowest applicable minimum wage within certain incorporated areas of the county—i.e., the California state minimum wage rate for small businesses—and the highest applicable minimum wage, i.e., the LA County/LA City/Santa Monica minimum wage rate for large businesses. By deriving both estimates, we can create a potential range of estimated violations for each industry group for which we may be confident the true number of violations falls somewhere within. We believe this method still reveals important variance in estimated violation rates across industries that may begin to inform proactive enforcement strategies and investigatory efforts. The point estimates reported throughout the study are averages of these two estimates.

The methodological approach I have employed here is fully consistent with previous research.¹¹ A few key methodological points to keep in mind:

First, I calculate hourly wages using the National Bureau of Economic Research (NBER)'s "earnwke" variable, which includes overtime, tips, and commissions (OTC) for both hourly and nonhourly workers.¹² 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 nonhourly workers (for whom different sources of wages are not distinguished). Efforts to

estimate and subtract OTC from nonhourly workers adds unknown quantities of additional measurement error to this key variable, and is not recommended.¹³

Minimum wage violations are dichotomous measures of whether an individual's estimated hourly wage was lower than the applicable legal minimum. As discussed above, I obtained two sets of estimates using (a) the LA County/City minimum wage for large employers and (b) the California state minimum wage for small employers. These estimates amount to an upper and lower bound, respectively, of the range within which true levels of minimum wage violations for each industry lie.

CPS-MORG data from the years 2016 through 2019 were used to develop the minimum wage violation estimates (data for 2020 is not yet available). Rather than limit the pool of workers to "low-wage" workers as in Galvin (2016), I use all covered, non-exempt workers here for the sake of precision and ease of interpretation. Reported estimates thus reflect the overall violation rate in the entire workforce.

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

Estimates were unable to be obtained for several industries due to lack of available data, including: utilities; telecommunications; internet service providers and data processing services; other information services; rental and leasing services; waste management and remediation services; agriculture; forestry, logging, fishing, hunting, and trapping; and mining. According to population estimates derived from the CPS-MORG data, these industries together amount to 1.95 percent of overall employment within LA County. Estimates for public administration and armed forces also were not collected for the purposes of the current study.

Finally, a note on measurement error in the CPS data. There is reason to believe that the measurement error in the CPS may actually bias *downward* the estimates of minimum wage violations reported below.¹⁴ First, despite going to great lengths to reach them, both Latinx households and undocumented immigrants are underrepresented in the CPS.¹⁵ 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.¹⁶ 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.¹⁷ 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.¹⁸ Roemer does find that the CPS reaches more "underground" workers than other large-scale surveys and is less biased than alternatives.¹⁹ These considerations notwithstanding, the fact that measurement error surely exists recommends using caution when working with the point estimates reported.

Appendix IV. Industry groups and examples of highly represented occupations²⁰

Industry	Occupation examples (Occupation code)
Construction (NAICS 23)	<ul style="list-style-type: none"> • Pipelayers, plumbers, pipefitters, and steamfitters (47-2150) • Construction equipment operators (47-2070) • Helpers, construction trades (47-3010) • Painters and paperhangers (47-2140) • Cement masons, concrete finishers, and terrazzo workers (47-2050) • Secretaries and administrative assistants (43-6010) • Driver/sales workers and truck drivers (53-3030)
Textile, apparel, and leather manufacturing (NAICS 313, 314, 315, 316)	<ul style="list-style-type: none"> • Textile machine setters, operators, and tenders (51-6060) • Laborers and material movers (53-7060) • Miscellaneous textile, apparel, and furnishings workers (51-6090) • Designers (27-1020) • Sales representatives (41-4010) • Tailors, dressmakers, and sewers (51-6050)
Other manufacturing (NAICS 31-33, except 313, 314, 315, 316)	<ul style="list-style-type: none"> • Miscellaneous assemblers and fabricators (51-2090) • Laborers and material movers (53-7060) • Miscellaneous production workers (51-9190) • Welding, soldering, and brazing workers (51-4120) • Machine tool cutting setters, operators, and tenders, metal and plastic (51-4030) • Sales representatives (41-4010)
Wholesale trade (NAICS 42)	<ul style="list-style-type: none"> • Sales representatives (41-4010) • Laborers and material movers (53-7060) • Driver/sales workers and truck drivers (53-3030)
Retail trade (NAICS 44, 45)	<ul style="list-style-type: none"> • 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) • Counter and rental clerks and parts salespersons (41-2020) • Customer service representatives (43-4051)

<p>Transportation and warehousing (NAICS 48,49)</p>	<ul style="list-style-type: none"> • Heavy and tractor-trailer truck drivers (53-3032) • Laborers and freight, stock, and material movers, hand (53-7062) • Postal service mail carriers (43-5052) • Light truck drivers (53-3033) • Passenger vehicle drivers, except bus drivers, transit and intercity (53-3058) • Industrial truck and tractor operators (53-7051) • Stockers and order fillers (53-7065) • Flight attendants (53-2031)
<p>Media and entertainment (NAICS 511, 512, 515, 71)</p>	<ul style="list-style-type: none"> • Actors, producers, and directors (27-2010) • Television, video, and film camera operators and editors (27-4030) • Artists and related workers (27-1010) • Editors (27-3041) • Broadcast announcers and radio disc jockeys (27-3011) • Advertising sales agents (41-3011) • Customer service representatives (43-4051) • News analysts, reporters, and journalists (27-3023) • Exercise trainers and group fitness instructors (39-9031) • Amusement and recreation attendants (39-3091) • Grounds maintenance workers (37-3010) • Building cleaning workers (37-2010)
<p>Finance and insurance (NAICS 52)</p>	<ul style="list-style-type: none"> • Customer service representatives (43-4051) • Tellers (43-3071) • Securities, commodities, and financial services sales agents (41-3031) • Insurance sales agents (41-3021) • Loan officers (13-2072) • Insurance claims and policy processing clerks (43-9041) • Claims adjusters, appraisers, examiners, and investigators (13-1030) • Secretaries and administrative assistants (43-6010)
<p>Real estate (NAICS 531)</p>	<ul style="list-style-type: none"> • Real estate brokers and sales agents (41-9020) • Property, real estate, and community association managers (11-9141) • Office clerks (43-9061) • Secretaries and administrative assistants (43-6014)
<p>Professional and technical services (NAICS 54)</p>	<ul style="list-style-type: none"> • Software developers and software quality assurance analysts and testers (15-1256) • Accountants and auditors (13-2011)

	<ul style="list-style-type: none"> • Lawyers (23-1011) • Management analysts (13-1111) • Paralegals and legal assistants (23-2011) • Computer systems analysts (15-1211) • Bookkeeping, accounting, and auditing clerks (43-3031) • Civil engineers (17-2051)
Administrative and support services (NAICS 561)	<ul style="list-style-type: none"> • 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)
Educational services (NAICS 61)	<ul style="list-style-type: none"> • Elementary and middle school teachers (25-2020) • Teaching assistants (25-9040) • Secondary school teachers (25-2030) • Secretaries and administrative assistants (43-6010) • Special education teachers (25-2050) • Education and childcare administrators (11-9030)
Health care (NAICS 621, 622, 623)	<ul style="list-style-type: none"> • Registered nurses (29-1141) • Nursing assistants (31-1131) • Medical assistants (31-9092) • Home health and personal care aides (31-1120) • Medical secretaries and administrative assistants (43-6013) • Dental assistants (31-9091)
Social assistance (NAICS 624)	<ul style="list-style-type: none"> • 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)
Accommodation (NAICS 721)	<ul style="list-style-type: none"> • 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)

	<ul style="list-style-type: none"> • Gambling dealers (39-3011)
Food services and drinking places (NAICS 722)	<ul style="list-style-type: none"> • 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)
Repair and maintenance (NAICS 811)	<ul style="list-style-type: none"> • Automotive service technicians and mechanics (49-3023) • Cleaners of vehicles and equipment (53-7061) • Automotive body and related repairers (49-3021)
Personal and laundry services (NAICS 812)	<ul style="list-style-type: none"> • 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)	<ul style="list-style-type: none"> • 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)

Endnotes

¹ See David Weil and Amanda Pyles, "Why Complain?: Complaints, Compliance, and the Problem of Enforcement in the Us Workplace," *Comp. Lab. L. & Pol'y. J.* 27 (2005).

² See Appendix I for more on our analytical approach.

³ The point estimates reported throughout the study are averages of these two estimates.

⁴ See Sean Farhang and Ira Katznelson, "The Southern Imposition: Congress and Labor in the New Deal and Fair Deal," *Studies in American Political Development* 19, no. 1 (2005): 1-30.

⁵ See Edna Bonacich and Richard Appelbaum, *Behind the Label: Inequality in the Los Angeles Apparel Industry* (Berkeley: University of California Press, 2000) and Jill Esbenshade, *Monitoring Sweatshops: Workers, Consumers, and the Global Apparel Industry* (Philadelphia: Temple University Press, 2004).

⁶ See, e.g., Sarah Maslin Nir, "The Price of Nice Nails," *New York Times*, May 7, 2015, <https://www.nytimes.com/2015/05/10/nyregion/at-nail-salons-in-nyc-manicurists-are-underpaid-and-unprotected.html>; Fabrice Robinet, "\$7 an Hour, 72 Hours a Week: Why Laundry Workers Have Had Enough," *New York Times*, August 23, 2019, <https://www.nytimes.com/2019/08/23/nyregion/nyc-laundry-workers-unionizing.html>; New York Nail Salon Workers Association, *Race to the Bottom: Low Prices & Stolen Wages in NY's Nail Salon Industry* (New York: Workers United, February 2020).

⁷ Complaints per 10,000 workers is calculated by, for each industry (1) scaling average annual employment per industry by the percentage of total LA County population residing in unincorporated areas (i.e., 10.5%, according to lacounty.gov); (2) dividing total industry complaints to the LA DCBA by the scaled average annual industry employment; and (3) multiplying the calculated complaint rate by 10,000. While this assumes that industry composition in unincorporated areas is equivalent to that of the entire county, we believe it is the closest and most reasonable approximation we have to industry employment totals in unincorporated areas given data constraints. The comparison of CPS estimates to LA DCBA complaints must therefore be interpreted cautiously and in this light.

⁸ These probabilities reflect the average of estimated probabilities based on both the LA County/City/SM large employer minimum wage rate and California State small employer minimum wage rate, consistent with the reported minimum wage estimates in Chart 1.

⁹ David Weil and Amanda Pyles, "Why Complain?: Complaints, Compliance, and the Problem of Enforcement in the Us Workplace," *Comp. Lab. L. & Pol'y. J.* 27 (2005).

¹⁰ 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); Stephen Trejo, "The effects of overtime pay regulation on worker compensation," *American Economic Review* 81, no. 4 (1991); Stephen Trejo, "Overtime pay, overtime hours, and labor unions," *Journal of Labor Economics* 11, no. 2 (1993); Weil and Pyles 2005; 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/>.

¹¹ In particular, Galvin (2016); Eastern Research Group (2014); and Cooper and Kroeger (2017).

¹² See National Bureau of Economic Research (NBER) CPS Labor Extracts 1979-2006, <https://data.nber.org/morg/docs/cpsx.pdf>. See also Cooper and Kroeger (2017)'s preference for this method of estimating wages.

¹³ Eastern Research Group (2014).

¹⁴ 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.

¹⁵ 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.

¹⁶ Bernhardt et al. (2009); Eastern Research Group (2014).

¹⁷ Christopher R. Bollinger, "Measurement error in the Current Population Survey: A nonparametric look," *Journal of Labor Economics* 16, no. 3 (1998).

¹⁸ 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).

¹⁹ Roemer 2002.

²⁰ Information obtained from the U.S. Bureau of Labor Statistics' Occupational Employment Statistics database: <https://www.bls.gov/oes/current/oesrci.htm>.