## UNITE HERE Estimates for National Job and Wage Loss for Housekeepers, and by Race, Ethnicity and Gender

As referenced in "Playing Dirty" Report

## Sources:

- U.S. Bureau of Labor Statistics (BLS), Occupational and Employment Series (OES), May 2019. National Industry-Specific Occupational Employment and Wage Estimates NAICS 721100 Traveler Accommodation; "maids and housekeeping cleaners" https://www.bls.gov/oes/current/naics4 721100.htm
- BLS OES May 2019. National Industry-Specific Occupational Employment and Wage Estimates NAICS 721100 Traveler Accommodation; "maids and housekeeping cleaners" https://www.bls.gov/oes/current/naics4 721100.htm
- U.S. Bureau of Labor Statistics, Current Employment Statistics (CES), Table B-7b, June 2019; Average weekly hours and overtime of production and nonsupervisory employees on private nonfarm payrolls by industry sector, not seasonally adjusted; Traveler Accommodation. https://www.bls.gov/opub/ee/2019/ces/table7b 201906.htm;
- Deutsche Bank Lodging Monthly Statistical Review, December 2019, p. 12. https://unitehere.app.box.com/file/593995771682?s=45lqx5nqgd2xz63di9qfwtengzs6m3cl
- Kalibri Labs "US Brand Loyalty Contribution Reaches an All-time High in 2019" February 11, 2020. https://www.kalibrilabs.com/press-release-1/us-hotel-loyalty-contribution-reaches-an-alltime-high2019
- American Community Survey 2019 1-Year estimates NAICS 721100 Traveler Accommodation
- Collective Bargaining Agreement between The Hotels and UNITE HERE Local 2.


## Data Points:

2019 Estimated Annual Occupied Room Nights = 1,281,200,000 (Deutsche Bank)
2019 Estimated Weekly Occupied Room Nights: 1,281,200,000/52 = 24,638,462
Average Length of Stay = 1.83 days (Kalibri Labs)
Estimated percentage of checkout room nights $1 / 1.83=.546448087431694$
Estimated percentage of stayover room nights: .83/1.83 = . 453551912568306
Estimated Weekly Checkouts: 24,638,462*. $55=13,463,640$
Estimated Weekly Stayover Rooms: 24,638,462*. 45 = 11,174,821
Total US Travel Accommodation "maids and housekeeping cleaners": 467,720 (OES 5/2019)
Average Weekly Hours per job (all Traveler Accommodation workers) = 29.5 (CES B-7b 5/2019)
Average shifts per week per worker: 29.5/8 = 3.6875
Total Housekeeping Shifts per year $=3.6875 * 467,720 * 52=89,599,023$
Average Rooms cleaned per shift: 1,281,200,000/89,599,023 = 14.3
Assumed difference in rooms cleaned on an "all-stayover" vs. "all checkout" shift ${ }^{1}=4$ (UNITE HERE Local 2)
Average Estimated Pre-Covid Checkout Quota: $x=12.75$, WHERE $1 / 14.29926314=(.546448087431694 / x)+$ (.453551912568306/(x+4))

Average Estimated Pre-COVID Stayover Quota: $x+4=16.75$, WHERE 1/14.29926314 $=(.546448087431694 / x)+$ (.453551912568306/(x+4))

2019 Weekly Checkout Shifts: 13,463,640/12.75 = 1,055,926
2019 Weekly Stayover Shifts: 11,174,821/16.75 = 667,132
2019 Mean annual wages for Traveler Accommodation "maids and housekeeping cleaners" = \$26,540 (OES 5/2019)

## Job and Wage Loss Calculations

Estimating future permanent job loss and attendant wage losses requires making assumptions about the behavior of hotel managers. Cleaning a room after a guest checks out takes longer than cleaning a "stayover" room. For example, a time-motion study by Hotel Management magazine in an all-suite hotel found that checkout rooms took $85 \%$ longer to clean. As a result, it is common practice for hotel management to reduce the number of rooms a housekeeper is expected clean on a shift when their assignment includes a high percentage of checkouts. However, the size of the room-cleaning quota prior to any reduction, the threshold number of checkouts in an assignment at which management will reduce workload, and the maximum number of rooms by which a quota may be reduced vary widely. Hotel Management also estimates that since the pandemic's onset the time needed to clean a common hotel room on checkout increased by $15 \%$ and larger resort rooms by as much as $35 \%$.

There are no industry-wide data on the typical maximum workload reduction when a housekeeper is required to clean only checkout rooms. Our model assumes a difference of four rooms between an all-stayover and allcheckout room cleaning shift. This assumes that COVID-19 cleaning protocols will lead the hotel industry to match, on average, the pre-COVID standard for room quota reductions in unionized hotels in San Francisco.

Permanent Job Loss $=2019$ weekly stayover cleaning shifts/Average weekly shifts per job
$667,132 / 3.6875=180,917$
Annual Wage Loss = Lost housekeeping jobs * Mean 2019 compensation
180,917 * $\$ 26,540=\$ 4,801,539,173$

## Estimates by Race, Gender and Ethnicity

The estimate for 2019 employment among "maids and housekeeping cleaners" in the Traveler Accommodation sector (NAICS 721100), is drawn from the U.S. Bureau of Labor Statistics (BLS) National Industry-Specific Occupational Employment and Wage Estimates. These files do not include data on employees' race, ethnicity and gender. The Census' American Community Survey also publishes information on employment by job and industry, with breakdowns by race, ethnicity and gender. The OEWS and ACS diverge significantly in the total numbers of workers. We use the ACS files only to identify the percentage of workers who fall into each race, ethnicity and gender category and apply them to the OEWS data.

## Limitations

The national BLS files, Census files, and private sector survey data selected for these estimates measure conditions across a diverse industry in which working conditions and compensation vary widely. The data record information about workers in 1,000-room downtown luxury convention hotels that host large meetings and roadside motels with minimal amenities and a very small number of employees. Averages can distort those results.

It is possible, for example, that average length of stay in higher-end hotels that rely on group and business travel may be longer than Kalibri Labs' 1.83 estimate. Since those hotels account disproportionately for a higher number of employees than smaller operations, more jobs may be at risk than estimated here.

Conversely, the category "maids and housekeeping cleaners" includes some workers not assigned to clean rooms, which would tend to reduce the number of jobs at risk.

Our assumption of an average of 29.5 hours worked per week per job is based on the Current Employment Statistics series, and refers to all Traveler Accommodation employees, not just maids and housekeeping cleaners. The hotel industry employs a significant number of part-time workers, and "full-time" workers do notalways receive a 40 -hour schedule due to seasonal fluctuations in business, but this assumption may not be precise because workers in other job classes may average a significantly different number of hours than housekeepers. A different assumption would change the estimates.

Our assumption of a four-room difference between an "all-stayover" and "all-checkout" cleaning shift projects that the entire hotel industry will match a pre-COVID standard that is among the largest in the industry. If the actual reduction in workload were to be lower on average, the numbers of lost jobs and amount of lost wages will be higher. If hotels that switch to check-out only cleaning reduce housekeepers' room quotas by more than four rooms on average, the estimated reductions in jobs and wages will be smaller.

Wages in the hotel industry also differ widely across geographies, brands and by union vs. non-union status. Housekeepers in union hotels in major cities earn far above the averages reflected in the BLS data. In those cities, the economic impact of eliminating daily room cleaning on both individual workers and their communities would be greater than the averages.

