

Taxing Matters – Methodology Notes

Incomes The median income for the communities measured was derived from US Census results from 1950, 1960, 1970, 1980, 1990, and 2000. The 1955, 1965, 1975, 1985, and 1995 years were linear interpolations of the census data. The income, which is self-reported on census forms with no verification by the Census Bureau, is widely regarded as only a more-or-less reliable indicator of personal income. But the intention of this project is to paint a picture of various typical families' tax burdens, not to derive precise measures of income (for which it would be inappropriate).

The self-reported income from the Census reports was defined equivalent to Adjusted Gross Income as used by the IRS. This is also a simplification, but again, the goal here is not the measurement of income.

Federal Taxes The Federal taxes (FICA and Income taxes) were calculated using the tax forms and documents issued by the IRS in those years. In particular, we used Publication 17 of the IRS, for the years in question, as well as the packet of instructions that came with the tax forms. These are widely available back to 1952 in your local government documents repository, though we got them from the Library of Congress on a recent swing through our nation's capital.

For the lower brackets, we used the standard deductions (for the years that this existed as a working concept – there has been substantial change over the years in how the tax code treats low incomes), and for the upper brackets, we used estimates derived from the annual IRS report: *Statistics of Income: Individual Tax Returns*, which reports gross income, taxable income and tax paid (among many others) by income categories. For the middle brackets, we used whichever method would provide the lowest tax, which is probably what many people do.

Incidentally, there exists a report from the Office of Tax Analysis (US Treasury Department) called *Average and Marginal Federal income, Social Security and Medicare, and Combined Tax Rates for Four-Person Families at the Same Relative Positions in the Income Distributions, 1955-1999*, by Allen Lerman, dated January 1998. This report was not used in the preparation of the Rhode Island Policy Reporter study, though it was exactly on topic, and provided the model. Unfortunately, the Lerman report doesn't include the upper brackets we needed, but more seriously, it assumes that *all* brackets had itemized deductions worth 23% of their income for all years before 1986 and 18% after. But IRS data (from the *Statistics of Income* reports) show this number ranges all over the map, from 10% to 80%. In any report, some simplifying assumptions are justified (see, e.g., our equation of Census income and AGI), but ones that compromise your results as much as

this are not. I notice that I could not find this report on the Office of Tax Analysis web site, so maybe they've thought better of it.

State Taxes The Rhode Island state income tax, until 2001, was simply a percentage of the federal tax. The percentage is inscribed in state law, Title 44, Chapter 30, section 2.

The sales tax rate is similarly recorded in the state General Laws, Title 44 chapter 18, section 18. The sales tax incidence requires an estimate of a family's spending habits. For this data, the Bureau of Labor Statistics, in particular the Division of Expenditure Surveys provided data. See also the article *How family spending has changed in the U.S.*, Eva Jacobs and Stephanie Shipp, Monthly Labor Review, March 1990.

Property Taxes Estimating historic property taxes was the hardest and most fraught of the aspects of this project. Properties in several sections of the towns in question were identified that have not changed much in the past 50 years. The chains of title were obtained for these properties, and then a search of past tax records was made to record the changes in tax on them. Housing costs reported during the Census were used to align the house records with the hypothetical families who might have been living in them. Taxes paid by renters were assumed to be evenly split between tenants and owners.