

# Appendix A. Summary and Background Tables

**Table A1. Consumer Expenditure Survey of Housing and Transportation Costs by Region: 1990 - 2000**

Metro Areas (PMSA, CMSA, MSA do not match for all areas 1990-2000)	1990-91 Consumer Expenditures on H & T					2000 Consumer Expenditure on H & T				Change 90-2000 Consumer Expend Survey H+T		
	IBT 1990- 1991					2000				Change in H 90-	Change in T 90-	Change in H+T 90-
	IBT 1990-91	Inflation adjusted	1990 H	1990 T	1990 H+T	IBT 2000	H	2000 T	2000 H+T	2000	2000	2000
Anchorage, AK MSA	\$50,560	\$67,750	27%	15%	42%	\$54,506	32%	18%	50%	5.1%	3.3%	8.4%
Atlanta, GA MSA	\$38,535	\$51,637	28%	15%	43%	\$53,936	37%	17%	55%	9.4%	2.2%	11.6%
Baltimore, MD MSA	\$40,367	\$54,092	27%	14%	41%	\$50,813	34%	17%	51%	7.0%	3.3%	10.3%
Boston-Lawrence-Salem, MA-NH CMSA	\$42,042	\$56,336	27%	11%	38%	\$49,557	36%	17%	53%	9.4%	5.6%	15.1%
Chicago-Gary-Lake County, IL-IN-WI CMSA	\$39,230	\$52,568	27%	13%	39%	\$51,332	36%	17%	53%	9.1%	4.8%	13.9%
Cincinnati-Hamilton, OH-KY-IN CMSA	\$33,185	\$44,468	25%	15%	39%	\$45,737	32%	20%	52%	7.3%	5.1%	12.4%
Cleveland-Akron-Lorain, OH CMSA	\$30,322	\$40,631	26%	15%	41%	\$48,578	33%	21%	54%	7.7%	5.7%	13.4%
Dallas-Fort Worth, TX CMSA	\$38,804	\$51,997	26%	17%	43%	\$56,046	31%	21%	52%	5.0%	4.5%	9.4%
Denver-Boulder, CO CMSA	n/a	n/a	n/a	n/a	n/a	\$55,168	36%	19%	55%	n/a	n/a	n/a
Detroit-Ann Arbor, MI CMSA	\$35,702	\$47,841	27%	16%	43%	\$49,041	33%	19%	52%	6.0%	2.6%	8.5%
Honolulu, HI MSA	\$41,499	\$55,609	27%	15%	42%	\$51,906	32%	15%	48%	5.3%	0.6%	5.9%
Houston-Galveston-Brazoria, TX CMSA	\$34,539	\$46,282	26%	19%	46%	\$54,733	31%	20%	51%	4.4%	0.7%	5.1%
Kansas City, MO-KS MSA	\$37,280	\$49,955	23%	13%	36%	\$51,298	32%	18%	50%	8.4%	5.9%	14.3%
Los Angeles-Anaheim-Riverside, CA CMSA	\$39,356	\$52,737	33%	14%	47%	\$52,776	38%	18%	56%	4.9%	4.3%	9.1%
Miami-Fort Lauderdale, FL CMSA	\$33,703	\$45,162	30%	17%	47%	\$46,034	37%	18%	55%	6.7%	1.1%	7.9%
Milwaukee-Racine, WI CMSA	\$31,440	\$42,130	29%	15%	44%	\$43,161	34%	17%	50%	4.6%	1.9%	6.5%
Minneapolis-St. Paul, MN-WI MSA	\$38,571	\$51,685	27%	15%	42%	\$60,574	31%	18%	49%	3.5%	3.2%	6.7%
New York-Northern New Jersey-Long Island, NY-NJ-CT CMSA	\$41,448	\$55,540	29%	12%	41%	\$57,063	37%	15%	52%	7.9%	3.3%	11.2%
Philadelphia-Wilmington-Trenton, PA-NJ-DE-MD CMSA	\$41,450	\$55,543	25%	12%	37%	\$49,932	36%	17%	53%	10.6%	5.4%	16.1%
Phoenix, AZ MSA	n/a	n/a	n/a	n/a	n/a	\$47,492	33%	22%	54%	n/a	n/a	n/a
Pittsburgh-Beaver Valley, PA CMSA	\$36,499	\$48,909	25%	13%	38%	\$41,371	29%	20%	49%	4.5%	7.0%	11.5%
Portland, OR PMSA, Portland-Vancouver, OR-WA CMSA	\$36,339	\$48,694	25%	15%	39%	\$49,035	35%	16%	51%	10.5%	1.7%	12.2%
San Diego, CA MSA	\$36,952	\$49,516	31%	16%	47%	\$52,898	38%	21%	58%	6.7%	4.4%	11.1%
San Francisco-Oakland-San Jose, CA CMSA	\$42,215	\$56,568	33%	14%	47%	\$64,818	37%	17%	54%	4.2%	2.4%	6.7%
Seattle-Tacoma, WA CMSA	\$39,921	\$53,494	29%	14%	43%	\$51,292	34%	20%	53%	4.6%	5.6%	10.3%
St. Louis, MO-IL MSA	\$35,814	\$47,991	24%	13%	37%	\$45,251	29%	19%	48%	5.2%	5.6%	10.8%
Tampa-St. Petersburg-Clearwater, FL MSA	n/a	n/a	n/a	n/a	n/a	\$45,116	32%	25%	56%			
Washington, DC-MD-VA MSA	\$46,275	\$62,009	27%	13%	40%	\$69,331	37%	16%	53%	10.7%	2.5%	13.2%
<b>Total</b>	<b>\$ 38,482</b>	<b>\$51,566</b>	<b>27%</b>	<b>14%</b>	<b>42%</b>	<b>\$51,743</b>	<b>34%</b>	<b>18%</b>	<b>52%</b>	<b>6.7%</b>	<b>4.1%</b>	<b>10.8%</b>

The Denver, Phoenix, and Tampa regions were not included in the survey until 2000

**Table A2. Growth in Area Median Income 1990 to 2000**  
**(Sorted by Change in Income 1990 to 2000)**

<b>MSA</b>	<b>1990 Median Income</b>	<b>1990 Median Adjusted</b>	<b>2000 Median Income</b>	<b>Change 1990- 2000</b>
Los Angeles-Anaheim-Riverside, CA CMSA	\$36,711	\$49,193	\$45,903	-7%
Anchorage, AK MSA	\$43,946	\$58,888	\$55,546	-6%
Honolulu, HI MSA	\$40,581	\$54,379	\$51,914	-5%
Boston-Lawrence-Salem, MA-NH CMSA	\$40,666	\$54,492	\$52,792	-3%
New York-Northern New Jersey-Long Island, NY-NJ-CT CMSA	\$38,445	\$51,516	\$50,795	-1%
Washington, DC-MD-VA MSA	\$46,884	\$62,825	\$62,216	-1%
Philadelphia-Wilmington-Trenton, PA-NJ-DE-MD CMSA	\$35,797	\$47,968	\$47,528	-1%
San Diego, CA MSA	\$35,022	\$46,929	\$47,067	0%
Miami-Fort Lauderdale, FL CMSA	\$28,503	\$38,194	\$38,632	1%
Baltimore, MD MSA	\$36,550	\$48,977	\$49,938	2%
Cleveland-Akron-Lorain, OH CMSA	\$30,332	\$40,645	\$42,215	4%
St. Louis, MO-IL MSA	\$31,774	\$42,577	\$44,437	4%
Pittsburgh-Beaver Valley, PA CMSA	\$26,501	\$35,511	\$37,467	6%
Detroit-Ann Arbor, MI CMSA	\$34,729	\$46,537	\$49,160	6%
Chicago-Gary-Lake County, IL-IN-WI CMSA	\$35,918	\$48,130	\$51,046	6%
Houston-Galveston-Brazoria, TX CMSA	\$31,488	\$42,194	\$44,761	6%
Milwaukee-Racine, WI CMSA	\$32,359	\$43,361	\$46,132	6%
Tampa-St. Petersburg-Clearwater, FL MSA	\$26,036	\$34,888	\$37,406	7%
Atlanta, GA MSA	\$36,051	\$48,308	\$51,948	8%
Dallas-Fort Worth, TX CMSA	\$32,825	\$43,986	\$47,418	8%
Seattle-Tacoma, WA CMSA	\$35,047	\$46,963	\$50,733	8%
Cincinnati-Hamilton, OH-KY-IN CMSA	\$30,977	\$41,509	\$44,914	8%
Phoenix, AZ MSA	\$30,797	\$41,268	\$44,752	8%
Kansas City, MO-KS MSA	\$31,613	\$42,361	\$46,193	9%
Minneapolis-St. Paul, MN-WI MSA	\$36,565	\$48,997	\$54,304	11%
Portland, OR PMSA, Portland-Vancouver, OR-WA CMSA	\$30,930	\$41,446	\$46,090	11%
San Francisco-Oakland-San Jose, CA CMSA	\$41,459	\$55,555	\$62,024	12%
Denver-Boulder, CO CMSA	\$33,126	\$44,389	\$51,088	15%
<i>Average</i>	\$34,701	\$46,500	\$48,372	4%

**Table A3. 1999 Household Income by Region (2000 Census, 5% PUMS)**

<b>MSA 2000</b>	<b>30% AMI</b>	<b>50% AMI</b>	<b>80% AMI</b>	<b>100% AMI</b>	<b>120% AMI</b>	<b>Total HHS*</b>	<b>% of HHS &gt;30% to 50% AMI</b>	<b>% of HHS &gt;50 to 80% AMI</b>	<b>No. of HHS &gt;30 to 80% AMI</b>
Anchorage, AK MSA	\$16,664	\$27,773	\$44,437	\$55,546	\$66,655	94,479	11%	17%	26,063
Atlanta, GA MSA	\$15,584	\$25,974	\$41,558	\$51,948	\$62,338	1,460,540	10%	18%	405,034
Baltimore PMSA	\$14,981	\$24,969	\$39,950	\$49,938	\$59,926	959,047	10%	16%	254,932
Boston-Worcester-Lawrence, MA-NH-ME-CT CMSA	\$15,838	\$26,396	\$42,234	\$52,792	\$63,350	2,011,887	10%	15%	516,228
Chicago-Gary-Kenosha, IL-IN-WI CMSA	\$15,314	\$25,523	\$40,837	\$51,046	\$61,255	3,268,555	10%	16%	871,343
Cincinnati-Hamilton, OH-KY-IN CMSA	\$13,474	\$22,457	\$35,931	\$44,914	\$53,897	706,164	11%	17%	193,350
Cleveland-Akron, OH CMSA	\$12,665	\$21,108	\$33,772	\$42,215	\$50,658	1,166,919	11%	16%	314,840
Dallas-Fort Worth, TX CMSA	\$14,225	\$23,709	\$37,934	\$47,418	\$56,902	1,835,857	10%	18%	511,085
Denver-Boulder-Greeley, CO CMSA	\$15,326	\$25,544	\$40,870	\$51,088	\$61,306	964,501	10%	18%	275,468
Detroit-Ann Arbor-Flint, MI CMSA	\$14,748	\$24,580	\$39,328	\$49,160	\$58,992	1,966,826	11%	16%	527,437
Honolulu, HI MSA	\$15,574	\$25,957	\$41,531	\$51,914	\$62,297	287,076	9%	16%	70,945
Houston-Galveston-Brazoria, TX CMSA	\$13,428	\$22,381	\$35,809	\$44,761	\$53,713	1,638,172	10%	17%	444,120
Kansas City, MO-KS MSA	\$13,858	\$23,097	\$36,954	\$46,193	\$55,432	662,131	10%	17%	182,543
Los Angeles-Riverside-Orange County, CA CMSA	\$13,771	\$22,952	\$36,722	\$45,903	\$55,084	5,348,414	11%	16%	1,446,302
Miami-Fort Lauderdale, FL CMSA	\$11,590	\$19,316	\$30,906	\$38,632	\$46,358	1,423,143	11%	16%	379,876
Milwaukee-Racine, WI CMSA	\$13,840	\$23,066	\$36,906	\$46,132	\$55,358	657,490	11%	17%	182,193
Minneapolis-St. Paul, MN-WI MSA	\$16,291	\$27,152	\$43,443	\$54,304	\$65,165	1,096,388	11%	18%	313,115
New York-N. New Jersey-Long Island, NY-NJ-CT- PA CMSA	\$15,239	\$25,398	\$40,636	\$50,795	\$60,954	7,680,008	10%	15%	1,924,523
Philadelphia-Wilmington-Atlantic City, PA-NJ-DE- MD CMSA	\$14,258	\$23,764	\$38,022	\$47,528	\$57,034	2,290,899	10%	16%	605,970
Phoenix-Mesa, AZ MSA	\$13,426	\$22,376	\$35,802	\$44,752	\$53,702	1,133,302	10%	17%	313,343
Pittsburgh, PA MSA	\$11,240	\$18,734	\$29,974	\$37,467	\$44,960	934,238	11%	16%	251,164
Portland-Salem, OR-WA CMSA	\$13,827	\$23,045	\$36,872	\$46,090	\$55,308	851,315	10%	18%	236,913
San Diego, CA MSA	\$14,120	\$23,534	\$37,654	\$47,067	\$56,480	1,011,862	10%	17%	273,269
San Francisco-Oakland-San Jose, CA CMSA	\$18,607	\$31,012	\$49,619	\$62,024	\$74,429	993,104	26%	41%	669,037
Seattle-Tacoma-Bremerton, WA CMSA	\$15,220	\$25,367	\$40,586	\$50,733	\$60,880	2,557,400	5%	9%	378,869
St. Louis, MO-IL MSA	\$13,331	\$22,219	\$35,550	\$44,437	\$53,324	1,363,171	8%	12%	274,242
Tampa-St. Petersburg-Clearwater, FL MSA	\$11,222	\$18,703	\$29,925	\$37,406	\$44,887	1,007,811	11%	17%	278,777
Washington, DC PMSA	\$18,665	\$31,108	\$49,773	\$62,216	\$74,659	1,777,086	10%	17%	474,130
<i>Total in 28 Metros (*not in group quarters)</i>						<i>47,147,785</i>			<i>12,595,111</i>

When we defined the costs at the regional level, we compared our housing and transportation costs to the 2000 Consumer Expenditure Survey (CES) to test whether there were similarities between the two measures. To make the comparison we selected the housing and transportation costs from the income bin that was the closest to the region's median income in the CES. We found a significant positive correlation between the two studies housing and transportation expenditures for each metro. The table compares the results from the two studies.

**Table A4**

<b>Comparison of Metro Housing and Transportation Costs</b>							
Metro Area	2000 CES by Median Income of Surveyed HHS			Cost Model by a <b>Comparable Income</b> to the CES Surveyed Income			
	%H	%T	%H&T	Type by Study	%H	%T	%H&T
Anchorage, AK MSA	32%	18%	50%	Med H - Med T	24%	22%	46%
Atlanta, GA MSA	25%	13%	38%	Med H - Med T	22%	24%	46%
Baltimore, MD PMSA	27%	14%	41%	Med H - Med T	23%	21%	45%
Boston, MA CMSA	27%	13%	40%	Med H - Med T	25%	26%	51%
Chicago, IL CMSA	30%	14%	44%	Med H - Med T	22%	21%	43%
Cincinnati, OH CMSA	28%	17%	45%	Low H - High T	21%	27%	48%
Cleveland, OH CMSA	26%	17%	43%	Low H - High T	21%	26%	47%
Dallas, TX CMSA	26%	16%	42%	Low H - High T	20%	23%	43%
Denver, CO CMSA	29%	15%	44%	Med H - Med T	23%	21%	44%
Detroit, MI CMSA	28%	16%	44%	Low H - High T	21%	26%	47%
Honolulu, HI MSA	27%	11%	38%	High H - Low T	25%	19%	43%
Houston, TX CMSA	25%	18%	43%	Low H - High T	19%	23%	42%
Kansas City, MO-KS MSA	22%	15%	38%	Low H - High T	18%	24%	42%
Los Angeles, CA CMSA	31%	15%	46%	High H - Med T	25%	20%	45%
Miami, FL CMSA	32%	16%	48%	High H - Med T	27%	23%	50%
Milwaukee, WI CMSA	31%	16%	47%	Low H - High T	21%	26%	47%
Minneapolis, MN MSA	26%	14%	40%	Med H - Med T	19%	19%	39%
New York, NY CMSA	30%	12%	42%	High H - Low T	25%	18%	43%
Philadelphia, PA CMSA	29%	14%	42%	Med H - Med T	24%	24%	48%
Phoenix, AZ MSA	28%	19%	46%	Med H - Med T	23%	25%	48%
Pittsburgh, PA MSA	25%	15%	41%	Low H - High T	18%	27%	46%
Portland, OR CMSA	30%	16%	46%	Med H - Med T	25%	26%	51%
San Diego, CA MSA	32%	19%	51%	High H - Med T	27%	21%	48%
San Francisco, CA CMSA	30%	15%	45%	High H - Low T	22%	17%	39%
Seattle, WA CMSA	29%	14%	43%	Med H - Med T	18%	22%	40%
St. Louis, MO MSA	26%	18%	43%	Low H - High T	27%	27%	54%
Tampa, FL MSA	25%	17%	42%	Low H - High T	21%	27%	48%
Washington, DC PMSA	24%	11%	36%	High H - Low T	22%	18%	40%

