Methodological Appendix, Virginia 2006: Assumptions and Sources

Introduction

*The Self-Sufficiency Standard measures how much income is needed for a family of a certain composition in a given place to adequately meet their basic needs—**without public or private assistance.***

The Self-Sufficiency Standard calculates a family-sustaining wage that does not require choosing between basic necessities such as child care, nutritional food, adequate housing, or health care. On the other hand, the Standard only covers immediate, day-to-day necessities, excluding longer-term needs such as retirement savings or college tuition, purchases of major items such as a car, emergency expenses, or extras such as gifts, video rentals, or after school activities.

While public work supports are often necessary and critical for certain families to meet the costs of such high-priced necessities as child care, health care, and housing, economic self-sufficiency cannot necessarily be achieved with wages alone or even wages combined with benefits. True self-sufficiency involves more than a job with a certain wage and benefits at one point in time. Central to efforts to attain self-sufficiency is access to education, training, and jobs that provide real potential for skill development and career advancement over the long-term.

In addition, the Self-Sufficiency Standard does not imply that any family at any income should be completely self-reliant and independent of one another or the community-at-large. Indeed, it is through interdependence among families and community institutions (such as schools or religious institutions), as well as informal networks of friends, extended family, and neighbors that many families are able to meet both their non-economic and economic needs.

Federal Poverty Level (FPL) and The Self-Sufficiency Standard

The Federal Poverty Line or FPL (also referred to as the federal poverty measure or federal poverty guidelines) was developed over four decades ago and is based on the cost of a single item—food. Because current expenditure patterns at that time indicated that families spent an average of one-third of their income on food, the U.S. Department of Agriculture (USDA) “thrifty food budget” was simply multiplied by three to determine the poverty level. Since then, it has only been updated for inflation. The FPL only varies by family size (regardless of composition) and does not vary by location or age of children. For instance, the 2006 FPL for a family of three (either two adults with one child, or one adult with two children) is $16,600 across the U.S.

The Self-Sufficiency Standard differs from the FPL in five important ways:

1. The Standard independently calculates the cost of each basic need (not just food) and does not assume that any one cost will account for a fixed percentage of the budget.
2. The Standard assumes that all adults—married or single—work full-time and includes all major costs (child care, taxes, and so forth) associated with employment.
3. The Standard varies costs by family size, as does the FPL, but the Standard also varies costs by family composition and the ages of children.
4. Whenever possible and appropriate, the Standard varies costs geographically (by state, region, county, and in some cases, by city or locality).
5. The Standard includes federal, state, and local taxes (e.g., income, payroll, and sales taxes) and tax credits.

The data used in the Self-Sufficiency Standard are collected or calculated using standardized or equivalent methodology nationwide; obtained from scholarly or credible sources such as the U.S. Census Bureau; updated annually (or as updates are available); and as geographically- and age-specific as possible and appropriate. The Standard allows each cost to increase at its own rate, by family type, geographic location, and over time. As improved or standardized data sources become available, the methodology used by the Standard is refined accordingly.

The Standard is calculated for each of Virginia's 70 family types (ranging from one adult, to one adult with one infant, and so forth, up to two-adult families with three teenagers) in each of Virginia's 135 cities/counties.

Monthly Costs

Housing

For housing costs, the Standard uses the most recent Fiscal Year Fair Market Rents (FMRs), calculated annually by the U.S. Department of Housing and Urban Development (HUD) for each state's metropolitan and non-metropolitan areas. Annual FMRs are based on data from the 2000 decennial census, the biannual American Housing Survey, and random digit dialing telephone surveys. FMRs, which include utilities (except telephone and cable), are intended to reflect the cost of housing that meets minimum standards of decency.

The FMRs are calculated for metropolitan areas (known as Metropolitan Statistical Areas or MSAs) and non-metropolitan counties. MSAs that have a population core of at least 2.5 million may be divided into HUD Metro FMR Areas (HMFAs).

When an MSA includes multiple counties, towns, and/or cities, the Standard uses National Low Income Housing Coalition (NLIHC) *county- (or town, city)-level* median gross rents to create ratios to vary the FMRs within a single MSA/HMFA. Of the 16 MSAs in Virginia, 11 consist of more than one county and/or city. Since HUD calculates only one set of FMRs for each of these 11 areas, the Standard used the NLIHC median gross rents for each county/city to vary the individual county/city FMRs within the MSA. The Standard used Virginia's 55 non-metropolitan FMR areas (counties) without adjustments.

In general, FMRs are set at the 40th percentile, meaning 40% of the housing in a given area is less expensive than the FMR. All of Virginia's FMRs are set at the 40th percentile, except for the Richmond, VA HMFA, the Virginia Beach-Norfolk-Newport News, VA-NC MSA, and the Washington-Arlington-Alexandria, DC-VA-MD HMFA, which are set at the 50th percentile.

The Standard assumes that parents and children do not share the same bedroom and no more than two children share a bedroom.

Sources: Housing

- U.S. Housing and Urban Development. 1995. *Fair Market Rents for the Section 8 Housing Assistance Payments Program*. Retrieved from http://www.huduser.org/datasets/fmr/fmrover.doc
- National Archives and Records Administration. Federal Register, Volume 70, No. 105, June 2, 2005. Department of Housing and Urban Development. *Proposed Fair Market Rents for Fiscal Year 2006 for Housing Choice Voucher, Moderate Rehabilitation Single Room Occupancy and Certain Other HUD Programs; Notice*. Retrieved from http://www.huduser.org/datasets/fmr/fmr2006P/Preamble_FY06_FMRP.pdf
- National Low Income Housing Coalition. Excerpts from Federal Register. August 6, 2004 (Vol. 69, No. 15). Retrieved from http://www.nlihc.org/2005fmrs/explanation.htm
- National Low Income Housing Coalition. Median Gross Rent by County. 2000. Retrieved from http://www.nlihc.org/research/lalihd/renterreport.pdf
- Federal Register. Effective October 1, 2005. Schedule B: FY 2006 Final Fair Market Rents for Existing Housing. Retrieved from http://www.huduser.org/datasets/fmr/fmr2006F/FY2006F_SCHEDULE_B.doc

Child Care

Since a basic assumption for calculating the Standard is that it provides the costs of meeting needs *without* public or private subsidies, free or unpaid child care provided by family relatives and friends or any other private subsidies are not considered when determining child care costs.

The Family Support Act, in effect from 1988 until welfare reform in 1996, required states to provide child care assistance at market-rate for low-income families in employment and/or education and training. States were also required to conduct child care cost surveys biannually to determine the market-rate (defined as the 75th percentile) by setting, age, and geographical location or set a statewide rate. Many states, including Virginia, have continued to conduct or commission the surveys as well as reimburse child care at this level.

Data for the 2006 Self-Sufficiency Standard for Virginia is from the most recent child care rate survey completed in 2004 (rates effective through 2005).

The "tier two" (licensed facilities) *family* care rates were used to create an age-weighted average for an "infant" (defined as 0 to 3 years old by the Standard and 0 to 16 months by Virginia). Virginia's tier two *center* care rates were used to calculate an age-weighted average of the cost of child care for preschoolers (defined as 3 to 5 years of age by the Standard, but 2 to 5 years by Virginia). For schoolage children, the tier two center care rates from the "before and after school" category were used.

Sources: Child Care

- Capizzano, J., Adams, G. & Sonenstein, F. (2000). *Child Care arrangements for child under five: Variation across states. New federalism: National Survey of America's Families*. (Series B, No. B-7). Washington DC: The Urban Institute. Retrieved from http://www.urban.org/UploadedPDF/anf_b7.pdf
- Almanac of Policy Issues. Child Care. Retrieved from http://www.policyalmanac.org/social_welfare/archive/child_care.shtml
- Mike Theis, Research Analyst. Virginia Department of Social Services, Division of Strategy Management, Office of Research.
- Child Care Maximum Reimbursable Rates. Survey created by Virginia Tech for Virginia Department of Social Services. 2004.
- Department of Social Services. *Child Care and Development Fund Plan for FFY 2006-2007*. Available at http://www.dss.virginia.gov/files/division/cc/ccdf/plan.pdf
- U.S. Bureau of Labor Statistics. Consumer Price Index. September 2005. Retrieved from http://www.bls.gov/cpi/home.htm

Food

Food costs for the Standard are based on USDA Low-Cost Food Plan. Although it is 25% higher than the Thrifty Food Plan, the Low-Cost Food Plan is based on more realistic assumptions about food preparation time and consumption patterns, while still being a very conservative estimate of food costs (for instance, the Low-Cost Food Plan does not allow for any take-out, fast-food, or restaurant meals).

The Standard varies food costs by the number and ages of children and the number and gender of adults. The Standard assumes that a single-*person* household is one adult male, the single-*parent* household is one adult female, and a two-parent household includes one adult male and one adult female.

Geographic differences in Virginia's grocery costs were varied by using ACCRA's Cost of Living Index. Food costs across Virginia range from 16% lower to 8% higher than the national average.

Sources: Food

- U.S. Department of Agriculture, Center for Nutrition Policy and Promotion. Official USDA Food Plans: Cost of food at home at four levels, U.S. Average, June 2005. Retrieved from http://www.usda.gov/cnpp/FoodPlans/Updates/foodjun05.pdf
- ACCRA. Cost of Living Index.2004, First, Second and Third Quarter average. Available at http://www.accra.org/

Public and Private Transportation

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. Public transportation use is assumed for an entire statistical area when more than 7% of the population in that area uses public transportation. Private transportation (a car) is assumed where public transportation use is less than 7%. There are six areas in Virginia where use of public transportation is assumed: Alexandria city, Arlington County, Fairfax County, Falls Church city, Fairfax city, and Richmond city. The cost of public transportation in these areas, except Richmond, includes daily roundtrip bus and train fares, plus a discounted return trip bus transfer. For Richmond, the cost was calculated for two daily Express trips.

Private transportation costs are based on the costs of owning and operating an average car. For the remaining 129 counties/independent cities in Virginia, the Standard assumes that adults use private transportation to go to and from work. One car is assumed for the single-parent family and two cars are assumed for a family with two adults. It is understood that the car(s) will be used to commute to and from work five days per week, plus one trip per week for shopping and errands. 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. For per-mile costs, driving cost data from the American Automobile Association is used. The commuting distance is computed from the National Household Travel Survey 2001.

The auto insurance premium is the average premium cost for a given state from a survey conducted by the National Association of Insurance Commissioners (NAIC). To create *within* state variation (regional or county) in auto insurance premiums, ratios are created using sample premiums from the automobile insurance companies with the largest market shares in the state.

The fixed costs of car ownership such as fire, theft, property damage and liability insurance, license, registration, taxes, repairs, monthly payments, and finance charges are included. The monthly variable costs (e.g., gas, oil, tires, and maintenance) are also included, but the initial cost of purchasing a car is not. To estimate private transportation fixed costs, the Standard uses Consumer Expenditure Survey amounts for families with incomes between the 20th and 40th percentile by region.

Auto insurance premiums and fixed auto costs are adjusted for inflation using the most recent Consumer Price Index.

Sources: Public and Private Transportation

- Porter, C. & 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.
- Census Transportation Planning Package (CTPP) 2000: Profiles for Virginia. Retrieved from http://transportation.org/ctpp/home/va.htm
- Alexandria city, Arlington city, Fairfax County, Fairfax city, and Falls Church city: Washington Metropolitan Transit Authority (WMTA). Retrieved from http://www.wmata.com/riding/hours_fares.cfm
- Richmond city: Greater Richmond Transit (GRTC). Retrieved from http://www.ridegrtc.com/FrontEnd/HTML/index.html
- American Automobile Association. *Your Driving Costs 2005*. Retrieved from http://www.aaawin.com/news_safety/pdf/Driving_Costs_2005.pdf
- U.S. Department of Transportation. National Household Travel Survey 2001. Retrieved from http://nhts.ornl.gov/2001/index.shtml
- National Association of Insurance Commissioners (NAIC). (2004 September). *Auto Insurance Database Report. Average Premiums and Expenditures 1998-2002*. NAIC Research Library.
- Fixed Auto Costs: Calculated and adjusted for region using Bureau of Labor Statistics on-line data query for the Consumer Expenditure Survey at http://www.bls.gov/data/

Health Care

The Standard assumes that an integral part of a Self-Sufficiency Wage is *employer-sponsored* health insurance for workers and their families. Nationally, 70% of non-elderly individuals in households with at least one full-time worker have employer-sponsored health insurance coverage. In Virginia, 75% of non-elderly individuals in households with at least one full-time worker have employer-sponsored health insurance coverage. Both nationally and in Virginia, the employer pays 83% of the insurance premium for the employee and 75% of the insurance premium for the family.

Health care premiums are obtained from The Henry J. Kaiser Foundation State Health Facts Online, Employment-Based Health Premium for a single adult and for a family. The Kaiser Foundation bases the cost of health insurance premiums on the average premium paid by a state's residents, according to the national Medical Expenditure Panel Survey (MEPS) and adjusted for inflation using the Medical Care Services Consumer Price Index. Average premiums from Virginia insurance companies with the largest market share were used to vary premium costs by major metropolitan area within the state. The areas used for determining health insurance premiums were the same areas that were used to determine auto insurance rates.

Health costs also include regional out-of-pocket costs calculated for adults, infants, preschoolers, schoolage children, and teenagers. Data for out-of-pocket health care costs (by age) are also obtained from the MEPS, adjusted by region using the MEPS Household Component Analytical Tool, and adjusted for inflation using the Medical Care Consumer Price Index.

Sources: Health Care

- Kaiser Family Foundation. State Health Facts Online. United States: Non-elderly with Employer Coverage. Rate of Non-elderly with Employer Coverage by Employment Status, State Data 2003-2004, U.S. 2004. Retrieved from http://www.statehealthfacts.org
- U.S. Department of Labor, Bureau of Labor Statistics, Consumer Price Index – All Urban Consumers, U.S. City Average. Medical Care Services (for premiums) and Medical Services (for out-of-pocket costs). Retrieved from http://www.bls.gov/cpi/home.htm
- Premiums: Kaiser Family Foundation. State Health Facts Online. Health Cost and Budgets. United States: Average Annual Cost of Employment-Based Health Insurance - single coverage, 2003, and United States: Average Annual Cost of Employment-Based Health Insurance - family coverage, 2003. Retrieved from http://www.statehealthfacts.org/
- Out-of-Pocket Costs: Agency for Healthcare Research and Quality. Household Component Analytical Tool (MEPSnet/HC). August 2003. Rockville, MD. Retrieved from http://www.meps.ahrq.gov/mepsnet/HC/MEPSnetHC.asp
- Kaiser Family Foundation. State Health Facts Online. Virginia: Non-elderly with Employer Coverage. Rate of Non-elderly with Employer Coverage by Employment Status, State Data 2003-2004, U.S. 2004. Retrieved from http://www.statehealthfacts.org
- Kaiser Family Foundation. State Health Facts Online. Health Cost and Budgets. Virginia: Average Annual Cost of Employment-Based Health Insurance - single coverage, 2003, and Virginia: Average Annual Cost of Employment-Based Health Insurance - family coverage, 2003. Retrieved from http://www.statehealthfacts.org/
- Top Health Insurance Carriers in Virginia supplied by the State of Virginia Bureau of Insurance via e-mail (bureauofinsurance@scc.virginia.gov).
- Health insurance quotes were retrieved from https://seca.anthem.com/ratequote/app and https://www.carefirst.com/eSales/index.jsp

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Miscellaneous

Miscellaneous items include all other essentials: clothing, shoes, paper products, diapers, non-prescription medicines, cleaning products, household items, personal hygiene items, and telephone. It does not allow for recreation, entertainment, savings, or debt repayment. Miscellaneous expenses are calculated by taking 10% of all other costs. This percentage is a conservative estimate in comparison to estimates in other basic needs budgets, which commonly use 15%.

Source: Miscellaneous

- Citro, C. & Michael, R. Eds. (1995). *Measuring poverty: A new approach*. Washington, DC: National Academy Press. Retrieved from http://www.census.gov/hhes/poverty/povmeas/toc.html

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Taxes and Tax Credits

Taxes

Since a given family's Self-Sufficiency Wage depends partly on their taxes and tax credits, the Self-Sufficiency Standard calculates federal and state income taxes and tax credits using an iterative process. Starting with a family's total monthly expenses for basic needs, total income to cover those needs plus the net cost of taxes and tax credits is estimated. Then, taxes and tax credits on that total are calculated, then the income estimated, and if needed, the tax formulas are adjusted so that total income covers expenses plus the net effect of taxes and tax credits.

For example, a family may require $30,000 annually to cover all expenses before taxes. If the net effect of taxes and tax credits is to increase a family's Self Sufficiency Wage by $2,500, then the taxes and tax credits are recalculated using this new wage of $32,500. These calculations are repeated until the family's income is exactly enough to cover all pre-tax expenses and the taxes and tax credits incurred at that income level.

Taxes include federal and state income tax, payroll taxes, and state and municipal sales tax, where applicable. Federal payroll taxes for Social Security and Medicare are calculated at 7.65% of each dollar earned. Although the federal income tax rate is higher than the payroll tax rate, federal exemptions and deductions are substantial. As a result, while payroll tax is paid on every dollar earned, most families will not owe federal income tax on the first $10,000 to $15,000 or more, thus lowering the effective federal tax rate to about 7% for some family types.

State sales taxes are calculated only on "miscellaneous" items, as one does not ordinarily pay tax on rent, child care, and so forth. Indirect taxes (e.g., property taxes paid by the landlord on housing) are assumed to be included in the price of housing passed on by the landlord to the tenant. Virginia has a statewide sales tax of 5% and a 2.5% grocery tax. Taxes on gasoline and automobiles are included as a cost of owning and running a car.

Virginia state income taxes were calculated using the tax forms and instructions from the Virginia Department of Revenue Services. The state income tax calculation includes state specific deductions, exemptions, and tax credits. For the 2005 tax year, Virginia's income tax graduates from 2% to 5.75%.

Sources: Taxes

- Internal Revenue Service. 1040 Instructions 2005. Available at http://www.irs.gov/pub/irs-pdf/f1040a.pdf
- Virginia Department of Taxation. *2005 Virginia 760. Resident Individual Income Tax Booklet*. Retrieved from http://federal taxes.

Tax Credits

The Earned Income Tax Credit (EITC), or as it is sometimes called, the Earned Income Credit, is a federal tax refund intended to offset the loss of income from payroll taxes owed by low-income working families. The EITC is a "refundable" tax credit, meaning working adults may receive the tax credit whether or not they owe any federal taxes.

Although by law an eligible family can receive part of the federal EITC on a monthly basis (Advance EITC), most workers prefer to receive it annually, as it is difficult to estimate the amount of EITC eligibility due to fluctuating hours and wages. In addition, some workers prefer to use EITC as "forced savings" to meet important family needs such as paying the security deposit for housing, buying a car, settling debts, paying tuition, or starting a savings account. Thus, nearly all families receive the federal EITC as a lump sum payment the following year when they file their tax returns, even though the Standard shows the EITC as income available *monthly*.

In 2004, Virginia became the 18th state to adopt a state EITC. The Virginia EITC is *not* a refundable EITC. The Virginia taxpayer can choose between the state EITC, which is 20% of the federal EITC, or the Credit for Low Income Individuals. However, In some Virginia localities the Self-Sufficiency Standard is above the income limit for the EITC, so families at that level of income would not receive the EITC.

Virginia residents may qualify to claim the Credit for Low Income Individuals if the total family adjusted gross income is below federal poverty guidelines. The maximum credit that can be claimed is $300 for each personal and dependent exemption claimed on the state return. Like the State EITC, this credit is *not* refundable.

In Virginia, a married couple filing a joint return can receive up to $259 against their joint income tax liability if each spouse received income during the taxable year. With this adjustment, two-income couples who file a joint return owe no more tax than the combined tax that would be due if separate returns were filed. Joint taxable income must be over $3,000 to benefit from this adjustment.

The federal Child Care Tax Credit (CCTC), also called the Child and Dependent Care Tax Credit, is a tax credit that allows working parents to deduct a percentage of their child care costs from the federal income taxes they owe. Like the EITC, the CCTC is deducted from the total amount of money a family needs to be self-sufficient. Unlike the EITC, the federal CCTC is *not* a refundable federal tax credit; that is, a family may only receive the CCTC as a credit against federal income taxes owed. Therefore, families who owe very little or nothing in federal income taxes will receive little or no CCTC. In 2005, up to $3,000 was deductible for one qualifying child and up to $6,000 for two or more qualifying children.

The federal Child Tax Credit (CTC) is like the EITC in that it is a refundable tax credit. The CTC provides parents with a deduction of $1,000 for each child under 17 years old or 15% of earned income over $11,000, whichever is less. For the Standard, the CTC is shown as received monthly, except in the modeling tables (discussed in the document, *Modeling the Impact of Supports on Wages Required to Meet Basic Needs*).

Sources: Tax Credits

- Internal Revenue Service. EITC for Individuals. Retrieved from http://www.irs.gov/individuals/article/0,,id=150557,00.html
- Romich, J. L. & Weisner, T. (2000). *How families view and use the EITC: The case for lump-sum delivery*. Paper delivered at Northwestern University, Joint Center for Poverty Research Conference.
- Internal Revenue Service. Publication 503. Child and Dependent Care Expenses. 2005. Retrieved from http://www.irs.gov/pub/irs-pdf/p503.pdf
- Internal Revenue Service. Publication 972. Child Tax Credit. 2005. Retrieved from http://www.irs.gov/pub/irs-pdf/p972.pdf
- Internal Revenue Service. Publication 17 (2005). Your Federal Income Tax For Individuals. Retrieved from http://www.irs.gov/publications/p17/index.html
- Internal Revenue Service. 1040A. 2005. Retrieved from http://www.irs.gov/pub/irs-pdf/i1040a.pdf
- State EITC Online Resource Center. Virginia. Retrieved from http://www.stateeitc.com/map/index.asp
- Virginia Department of Taxation. 2005 Virginia 760. Resident Individual Income Tax Booklet. Retrieved from http://www.tax.virginia.gov/Web_PDFs/indForms/currentyear/760instweb.pdf
- Virginia Department of Taxation. Tax Credits. Retrieved from http://www.tax.virginia.gov/site.cfm?alias=TaxCredit2#individ
- Virginia Department of Taxation. Spouse Tax Adjustment. Retrieved from http://www.tax.virginia.gov/site.cfm?alias=SpouseTaxAdjustment