



EPI'S FAMILY BUDGETS AND WAGE SUFFICIENCY

An Application of EPI's Family Budget Calculator to the Wages of University of California Administrative Support Employees

BY ELISE GOULD

For over a decade, the Economic Policy Institute (EPI) has calculated basic family budgets for every area of the United States. These budgets measure how much it costs various representative family types in over 600 local areas across the country to have an adequate but modest standard of living. They measure the income families need by estimating community-specific costs of housing, food, child care, transportation, health care, other necessities, and taxes.

EPI's family budgets have frequently been used to gauge the adequacy of earnings. Our methodology is so respected that our family budget tool has been used and cited by living-wage advocates, private employers, academics, and policymakers looking for comprehensive measures of economic security.

The union representing administrative support workers in the University of California (UC) system, Teamsters Local 2010, asked EPI to estimate how many of its members earn wages below the family budget threshold for a one-adult, one-child family. **Applying the basic family budget data to the reported wages of a large sample of UC administrative support employees indicates that 93.2 percent of these workers—10,620 people—would not earn enough from their wages, even if they worked full time, to meet or exceed their metropolitan area's basic family budget for a prototypical family with one adult and one child.**

The other major findings from this study include:

- Annual family budgets for one-parent, one-child families in UC campus metro areas range from a high of \$72,914 in San Francisco down to \$44,585 in Merced.
- Housing costs vary substantially across UC campus metro areas, accounting for between 21.4 percent and 32.2 percent of one-parent, one-child family budgets.
- Most workers' annualized wages are far below the modest family budget threshold: Over four-fifths (83.3 percent) of workers fall below 90 percent of their respective one-parent, one-child budget threshold.
- Furthermore, among workers below EPI's family budget threshold, the average distance between annualized UC administrative support wages and one-parent, one-child family budgets is \$15,457.

The paper proceeds as follows. First, we describe the components of EPI's family budgets. Next, we make the budgets more specific to the UC population by using known information on health insurance premium contributions, and present these modified budgets for the UC campus metro areas. Last, we compare administrative support staff wages to their respective campus metro area family budget threshold.

EPI's basic family budgets

The EPI Family Budget Calculator illustrates the income required to afford an adequate standard of living for six family types living in over 600 specific U.S. communities. The fact that the budgets differ by location is important, since certain costs, such as housing, vary significantly depending on where one resides. Geographical cost-of-living differences are built into the budget calculations by incorporating regional, state, or local variations in prices (depending on item). This geographic dimension of EPI's family budget measurements offers a comparative advantage over using poverty thresholds, which only use a national baseline in their measurements (e.g., the federal poverty line), or which use a geographic component only for measuring home prices (e.g., the Supplemental Poverty Measure).

This section provides a brief description of each component of EPI's basic family budgets (which will soon be updated fully with data for 2014) and the restrictions and/or working assumptions entailed in calculating costs of housing, food, transportation, child care, health care, other necessities, and taxes.

Housing costs are based on the Department of Housing and Urban Development's (HUD) fair market rents, or FMRs (HUD 2014). FMRs represent rents (shelter rent plus utilities) at the 40th percentile (i.e., the dollar amount below which 40 percent of standard quality rental units are rented) for privately owned, structurally safe, and sanitary rental housing of a modest nature with suitable amenities. Rents for two-bedroom apartments were used for families with one or two children, and rents for three-bedroom apartments were used for families with three children (based on HUD guidelines). (As noted previously, the present analysis only examines budgets for families composed of one adult and one child.)

Food costs are based on the "low-cost plan" taken from the Department of Agriculture report *Official USDA Food Plans: Cost of Food at Home at Four Levels* (USDA 2014). This plan is the second-least-expensive of four types of food plans and assumes almost all food is bought at the grocery store and then prepared at home. The USDA food plans represent the amount families need to spend to achieve nutritionally adequate diets.

Transportation expenses are based on the costs of owning and operating a car for work and other necessary trips. The National Household Travel Survey (FHA 2009) is used to derive costs based on average miles driven per month by size of the metropolitan statistical area or rural area and multiplied by the cost per mile, as provided by the Internal Revenue Service (IRS 2014).

Child care expenses are based on costs of center-based child care and family-based care for four-year-olds and school-age children, as reported by the Child Care Aware of America annual report on the cost of child care by state (CCAA 2014). We assume all families in urban areas utilize center-based care and all families in rural areas utilize family-based care.

Health care expenses have two components: Affordable Care Act (ACA) insurance premiums and out-of-pocket expenditures. Premiums are based on the lowest-cost bronze plan in the rating area adjusted for family size, age of user, and tobacco surcharge (Henry J. Kaiser Family Foundation 2014). For the purpose of this family budget all members of the family are assumed to be non-smokers, and all adults are assumed to be 40 years old. Out-of-pocket medical expenditures are calculated for adults and children separately by region and are differentiated between metropolitan statistical areas and non-metropolitan statistical areas for those covered by private insurance (HHS 2013).

EPI's basic family budgets include the costs of other necessities such as apparel, entertainment, personal care expenses, household supplies (includes furnishings and equipment, household operations, housekeeping supplies, and telephone services), reading materials, school supplies, and other miscellaneous items of necessity as reported for the second quintile from the Bureau of Labor Statistics Consumer Expenditure Survey (BLS 2013).

The family budget components enumerated thus far sum to the family's post-tax income. To calculate the tax component of family budgets, we utilize the National Bureau of Economic Research's Internet TAXSIM (NBER 2013) to gather information on federal personal income taxes, state income taxes, and federal Social Security and Medicare payroll taxes.

EPI's basic family budgets sum each of these components to get the total cost of living in each area across the United States. Notably, these budgets do not include several components of what might be considered a middle-class lifestyle. In particular, they do not include any savings. There are no savings for a rainy day (e.g., job loss or unexpected medical bill), savings for retirement (except through Social Security payments), or further investments in their children (e.g., college savings). They are adequate but decidedly modest family budgets.

Creation of UC-specific family budgets

To make modified UC-specific family budgets, we begin with EPI family budgets for each area for 2014. Because we do not have information on the family type of the UC administrative support staff by wage level, we compare wages to a one-adult, one-child family prototype. Because we do have information on enrollment in various health plans and the employee premiums associated with each health plan and each wage level, we replace the EPI family budget line item for health care with a more-targeted measure. Using campus-specific enrollment data for the workers in each pay band and the health insurance premiums for each of those pay bands, we can estimate the premiums they need to pay for a one-child, one-adult family. Although we do not know the specific health plan for each administrative support worker, we create an enrollment-weighted average of the cost to individual workers of all the plan options.

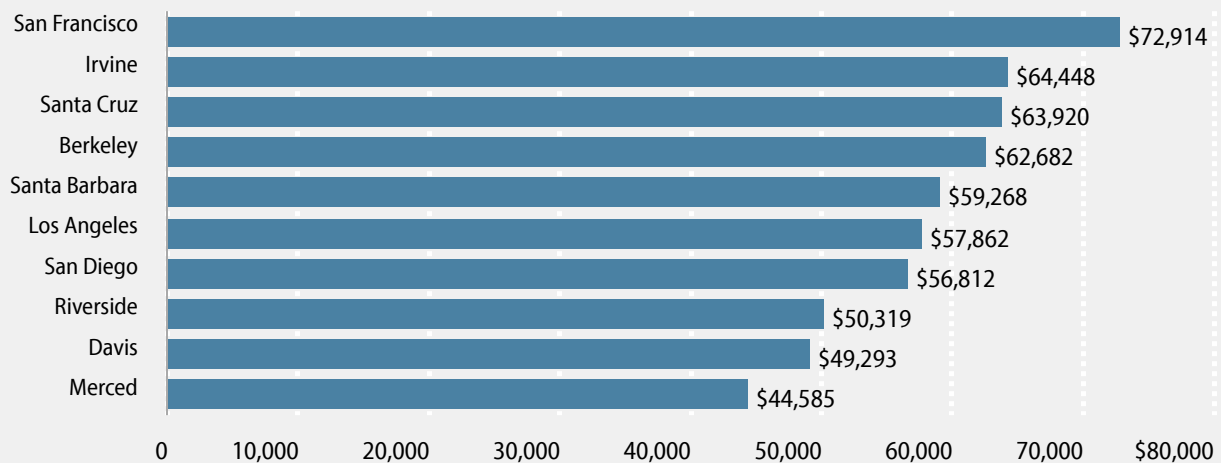
Workers have six health insurance plan options in the UC system. The employee premium differs by plan type and salary level. Employee premiums are progressive: Required contributions are lower for lower-paid employees (those with annualized salaries of less than \$50,000) and higher for higher-paid workers. The predicted premium for workers in each pay band depends on the respective predicted enrollment in each plan.

Using the campus-level enrollment data and the required worker contribution for each plan, we create a weighted-average premium cost at each campus. These include only the share of premiums paid for by the individual workers, not the amount paid for by the employer. Once the health insurance costs are calculated for each pay band at each campus, we construct our modified family budget by adding these costs to the family budget data.

These modified family budgets for workers at each UC campus metro area are shown in **Figure A**. While those displayed are specifically for workers in pay band 1 (less than \$50,000), pay band 2 family budgets are on average nearly \$1,000 higher, reflecting that these workers make mildly different health insurance plan selections from the menu of available options, and that they have slightly higher required health insurance premium contributions. The figure depicts the importance of accounting for geographic differences in the cost of living. The annual budget for a one-parent, one-child UC family ranges from a high of \$72,914 in San Francisco down to \$44,585 in Merced.

FIGURE A

Annual family budget thresholds in selected UC campus metro areas, 2014



Note: Budgets are for one-adult, one-child families.

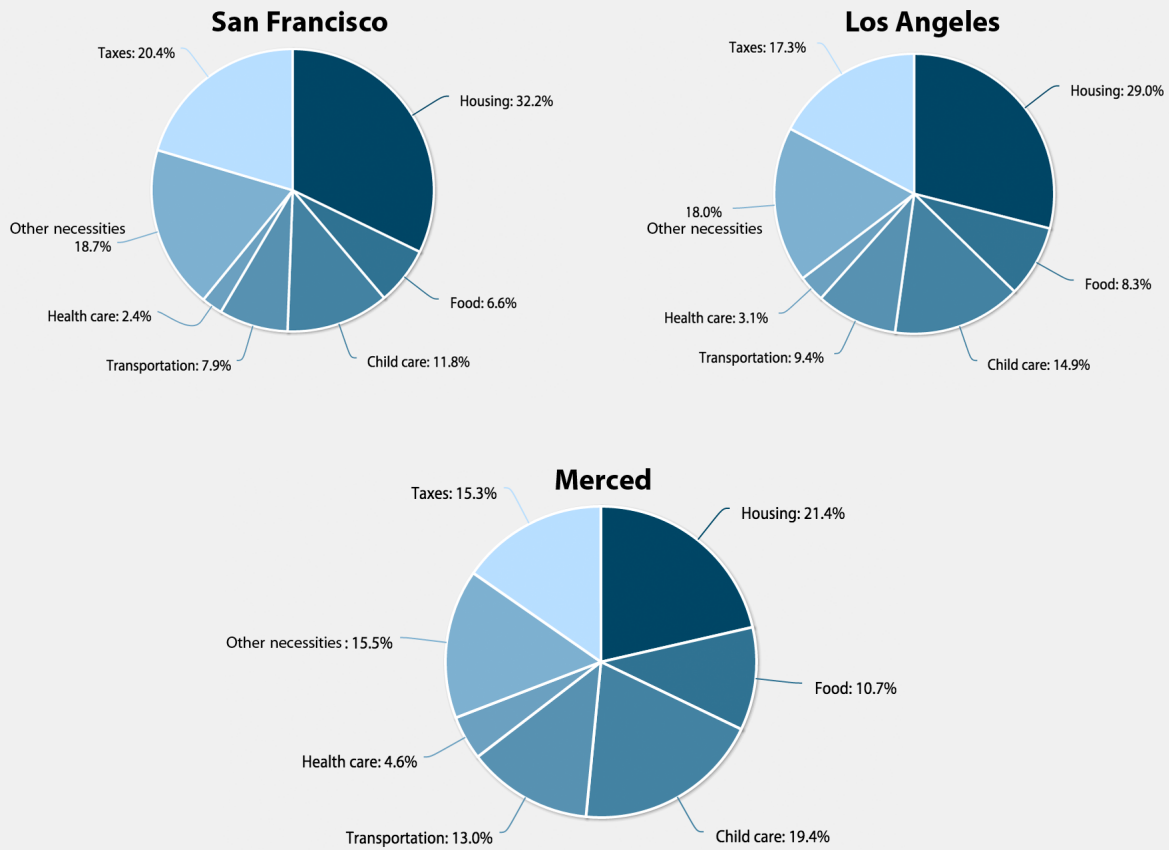
Source: EPI analysis of UC Office of the President (2014a; 2014c) and EPI (2015, forthcoming)

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This overall geographical variation is driven largely by variability in the housing component. **Figure B** illustrates this overall geographic variability by comparing the share of family budgets accounted for by each of the seven components in three different UC campus metro areas: the most expensive (San Francisco), the least expensive (Merced), and the

FIGURE B

Variation in components of family budgets by geographic area, 2014



Note: Budgets are for one-adult, one-child families.

Source: EPI analysis of U.C. Office of the President (2014a; 2014c), and EPI (2015, forthcoming)

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largest (Los Angeles). In San Francisco, where monthly rent for a two-bedroom apartment is \$1,956, families can expect that nearly a third (32.2 percent) of their budgets will be spent on housing.

This contrasts with 29.0 percent of the total family budget in Los Angeles (where housing costs \$1,398 per month, on average), and only 21.4 percent in Merced (\$795). Because of the far lower housing costs in Merced, the share of family budgets devoted to child care—for these prototypical one-child families—is almost as high, at 19.4 percent of their total budget. Furthermore, while expected food costs do not vary across regions, it is clear that they constitute a varying proportion of family budgets.

Comparison of UC administrative support staff wages to EPI's modified family budgets

For each of the workers in the data set, we compare their wages (taking into account our estimate of the employer contribution to health insurance benefits) with the appropriate final family budget threshold, depending on the worker's pay band and metro area. The wages we use for this analysis correspond to each worker's annual wages if he or she had worked full time, full year. To the extent that workers who do work part time have no other family income, we are over-estimating their total family income and therefore underestimating the number of workers who fall below the family budget thresholds.

The first set of results is found in **Table 1**. Of the nearly 11,400 administrative support workers in the UC system, our results suggest that 10,620 would not earn enough from their wages, even if they worked full time, to reach or exceed their metropolitan area's basic family budget threshold for a family with one adult and one child. In other words, 93.2 percent of all administrative support employees fail to reach a decent standard of living in the metropolitan area where they work.

TABLE 1

Comparison of UC administrative support worker wages and EPI family budget thresholds, 2014

Campus	Number of admin. support staff	Number below family budget threshold	Share below family budget threshold
<i>Berkeley</i>	1,112	1,099	98.8%
<i>San Francisco</i>	1,893	1,892	99.9%
<i>Davis</i>	1,579	1,066	67.5%
<i>Los Angeles</i>	2,966	2,836	95.6%
<i>Riverside</i>	399	360	90.2%
<i>San Diego</i>	1,618	1,578	97.5%
<i>Santa Cruz</i>	332	328	98.8%
<i>Santa Barbara</i>	557	549	98.6%
<i>Irvine</i>	842	839	99.6%
<i>Merced</i>	100	73	73.0%
Total	11,398	10,620	93.2%

Note: Comparisons are for budget thresholds of one-parent, one-child families, and assume that employees work full time, full year.

Source: EPI analysis of UC Office of the President (2014a; 2014b; 2014c) and EPI (2015, forthcoming)

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Because the cost of living in the 10 UC campuses varies more widely than wage levels, the ratio of UC wages to this family budget threshold also varies by area. The share of administrative support workers who fail to meet their local

family budget threshold ranges from 73.0 percent of workers in Merced to 99.9 percent of workers in San Francisco. It's not surprising that relatively more workers fall below family budget thresholds in the most expensive area; however, nearly three-quarters of administrative support workers have trouble affording a decent living in least-expensive Merced.

Many of these UC administrative support workers fall far below the family budget threshold. **Table 2** displays additional statistics on the UC workers, displaying how far they really are from meeting basic family living standards. Even if they worked full-time, full-year, over four-fifths (83.3 percent) of UC administrative support staff earn less than 90 percent of their respective family budget threshold. Furthermore, nearly half (46.3 percent) make less than 75 percent of their respective family budget threshold.

TABLE 2

Comparison of UC administrative support worker wages and EPI family budget thresholds, 2014

Campus	Share below 90% of family budget threshold	Share below 75% of family budget threshold	Average distance below family budget threshold
<i>Berkeley</i>	86.8%	43.2%	\$15,734
<i>San Francisco</i>	96.2%	66.5%	\$21,376
<i>Davis</i>	47.4%	10.5%	\$7,259
<i>Los Angeles</i>	84.6%	43.5%	\$14,338
<i>Riverside</i>	65.9%	17.8%	\$8,352
<i>San Diego</i>	90.7%	47.5%	\$13,898
<i>Santa Cruz</i>	96.1%	74.7%	\$20,011
<i>Santa Barbara</i>	93.4%	60.5%	\$15,206
<i>Irvine</i>	98.5%	78.3%	\$21,195
<i>Merced</i>	47.0%	3.0%	\$5,227
Total	83.3%	46.3%	\$15,457

Note: Comparisons are for budget thresholds of one-parent, one-child families, and assume that employees work full time, full year.

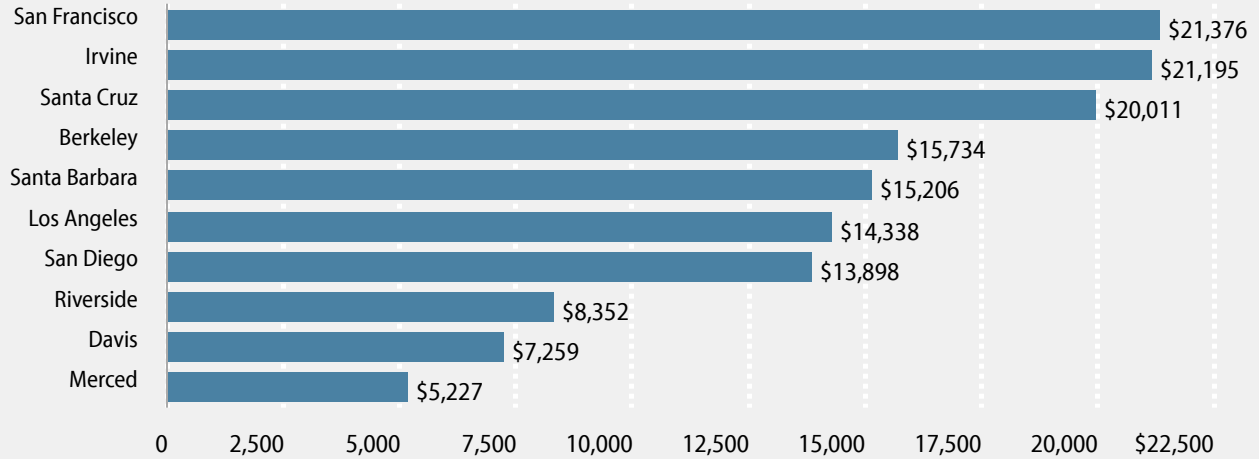
Source: EPI analysis of UC Office of the President (2014a; 2014b; 2014c) and EPI (2015, forthcoming)

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UC wages alone are not adequate to support a one-parent, one-child family in UC metropolitan areas. Among those with wages below the family budget threshold, the average distance they must traverse to reach the threshold is \$15,457 a year. **Figure C** shows the variability in wage adequacy across UC campus metropolitan areas. Unsurprisingly, it is in San Francisco that workers face the largest gap—\$21,376—between their earnings and the appropriate basic family budget threshold. In comparison, the gap stands at \$14,338 in Los Angeles and \$5,227 in Merced.

FIGURE C

Average distance from annual family budget threshold in selected UC campus metro areas, 2014



Source: EPI analysis of UC Office of the President (2014a; 2014b; 2014c) and EPI (2015, forthcoming)

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Conclusion

The EPI family budgets serve as a foundation for future research assessing how many Americans are able to obtain an adequate living standard. Applying these methods to the UC administrative support staff, we find that a large share (93.2 percent) do not earn enough in wages, even if they worked full-time, full-year, to support a modest standard of living in the metropolitan area where they work. Many of these workers fall far below this standard: Over four-fifths make less than 90 percent of their family budget threshold, while nearly half make less than 75 percent of their respective threshold. Among those with wages below this threshold, the average distance they must traverse to reach their family budget threshold is \$15,457 a year.

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References

Bureau of Labor Statistics (BLS). 2013. Consumer Expenditure Survey. Annual Calendar Year Current Expenditure Tables.

<http://www.bls.gov/cex/#tables>

Child Care Aware of America (CCAA). 2014. *Parents and the High Cost of Child Care: 2014 Report*. <http://www.naccrra.org/costofcare>

Economic Policy Institute (EPI). 2015 (forthcoming). "Family Budget Calculator" (update).

Federal Highway Administration (FHA). 2009. *National Household Travel Survey (NHTS)*. Tabulation created on the NHTS website, <http://nhts.ornl.gov>.

Internal Revenue Service (IRS). 2014. "2014 Standard Mileage Rates." IRS Announcement 2013-95. <http://www.irs.gov/2014-Standard-Mileage-Rates-for-Business,-Medical-and-Moving-Announced>

National Bureau of Economic Research (NBER). 2013. TAXSIM Model Version 9.2 with ATRA. <http://nber.org/~taxsim/taxsimcalc9/>

The Henry J. Kaiser Family Foundation. 2014. *2014 Health Insurance Marketplace Calculator*. <http://kff.org/interactive/subsidy-calculator-2014/>

U.S. Department of Agriculture Center for Nutrition Policy and Promotion (USDA). 2014. "Cost of Food at Home: U.S. Average at Four Cost Levels" [data tables, June 2014 annual average]. <http://www.cnpp.usda.gov/USDAFoodCost-Home.htm>

U.S. Department of Health and Human Services (HHS). 2013. Medical Expenditure Panel Survey. *MEPS HC-155: 2012 Full Year Consolidated Data File* [microdata]. http://meps.ahrq.gov/mepsweb/data_stats/download_data_files_detail.jsp?cboPufNumber=HC-155

U.S. Department of Housing and Urban Development (HUD). 2014. Fair Market Rents dataset, county-level data file. <http://www.huduser.org/portal/datasets/fmr.html>

U.C. Office of the President. 2014a. University of California health insurance premium information announcing 2015 rates, provided to EPI on October 23.

U.C. Office of the President. 2014b. University of California CX Unit 770 FTP Report, provided to EPI in November.

U.C. Office of the President. 2014c. University of California administrative support worker health insurance enrollment data set, provided to EPI on December 9.