

A 2005 Living Wage Estimate for Nashville **Drafted by Living Income for Vanderbilt Employees (LIVE)**

Introduction

A living wage “affords the earner and her or his family the most basic costs of living without need for government support or poverty programs.”¹ Two independent agencies, the Economic Policy Institute (EPI) and Wider Opportunities for Women (WOW) provide living wage estimates for various locations across the United States. Both of these two estimates are based on the cumulative calculated costs of housing, child care, food, transportation, health care, miscellaneous necessities, and taxes. A living wage estimate does not include money spent on entertainment or savings of any kind. Recently, in determining its first living wage estimate, Living Income for Vanderbilt Employees (LIVE) used the WOW calculations for Davidson County, Tennessee. To update this estimate for 2005, this short paper will continue to use the WOW 2002 estimates as its starting point, while adjusting those numbers for inflation² and for readily discernable changes in costs as attested to by government data. In some cases this will include comparing WOW data to EPI data, and in some cases, altogether different data will come from government sources.

Family Demographics

WOW calculates a living wage for a number of different family types while EPI assumes a family with two employable adults and two children. The family budget derived from the mentioned components is divided by two and by fifty-two forty-hour work weeks in order to estimate what a living wage would be if both parents were

earning the same income. In determining a living wage, it is difficult to adequately represent all the varying types of families that may be represented by Vanderbilt's employees. Some employees inevitably will have more (perhaps many more) than two children—not to mention elderly dependents, and others may be single parents; in either case, the hourly wage necessary to provide for one's children would increase dramatically. It is also the case that some employees have no children or only one child; in this case, the wage necessary for "self-sufficiency" would decrease drastically. As a family of four is a middle ground, and because it is the standard used by EPI and most other living wage groups, a family of four with two working adults will be the standard measure. Additionally, because the age of the children in a family affects the costs incurred, it is important to note that this estimate again uses EPI's standard and assumes one pre-school-aged child and one school-aged child. This decision marks a compromise as childcare costs go down as children's age goes up while food costs increase with increased age.

Housing

The cost of housing is based on the Fair Market Rents provided by the U.S. Department of Housing and Urban Development. The Fair Market Rent is the highest rental rate at which the Department of Housing and Urban Development will reimburse low-income families under the Section 8 Housing Assistance Payments Program. The FMR rate for a two-bedroom unit in 2002 was \$660. The Revised FMR for 2005 on a two-bedroom rental unit is \$654.³

Child Care

Child care costs are taken directly from the Working Opportunities for Women estimate and adjusted for inflation. WOW's methodology is as follows (WOW's endnotes are listed as footnotes to prevent confusion):

The Standard uses the most accurate information available...In most states, this is the survey of child care costs originally mandated by the Family Support Act, which provides the cost of child care at the 75th percentile, by age of child and setting (family day care home, day care center, etc.)¹ For Tennessee, the Standard uses data from a February 2002 Statewide Market Rate Survey of Full Time Child Care Rates for Infants, Toddlers, 2 Year Olds, 3 Year Olds, 4 Year Olds and 5 Year Olds and a Market Rate Survey of Before, After and Before and After School Rates for School Aged Children of Tennessee, provided by the Child Care Services section of the State of Tennessee Department of Human Services. The rates given are averages specified by age...Data from Tennessee's Department of Human Services most recent Child Care Assistance Program Market Rate Survey and Child Care Provider Reimbursement Rates were applied to this report to create a ratio for approximating rates given for the 75th percentile.

Because it is more common for very young children to be in day care homes rather than day care centers,² the Standard assumes that children two years of age and less (infants, toddlers and two-year olds, called "infants" here) receive full-time care in day care homes. Preschoolers (three, four and five year olds), in contrast, are assumed to go to day care centers fulltime. Schoolage children (ages 6 to 12) are assumed to received part-time care in before and after-school programs.

¹ Under the 1988 Family Support Act (which was superceded by the Personal Responsibility and Work Opportunity Reconciliation Act, passed in 1996), states were required to fund or reimburse child care needed by those on welfare (or leaving welfare) at market rate, which was defined as the 75th percentile, for the age of child, setting, and location. Most states conducted surveys of costs, or commissioned child care referral networks or researchers to do these studies.

² Child care centers are more frequently used for older children (two to four years old) than for infants (J.R. Veum and P.M. Gleason. October 1991. "Child Care Arrangements and Costs" Monthly Labor Review. p 10-17). However, particularly for younger children and lower-income parents, relative care (other than the parent) accounts for significant amounts of child care for children under three (27% compared to 17% in family day care and 22% in child care centers). It should be noted that relative care is usually, but not always, in the relative's home, and is usually, although not always, paid; thus it more closely resembles day care homes rather than day care centers. For children three years and older, the predominant child care arrangement is the child care center, accounting for 45% of the care (compared to 14% in family child care and 17% in relative child care). See J. Capizzano, G. Adams, and F. Sonenstein. March 2000. Child Care Arrangements for Children Under Five: Variation across states. Washington, DC: The Urban Institute

Ratios were created from the state's Child Care Assistance Market Rate Survey to differentiate rates for home child care and child care in centers.⁴

According to this methodology, the self-sufficiency standard for child care for one preschool-aged child and one school-aged child in Davidson County in June, 2002 was \$678 per month. Adjusted for inflation, the self-sufficiency standard for child care is \$739 per month.

Food

Both WOW and EPI take food budgets from the U.S. Department of Agriculture's most recent Low-Cost Food Plan. The Low-Cost Food Plan is 25% more than the Thrifty Food Plan, and while both plans satisfy "minimum nutrition standards," the Thrifty Food Plan is meant for emergency use only and not sustainable. The family of four is calculated as including a couple aged 20-50 years, and gives the option of a calculation including a two-year-old child and one aged 3-5 years or a calculation including one child aged 6-8 years and the other aged 9-11 years. Because in the child care category, this study used the calculation based on child care for older children, for food costs, this study also bases its budget on food needs for older children. The Low-Cost Food Plan assumes that all meals and snacks are bought at stores and prepared at home. In 2002, the food budget for the Low-Cost Food Plan was \$544, as of August, 2005 the Low-Cost Food Plan for a family of four had risen to \$652.50.⁵

Transportation

To determine transportation costs, WOW uses the following methodology:

If there is an adequate public transportation system in a given area, it is assumed that workers use public transportation to get to and from work. A public transportation system is considered “adequate” if it is used by a substantial percentage of the population to get to work. According to one study, if about 7% of the total public uses public transportation, that “translates” to about 30% of the low- and moderate- income population.³ Since only 2.9% of Nashville’s population...use public transportation it is assumed that employed adults throughout Tennessee require a car.⁴ If there are two adults in the family, we assume they need two cars. (It is unlikely that two adults with two jobs would be traveling to and from the same place of work at exactly the same time).

Private transportation costs are based on the costs of owning and operating an average car...The costs include the fixed costs of owning a car (including a small car payment, fire and theft insurance, property damage and liability, license, registration, taxes, repairs, and finance charges), as well as monthly variable costs (e.g., gas, oil, tires, and maintenance), but do not include the initial cost of purchasing a car. To estimate fixed costs, except insurance, we use the Consumer Expenditure Survey amounts for families in the second quintile (those whose incomes are between the 20th and 40th percentile) of income, by region. For auto insurance, we use the average cost for Tennessee from a survey conducted by the National Association of Insurance Commissioners. To account for regional differences in auto insurance costs within the state, we created a ratio by using auto insurance quotes from two top auto insurance companies, offering rates in twelve different regions of the state. For variable costs, we used the *AAA Your Driving Costs 2000* survey for per-mile costs. The Standard assumes that the car(s) will be used to commute to and from work five days per week, plus one shopping and errands trip per week. (The commuting distance is computed using the state-wide average from the National Personal Transportation Survey). In addition, one parent in each household with young children is assumed to have a slightly longer weekday trip to allow for “linking” trips to a day care site.⁶

It should be obvious that transportation costs, as calculated by WOW are exceedingly conservative, allowing only eleven total automobile round-trips per week. Likewise, while the inflation rate by which the 2002 rate will be adjusted is 1.09%, the

³ See Porter, C and Deakin, E. (1995). *Socioeconomic and Journey-to-Work Data: A Compendium for the 35 Largest U.S. Metropolitan Areas*. Berkeley, CA: Institute of Urban and Regional Development, University of California at Berkeley.

⁴ *Travel to Work Characteristics for the 50 Largest Metropolitan Areas by Population in the U.S.* 1990 Census, www.census.gov, or ftp.fischer.lib.virginia.edu/pub/ccdb.47948/tableD.html

cost of gas has nearly doubled since that time. According to the IRS' per-mile reimbursement rate, the cost of owning and operating a car has increased 20% just in the last nine months.⁷ Nonetheless, because WOW estimated the cost of transportation for a family of four at \$393 per month, adjusted for inflation, the current cost of transportation in Nashville is \$428.37 per month.

Health Care

One of the hallmarks of Vanderbilt's employee benefits package is its employee health care program which offers a number of choices for both medical and dental coverage and prescription drug coverage for most employees after three months. For this estimate, the plans with higher monthly payments and lower co-payments and deductibles were preferred to those with lower monthly payments that in turn risk more severe financial setbacks in the event of major or persistent illness. The current monthly premium for the combined family packages of BlueCross Preferred and CIGNA Dental PPO is \$286.53. Co-pays for office visits are \$15, emergency room visits are \$100 + 10% and inpatient and outpatient services are 10% to any Vanderbilt hospital. Under the prescription drug benefit, the co-pay for generic drugs is \$10, \$30 for drugs on the "Preferred Drug List," and \$45 for all other drugs.⁸ The dental deductible is \$50 per visit.⁹ The original WOW estimate of monthly expenses fails to even cover the monthly cost of premiums, much less co-pays and deductibles. According to EPI, in 1998, the average monthly out-of-pocket expense for health care was \$93.76.¹⁰ Adjusted for inflation¹¹, this comes to \$111.29 per month. Adding this to the premium rate, monthly health care expenses come to \$397.82.

Other

Wider Opportunities for Women calculates that “Other Necessities” will be approximately 10% of all expenditures before taxes are taken into account. This category includes items such as clothing, diapers, non-prescription medication, personal hygiene items, etc. 10% represents a conservative estimate as many other “basic needs budgets” calculate based on a rate of 15% of all other costs. This figure represents any income that could be used for entertainment; though calculating with a rate of 10% leaves little disposable income for any “other items” that are not necessities. In 2002, 10% of all expenditures before taxes was \$253. The total cost of the first five expenditures for 2005 is \$2,871.69 per month. Ten percent of this figure is \$287.16.

Taxes

WOW’s methodology on computing taxes includes various tax credits as well as county-by-county sales taxes and is as follows:

Taxes include state sales tax, federal income taxes, and payroll taxes. Tennessee retail sales and grocery tax varies from 7.5 to 9%, by county...we have separately calculated sales tax for each county, but have not included the local city sales taxes (often an additional tax rate of 1.75 to 2.75% in cities throughout Tennessee). Sales tax is calculated on the cost of miscellaneous and food items.

Taxes on gasoline and automobiles are included as a cost of owning and running a car. Although the federal income tax rate is higher than the payroll tax rate—15% for most family types —federal exemptions and deductions are substantial. As a result, while the payroll tax is paid on every dollar earned, families do not pay federal income tax on the first \$10,000 to \$12,000 or more, thus lowering the effective federal tax rate to 7% to 10% for most family types. Payroll taxes for Social Security and Medicare are calculated at 7.65% of each dollar earned.

Earned Income Tax Credit (EITC): The EITC is a federal tax refund intended to offset the loss of income from payroll taxes owed by working-poor and near-poor families. The EITC is a “refundable” tax credit; that is, working adults may receive the tax credit whether or not they owe any federal taxes.

Child Care Tax Credit (CCTC): The CCTC is a federal tax credit that allows working parents to offset a percentage of their child care costs against their federal income tax liability. Like the EITC, the CCTC reduces the total amount of money a family needs to be self-sufficient. Unlike the EITC, the federal CCTC is not a “refundable” tax credit. A family may only receive the CCTC as a credit against federal income taxes owed. Therefore, families who owe very little or nothing to the federal government in income taxes, receive little or no CCTC.

Child Tax Credit (CTC): The CTC is a partially refundable federal tax credit that provides parents a deduction of up to \$600 (for children less than 17 years old). A family that earns more than \$10,000 in 2001 is able to receive a refund of 10% of their taxable earnings above \$10,000 up to the maximum CTC benefit (\$600 per child). This \$10,000 threshold will be adjusted annually with inflation.¹²

Because the 2002 WOW estimate relies on old data for its sales tax estimate, it is necessary to recalculate that cost in order to reflect the increase in the cost of food and miscellaneous items. The state sales tax is 7.0% and 6.0% on non-prepared food, while Davidson County adds an additional 2.25% on top of this figure.¹³ Therefore, in 2002, WOW estimated \$23.40 in sales tax on miscellaneous items and \$44.88 in sales tax on food. In subtracting the sales tax total of \$68.28 from the cumulative tax total of \$537, the non-sales tax revenue estimate comes to \$468.72. For the 2005 tax estimate, this study carries over that figure and adds it to a 9.25% sales tax on its 2005 miscellaneous estimate, \$26.56, and a 8.25% sales tax on its 2005 food estimate, \$53.83, for a 2005 cumulative tax estimate of \$549.11. With the 2002 estimate, the 2005 estimate will also subtract the appropriate amount for the Child Care Tax Credit and the Child Tax Credit, while the Earned Income Tax Credit does not apply.

Conclusion

Given the method followed above, this study determines that in Nashville, a family of four with two working adults, one preschool-aged child, and one school-aged child that receives its health care from Vanderbilt University would need a cumulative yearly income of \$42,335.52. Therefore, a Living Wage for a Vanderbilt Employee would be \$10.18/hour.

Table 1

	2002	2005
Housing	660	654
Childcare	678	739
Food	544	652.5
Transportation	393	428.37
Health Care	255	397.82
Misc (10%)	253	287.16
Taxes	537	549.11
Childcare Tax Credit	-80	-80
Child Tax Credit	-100	-100
Monthly Budget	3140	3527.96
Yearly Budget	37680	42335.52
Hourly Wage	\$9.06/hour	\$10.18/hour

¹ "What is a Living Wage?" Living Wage Action Center. Site Accessed: October 11, 2005. http://www.livingwageaction.org/info_basics.htm.

² Unless otherwise noted, all inflation calculations were made by multiplying original data by 1.09, which is the August, 2005 Consumer Price Index for the Southern Region of the United States divided by the CPI for June, 2002, when the Wider Opportunities for Women Study was published. The monthly CPIs were taken from the U.S. Bureau of Labor Statistics. Site Accessed: October 11, 2005. <http://data.bls.gov/cgi-bin/surveymost>

³ "Proposed FY 2006 Fair Market Rent Documentation System -- Select Geography." U.S. Department of Housing and Urban Development. Site accessed October 8, 2005. http://www.huduser.org/datasets/fmr/fmrs/select_Geography.odt

⁴ Pearce, Diana and Jennifer Brooks. *The Self-Sufficiency Standard for Tennessee*. Published by: Wider Opportunities for Women: 2002. pp. 5-6.

⁵ "Official USDA Food Plans: Cost of Food at Home at Four Levels" U.S. Department of Agriculture. Site Accessed: October 9, 2005. <http://www.cnpp.usda.gov/using3.html>.

⁶ Pearce, Diana and Jennifer Brooks. *The Self-Sufficiency Standard for Tennessee*. Published by: Wider Opportunities for Women: 2002. pp. 6-7

⁷ At the beginning of 2005, the IRS per-mile reimbursement rate was \$.405/mile. As of October, 2005, that rate had jumped to \$.485/mile, though this spike could decline by the beginning of 2006. See: "IRS Increases Mileage Rate Until Dec. 31, 2005." Internal Revenue Service. September 9, 2005. Site Accessed: October 11, 2005. <http://www.irs.gov/newsroom/article/0,,id=147423,00.html>.

⁸ "A Comparison of Health Care Coverage Options Inside the Vanderbilt Group Health Plan." Vanderbilt University Human Resources. December, 2004.

⁹ Vanderbilt University Human Resources. Site Accessed: October 11, 2005. <http://hr.vanderbilt.edu/benefits/dental.htm>

¹⁰ "Poverty and Family Budgets." Economic Policy Institute. Site Accessed: October 11, 2005. http://www.epi.org/content.cfm/issueguides_poverty_instructions

¹¹ With August 1998 as the base CPI, the rate of inflation comes to 1.187.

¹² Pearce, Diana and Jennifer Brooks. *The Self-Sufficiency Standard for Tennessee*. Published by: Wider Opportunities for Women: 2002. p. 7.

¹³ Tennessee Department of Revenue. Site Accessed: October 11, 2005. <http://www.state.tn.us/revenue/pubs/taxlist.pdf>