

Working Paper Series  
WP 2006-9

**CHANGES IN THE FUNCTIONAL  
DISTRIBUTION OF HOUSEHOLD  
INCOME IN WASHINGTON: A  
COMPARISON USING 1990 AND 2000  
PUMS CENSUS DATA**

By

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**September 18, 2006**

# Changes in the Functional Distribution of Household Income in Washington: A Comparison Using 1990 and 2000 PUMS Census data

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## ABSTRACT

*This paper examines and details the main sources of household income in Washington using the Census of Population PUMS microsample. In accord with the generally good economy in the 1990's, the share of property type income in total household income increased from 1990 to 2000. And with welfare reform in the mid-1990's the share of public assistance type income decreased as a share of household income.*

*In order to better understand the relative importance of alternative sources of income to Washington households, each household was identified according to the income source which provided the largest contribution to household income. For example, a household whose largest source of income comes from salary and wages was identified as a Labor household. Similarly, households whose largest source of income was interest, dividends or net rentals were identified as Capital households. Labor and capital households are not very different in terms of mean household income. In 2000, average household income of Labor households was \$65,300 while the average household income of Capital households was \$96,200. However, Labor households were very different than Capital household regarding diversification of income source. Labor households depended upon wage income for 92 percent of mean household income. Capital households obtained 70 percent of their mean household income from interest, dividends and rents, but also had 11 percent of their mean income from wages and 15 percent of their mean income from social security and pensions.*

**Keywords:** Sources of Household Income in Washington, Labor's share of income, Capital's share of income.

**JEL Classification:** R13

**Length:** 16 pages

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## INTRODUCTION

During the 1980's and 1990's, family income inequality grew in the US (US Census Bureau, 2004). The state of Washington was one of 39 states where the average income of the top 20 percent of the wealthiest families grew faster than the average income of the lowest 20 percent of families<sup>1</sup> (Bernstein 2002). Further, this trend of income inequality increased over time. In the late 80's, the wealthiest 20 percent had income levels 7 times as large as the poorest 20 percent. By the end of the 90's, the wealthiest had income 8.6 times as large. There are several possible causes for the increase in income disparity. First, inequality of wages increased from the late 70's through the 90's (Bernstein and Mishel 1997), and wages comprise roughly 75 percent of household income. Next, income from dividends interest and rent generally accrue to wealthy families with ownership of financial and real capital; and, the economic growth of the 90's with its resulting growth in interest, dividends and rents meant greater property type income to a select group of capital owners. Finally, there was a relative reduction in public assistance payments in the 90's as a result of welfare reform which directly affected lower income families<sup>2</sup>.

In the paper we use the 2000 US Census data for the state of Washington and compile estimates of total household income from 8 different sources. We then compare these figures to a similar set of data for the state of Washington compiled using 1990 US Census data. Using a simple side-by-side comparison, we then examine how the distribution of alternative sources of income has changed from 1990 to 2000; a period where the disparity in income distribution grew dramatically in the state of Washington.

In the remainder of this paper, we show how the distribution of income from different sources to different *types* of households changed from 1990 to 2000. The next section describes the methods for compiling the 2000 Census household income data. We then describe the data by type of household and compare it with a similar sample of Washington household data created by Yusuf (2000) using 1990 Census data.

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<sup>1</sup> The rate of growth was measured from 1978-1980 to 1998-2000.

<sup>2</sup> One example is President Clinton's Personal Responsibility and Work Opportunity Reconciliation Act of 1996.

## METHODS

The U.S. Census Bureau provides Public Use Microdata Sample (PUMS) files for every state in the US which list characteristics of persons and their associated household<sup>3</sup>. The PUMS files are available as 1 percent and 5 percent samples of the population; the 5 percent data offering finer geographic detail than the 1 percent data<sup>4</sup>. Using weights provided in the PUMS files, characteristics of entire state populations can be derived from the PUMS data. For this project, we used the 2000 U.S.Census, state of Washington, 5 percent PUMS file.

The 2000 Census identifies eight sources of household income<sup>5</sup> in PUMS (see **Table 1** for descriptions of each income source). The income of all persons in a household is summed to arrive at total household income.

**TABLE 1: Sources of household income defined by Census of Population**

<b>Income Type</b>	<b>Definition</b>
<b>Wage or Salary</b>	Total money earnings received for work performed as an employee during the calendar year 1999.
<b>Self-employment</b>	Both farm and nonfarm self-employment income.
<b>Interest, dividends, or net rental</b>	Interest on savings or bonds, dividends from stockholdings or membership in associations, net income from rental of property to others and receipts from boarders or lodgers, net royalties, and periodic payments from an estate or trust fund.
<b>Social Security</b>	Social security pensions and survivors benefits, permanent disability insurance payments made by the Social Security Administration prior to deductions for medical insurance, and railroad retirement insurance checks from the U.S. government. Medicare reimbursements are not included.
<b>Supplemental Security Income (SSI)</b>	SSI is a nationwide U.S. assistance program administered by the Social Security Administration that guarantees a minimum level of income for needy aged, blind, or disabled individuals.

<sup>3</sup> The data were taken from: [www.census.gov/main/www/pums.html](http://www.census.gov/main/www/pums.html) and compiled using Microsoft Access, 2003

<sup>4</sup> To maintain confidentiality of the PUMS data, the Census sets minimum population thresholds for the size of the geographic units reported. The 5 percent state files report household location using PUMAs (Public Use Microdata Area) which have a minimum population of 100,000. The 1 percent state files use Super-PUMAs which have a minimum population of 400,000. The 5 percent PUMS data also reports location using Super-PUMAs, which are comprised of several smaller PUMAs.

<sup>5</sup> Income reported in the 2000 Census was obviously received in 1999.

<b>Public Assistance</b>	Includes general assistance and Temporary Assistance to Needy Families (TANF). Separate payments received for hospital or other medical care (vendor payments) are excluded. This does not include Supplemental Security - Income (SSI).
<b>Retirement</b>	Includes: (1) retirement pensions and survivor benefits from a former employer; labor union; or federal, state, or local government; and the U.S. military; (2) income from workers' compensation; disability income from companies or unions; federal, state, or local government; and the U.S. military; (3) periodic receipts from annuities and insurance; and (4) regular income from IRA and KEOGH plans. This does not include social security income.
<b>Other</b>	Includes: Unemployment compensation, Veterans' Administration (VA) payments, alimony and child support, contributions received periodically from people not living in the household, military family allotments, and other kinds of periodic income other than earnings.

Source: 2000 Census of Population and Housing, Public Use Microdata Sample, United States: Technical Documentation, 2003.

Table 2 compares the sources of household income in Washington in 1990 and 2000<sup>6</sup>. The data confirm that the percentage of total household income from wages and self-employment decreased over the 10 year period, at the same time, the percentage of income from interest, dividends and rent grew (**Table 2**). Further, the relative share of social security and public assistance income decreased, whereas percentage from retirement income grew. These changes in the relative percentage of alternative source are consistent with the size distribution of income household income in Washington becoming more unequal. As labor, social security, and public assistance all decreased in relative importance, property type income in the form of interest dividends and rents as well as private pension income increased in relative importance.

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<sup>6</sup> Changes were made to account for 2 incompatibilities: 1. The 1990 data details proprietors' income and farm income, whereas 2000 data combines both categories as self-employment income; 2. The 2000 data details supplemental security and public assistance income, whereas the 1990 data had only public assistance data; a combination of the two. Supplemental security and Public assistance income sources and household types were combined into a single category (Public Assistance) in the 2000 data.

**TABLE 2: A comparison of sources household income for the State of Washington: by source as a percentage, 1990 and 2000**

<b>Income Source</b>	<b>1990</b>	<b>2000</b>	<b>Change</b>
Wages or Salary	74.1%	73.6%	-0.5%
Self-employment	7.0%	5.9%	-1.1%
Interest, dividends, or rents	6.8%	7.7%	0.9%
Social Security	5.3%	4.8%	-0.6%
Public Assistance	0.9%	0.7%	-0.2%
Retirement	4.6%	5.3%	0.7%
Other	1.3%	2.1%	0.8%

Source: 1990 and 2000 US Census PUMS data

### **TYPES OF HOUSEHOLDS CLASSIFIED BY PRIMARY SOURCE OF INCOME**

To better understand the relative importance of alternative sources of income to Washington households each household was identified according to the income source which provided the largest contribution to household income. For example, a household whose largest source of income comes from salary and wages was identified as a Labor household. Similarly, households whose largest source of income was interest, dividends or net rentals were identified as Capital households. In all, nine household types are designated (**Table 3**). The Mixed household represents households who have 2 or more sources of income of the same magnitude responsible for the largest contributions to household income. For example, a household with total income of \$70k that reports \$35k from retirement income and \$35k from other income is classified as a Mixed household. The likelihood that a large number of households actually have 2 or more sources of income of identical amounts is small. However, because the Census reports income after rounding to the nearest hundred, identical levels of income become more likely.

**TABLE 3: Household types designated by primary source of income**

Household Type	Primary Income Source
Labor	Wages or Salary
Self-Emp	Self-employment Income
Capital	Interest, dividends or net rental
Social Security (SS)	Social Security
Supplemental (Supp)	Supplemental Security Income
Public Assistance (PA)	Public Assistance
Retired	Retirement
Other	Other income
Mixed	Combination of 2 or more equal sources of income

Source: Author's Procedure

Basically, eight different sources of income are identified for each of the nine household types (**Appendix A**)<sup>7</sup>. By far the majority of Washington households (71.0%) received most of their income from wages (Table 4). The next largest group of households (9.6%) depends on social security for most of their income. Retired households (5.6%) were the third largest group while self-employed households were the fourth largest (4.2% of households). The only other group with relatively large numbers was the capitalist group. Capitalist households made up 4.1% of households in Washington and had the highest average household income (Table 5).

Table 5 shows the relative importance of alternative sources of income for a given type of household. For example, labor type households are very dependent on wages and receive relatively little income from other sources (Table 5). This contrasts with Self-employed and Capitalist households who had a much broader mix of sources of income. For example, Self-employed and Capitalist households received 14.1 and 11.3 percent of their total income from wages respectively (Table 5). In addition, Capitalist households received important shares of their total income from social security and Retirement sources. The other group which shows broad diversification in sources of income is the Retired group. This group received considerable income from Wages,

<sup>7</sup> An additional household is identified as *Rest*. This represents households who only report negative income to the Census. We account for these households but do not incorporate them in any analyses.

Social Security and Interest so that on a per household level they have a fairly high average household income (\$51,277)

**TABLE 4: Household and population totals by household type**

<b>Household type</b>	<b>Households</b>	<b>%</b>	<b>Persons</b>	<b>%</b>
Labor	1,612,305	71.0%	4,567,691	77.5%
Self	96,365	4.2%	267,353	4.5%
Capital	93,410	4.1%	174,013	3.0%
SS	218,522	9.6%	359,928	6.1%
Supp	26,905	1.2%	50,590	0.9%
PA	16,441	0.7%	56,741	1.0%
Retired	127,007	5.6%	230,543	3.9%
Other	51,443	2.3%	109,555	1.9%
Mixed	6,585	0.3%	11,391	0.2%
Rest	22,365	1.0%	64,237	1.1%
<b>Total</b>	<b>2,271,348</b>	<b>100%</b>	<b>5,892,042</b>	<b>100%</b>

Source: 2000 US Census PUMS data.



**TABLE 5: Per household income by household type**

Household Types	Source of Income								Household Total
	Wages	Self-emp	Interest	S.S.	Supp	PA	Retire	Other	
Labor	<b>\$ 60,024</b>	\$ 1,104	\$ 1,701	\$ 637	\$ 115	\$ 98	\$ 922	\$ 720	<b>\$ 65,319</b>
Self	\$ 11,058	<b>\$ 61,587</b>	\$ 2,810	\$ 1,022	\$ 112	\$ 94	\$ 988	\$ 548	<b>\$ 78,220</b>
Capital	\$ 10,868	\$ 1,722	<b>\$ 67,486</b>	\$ 8,506	\$ 174	\$ 37	\$ 6,111	\$ 1,278	<b>\$ 96,183</b>
SS	\$ 998	\$ 167	\$ 2,050	<b>\$ 14,081</b>	\$ 279	\$ 76	\$ 3,220	\$ 606	<b>\$ 21,477</b>
Supp	\$ 701	\$ 60	\$ 143	\$ 976	<b>\$ 8,929</b>	\$ 496	\$ 394	\$ 345	<b>\$ 12,043</b>
PA	\$ 1,253	\$ 53	\$ 95	\$ 755	\$ 567	<b>\$ 8,668</b>	\$ 195	\$ 496	<b>\$ 12,083</b>
Retired	\$ 3,921	\$ 564	\$ 4,002	\$ 8,889	\$ 270	\$ 64	<b>\$ 32,469</b>	\$ 1,099	<b>\$ 51,277</b>
Other	\$ 3,725	\$ 318	\$ 2,140	\$ 4,802	\$ 466	\$ 215	\$ 2,607	<b>\$ 24,037</b>	<b>\$ 38,310</b>
Mixed	\$ 8,257	\$ 4,883	\$ 4,911	\$ 6,262	\$ 684	\$ 363	\$ 6,774	\$ 2,675	<b>\$ 34,810</b>

Source: 2000 US Census PUMS data.

Three types of Washington households emerged as having low average household income. Social Security households obtained only 4.6 percent of their total income from wages, but did receive some payment from Interest and Retirement sources to pull their average household income up to \$21,477. Far lower were the average incomes of SSI households and Public Assistance households with annual averages of \$12,043 and \$12,083 respectively (Table 5). Together these households make up roughly two percent of the household total. SSI households have the lowest number of persons at just over 50 thousand. Interestingly, the SSI population consists of only 27 thousand households, whereas the larger Public Assistance population, over 56 thousand individuals, consists of just over 16 thousand households.

The PUMS data provided by Census reflects levels of income *reported* by households. PUMS salary and wage estimates are compared with estimates from two other sources: IMPLAN and Bureaus of Economic Analysis (BEA)<sup>8</sup> to provide a comparison of the PUMS wage data with other sources. IMPLAN provides the largest estimate of salary and wages at \$114 billion, roughly 15 percent larger than PUMS (Table 6). This difference can be partially attributed to the fact that the IMPLAN data is for 2000 whereas the PUMS data represents 1999. As shown, IMPLAN compares relatively well with BEA, 2000 data. The Census PUMS data compares well to BEA, 1999 data, an encouraging result. The distribution of wages to Farm and Non-Farm households is fairly comparable as well.

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<sup>8</sup> IMPLAN data were purchased from Minnesota IMPLAN Group, Inc. ([www.implan.com](http://www.implan.com)). BEA data comes from BEA's Annual State Personal Income, Table SA07, taken from: [www.bea.gov/bea/regional/spi/](http://www.bea.gov/bea/regional/spi/)

**TABLE 6: Comparison of PUMS Wage data to other sources**

<b>SOURCE</b>	<b>Salary and Wages</b>	
IMPLAN, 2000	<b>\$ 114,731,859,900</b>	
Census PUMS, 2000*	<b>\$ 99,804,318,368</b>	
Farm	\$ 605,242,320	<b>0.6%</b>
Non-Farm	\$ ,199,076,048	<b>99.4%</b>
BEA, 1999	<b>\$ 103,759,686,000</b>	
Farm	\$ 982,739,000	<b>0.9%</b>
Non-Farm	\$ 102,776,947,000	<b>99.1%</b>
BEA, 2000	<b>\$ 110,001,468,000</b>	
Farm	\$ 1,004,426,000	0.91%
Non-Farm	\$ 108,997,042,000	99.09%

2000 PUMS data reports income earned in 1999

Sources: Minnesota IMPLAN Group; Bureau of Economic Analysis; 2000 US Census PUMS data

### **CHANGES IN SOURCES OF HOUSEHOLD INCOME BETWEEN 1990 AND 2000.**

Estimates of sources of household income in Washington were generated from the 1990 PUMS data (Yusuf 2000) providing an opportunity for comparison with the 2000 PUMS data (**Table 7**). In 1990 labor households received a larger share of income from wages (column 1), but a smaller percentage of income come from capital, self-employment and public assistance than in 2000; i.e. they were more reliant on wages in 2000 than in 1990. Self-employment households (column 2) showed a similar increase in income from wages and a decrease in income from self-employment and capital. Capital households (column 3), also show an increase in income from wages; however, the share of income from capital also increased by nearly 7 percent (from 63.9 to 70.2 percent). Clearly capitalist households became more dependent on capital income between 1990 and 2000.

**TABLE 7: Percentage of household income from different sources<sup>9</sup>**

Income Source	Household Type								
	Labor	Self-emp	Capital	SS	PA	Retire	Other	Mixed	Total
<b>1990</b>									
Labor	91.5%	13.3%	8.7%	5.1%	10.2%	7.7%	15.0%	na	74.1%
Self-emp	2.0%	79.3%	1.6%	1.0%	1.1%	1.0%	0.9%	na	7.0%
Capital	2.8%	4.4%	63.9%	10.8%	0.7%	11.2%	3.5%	na	6.8%
SS	1.0%	1.1%	15.7%	67.2%	4.5%	17.3%	9.3%	na	5.3%
PA	0.4%	0.2%	0.4%	1.1%	79.1%	0.7%	2.9%	na	0.9%
Ret	1.4%	1.3%	8.7%	13.6%	2.5%	61.1%	3.3%	na	4.6%
Other	0.9%	0.4%	0.9%	1.3%	1.9%	0.9%	65.2%	na	1.3%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>na</b>	<b>100%</b>
<b>2000</b>									
Labor	91.9%	14.1%	11.3%	4.6%	7.6%	7.6%	9.7%	23.7%	73.6%
Self-emp	1.7%	78.7%	1.8%	0.8%	0.5%	1.1%	0.8%	14.0%	5.9%
Capital	2.6%	3.6%	70.2%	9.5%	1.0%	7.8%	5.6%	14.1%	7.7%
SS	1.0%	1.3%	8.8%	65.6%	7.4%	17.3%	12.5%	18.0%	4.8%
PA	0.3%	0.3%	0.2%	1.7%	77.6%	0.7%	1.8%	3.0%	0.7%
Ret	1.4%	1.3%	6.4%	15.0%	2.6%	63.3%	6.8%	19.5%	5.3%
Other	1.1%	0.7%	1.3%	2.8%	3.3%	2.1%	62.7%	7.7%	2.1%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Source: 1990 and 2000 US Census PUMS data

Another notable change is with Public Assistance households (column 5). The percentage of public assistance income declined from 79.1 percent to 77.6 percent of total household income suggesting that cash assistance payments have declined for those households.

This apparently was made up by increases in income from social security.

The distribution of the different sources of income to households reveals changes as well (**Table 8**). The share of wage income going to Labor households decreased whereas the share of wage income to Capital households increased. Interestingly, even though the percentage of Labor household income from wages increased (as previously mentioned in Table 7) the percentage of wage payments going to Labor households declined.

<sup>9</sup> In addition to the changes referenced in footnote 6, the 1990 data did not contain information on Mixed households.

**TABLE 8: Percentage distribution of sources of income to household types**

Income Source	Household Type								
	Labor	Self-emp	Capital	SS	PA	Retire	Other	Mixed	Totals
<b>1999</b>									
Labor	97.3%	1.2%	0.6%	0.3%	0.1%	0.4%	0.1%	na	100%
Self-emp	22.7%	74.8%	1.2%	0.6%	0.1%	0.5%	0.1%	na	100%
Capital	32.9%	4.3%	49.3%	6.9%	0.1%	6.2%	0.3%	na	100%
SS	15.1%	1.4%	15.4%	54.3%	0.5%	12.2%	1.2%	na	100%
PA	31.5%	1.6%	2.6%	5.3%	53.7%	3.1%	2.1%	na	100%
Ret	24.5%	1.8%	9.9%	12.9%	0.3%	50.1%	0.5%	na	100%
Other	53.5%	2.1%	3.7%	4.1%	0.9%	2.6%	33.0%	na	100%
Total	78.8%	6.6%	5.2%	4.3%	0.6%	3.8%	0.7%	na	100%
<b>2000</b>									
Labor	96.9%	1.1%	1.0%	0.2%	0.0%	0.5%	0.2%	0.1%	100%
Self-emp	22.2%	73.9%	2.0%	0.5%	0.0%	0.9%	0.2%	0.4%	100%
Capital	26.3%	2.6%	60.5%	4.3%	0.1%	4.9%	1.1%	0.3%	100%
SS	15.9%	1.5%	12.3%	47.7%	0.6%	17.5%	3.8%	0.6%	100%
PA	36.1%	2.1%	2.1%	8.2%	42.7%	4.5%	3.7%	0.7%	100%
Ret	20.7%	1.3%	8.0%	9.8%	0.2%	57.5%	1.9%	0.6%	100%
Other	40.4%	1.8%	4.2%	4.6%	0.6%	4.9%	43.0%	0.6%	100%
Total	77.6%	5.6%	6.6%	3.5%	0.4%	4.8%	1.5%	0.2%	100%

Source: 1990 and 2000 US Census PUMS data

The concentration of capital payments to Capital households increased by over 11 percent (from 49.3 to 60.5 percent), while at the same time, the proportion of capital payments to Labor households diminished by almost 7 percent (from 32.9 to 26.3 percent). The concentration of social security (public assistance) payments to SS (PA) households decreased with a larger percent of that income being allocated to labor and retirement type households. The concentration of retirement income increased as a larger portion of retirement income was distributed to Retired households. Also the share of

retirement income as a share of total household income increased. This was expected as a larger portion of workers reached retirement age and claimed pension income.

## **CONCLUSIONS**

These results offer insight into the relative importance of alternative sources of household income and the distribution of those different sources of income across types of Washington households. Wages and salaries made up the vast majority (74 percent) of Washington household income (Appendix A). Next in importance was property type income (8 percent), and self employment income (6 percent). Retirement (5 percent) and social security (5 percent) were of roughly equal importance. Public assistance payments a source of major political interest and policy (Welfare) reform in the 1990's consisted of only 0.3 percent of Washington household income.

Labor type households account for 71 percent of Washington households and 78 percent of the population. Labor households are very dependent on a single source of income, namely labor income. Roughly 92 percent of Labor household income came from wages and salary. This is in contrast to other household types. For example, Retirement households receive only 63 percent of their total income from retirement and get the rest from a variety of sources such as social security, capital and wages. Other types of households are similarly diversified. As such, roughly 22 percent of Washington's population lives in households that obtain income from a number of different sources. Out of this 22 percent roughly 3 percent of the persons are wealthy getting most of their income from interest dividends and rent and roughly 8 percent are poor obtaining most of their income from social security, supplement social security or public assistance. Five percent of the 22 percent live in households that receive most of their income in the form of self employment income and another 4 percent of persons live in households receiving most of their income from pensions and other private income sources. Both of these last two groups are not poor.

Capital households, who make up only 4 percent of all households in the state, received the majority (60%) of total property type income and gained a larger share of that income from 1990 to 2000. As expected, property type income increased as a percent of total income (it went from 5.2% in 1990 to 6.6% in 2000) However, Capital

households also received a significant share of income in the form of wages, social security, and retirement sources. Their access to retirement and social security suggests that a portion of those households (Capital) are elderly. This is in contrast to the Self-Employed households who also received a significant share of their household income as wages, but not from either social security or retirement sources.

In summary Labor households are very dependent on wages as their main form of income. Capital households are much less dependent on property type income—although they got an increasing share of a growing share (capital income) of total household income. They also received important amounts of wages, self employment income, social security and retirement income.

Welfare reform was successful in reducing the share of Washington total household income coming from this source; from 0.6 percent in 1990 to 0.3 percent in 2000. The percentage of household income from public assistance was reduced for PA households coinciding with the reduction in government public assistance in the 90's. However, this reduction was not replaced by wage and salary income, which also decreased for PA households, but instead by social security income, suggesting that perhaps PA households became more dependent on another social program.

The implications, as suggested in the introduction, are that wealthy households are capturing a larger share of household income, but these results show that at the same time they are relatively well diversified in sources of income. Poorer households, especially those in the Public Assistance or Supplemental Social Security categories, are existing on an average income from all sources of just over \$1000 per month, most of which is from a single public source. Of course the income measures used in this study do not include non-monetary forms of income such as food stamps, housing assistance, the Earned Income Tax Credit, Medicaid, and other things such as school lunches. That is a weakness of the Census Bureau's data.

There are many possibilities for expanding the humble beginnings outlined above. First, compiling similar tables for more states would offer an interesting spatial comparison. This could provide evidence of possible differences in sources of household income by region or more drastic shifts in income distribution according to regional differences. Adding additional time periods may also be beneficial, for example, previous

Census data sets or even yearly American Community Survey PUMS data. Finally, using more of the detail in PUMS data to hypothesize as to why and how income distribution changes over time would be ideal.

## **REFERENCES**

Bernstein, J. Mishel, L. (1997) *Wage Inequality: Has wage inequality stopped growing?* Monthly Labor Review.

Bernstein, J. Boushey, H. McNichol, E. Zahradnik, R. (2002). *Pulling Apart: A state-by-state analysis of income trends*. Center on Budget and Policy Priorities. Economic Policy Institute.

US Department of Census, *Income Inequality (1947-1998)*. Created August 3, 2000, revised May 13, 2004. Taken from:  
[www.census.gov/hhes/income/incineq/p60204/p60204txt.html](http://www.census.gov/hhes/income/incineq/p60204/p60204txt.html) on August 1, 2006.

Yusuf, F. (2000). *Dissertation: Estimating the effects of changes in agricultural productivity on Washington households*. Washington State University, Department of Agricultural Economics.



**Appendix A: Total household income from different sources and percentage of household income from different sources by household type**

Source of Income									
Household Type	Wages	Self-emp	Interest	S.S.	Supp	PA	Retire	Other	Household Total
1999									
Labor	\$ 96,776,468,056	\$ 1,779,409,754	\$ 2,742,073,164	\$ 1,026,434,870	\$ 185,742,000	\$ 157,427,418	\$ 1,485,948,442	\$ 1,160,686,980	\$ 105,314,190,684
Self	\$ 1,065,571,410	\$ 5,934,863,080	\$ 270,777,720	\$ 98,510,530	\$ 10,748,220	\$ 9,098,090	\$ 95,234,880	\$ 52,821,118	\$ 7,537,625,048
Capital	\$ 1,015,221,656	\$ 160,898,614	\$ 6,303,888,420	\$ 794,546,148	\$ 16,261,200	\$ 3,409,960	\$ 570,839,742	\$ 119,397,296	\$ 8,984,463,036
SS	\$ 218,016,366	\$ 36,529,562	\$ 447,981,142	\$ 3,077,000,910	\$ 60,950,500	\$ 16,620,650	\$ 703,738,040	\$ 132,433,110	\$ 4,693,270,280
Supp	\$ 18,869,750	\$ 1,615,300	\$ 3,835,524	\$ 26,260,906	\$ 240,222,760	\$ 13,335,268	\$ 10,599,470	\$ 9,287,960	\$ 324,026,938
PA	\$ 20,600,490	\$ 876,720	\$ 1,569,814	\$ 12,417,250	\$ 9,316,900	\$ 142,516,574	\$ 3,205,400	\$ 8,158,260	\$ 198,661,408
Retired	\$ 497,959,560	\$ 71,694,670	\$ 508,248,770	\$ 1,128,909,850	\$ 34,342,400	\$ 8,106,240	\$ 4,123,737,380	\$ 139,574,558	\$ 6,512,573,428
Other	\$ 191,611,080	\$ 16,345,410	\$ 110,104,046	\$ 247,031,790	\$ 23,964,600	\$ 11,055,840	\$ 134,114,690	\$ 1,236,545,482	\$ 1,970,772,938
Mixed	\$ 54,371,160	\$ 32,152,300	\$ 32,338,784	\$ 41,234,440	\$ 4,506,700	\$ 2,393,160	\$ 44,609,800	\$ 17,617,314	\$ 229,223,658
Rest	\$ -	\$ (4,532,060)	\$ (1,181,990)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (5,714,050)
<b>Source Total</b>	<b>\$ 99,858,689,528</b>	<b>\$ 8,029,853,350</b>	<b>\$ 10,419,635,394</b>	<b>\$ 6,452,346,694</b>	<b>\$ 586,055,280</b>	<b>\$ 363,963,200</b>	<b>\$ 7,172,027,844</b>	<b>\$ 2,876,522,078</b>	<b>\$ 135,759,093,368</b>
1999									
Labor	91.9%	1.7%	2.6%	1.0%	0.2%	0.1%	1.4%	1.1%	100%
Self	14.1%	78.7%	3.6%	1.3%	0.1%	0.1%	1.3%	0.7%	100%
Capital	11.3%	1.8%	70.2%	8.8%	0.2%	0.0%	6.4%	1.3%	100%
SS	4.6%	0.8%	9.5%	65.6%	1.3%	0.4%	15.0%	2.8%	100%
Supp	5.8%	0.5%	1.2%	8.1%	74.1%	4.1%	3.3%	2.9%	100%
PA	10.4%	0.4%	0.8%	6.3%	4.7%	71.7%	1.6%	4.1%	100%
Retired	7.6%	1.1%	7.8%	17.3%	0.5%	0.1%	63.3%	2.1%	100%
Other	9.7%	0.8%	5.6%	12.5%	1.2%	0.6%	6.8%	62.7%	100%
Mixed	23.7%	14.0%	14.1%	18.0%	2.0%	1.0%	19.5%	7.7%	100%
<b>Source Total</b>	<b>73.6%</b>	<b>5.9%</b>	<b>7.7%</b>	<b>4.8%</b>	<b>0.4%</b>	<b>0.3%</b>	<b>5.3%</b>	<b>2.1%</b>	<b>100%</b>