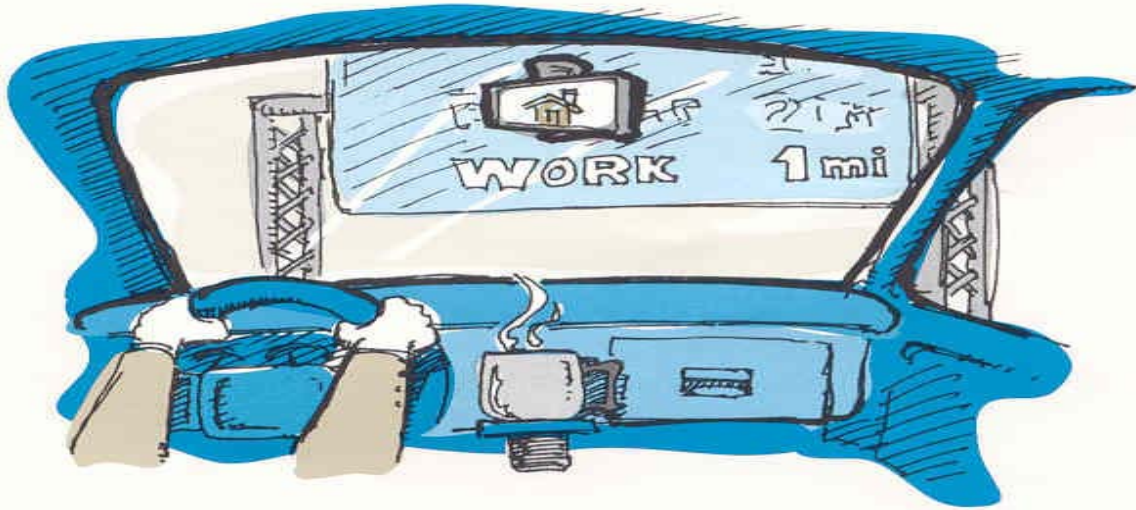


# **WORKFORCE HOUSING BALANCE FOR THE ATLANTA REGIONAL COMMISSION *A SPATIAL DISTRIBUTION ASSESSMENT***



*Figure from "Top Ten State and Local Strategies to Increase Affordable Housing Supply" by Arthur C. Nelson, Housing Facts and Figures, Fannie Mae Foundation, 5(1) 2003.*

**Arthur C. Nelson, Ph.D., FAICP**

**March 25, 2004**

**WORKFORCE HOUSING BALANCE FOR THE  
ATLANTA REGIONAL COMMISSION  
*A SPATIAL DISTRIBUTION ASSESSMENT***

Arthur C. Nelson, Ph.D., FAICP

*“Securing access to decent, affordable housing is fundamental to the American Dream. All Americans want to live in good-quality homes they can afford without sacrificing other basic needs. All Americans want to live in safe communities with ready access to job opportunities, good schools, and amenities. All parents want their children to grow up with positive role models and peer influences nearby. And the overwhelming majority of Americans want to purchase a home as a way to build wealth.”*

The Bipartisan Millennial Housing Commission, 2002

## **OVERVIEW**

To sustain economic development, Atlanta’s communities need a diverse workforce. Workers need safe and decent housing to meet their family’s needs. As metropolitan Atlanta grows and its composition of households change, its workforce and workforce housing needs change.

**Workforce** housing is typically considered housing for households whose income ranges between about 30 to about 150 percent of the region’s median income but there is no consensus on what the range should be. Fairfield County, Connecticut, for example, chooses a lower range, from 30 to 80 percent of the region’s median income while Portland, Oregon chooses a higher range, from 60 to 150 percent of the region’s median income. This report does not establish a range but rather estimates workforce housing needs by the following household income categories:

Less than \$20,000  
\$20,000 to \$34,999  
\$35,000 to \$49,999  
\$50,000 to \$74,999  
\$75,000 to \$99,999  
More than \$100,000

Identifying workforce housing needs is a relatively new idea nationally, one that departs from the traditional planning approach to estimate all housing needs. Emerging information suggests there is a growing disconnect between housing supply and housing that can be afforded by the workforce. A 2001 study conducted by the National Housing Conference's Center for Housing Policy, *Paycheck to Paycheck: Working Families and the Cost of Housing in America*, studied whether households whose principal wage-earner was a janitor, elementary school teacher, police officer, licensed practical nurse, and retail salesperson could afford housing in 60 of the nation's largest housing markets. These occupations were selected because of the important role they play in communities. The report concluded that for the most part households supported by jobs in these occupations could find affordable housing in only five to about 30 percent of all metropolitan areas, and those were among the most economically distressed for lack of growth. The upshot is that in no growing metropolitan area in America can all households supported by jobs in these and many other occupations find affordable housing.

The Center for Housing Policy concludes that:

*The number of working families with "critical housing needs, i.e. those who pay at least 50 percent of their income for housing or are living in severely inadequate housing, has grown from 3 million to 3.7 million between 1997 and 1999. About 8 out of 10 pay more than half their income for housing. The other 20 percent live in severely inadequate housing and a small fraction of working families deal with both of these problems.*

*With regard to rental housing, on a single income Janitors are able to rent a one-bedroom apartment on 30 percent of their income in just 6 out of 60 metropolitan areas, while Retail Sales persons manage to afford a one-bedroom using this traditional standard in only 3 out of 60 localities. For two-bedroom apartments, the situation is even worse. The same problem exists for Teachers, Police Officers, and Licensed Practical Nurses in the highest cost metropolitan areas.*

*On the homeowner side, it was found that households dependent on one Teacher's or one Police Officer's salary alone cannot afford to buy a median priced home in two-thirds of the metropolitan areas. Licensed Practical Nurses are priced out of all but the lowest cost-to-income markets, while Janitors and Retail Salesperson cannot afford to purchase a home across the board.*

This report is but a first step for metropolitan Atlanta. It estimates the workforce housing needs for 2000 and 2030 for the Atlanta Regional Commission area (including Coweta, Forsyth and Paulding counties), all 13 counties, and all Livable Centers (approved as of March 2004). It does not estimate supply of housing, however. It only estimates needs, which may be used as planning targets.

Broadly speaking, ARC’s workforce housing needs from 2000 to 2030 will grow more than 60 percent, as noted in the table below. However, when one considers that metropolitan Atlanta loses about six-tenths of one percent of its housing stock annually, over the 30 period 2000 to 2030 up to 20 percent of the stock in place in 2000 will need to be replaced. *Growth* in workforce housing demand may approach 80 percent of the supply in 2000.

**Table 1.**  
**ARC Workforce Housing Demand, 2000 to 2030**

<b>HH Income</b>	<b>2000</b>	<b>2030</b>	<b>Change</b>	<b>Percent</b>
HH <\$20k	20,054	38,591	18,537	92.4%
HH <\$35k	423,552	695,114	271,562	64.1%
HH <\$50k	326,242	558,257	232,015	71.1%
HH <\$75k	422,744	642,485	219,741	52.0%
HH <\$100k	130,890	210,737	79,846	61.0%
HH >\$100k	101,033	163,718	62,684	62.0%
Total	1,424,515	2,308,901	884,386	62.1%

This report has three major sections. The first presents the methodology and results of the analysis to estimate workforce housing needs. The second summarizes the barriers or impediments to meeting workforce housing needs. The third suggests some policy options that may be considered to overcome workforce housing barriers locally and throughout the region.

## Method and Estimates

There is no consensus on how to estimate workforce housing needs. Three different approaches were considered but rejected. They were based on approaches used in Portland, Oregon, New Jersey, and Florida (for developments of regional impact).

In Portland, workforce housing needs of only the central city were considered and estimates were based on a combination of interviews with locally knowledgeable people and synthesis of numerous housing-related studies conducted over the past decade. The approach is costly. The approach also used the highest income ranges found: 60 to 150 percent of the regional median household income.

The Center for Urban Policy Research at Rutgers estimates total affordable housing needs for every community in New Jersey. Although household income is used the approach does not differentiate by whether the household is a working one. The approach is data-intensive, using large datasets provide by the state and federal government.

The Florida Department of Community Affairs requires all “developments of regional impact” to estimate their impact on affordable housing needs of workers working in the DRIs. The approach is very localized and focuses only on households whose income is 60 percent of the regional median and includes an assessment of housing supply within a 30 minute drive of the DRI where the jobs would be located.

Estimating workforce housing needs depends greatly on data, resources, and above all what is trying to be accomplished. For this analysis, data were limited to ARC projections to 2030 (issued in preliminary form in February 2004) and the Nationwide Household Transportation Survey for metropolitan Atlanta. Resources were modest. Most important, the purposes of the analyses were to gather an initial impression of the order of magnitude of the workforce housing needs for the ARC area, the 13 counties, and the approved Livable Centers. This report goes beyond the initial purposes by distributing the workforce housing needs by income category that ARC uses to estimate current and project future household incomes at the census tracts level by household size.

The **first step** involves estimating the number of workers by household size and household incomes by number of household workers by household size. Table 2 presents this analysis. Significant to the analysis are the number of workers per household by household size and the total share of all households the household size category represents. For three-person households, for example, there are 1.22 workers on average and this household category represents 20.90 percent of all households. Different datasets may yield different figures but we suspect the variation should be negligible.

**Table 2.**  
**Workers and Household Income by Household Size**  
**Metropolitan Atlanta, 2000**

<b>HH Size</b>	<b>Workers</b>	<b>Ratio</b>	<b>Share</b>	<b>Median HH Income</b>
1	0	43.6%		\$15,000
1	1	56.4%		\$47,500
	Workers/HH	0.56	11.57%	\$37,500
2	0	22.3%		\$47,500
2	1	33.0%		\$67,500
2	2	44.6%		\$75,000
	Workers/HH	1.22	32.46%	\$62,500
3	0	1.8%		\$125,000
3	1	29.8%		\$72,500
3	2	50.9%		\$77,500
3	3	17.5%		\$125,000
	Workers/HH	1.84	20.90%	\$77,500
4+	0	0.0%		
4+	1	20.2%		\$62,500
4+	2	54.3%		\$85,000
4+	3	19.1%		\$57,500
4+	4	6.4%		\$60,000
	Workers/HH	2.12	35.07%	\$67,500

Source: Nationwide Household Transportation Survey 2001.

The **second step** involves estimating the distribution of occupational representation by major economic sector and its associated income. It also includes estimating household income by occupational assignment for each major economic sector. The step concludes with a distribution of household income by income category for each major economic sector. This step is necessary because its output is used to distribute ARC's projected employment by major economic sector into household size and income categories to estimate workforce housing needs.

Table 3 reports mean job incomes in 2000 by major occupational group for each of the major economic sectors except service but including government. Occupational income comes from the Bureau of Labor Statistics report *Occupational Forecast 1998-2008* for the year 2000. Since these are national figures, adjusting for Atlanta is done in the last column by increasing national 2000 incomes by 24 percent (or multiplying by 124 percent). Table 4 reports similar information for services but includes major service sectors as well.

Through an iterative process of matching the national distribution of occupations by economic sector by household size, Table 5 was developed. This table is the set of coefficients that is applied to the 2000 and projected 2030 distribution of jobs by major economic sector by income and household size. The table implicitly assumes the national and Atlanta regional distributions of jobs by occupation, income, and household size is reasonably comparable. Resources do not allow verification. Indeed, data for verification may not be available.

**Table 3.**  
**Income by Major Occupational Category by Major Economic Sector**

<b>Major Occupational Category</b>	<b>National Jobs 2008</b>	<b>Income 2000</b>	<b>Job Share</b>	<b>Atlanta @ 124%</b>
<b>Construction</b>				
Professional Specialty Occupations	57	\$54,231	0.87%	\$67,085
Precision Production, Craft, Repair Operators, Fabricators, Laborers	3,701	\$29,829	56.62%	\$36,899
Marketing and Sales Occupations	1,219	\$20,446	18.65%	\$25,292
Administrative Support Occupations	110	\$31,140	1.68%	\$38,521
Agriculture, Forestry, Fishing	528	\$23,520	8.08%	\$29,095
Technicians and Related Support	159	\$14,820	2.43%	\$18,333
Executive, Admin, and Managerial	45	\$27,200	0.69%	\$33,647
Service Occupations	697	\$50,118	10.66%	\$61,998
	20	\$20,360	0.31%	\$25,186
<b>Manufacturing</b>				
Marketing and Sales Occupations	622	\$31,140	3.33%	\$38,521
Executive, Admin, and Managerial	1,687	\$48,931	9.03%	\$60,530
Professional Specialty Occupations	1,438	\$49,064	7.70%	\$60,694
Technicians and Related Support	480	\$27,200	2.57%	\$33,647
Administrative Support Occupations	1,703	\$23,520	9.11%	\$29,095
Service Occupations	207	\$20,360	1.11%	\$25,186
Agriculture, Forestry, Fishing	96	\$14,820	0.51%	\$18,333
Precision Production, Craft, Repair Operators, Fabricators, Laborers	4,030	\$27,073	21.57%	\$33,490
	8,421	\$22,089	45.07%	\$27,325
<b>Trans, Com, Utilities</b>				
Administrative Support Occupations	1,568	\$23,089	20.78%	\$28,562
Operators, Fabricators, Laborers	2,559	\$22,253	33.92%	\$27,528
Executive, Admin, and Managerial	721	\$49,513	9.56%	\$61,249
Agriculture, Forestry, Fishing	9	\$15,760	0.12%	\$19,496
Marketing and Sales Occupations	482	\$28,897	6.39%	\$35,746
Technicians and Related Support	339	\$41,003	4.49%	\$50,722
Precision Production, Craft, Repair	1,162	\$33,805	15.40%	\$41,818
Professional Specialty Occupations	423	\$36,730	5.61%	\$45,436
Service Occupations	281	\$20,360	3.72%	\$25,186

**Table 3 - Continued**  
**Income by Major Occupational Category by Major Economic Sector**

<b>Major Occupational Category</b>	<b>National Jobs 2008</b>	<b>Income 2000</b>	<b>Job Share</b>	<b>Atlanta @ 124%</b>
<b>Wholesale</b>				
Technicians and Related Support	157	\$27,200	2.14%	\$33,647
Administrative Support Occupations	1,870	\$20,862	25.51%	\$25,807
Precision Production, Craft, Repair	714	\$29,822	9.74%	\$36,891
Service Occupations	75	\$20,360	1.02%	\$25,186
Executive, Admin, and Managerial	902	\$48,978	12.31%	\$60,588
Marketing and Sales Occupations	1,673	\$29,174	22.82%	\$36,090
Agriculture, Forestry, Fishing	109	\$15,760	1.49%	\$19,496
Professional Specialty Occupations	259	\$36,730	3.53%	\$45,436
Operators, Fabricators, Laborers	1,571	\$21,284	21.43%	\$26,329
<b>Retail</b>				
Professional Specialty Occupations	370	\$36,730	1.46%	\$45,436
Precision Production, Craft, Repair	1,225	\$27,160	4.83%	\$33,598
Executive, Admin, and Managerial	1,473	\$37,620	5.81%	\$46,538
Administrative Support Occupations	3,047	\$20,168	12.01%	\$24,949
Agriculture, Forestry, Fishing	57	\$15,760	0.22%	\$19,496
Marketing and Sales Occupations	9,183	\$20,896	36.21%	\$25,849
Service Occupations	8,410	\$13,425	33.16%	\$16,607
Technicians and Related Support	182	\$27,200	0.72%	\$33,647
Operators, Fabricators, Laborers	1,416	\$23,833	5.58%	\$29,482
<b>Finance Insurance Real Estate</b>				
Administrative Support Occupations	3,512	\$22,756	41.96%	\$28,150
Technicians and Related Support	161	\$27,200	1.92%	\$33,647
Professional Specialty Occupations	506	\$36,730	6.05%	\$45,436
Marketing and Sales Occupations	1,005	\$37,341	12.01%	\$46,193
Service Occupations	359	\$20,360	4.29%	\$25,186
Agriculture, Forestry, Fishing	96	\$16,953	1.15%	\$20,972
Executive, Admin, and Managerial	2,369	\$44,721	28.31%	\$55,322
Precision Production, Craft, Repair	332	\$27,160	3.97%	\$33,598
Operators, Fabricators, Laborers	29	\$18,930	0.35%	\$23,417

**Table 3 - Continued**  
**Income by Major Occupational Category by Major Economic Sector**

<b>Major Occupational Category</b>	<b>National Jobs 2008</b>	<b>Income 2000</b>	<b>Job Share</b>	<b>Atlanta @ 124%</b>
<b>Government</b>				
Service Occupations	2,591	\$31,517	24.72%	\$38,988
Precision Production, Craft, Repair	976	\$28,906	9.31%	\$35,757
Agriculture, Forestry, Fishing	141	\$15,760	1.35%	\$19,496
Administrative Support Occupations	2,549	\$27,527	24.32%	\$34,051
Executive, Admin, and Managerial	1,364	\$45,723	13.01%	\$56,561
Technicians and Related Support	479	\$31,158	4.57%	\$38,543
Operators, Fabricators, Laborers	472	\$18,930	4.50%	\$23,417
Professional Specialty Occupations	1,910	\$41,775	18.22%	\$51,677

**Table 4**  
**Income by Major Occupational Category by Major Service Sector**

<b>Service Sector</b>	<b>Occupational Category</b>	<b>National Jobs 2008</b>	<b>Income in 2000</b>	<b>Job Share</b>	<b>Atlanta @ 124%</b>
Business Services	Administrative Support Occupations	2,860	\$22,107	5.40%	\$27,347
Business Services	Ag, Forestry, Fishing	62	\$16,940	0.12%	\$20,955
Business Services	Executive, Admin, Man	1,165	\$51,059	2.20%	\$63,161
Business Services	Marketing and Sales	1,141	\$29,155	2.16%	\$36,066
Business Services	Operators, Fabricators	2,061	\$19,897	3.89%	\$24,614
Business Services	Precision Production	664	\$29,069	1.25%	\$35,960
Business Services	Professional Specialty	2,081	\$47,916	3.93%	\$59,273
Business Services	Service Occupations	2,329	\$16,703	4.40%	\$20,662
Business Services	Technicians and Related	783	\$41,343	1.48%	\$51,143
Health Services	Administrative Support	2,399	\$22,641	4.53%	\$28,008
Health Services	Ag, Forestry, Fishing	12	\$15,760	0.02%	\$19,496
Health Services	Executive, Admin, Man	754	\$46,222	1.42%	\$57,178
Health Services	Operators, Fabricators	98	\$18,930	0.19%	\$23,417
Health Services	Precision Production	159	\$27,160	0.30%	\$33,598
Health Services	Professional Specialty	4,071	\$51,370	7.69%	\$63,547
Health Services	Service Occupations	3,904	\$17,766	7.38%	\$21,977
Health Services	Technicians and Related	2,167	\$30,031	4.09%	\$37,150

**Table 4 - Continued**  
**Income by Major Occupational Category by Major Service Sector**

<b>Service Sector</b>	<b>Occupational Category</b>	<b>National</b>		<b>Job Share</b>	<b>Atlanta @ 124%</b>
		<b>Jobs 2008</b>	<b>Income in 2000</b>		
Education	Administrative Support	2,649	\$19,195	5.00%	\$23,745
Education	Ag, Forestry, Fishing	55	\$15,760	0.10%	\$19,496
Education	Executive, Admin, Man	827	\$52,616	1.56%	\$65,088
Education	Marketing and Sales	39	\$31,140	0.07%	\$38,521
Education	Operators, Fabricators	403	\$18,834	0.76%	\$23,298
Education	Precision Production	261	\$27,160	0.49%	\$33,598
Education	Professional Specialty	7,215	\$38,043	13.63%	\$47,060
Education	Service Occupations	1,242	\$16,827	2.35%	\$20,816
Education	Technicians and Related	193	\$27,200	0.36%	\$33,647
Hotel and Lodging	Administrative Support	316	\$19,557	0.60%	\$24,193
Hotel and Lodging	Ag, Forestry, Fishing	26	\$17,034	0.05%	\$21,071
Hotel and Lodging	Executive, Admin, Man	148	\$42,676	0.28%	\$52,792
Hotel and Lodging	Marketing and Sales	91	\$22,703	0.17%	\$28,084
Hotel and Lodging	Operators, Fabricators	65	\$16,505	0.12%	\$20,417
Hotel and Lodging	Precision Production	99	\$24,424	0.19%	\$30,213
Hotel and Lodging	Professional Specialty	44	\$27,535	0.08%	\$34,061
Hotel and Lodging	Service Occupations	1,294	\$14,923	2.44%	\$18,461
Hotel and Lodging	Technicians and Related	4	\$27,200	0.01%	\$33,647
Eng & Mngmnt	Administrative Support	906	\$22,951	1.71%	\$28,392
Eng & Mngmnt	Ag, Forestry, Fishing	17	\$15,760	0.03%	\$19,496
Eng & Mngmnt	Executive, Admin, Man	1,162	\$45,423	2.20%	\$56,190
Eng & Mngmnt	Marketing and Sales	141	\$31,140	0.27%	\$38,521
Eng & Mngmnt	Operators, Fabricators	82	\$18,930	0.15%	\$23,417
Eng & Mngmnt	Precision Production	150	\$27,160	0.28%	\$33,598
Eng & Mngmnt	Professional Specialty	1,163	\$49,469	2.20%	\$61,195
Eng & Mngmnt	Service Occupations	118	\$20,360	0.22%	\$25,186
Eng & Mngmnt	Technicians and Related	520	\$34,195	0.98%	\$42,300
Social Services	Administrative Support	432	\$21,069	0.82%	\$26,064
Social Services	Ag, Forestry, Fishing	14	\$15,760	0.03%	\$19,496
Social Services	Executive, Admin, Man	407	\$48,612	0.77%	\$60,135
Social Services	Marketing and Sales	36	\$31,140	0.07%	\$38,521
Social Services	Operators, Fabricators	130	\$18,930	0.25%	\$23,417
Social Services	Precision Production	66	\$27,160	0.12%	\$33,598
Social Services	Professional Specialty	1,343	\$25,600	2.54%	\$31,668
Social Services	Service Occupations	1,165	\$15,755	2.20%	\$19,490
Social Services	Technicians and Related	86	\$27,091	0.16%	\$33,513

**Table 4 - Continued**  
**Income by Major Occupational Category by Major Service Sector**

<b>Service Sector</b>	<b>Occupational Category</b>	<b>National</b>		<b>Job Share</b>	<b>Atlanta @ 124%</b>
		<b>Jobs 2008</b>	<b>Income in 2000</b>		
Amusement, Rec	Administrative Support	139	\$23,520	0.26%	\$29,095
Amusement, Rec	Ag, Forestry, Fishing	152	\$16,958	0.29%	\$20,978
Amusement, Rec	Executive, Admin, Man	144	\$49,689	0.27%	\$61,467
Amusement, Rec	Marketing and Sales	279	\$20,234	0.53%	\$25,030
Amusement, Rec	Operators, Fabricators	55	\$18,930	0.10%	\$23,417
Amusement, Rec	Precision Production	80	\$25,467	0.15%	\$31,503
Amusement, Rec	Professional Specialty	369	\$23,270	0.70%	\$28,786
Amusement, Rec	Service Occupations	881	\$13,403	1.66%	\$16,579
Amusement, Rec	Technicians and Related	11	\$27,200	0.02%	\$33,647
Legal	Administrative Support	529	\$26,284	1.00%	\$32,515
Legal	Executive, Admin, Man	47	\$50,097	0.09%	\$61,972
Legal	Operators, Fabricators	1	\$18,930	0.00%	\$23,417
Legal	Professional Specialty	404	\$76,529	0.76%	\$94,669
Legal	Service Occupations	13	\$20,360	0.02%	\$25,186
Legal	Technicians and Related	205	\$32,372	0.39%	\$40,045

**Table 5.**  
**Percent of Households by Workers by Income Category by Economic Sector**

<b>Construction</b>	<b>HH Wrkrs</b>	<b>&lt;\$20k</b>	<b>&lt;\$35k</b>	<b>&lt;\$50k</b>	<b>&lt;\$75k</b>	<b>&lt;\$100k</b>	<b>&gt;\$100k</b>
	1	2.43%	27.72%	58.31%	11.54%	0.00%	0.00%
	2	0.00%	21.39%	67.07%	0.00%	11.54%	0.00%
	3	0.00%	2.43%	18.96%	67.07%	0.00%	11.54%
	4	0.00%	0.00%	21.39%	8.77%	58.31%	11.54%
<b>Manufacturing</b>	<b>HH Wrkrs</b>	<b>&lt;\$20k</b>	<b>&lt;\$35k</b>	<b>&lt;\$50k</b>	<b>&lt;\$75k</b>	<b>&lt;\$100k</b>	<b>&gt;\$100k</b>
	1	0.51%	79.43%	3.33%	16.73%	0.00%	0.00%
	2	0.00%	46.69%	36.58%	16.73%	0.00%	0.00%
	3	0.00%	0.51%	1.11%	81.65%	0.00%	16.73%
	4	0.00%	0.00%	1.62%	78.32%	3.33%	16.73%
<b>TCU</b>	<b>HH Wrkrs</b>	<b>&lt;\$20k</b>	<b>&lt;\$35k</b>	<b>&lt;\$50k</b>	<b>&lt;\$75k</b>	<b>&lt;\$100k</b>	<b>&gt;\$100k</b>
	1	0.12%	58.43%	27.40%	14.05%	0.00%	0.00%
	2	0.00%	58.55%	6.39%	35.06%	0.00%	0.00%
	3	0.00%	0.00%	3.84%	61.09%	25.50%	9.56%
	4	0.00%	0.00%	3.84%	54.71%	27.40%	14.05%
<b>Wholesaling</b>	<b>HH Wrkrs</b>	<b>&lt;\$20k</b>	<b>&lt;\$35k</b>	<b>&lt;\$50k</b>	<b>&lt;\$75k</b>	<b>&lt;\$100k</b>	<b>&gt;\$100k</b>
	1	1.49%	50.11%	36.10%	12.31%	0.00%	0.00%
	2	0.00%	49.45%	34.71%	15.84%	0.00%	0.00%
	3	0.00%	0.00%	49.45%	34.71%	3.53%	12.31%
	4	0.00%	0.00%	28.02%	23.57%	36.10%	12.31%
<b>Retail</b>	<b>HH Wrkrs</b>	<b>&lt;\$20k</b>	<b>&lt;\$35k</b>	<b>&lt;\$50k</b>	<b>&lt;\$75k</b>	<b>&lt;\$100k</b>	<b>&gt;\$100k</b>
	1	33.38%	59.35%	7.27%	0.00%	0.00%	0.00%
	2	0.00%	81.60%	11.13%	7.27%	0.00%	0.00%
	3	0.00%	33.16%	48.44%	11.13%	7.27%	0.00%
	4	0.00%	0.00%	81.60%	11.13%	7.27%	0.00%
<b>FIRE</b>	<b>HH Wrkrs</b>	<b>&lt;\$20k</b>	<b>&lt;\$35k</b>	<b>&lt;\$50k</b>	<b>&lt;\$75k</b>	<b>&lt;\$100k</b>	<b>&gt;\$100k</b>
	1	0.00%	53.64%	18.05%	28.31%	0.00%	0.00%
	2	0.00%	47.75%	5.89%	46.36%	0.00%	0.00%
	3	0.00%	0.00%	5.78%	47.86%	18.05%	28.31%
	4	0.00%	0.00%	5.78%	47.86%	18.05%	28.31%
<b>Services</b>	<b>HH Wrkrs</b>	<b>&lt;\$20k</b>	<b>&lt;\$35k</b>	<b>&lt;\$50k</b>	<b>&lt;\$75k</b>	<b>&lt;\$100k</b>	<b>&gt;\$100k</b>
	1	6.50%	45.73%	22.91%	24.09%	0.76%	0.00%
	2	0.00%	45.55%	14.98%	26.89%	11.82%	0.76%
	3	0.00%	4.11%	29.63%	26.79%	16.37%	23.10%
	4	0.00%	0.00%	22.65%	29.58%	22.91%	24.86%
<b>Government</b>	<b>HH Wrkrs</b>	<b>&lt;\$20k</b>	<b>&lt;\$35k</b>	<b>&lt;\$50k</b>	<b>&lt;\$75k</b>	<b>&lt;\$100k</b>	<b>&gt;\$100k</b>
	1	1.35%	28.82%	38.60%	31.23%	0.00%	0.00%
	2	0.00%	5.85%	62.92%	31.23%	0.00%	0.00%
	3	0.00%	0.00%	5.85%	62.92%	18.22%	13.01%
	4	0.00%	0.00%	5.85%	24.32%	38.60%	31.23%

The **third step** is to distribute 2000 and 2030 jobs by census tract using employment estimates provided by ARC in February 2004. Table 6 provides a small sample of the output of this step. It is for a selection of census tracts in Fulton County for households of three persons. The assignment process works as follows. Of the total jobs in finance, insurance and real estate (FIRE) existing in the census tracts in 2000, 20.90 percent are assigned to three-person households based on Table 2. The jobs assigned are then divided by 1.22, which is the average number of workers in three-person households to arrive at the number of three-person households supported by jobs in FIRE. This number is distributed based on the income percentages for FIRE jobs for three-person households in the manner shown in Table 5. The assumption of course is that all jobs held by household are in FIRE which of course is not accurate. It further assumes that all jobs pay the same, which is also not accurate. However, as some jobs will be better paying than others, we may assume for sake of this exercise that on balance this procedure generates a reasonable albeit imprecise picture of the order of magnitude of FIRE jobs assigned to households based on household size and income category. (For one-person households, we do not assume 0.56 workers per household but instead 1.0 since, after all, a workforce household has to have at least one worker in it.) This process is done for all economic sectors for four household size categories for six income categories for 2000 and 2030 for all census tracts using ARC's February 2004 projections.

**Table 6**  
**Sample Detailed Assignment of Jobs by Household Size and Income**

		Working							
		3- Person HH Share	3- Person H Holds	3- Person HH <\$20k	3- Person HH <\$35k	3- Person HH <\$50k	3- Person HH <\$75k	3- Person HH <\$100k	3- Person HH >\$100k
2000	FIRE	20.90%	1.84	0.00%	0.00%	5.78%	47.86%	18.05%	28.31%
1.00	19	3.97	2.16	0.00	0.00	0.12	1.03	0.39	0.61
2.00	56	11.70	6.35	0.00	0.00	0.37	3.04	1.15	1.80
4.00	2,253	470.78	255.56	0.00	0.00	14.78	122.30	46.14	72.34
5.00	425	88.81	48.21	0.00	0.00	2.79	23.07	8.70	13.65
6.00	39	8.15	4.42	0.00	0.00	0.26	2.12	0.80	1.25
7.00	29	6.06	3.29	0.00	0.00	0.19	1.57	0.59	0.93
8.00	1	0.21	0.11	0.00	0.00	0.01	0.05	0.02	0.03
10.00	236	49.31	26.77	0.00	0.00	1.55	12.81	4.83	7.58
11.00	802	167.58	90.97	0.00	0.00	5.26	43.54	16.42	25.75
12.00	1,798	375.70	203.95	0.00	0.00	11.80	97.60	36.82	57.73
13.00	62	12.96	7.03	0.00	0.00	0.41	3.37	1.27	1.99
14.00	34	7.10	3.86	0.00	0.00	0.22	1.85	0.70	1.09
15.00	102	21.31	11.57	0.00	0.00	0.67	5.54	2.09	3.28
16.00	6	1.25	0.68	0.00	0.00	0.04	0.33	0.12	0.19
17.00	21	4.39	2.38	0.00	0.00	0.14	1.14	0.43	0.67
18.00	92	19.22	10.44	0.00	0.00	0.60	4.99	1.88	2.95
19.00	2,848	595.10	323.06	0.00	0.00	18.68	154.60	58.33	91.45
21.00	72	15.04	8.17	0.00	0.00	0.47	3.91	1.47	2.31
22.00	16	3.34	1.81	0.00	0.00	0.10	0.87	0.33	0.51
23.00	2	0.42	0.23	0.00	0.00	0.01	0.11	0.04	0.06
24.00	10	2.09	1.13	0.00	0.00	0.07	0.54	0.20	0.32
25.00	20	4.18	2.27	0.00	0.00	0.13	1.09	0.41	0.64
26.00	1	0.21	0.11	0.00	0.00	0.01	0.05	0.02	0.03
27.00	6,421	1,341.70	728.35	0.00	0.00	42.12	348.55	131.50	206.17
28.00	428	89.43	48.55	0.00	0.00	2.81	23.23	8.77	13.74
29.00	17	3.55	1.93	0.00	0.00	0.11	0.92	0.35	0.55
30.00	8	1.67	0.91	0.00	0.00	0.05	0.43	0.16	0.26
31.00	13	2.72	1.47	0.00	0.00	0.09	0.71	0.27	0.42
32.00	32	6.69	3.63	0.00	0.00	0.21	1.74	0.66	1.03
33.00	65	13.58	7.37	0.00	0.00	0.43	3.53	1.33	2.09
35.00	749	156.51	84.96	0.00	0.00	4.91	40.66	15.34	24.05
36.00	3	0.63	0.34	0.00	0.00	0.02	0.16	0.06	0.10

We now come to the estimates of workforce housing needs. The data for individual economic sectors aggregates households by household size and sector employment into an estimate of total workforce households for all six income categories. Although estimates are actually provided at the census tract level, they are aggregated here to the region as a whole (Table 1), counties are included in Table 7 while Livable Centers are reported in Table 8. These are estimates of workforce housing demand for 2000 and 2030. No effort is made to compare demand to supply.

**Table 7**  
**Workforce Housing Needs by Income Category and County, 2000 to 2030**

Clayton County

HH Income	2000	2030	Change	Percent
HH <\$20k	1,270	1,727	457	36.0%
HH <\$35k	28,088	38,277	10,189	36.3%
HH <\$50k	19,199	26,706	7,507	39.1%
HH <\$75k	27,508	37,941	10,433	37.9%
HH <\$100k	8,306	11,769	3,464	41.7%
HH >\$100k	5,347	7,990	2,643	49.4%
Total	89,717	124,410	34,693	38.7%

Cherokee County

HH Income	2000	2030	Change	Percent
HH <\$20k	448	1,067	619	138.2%
HH <\$35k	7,001	17,021	10,019	143.1%
HH <\$50k	6,488	14,638	8,151	125.6%
HH <\$75k	6,115	14,026	7,911	129.4%
HH <\$100k	2,045	4,775	2,730	133.5%
HH >\$100k	1,504	3,469	1,965	130.7%
Total	23,601	54,997	31,396	133.0%

Cobb County

HH Income	2000	2030	Change	Percent
HH <\$20k	3,514	5,618	2,104	59.9%
HH <\$35k	62,972	98,876	35,904	57.0%
HH <\$50k	51,074	78,426	27,353	53.6%
HH <\$75k	57,315	89,298	31,982	55.8%
HH <\$100k	18,102	27,895	9,793	54.1%
HH >\$100k	14,185	22,212	8,028	56.6%
Total	207,162	322,326	115,164	55.6%

#### Coweta County

HH Income	2000	2030	Change	Percent
HH <\$20k	327	773	446	136.4%
HH <\$35k	5,461	12,691	7,230	132.4%
HH <\$50k	4,727	10,369	5,641	119.3%
HH <\$75k	5,100	10,993	5,893	115.6%
HH <\$100k	1,373	3,425	2,051	149.4%
HH >\$100k	1,167	2,680	1,513	129.7%
Total	18,155	40,931	22,776	125.5%

#### DeKalb County

HH Income	2000	2030	Change	Percent
HH <\$20k	3,027	5,294	2,267	74.9%
HH <\$35k	84,203	97,680	13,477	16.0%
HH <\$50k	61,076	79,224	18,149	29.7%
HH <\$75k	99,864	93,318	(6,546)	-6.6%
HH <\$100k	37,405	31,236	(6,169)	-16.5%
HH >\$100k	26,246	24,729	(1,517)	-5.8%
Total	311,821	331,482	19,661	6.3%

#### Douglas County

HH Income	2000	2030	Change	Percent
HH <\$20k	468	1,038	570	122.0%
HH <\$35k	6,916	15,593	8,677	125.5%
HH <\$50k	6,015	12,194	6,179	102.7%
HH <\$75k	5,558	12,118	6,560	118.0%
HH <\$100k	1,905	4,102	2,197	115.3%
HH >\$100k	1,353	3,082	1,729	127.8%
Total	22,215	48,127	25,912	116.6%

#### Fayette County

HH Income	2000	2030	Change	Percent
HH <\$20k	397	717	320	80.5%
HH <\$35k	6,899	11,822	4,923	71.4%
HH <\$50k	6,078	9,906	3,827	63.0%
HH <\$75k	6,311	10,395	4,084	64.7%
HH <\$100k	1,950	3,327	1,377	70.6%
HH >\$100k	1,536	2,520	984	64.0%
Total	23,172	38,686	15,514	67.0%

#### Forsyth County

HH Income	2000	2030	Change	Percent
HH <\$20k	313	1,391	1,078	344.6%
HH <\$35k	6,772	20,984	14,212	209.8%
HH <\$50k	6,037	16,912	10,875	180.1%
HH <\$75k	6,847	16,354	9,507	138.9%
HH <\$100k	1,910	5,135	3,225	168.8%
HH >\$100k	1,557	3,921	2,364	151.9%
Total	23,436	64,697	41,261	176.1%

#### Fulton County

HH Income	2000	2030	Change	Percent
HH <\$20k	6,217	10,103	3,885	62.5%
HH <\$35k	137,767	203,539	65,772	47.7%
HH <\$50k	124,220	161,682	37,462	30.2%
HH <\$75k	162,984	205,042	42,059	25.8%
HH <\$100k	58,200	69,206	11,006	18.9%
HH >\$100k	48,949	55,360	6,411	13.1%
Total	538,337	704,933	166,596	30.9%

#### Gwinnett County

HH Income	2000	2030	Change	Percent
HH <\$20k	3,115	8,802	5,687	182.6%
HH <\$35k	59,237	144,305	85,068	143.6%
HH <\$50k	47,299	118,937	71,638	151.5%
HH <\$75k	54,737	123,243	68,506	125.2%
HH <\$100k	15,621	40,233	24,612	157.6%
HH >\$100k	12,761	30,629	17,868	140.0%
Total	192,770	466,150	273,380	141.8%

#### Henry County

HH Income	2000	2030	Change	Percent
HH <\$20k	426	886	460	108.1%
HH <\$35k	6,525	14,903	8,378	128.4%
HH <\$50k	5,877	12,502	6,626	112.7%
HH <\$75k	5,591	13,078	7,486	133.9%
HH <\$100k	1,921	4,064	2,144	111.6%
HH >\$100k	1,380	3,155	1,775	128.6%
Total	21,720	48,589	26,869	123.7%

Paulding County

HH Income	2000	2030	Change	Percent
HH <\$20k	158	440	282	177.7%
HH <\$35k	2,229	7,018	4,789	214.9%
HH <\$50k	2,544	6,850	4,306	169.2%
HH <\$75k	2,036	6,065	4,028	197.8%
HH <\$100k	795	2,374	1,579	198.7%
HH >\$100k	489	1,482	992	202.7%
Total	8,252	24,228	15,976	193.6%

Rockdale County

HH Income	2000	2030	Change	Percent
HH <\$20k	374	735	361	96.6%
HH <\$35k	6,954	12,405	5,451	78.4%
HH <\$50k	5,852	9,910	4,058	69.3%
HH <\$75k	6,379	10,613	4,235	66.4%
HH <\$100k	1,846	3,195	1,350	73.1%
HH >\$100k	1,438	2,487	1,049	73.0%
Total	22,842	39,346	16,504	72.3%

**Table 8**  
**Workforce Housing Needs by Income Category and Livable Center Census Tracts**  
**2000 to 2030**

Acworth

HH Income	2000	2030	Change	Percent
HH <\$20k	60	130	71	117.7%
HH <\$35k	857	2,088	1,231	143.7%
HH <\$50k	808	1,747	939	116.1%
HH <\$75k	705	1,720	1,015	144.0%
HH <\$100k	215	615	400	186.2%
HH >\$100k	156	462	306	195.8%
Total	2,801	6,762	3,961	141.4%

Austell

HH Income	2000	2030	Change	Percent
HH <\$20k	14	40	26	190.6%
HH <\$35k	545	1,150	605	111.2%
HH <\$50k	516	961	444	86.0%
HH <\$75k	702	1,374	672	95.8%
HH <\$100k	177	282	105	59.2%
HH >\$100k	148	275	127	86.0%
Total	2,102	4,083	1,981	94.2%

Avondale Station

HH Income	2000	2030	Change	Percent
HH <\$20k	35	69	34	95.3%
HH <\$35k	644	1,056	413	64.1%
HH <\$50k	517	866	350	67.7%
HH <\$75k	617	880	263	42.7%
HH <\$100k	190	289	99	52.2%
HH >\$100k	162	224	62	38.5%
Total	2,164	3,385	1,221	56.4%

Buckhead

HH Income	2000	2030	Change	Percent
HH <\$20k	723	1,031	308	42.6%
HH <\$35k	12,443	18,288	5,845	47.0%
HH <\$50k	7,927	12,362	4,434	55.9%
HH <\$75k	10,374	15,601	5,227	50.4%
HH <\$100k	3,460	5,550	2,090	60.4%
HH >\$100k	3,004	4,603	1,599	53.2%
Total	37,932	57,435	19,503	51.4%

### Chamblee

HH Income	2000	2030	Change	Percent
HH <\$20k	73	88	15	21.1%
HH <\$35k	1,275	1,555	280	21.9%
HH <\$50k	978	1,170	191	19.6%
HH <\$75k	1,046	1,345	298	28.5%
HH <\$100k	304	386	82	27.1%
HH >\$100k	197	276	80	40.5%
Total	3,873	4,819	947	24.4%

### Canton

HH Income	2000	2030	Change	Percent
HH <\$20k	49	50	1	2.9%
HH <\$35k	581	912	331	57.0%
HH <\$50k	478	859	381	79.7%
HH <\$75k	350	944	594	169.9%
HH <\$100k	118	295	177	149.9%
HH >\$100k	74	240	167	226.6%
Total	1,649	3,301	1,652	100.2%

### City Center

HH Income	2000	2030	Change	Percent
HH <\$20k	284	408	124	43.6%
HH <\$35k	9,123	12,600	3,478	38.1%
HH <\$50k	9,792	13,058	3,266	33.4%
HH <\$75k	13,719	18,271	4,552	33.2%
HH <\$100k	4,529	5,970	1,441	31.8%
HH >\$100k	3,829	5,147	1,318	34.4%
Total	41,277	55,454	14,178	34.3%

### Conyers

HH Income	2000	2030	Change	Percent
HH <\$20k	177	326	149	84.4%
HH <\$35k	3,692	5,699	2,007	54.4%
HH <\$50k	2,831	4,265	1,434	50.6%
HH <\$75k	3,568	4,912	1,344	37.7%
HH <\$100k	962	1,405	443	46.1%
HH >\$100k	798	1,217	420	52.6%
Total	12,028	17,825	5,797	48.2%

### Cumberland

HH Income	2000	2030	Change	Percent
HH <\$20k	636	772	137	21.5%
HH <\$35k	12,572	16,509	3,937	31.3%
HH <\$50k	7,803	10,420	2,616	33.5%
HH <\$75k	11,188	15,494	4,307	38.5%
HH <\$100k	3,450	4,437	987	28.6%
HH >\$100k	2,884	3,774	890	30.9%
Total	38,533	51,406	12,873	33.4%

### Decatur

HH Income	2000	2030	Change	Percent
HH <\$20k	43	49	6	13.2%
HH <\$35k	735	902	168	22.8%
HH <\$50k	607	734	127	21.0%
HH <\$75k	657	863	206	31.4%
HH <\$100k	287	350	63	21.9%
HH >\$100k	218	270	53	24.2%
Total	2,546	3,169	623	24.4%

### Douglasville

HH Income	2000	2030	Change	Percent
HH <\$20k	85	170	85	99.3%
HH <\$35k	1,265	2,515	1,250	98.9%
HH <\$50k	1,332	2,228	896	67.3%
HH <\$75k	1,269	2,173	903	71.2%
HH <\$100k	463	851	387	83.5%
HH >\$100k	347	645	299	86.1%
Total	4,762	8,582	3,820	80.2%

### Duluth

HH Income	2000	2030	Change	Percent
HH <\$20k	102	86	(16)	-15.7%
HH <\$35k	1,345	1,403	58	4.3%
HH <\$50k	1,053	1,127	74	7.0%
HH <\$75k	887	1,151	264	29.8%
HH <\$100k	311	472	161	51.8%
HH >\$100k	215	353	138	64.4%
Total	3,912	4,592	679	17.4%

#### Emory Village

HH Income	2000	2030	Change	Percent
HH <\$20k	14	15	1	6.3%
HH <\$35k	186	253	66	35.6%
HH <\$50k	166	244	79	47.5%
HH <\$75k	146	236	90	61.3%
HH <\$100k	61	105	43	70.2%
HH >\$100k	45	74	29	64.7%
Total	619	926	308	49.7%

#### Fayetteville

HH Income	2000	2030	Change	Percent
HH <\$20k	25	36	10	40.5%
HH <\$35k	453	629	176	38.8%
HH <\$50k	475	575	100	21.1%
HH <\$75k	507	653	146	28.8%
HH <\$100k	206	237	31	15.3%
HH >\$100k	154	181	27	17.5%
Total	1,820	2,311	491	26.9%

#### Forest Park

HH Income	2000	2030	Change	Percent
HH <\$20k	83	140	58	69.6%
HH <\$35k	1,557	2,040	483	31.0%
HH <\$50k	1,126	1,668	542	48.1%
HH <\$75k	1,387	1,601	214	15.4%
HH <\$100k	436	611	175	40.2%
HH >\$100k	265	400	135	50.8%
Total	4,854	6,460	1,607	33.1%

#### Greenbrier

HH Income	2000	2030	Change	Percent
HH <\$20k	66	112	46	69.8%
HH <\$35k	738	1,243	505	68.4%
HH <\$50k	733	1,201	467	63.7%
HH <\$75k	536	874	338	63.0%
HH <\$100k	201	314	113	56.3%
HH >\$100k	136	217	81	59.2%
Total	2,411	3,961	1,550	64.3%

### Gwinnett

HH Income	2000	2030	Change	Percent
HH <\$20k	586	981	395	67.3%
HH <\$35k	8,359	14,189	5,831	69.8%
HH <\$50k	6,026	10,602	4,576	75.9%
HH <\$75k	5,791	10,285	4,494	77.6%
HH <\$100k	1,415	3,411	1,997	141.2%
HH >\$100k	1,171	2,652	1,481	126.4%
Total	23,348	42,121	18,773	80.4%

### Hapeville

HH Income	2000	2030	Change	Percent
HH <\$20k	78	102	24	31.6%
HH <\$35k	5,680	6,166	486	8.6%
HH <\$50k	2,524	2,877	353	14.0%
HH <\$75k	6,646	7,089	444	6.7%
HH <\$100k	1,864	2,183	319	17.1%
HH >\$100k	1,207	1,388	181	15.0%
Total	17,998	19,805	1,808	10.0%

### H.E. Holmes

HH Income	2000	2030	Change	Percent
HH <\$20k	18	28	10	58.1%
HH <\$35k	228	425	197	86.2%
HH <\$50k	203	360	157	77.5%
HH <\$75k	178	357	178	100.0%
HH <\$100k	71	122	51	71.7%
HH >\$100k	52	94	42	80.2%
Total	751	1,386	636	84.7%

### Jonesboro

HH Income	2000	2030	Change	Percent
HH <\$20k	57	89	32	57.0%
HH <\$35k	761	1,067	306	40.3%
HH <\$50k	655	814	159	24.2%
HH <\$75k	598	635	37	6.2%
HH <\$100k	196	192	(4)	-1.9%
HH >\$100k	144	136	(8)	-5.8%
Total	2,411	2,933	522	21.7%

JSA-McGill

HH Income	2000	2030	Change	Percent
HH <\$20k	302	369	67	22.4%
HH <\$35k	7,847	9,236	1,390	17.7%
HH <\$50k	5,911	7,347	1,436	24.3%
HH <\$75k	8,656	10,216	1,559	18.0%
HH <\$100k	2,804	3,870	1,067	38.0%
HH >\$100k	2,536	3,291	755	29.8%
Total	28,055	34,329	6,274	22.4%

Kennesaw

HH Income	2000	2030	Change	Percent
HH <\$20k	55	111	57	103.6%
HH <\$35k	1,274	2,280	1,006	79.0%
HH <\$50k	1,169	2,005	836	71.5%
HH <\$75k	1,366	2,271	905	66.2%
HH <\$100k	421	738	317	75.4%
HH >\$100k	314	495	181	57.5%
Total	4,599	7,900	3,301	71.8%

Kensington Station

HH Income	2000	2030	Change	Percent
HH <\$20k	35	160	125	355.0%
HH <\$35k	498	2,070	1,572	315.4%
HH <\$50k	776	2,265	1,489	191.9%
HH <\$75k	697	1,936	1,239	177.8%
HH <\$100k	279	737	458	164.5%
HH >\$100k	201	536	335	166.7%
Total	2,486	7,702	5,217	209.9%

Lilburn

HH Income	2000	2030	Change	Percent
HH <\$20k	26	74	48	180.7%
HH <\$35k	453	874	421	92.9%
HH <\$50k	417	800	383	92.0%
HH <\$75k	436	611	174	40.0%
HH <\$100k	149	205	56	37.5%
HH >\$100k	114	147	32	28.4%
Total	1,596	2,710	1,114	69.8%

Lithonia

HH Income	2000	2030	Change	Percent
HH <\$20k	13	25	13	98.7%
HH <\$35k	467	823	356	76.2%
HH <\$50k	515	814	300	58.2%
HH <\$75k	592	1,019	428	72.3%
HH <\$100k	168	295	126	75.0%
HH >\$100k	133	234	101	76.2%
Total	1,887	3,211	1,324	70.1%

Mableton

HH Income	2000	2030	Change	Percent
HH <\$20k	20	26	6	32.0%
HH <\$35k	291	389	98	33.5%
HH <\$50k	244	344	100	40.9%
HH <\$75k	229	307	78	34.2%
HH <\$100k	82	117	34	41.5%
HH >\$100k	60	73	14	23.0%
Total	926	1,256	330	35.6%

Marietta

HH Income	2000	2030	Change	Percent
HH <\$20k	131	235	104	78.9%
HH <\$35k	2,298	4,016	1,718	74.8%
HH <\$50k	3,198	4,450	1,252	39.2%
HH <\$75k	3,213	4,544	1,331	41.4%
HH <\$100k	1,182	1,697	514	43.5%
HH >\$100k	886	1,248	363	40.9%
Total	10,909	16,190	5,281	48.4%

Midtown

HH Income	2000	2030	Change	Percent
HH <\$20k	309	508	199	64.5%
HH <\$35k	8,887	16,285	7,397	83.2%
HH <\$50k	5,578	10,120	4,543	81.4%
HH <\$75k	9,449	17,963	8,514	90.1%
HH <\$100k	3,363	6,188	2,824	84.0%
HH >\$100k	2,629	4,721	2,092	79.6%
Total	30,215	55,785	25,570	84.6%

Moores Mill

HH Income	2000	2030	Change	Percent
HH <\$20k	37	65	28	75.4%
HH <\$35k	1,620	2,256	635	39.2%
HH <\$50k	1,346	1,621	275	20.4%
HH <\$75k	1,895	2,475	581	30.6%
HH <\$100k	538	677	139	25.8%
HH >\$100k	389	498	110	28.3%
Total	5,825	7,592	1,767	30.3%

Morrow

HH Income	2000	2030	Change	Percent
HH <\$20k	44	94	50	112.4%
HH <\$35k	520	1,050	530	102.1%
HH <\$50k	588	1,133	545	92.8%
HH <\$75k	470	856	386	82.1%
HH <\$100k	191	334	144	75.4%
HH >\$100k	135	228	93	69.0%
Total	1,948	3,696	1,748	89.8%

Norcross

HH Income	2000	2030	Change	Percent
HH <\$20k	45	62	17	38.2%
HH <\$35k	1,241	1,482	241	19.4%
HH <\$50k	1,015	1,108	94	9.3%
HH <\$75k	1,355	1,536	182	13.4%
HH <\$100k	302	387	85	28.2%
HH >\$100k	292	361	69	23.6%
Total	4,249	4,937	688	16.2%

Northlake

HH Income	2000	2030	Change	Percent
HH <\$20k	285	416	131	46.0%
HH <\$35k	5,779	6,977	1,198	20.7%
HH <\$50k	3,969	5,168	1,198	30.2%
HH <\$75k	5,480	5,940	460	8.4%
HH <\$100k	1,481	1,943	462	31.2%
HH >\$100k	1,265	1,641	376	29.7%
Total	18,258	22,084	3,826	21.0%

#### Old National

HH Income	2000	2030	Change	Percent
HH <\$20k	85	156	71	83.1%
HH <\$35k	1,507	2,212	705	46.8%
HH <\$50k	1,139	1,676	537	47.1%
HH <\$75k	1,336	1,623	287	21.5%
HH <\$100k	438	527	90	20.5%
HH >\$100k	372	395	23	6.3%
Total	4,877	6,589	1,712	35.1%

#### Peachtree City

HH Income	2000	2030	Change	Percent
HH <\$20k	39	81	43	109.5%
HH <\$35k	1,611	2,058	447	27.7%
HH <\$50k	1,087	1,352	265	24.3%
HH <\$75k	1,923	2,105	181	9.4%
HH <\$100k	210	299	89	42.3%
HH >\$100k	350	377	27	7.7%
Total	5,221	6,272	1,051	20.1%

#### Perimeter

HH Income	2000	2030	Change	Percent
HH <\$20k	798	1,010	211	26.5%
HH <\$35k	18,842	24,417	5,574	29.6%
HH <\$50k	11,598	15,601	4,003	34.5%
HH <\$75k	18,468	24,194	5,726	31.0%
HH <\$100k	6,107	8,527	2,420	39.6%
HH >\$100k	5,194	7,057	1,863	35.9%
Total	61,007	80,806	19,799	32.5%

#### Powder Springs

HH Income	2000	2030	Change	Percent
HH <\$20k	21	63	42	198.3%
HH <\$35k	284	929	645	227.2%
HH <\$50k	363	836	473	130.3%
HH <\$75k	257	781	524	203.9%
HH <\$100k	124	287	163	131.6%
HH >\$100k	70	203	133	189.4%
Total	1,120	3,100	1,981	176.9%

### Roswell

HH Income	2000	2030	Change	Percent
HH <\$20k	70	107	37	53.5%
HH <\$35k	1,024	1,449	425	41.5%
HH <\$50k	911	1,260	349	38.3%
HH <\$75k	880	1,063	183	20.8%
HH <\$100k	333	440	107	32.2%
HH >\$100k	251	302	51	20.4%
Total	3,469	4,621	1,153	33.2%

### Sandtown

HH Income	2000	2030	Change	Percent
HH <\$20k	119	136	17	14.1%
HH <\$35k	6,316	6,813	497	7.9%
HH <\$50k	3,599	4,047	448	12.5%
HH <\$75k	7,421	8,080	659	8.9%
HH <\$100k	977	1,243	266	27.2%
HH >\$100k	1,294	1,466	172	13.3%
Total	19,727	21,786	2,058	10.4%

### Sandy Springs

HH Income	2000	2030	Change	Percent
HH <\$20k	208	400	192	92.4%
HH <\$35k	4,600	7,450	2,850	61.9%
HH <\$50k	2,872	5,176	2,304	80.2%
HH <\$75k	4,221	6,423	2,202	52.2%
HH <\$100k	1,479	2,455	976	66.0%
HH >\$100k	1,061	1,861	800	75.4%
Total	14,441	23,766	9,325	64.6%

### Smryna

HH Income	2000	2030	Change	Percent
HH <\$20k	155	313	158	101.9%
HH <\$35k	2,418	4,696	2,278	94.2%
HH <\$50k	1,875	3,877	2,002	106.8%
HH <\$75k	1,943	3,667	1,725	88.8%
HH <\$100k	632	1,299	667	105.5%
HH >\$100k	448	880	432	96.6%
Total	7,471	14,733	7,262	97.2%

### Snellville

HH Income	2000	2030	Change	Percent
HH <\$20k	73	64	(8)	-11.4%
HH <\$35k	766	888	122	16.0%
HH <\$50k	651	750	99	15.2%
HH <\$75k	364	650	286	78.5%
HH <\$100k	170	245	75	44.2%
HH >\$100k	92	173	81	87.7%
Total	2,116	2,771	655	31.0%

### Stockbridge

HH Income	2000	2030	Change	Percent
HH <\$20k	130	116	(15)	-11.1%
HH <\$35k	1,740	1,896	156	9.0%
HH <\$50k	1,361	1,700	340	25.0%
HH <\$75k	1,165	1,814	649	55.7%
HH <\$100k	460	608	148	32.1%
HH >\$100k	320	468	147	46.0%
Total	5,176	6,602	1,425	27.5%

### Stone Mountain

HH Income	2000	2030	Change	Percent
HH <\$20k	26	28	2	6.2%
HH <\$35k	378	416	38	10.1%
HH <\$50k	322	568	246	76.3%
HH <\$75k	300	533	234	78.0%
HH <\$100k	135	213	78	58.0%
HH >\$100k	98	156	58	59.5%
Total	1,258	1,914	656	52.2%

### Suwanee

HH Income	2000	2030	Change	Percent
HH <\$20k	68	323	255	377.7%
HH <\$35k	1,606	5,781	4,175	260.0%
HH <\$50k	1,642	5,248	3,607	219.7%
HH <\$75k	1,810	5,828	4,018	222.0%
HH <\$100k	572	1,842	1,270	221.9%
HH >\$100k	422	1,428	1,006	238.4%
Total	6,118	20,449	14,330	234.2%

#### Union City

HH Income	2000	2030	Change	Percent
HH <\$20k	71	93	23	31.9%
HH <\$35k	861	1,368	507	58.9%
HH <\$50k	622	885	263	42.3%
HH <\$75k	488	999	512	105.0%
HH <\$100k	128	206	78	61.1%
HH >\$100k	93	212	119	127.6%
Total	2,262	3,763	1,501	66.4%

#### West End

HH Income	2000	2030	Change	Percent
HH <\$20k	18	28	10	55.6%
HH <\$35k	349	571	222	63.4%
HH <\$50k	284	437	153	53.7%
HH <\$75k	361	560	199	55.0%
HH <\$100k	87	168	81	93.7%
HH >\$100k	87	152	64	73.7%
Total	1,186	1,914	728	61.4%

#### West Village

HH Income	2000	2030	Change	Percent
HH <\$20k	7	40	32	434.8%
HH <\$35k	142	865	723	508.8%
HH <\$50k	183	910	727	396.0%
HH <\$75k	174	999	824	472.3%
HH <\$100k	62	267	206	334.0%
HH >\$100k	43	220	177	412.7%
Total	612	3,301	2,689	439.4%

#### Woodstock

HH Income	2000	2030	Change	Percent
HH <\$20k	87	221	133	152.5%
HH <\$35k	1,253	2,951	1,698	135.5%
HH <\$50k	975	2,268	1,293	132.6%
HH <\$75k	919	1,987	1,069	116.3%
HH <\$100k	300	738	438	145.9%
HH >\$100k	227	549	322	141.5%
Total	3,762	8,714	4,953	131.7%



## **Barriers to Workforce Housing Balance**

The link between job location and housing needs has not been understood well by planners. The history of land use planning indicates a preference to separate land uses spatially so that jobs may be found in one part of the community while housing may be found in another. The spatial separation of land uses has been facilitated by zoning which itself has been sanctioned by the US Supreme Court as a valid exercise of the local police power. The result is a disconnection between residential and office, retail, industrial and institutional land uses that is associated with more and longer vehicle trips between them. What housing does exist near nonresidential land uses has tended historically to be low income or “worker” housing but even this is not widespread.

Fortunately, planning is evolving. Where as recently as the 1970s the idea of including housing elements in comprehensive plans was considered revolutionary it is now commonplace. The idea that communities should plan to include their share of the region’s low- and moderate-housing needs began to take hold in the 1980s although it is not widespread. Jobs-housing balance emerged during the 1990s as an effort to bring residential and nonresidential land uses together principally to reduce traffic congestion and improve air quality. There is now a budding movement aimed more specially at achieving workforce housing balance.

This section reviews the history of housing planning generally, reviews significant state efforts to influence local planning to address housing in the context of standard housing demand analysis and inclusionary housing principles, and develops the concept of workforce housing as an important planning consideration at the regional scale.

### **A Brief History of Planning for Housing Needs**

One may be surprised to learn that addressing housing in terms of social equity is a relatively recent phenomenon in planning. Housing districts were certainly part of ancient city plans but they were designed principally to separate classes of people and, except for needs of ruling classes, the number and configuration of housing for lower classes appears to be conspicuous by its absence. In the colonies and later the United States, questions about housing were geared only to public safety and health concerns. Haar (1977) notes that the early plan for Philadelphia restricted construction of wood frame buildings including homes for the purpose of reducing risk of fire. High residential density was seen as detrimental to public health in the 19<sup>th</sup> century (Mumford 1961; Scott 1969). Although many notable housing reformers of the late 19<sup>th</sup> century pushed for aggressive reforms to improve the living conditions of the working poor, throughout the 20<sup>th</sup> century plans relegated housing concerns to secondary status, being subservient to achieving an overall development pattern based on economic development, transportation, and (as a result of the “Beautiful City” movement) aesthetics. Even the most influential figures of their day in shaping the nascent planning profession, such as Howard (1902) and Geddes (1915), were more concerned with the physical form of communities shaped by plans and not the social implications. The planning profession’s

principal textbook from the late 1960s through the 1970s (Goodman and Freund 1968) did not include a single chapter on housing despite having 584 text pages organized into 20 chapters. As Toulan (1993: 93) observes, the master plan as conceived by early framers of the planning profession were preoccupied with relationships between land uses:

*In this context the general plan was to deal with different land use categories, not with activities and certainly not with questions of social justice and equity. In other words, the housing element of the general plan was reduced to a blueprint for the location, size, and type of residential areas.*

Federal housing policies enacted after World War II connected social and equity concerns with housing provision. Principal among those is the 1949 Housing Act and later the Fair Housing Act. Only beginning in the 1970s was the idea that communities need to meet housing needs of everyone, and do so in a manner that was inclusionary, broached (Downs 1973). Through its Mount Laurel decisions of the late 1970s and early 1980s, New Jersey advanced the idea that providing for housing needs in every community was not only good policy but required of that state's constitution (Hagman and Juergensmeyer 1986).

The late 1970s and 1980s were a watershed in state efforts to require local governments to address local housing needs, especially inclusionary needs. Not that many states ventured into this arena. Notable among them are California, Connecticut, Florida, Georgia, Idaho, Oregon, Rhode Island Vermont, and Washington (American Planning Association 2002). Still, most of those states do not actually monitor performance of local governments in meeting housing needs (see, e.g., Weitz 1999). We turn our attention now to reviewing how four states attempt to combat exclusion through the comprehensive planning process.

### **Combating Exclusion**

Many communities use land use regulatory techniques to exclude certain, usually low income, classes of people. A typical strategy is to zone the community for large lots and require large, minimum building sizes, thus making the community unaffordable to low-income households. Many such schemes are considered unethical or not unconstitutional (Downs 1973). In New Jersey, the pioneering *Mt. Laurel* decisions require communities to avoid exclusionary land use practices. Many communities now employ a variety of inclusionary land use regulatory practices. They go beyond merely removing exclusionary barriers--such as lowering minimum lot sizes and allowing small homes--to require that developments have a range of housing opportunities affordable to wide range of households or contribute "linkage" fees to a fund to build such housing. But in many states, inclusionary policies are voluntary. In several growth management states, state statutes and implementing rules mandate inclusionary practices.

This section of the report serves four purposes. First, it reviews what constitutes exclusionary practices. Next, it identifies the kinds of households or occupant characteristics that are affected by exclusionary practices. Third, it discusses what constitutes inclusionary practices. Fourth, it assesses the extent to which selected states mandate inclusionary practices among local plans. The general conclusion of this section is that inclusionary housing mandates are well meaning but it is too early to tell whether they make more of a difference in removing exclusionary barriers than litigation.

### ***Exclusionary Practices***

Land use planning is inherently exclusionary. By restricting how land is used, land use policies exclude certain uses and by implication certain people from the community. Most, perhaps all, exclusionary effects are initially viewed as reasonable, at least from the point of view of the community involved. But exclusionary policies in one community can impose excessive burdens on nearby communities, or disrupt the natural progression of families and their constituent members through cycles. Moreover, exclusionary effects are considered mostly unethical by planning standards and oftentimes unconstitutional. This section of the paper reviews various forms of exclusionary planning practices.

The term "exclusionary planning" characterizes those local land use actions employed to keep lower income, minority, and non-traditional family groups out of the community. Exclusion is usually accomplished through zoning techniques that raise the cost of housing above that which many groups can afford, or restrict the use of land such that other groups are effectively shut out of the community. Exclusion comes in the following general forms:

- # *Large Minimum Lot Sizes*. This technique involves the zoning of residential land, especially vacant land or land scheduled for new development, for large lots. The effect is to reduce the potential supply of buildable lots and housing units, resulting in higher overall housing costs within the community. *Fiscal* rationale is often used to defend such practices for the reason that higher cost housing generates more net revenue than lower cost housing.
  
- # *Large Minimum Housing Size*. This technique involves restricting homes to a minimum amount of heated square feet. *Compatibility* is the rationale used to justify this technique since smaller homes may reduce the value of larger homes.
  
- # *Prohibiting Multifamily Housing*. This technique involves prohibiting multifamily housing thereby rendering the community incapable of accommodating household types that because of income or life cycle can only afford temporary housing. *Stability* is the rationale used to defend this approach as the perception is that households occupying forms of temporary housing are not stakeholders in the community.

- # *Prohibiting Manufactured Homes.* This technique involves prohibiting homes not built on-site; manufactured homes are usually less costly than "stick-built" homes. *Durability* is the rationale used since the perception is that manufactured homes depreciate more quickly than stick-built homes; *compatibility* is also used as a rationale.
- # *Limiting Bedrooms.* This technique involves restricting homes to a certain minimum number of bedrooms. Rationale used to justify this technique include *fiscal*, since homes with more bedrooms are usually larger and more expensive than smaller homes, and *stability* since homes with more bedrooms are more attractive to families while smaller homes are usually more attractive to transient households.
- # *Prohibiting Groups Homes.* This involves restricting the use of existing homes for welfare, foster care, or other government-sponsored family services. *Stability* is the rationale used to justify this approach since group homes bring temporary residents into the community.
- # *Restricting Age.* This involves intentionally restricting housing types to those that are not attractive to young people or seniors. *Fiscal* and *stability* rationale are used since such housing is usually of lower value and occupied temporarily.
- # *Restricting Accessory Units/Granny Flats.* This involves preventing the use of unused bedrooms or spaces of existing homes as supplemental living quarters; it effectively prevents retired people and others from renting out spare rooms. *Stability* is the rationale used to justify this approach since "roomers" are temporary residents.
- # *Requiring Blood Relationship.* This involves restricting the occupancy of homes to people of blood relations. *Stability* is the rationale used to defend this approach since people of blood relations occupying the same dwelling are perceived to possess more desirable community values than those who are not of blood relations.
- # *Limiting Maximum Number of Persons.* This involves restricting maximum occupancy of homes, usually with the effect of preventing very large families or extended families from residing in the community. *Public health* rationale is used to justify this approach since large or extended families can lead to overcrowding.
- # *Requiring Minimum Annual Tenancy.* This involves requiring occupancy of dwellings for a minimum period of time during the year. The effect is to prevent students or migratory farm labor families from living in the community. *Stability* is used as the rationale for this approach.

### *People Affected by Exclusion*

People are affected by exclusionary policies along income, ethnic, racial, religious, life cycle, tenancy, partnership, and care-taking dimensions. This section offers an incomplete list of affected people and households. Table 9 presents a preliminary matrix on the exclusionary policies affect which groups/classes of people/households.

- # *Income*. Usually, only low and sometimes low-middle income groups are targets of exclusionary policies.
- # *Race*. Since low income is moderately correlated with minority status, income-driven exclusionary policies affect minorities, particularly African-Americans and to a less extent Hispanic-Americans, disproportionately than European-Americans.
- # *Ethnicity*. Exclusionary policies that restrict occupancy usually impact on some ethnic groups more than others, especially migratory Asian and European households with extended families.
- # *Religion*. Exclusionary policies that restrict occupancy usually impact on some religious groups more than others, especially where religious convictions lead to large families.
- # *Individual Life Cycle*. Most individuals pass through dependent, young adult, settled-adult/parent, empty-nest, and elderly dependent phases of their life. As a general proposition, most exclusionary policies impact mostly on young adult and elderly-dependent elements of one's life cycle.
- # *Family Life Cycle*. Most families pass through initial family formation, early child-rearing, late child-rearing, empty-nest, and elderly dependent phases. As a general proposition, most exclusionary policies impact mostly on all phases of the family life-cycle except late child-rearing and empty-nest.
- # *Tenancy-Sensitive*. Certain households, regardless of income, have occupations that do not lend themselves to home ownership. At one end of the spectrum are migratory farm laborers who may live in an area for a few months out of the year; such families are also low-income and often large and extended. At the other end are certain households who may split time between communities for a variety of reasons not necessarily related to income such as artists, consultants, entertainers, and educators. Certain but not all exclusionary policies affect these households.
- # *Nontraditional Partnerships*. Nontraditional relationships have many permutations including two single-parent households joining financial forces, same-gender households, and cohabitants with out-of-wedlock

children as just a few examples. Certain but not all exclusionary policies affect these households.

**Table 9**  
**Effect of Exclusionary Housing Practices on Groups or Classes of People**

Group or Class	<i>Exclusionary Barrier</i>										
	Large Min. Lot Size	Large Min. House Size	Prohibit Multi-Family Housing	Prohibit Manuf. Homes	Bedroom Min.	Prohibit Group Homes	Restrict Age	Restrict Assess-ory Units	Require Blood Relation-ship	Maximum Number of Occupants	Minimum Annual Tenancy
Income	D	D	D	D	D						
Race	I	I	I	I	I						
Ethnic										D	I
Religion										D	
Individual Cycle	I	D	D		D		D	I			I
Family Cycle	D	D	D	D	D		D	D		I	
Tenancy											D
Nontrad Partners								D	D	D	

D = Direct  
 I = Indirect

## *Assessment of Selected State Inclusionary Housing Mandates*

Some states, notably New Jersey, mandate inclusionary policies in local plans. In most states, however, inclusionary policies are a matter of local option. The dismantling of exclusionary policies tends to be a function of courts. In a few states, mandatory housing elements are required in part to encourage inclusionary policies and dismantle exclusionary ones.

In particular, four of Professor Dennis Gale's eight growth management states (Gale 1992) are selected for this assessment: New Jersey, Florida, Oregon, and Washington. California is not included since, strictly speaking, it does not have a statewide growth management policy. Vermont and Rhode Island are not included because their small populations and limited growth make the effect of such policies more-or-less inconsequential. Maine is not included because its growth management act was recently rescinded. After reviewing the chief housing elements of these states, Table 10 summarizes their housing inclusion features while Table 11 assesses the extent to which such mandates eliminate exclusionary practices in those states.

- # *New Jersey.* The *State Planning Act* of New Jersey was adopted in 1986. It initiated a unique process of cooperative statewide planning in which community plans went through a "cross-acceptance" process (Gale 1992; Innes 1992; Bollens 1992). The New Jersey Planning Act cites the undesirability of concentrating poor and minority people in the older urbanized areas (NJRSA 58:18A-196 g.). The New Jersey Act, however, is surprisingly silent on explicitly requiring inclusionary practices or in other ways removing exclusionary barriers. It seems, instead, that New Jersey communities look to the New Jersey Fair Housing Act, adopted in 1985, for guidance (NJRSA 52:27 et seq.). The Fair Housing Act requires local governments to provide a realistic opportunity for the construction of the local government's fair share of the region's low and moderate income housing needs. Several inclusionary housing policies are advanced, however, in the New Jersey State Planning Commission's *Communities of Place* (1992: 49-54), but these policies affect mostly low and middle income needs. New Jersey's Planning Act and Fair Housing Act may not lead to the production of housing meeting needs of particular higher income households nor does it address the extent to which the use of existing dwellings can be modified to meet inclusionary needs.
  
- # *Florida.* Florida addresses inclusionary objectives in two separate but linked statutes, the *Local Government Comprehensive Planning and Land Development Regulation Act* (F.S. Chapter 163 Part II, 1985) and the *State Comprehensive Plan* (F.S. Chapter 187). Both Acts address the need for accommodating housing needs of low and middle income households. In addition, either or both of the Acts require elimination of housing discrimination policies, implementation of policies that encourage housing opportunities for all citizens, providing for the housing needs of the

elderly, identifying all housing needs, providing incentives for low income housing production, and recycling older houses and redeveloping residential neighborhoods. In general, the Florida planning mandates have the potential effect of eliminating most if not all exclusionary practices and meeting the housing needs of all groups or classes of households. In practice, however, it is this writer's opinion that local plans fall short of these policy objectives because local and state planners do not employ housing studies identifying all housing needs.

# Oregon. Strictly speaking, the *Oregon Land Use Planning Act* (ORS Chapter 197) does not mandate inclusionary policies; however, it delegated policy-making powers to a land conservation and development commission (LCDC) that indeed mandates that all local governments collectively ". . . provide for the housing needs of the state" (*Goal 10* of State-Wide Land Use Goals and Guidelines). The focus has been on assuring that local governments provide for their fair share of regional low and moderate income housing needs.

# Washington. The *Washington Growth Management Act* (ESHB 2929 and ReSHB 1025, which amends several statutes of the Revised Code of Washington) mandates that "urban" counties include a housing element that: projects all housing needs; accommodates federally assisted, low income, manufactured, multifamily, group, and foster care housing needs; and, provides for the housing needs of all economic segments of the community. By its language, the Washington GMA may go farthest among growth management states in mandating inclusionary policies while also eliminating exclusionary policies.

**Table 10**  
**Inclusionary Housing Mandates of Selected States**

Group/Class	<i>Growth Management Mandates</i>			
	New Jersey	Florida	Oregon	Washington
Income	R	R	R	R
Race	I	I	I	I
Ethnic	S	I	I	I
Religion	S	I	I	I
Individual Cycle	S	I	I	I
Family Cycle	S	I	I	I
Tenancy	S	I	I	I
Nontraditional Partners	S	I	I	I

R = Required  
 I = Implied  
 S = Silent

**Table 11**  
**Assessment of Inclusionary Housing Mandates on Removing Exclusionary Barriers**

Group/Class	<i>Growth Management Mandates</i>			
	New Jersey	Florida	Oregon	Washington
Large Lot Size Minimum	P	N	P	W
Large House Size Minimum	P	N	P	W
Prohibit Multifamily Uses	P	W	P	P
Prohibit Manufactured Housing	W	N	P	P
Minimum Bedrooms Required	W	N	W	W
Prohibit Group Homes	N	W	W	P
Restrict Age	W	W	W	W
Restrict Accessory Unit	N	N	W	P
Blood Relationship Required	N	N	N	W
Maximum Occupancy Limit	N	N	N	W
Minimum Tenancy Required	N	N	W	W

P = Powerful discouragement  
 W = Weak discouragement  
 N = No discouragement

Overarching the housing policies of all states is Title I of the National Affordable Housing Act, which requires that local governments prepare Comprehensive Housing Affordability Strategy (CHAS) plans as a condition for receiving HOME, CDBG, McKinney, and Section 8 funds. CHAS elements include an estimate of housing needs over a five-year period that is broken down by income levels, tenure types, family composition, and special populations (such as self-sufficiency program participants, persons with AIDs, and the homeless). CHAS plans are usually prepared by local housing agencies; they are not required to be adopted as amendments to local comprehensive plans. Moreover, CHAS plans are for five year periods; growth management plans typically extend to twenty or more years.

At one level, all states' inclusionary housing policies aim to remove all exclusionary barriers. At another, however, exhaustive inventories, assessments, and projections of all housing needs is not done and will not be done without external pressure, usually in the form of litigation. At yet another level, developers of housing, especially housing in subdivisions, remain more-or-less free to use a variety of exclusionary techniques through deed restrictions and covenants. Indeed, the Florida department of community affairs is not allowed under that state's growth management laws to review the implementing ordinances of local governments for consistency with inclusionary mandates.

### **Countering Exclusion Through Jobs-Housing Balance and Jobs-Workforce Housing Balance**

Over the past decade or so, jobs-housing and more recently jobs-workforce housing location have become approaches to removing exclusion while also achieving other planning objectives, notably reducing traffic demand. This section reviews what is meant by each concept and illustrates methods by which they are calculated.

#### ***Jobs-Housing Balance***

Jobs-housing balance implies conceptually that there are enough jobs in a community or a subregion to support the households living there or nearby. Jobs-housing balance is a growing measure of quality of life. In the broadest sense, the balance of jobs and housing in a metropolitan region such as the ARC jurisdiction is defined as a provision of an adequate supply of housing to house workers employed within its subregions. Jobs-housing balance is also defined as an adequate provision of employment in a defined area that generates enough local workers to fill the housing supply. The idea is that when accomplished, a jobs-housing balance will confer certain benefits but without such a balance the region is made worse off.

Jobs-housing balance is often presented as a jobs-employed residents' ratio. In this context, a ratio of 1.0 represents one job for every one household. Does this create a jobs-housing balance? No. The reason is there are typically 1.5 workers per household so the jobs-employed residents' ratio must be based on this figure. Thus, if there were 15,000 jobs in a community and 10,000 housing units, the jobs-residents' ratio would be

1.5 while the jobs-housing ratio would be 1.0. This is an important distinction because earlier conceptualizations of the jobs-housing balance were based on employed residents and not on the number of residents per household.

Operationally, if the index is below 1.0 the area is considered to have fewer jobs than employed residents living in the area and hence a housing surplus. If the ratio is more than 1.0 there are more jobs than residents in the area and hence a job surplus. There is no consensus on the ideal range within which one may consider an area as having a reasonable jobs-housing balance ratio, however. Weitz (2002) cites Cervero (1991) and Ewing (1996) as suggesting balance is achieved reasonably at a range of 1.3-1.4 to 1.6-1.7. Splitting the difference gives us 1.35 to 1.65. A range of 1.25 to 1.75 may not be unreasonable, however.

Why is achieving jobs-housing balance important? With longer commutes, meeting air quality standards associated with increased driving and congestion has become even more challenging than in the past. The Atlanta region is classified as “serious” for its air quality standards, the closest level to being considered have reasonably clean air. Despite efforts to improve air quality, however, Atlanta appears to be losing ground and its air may become classified as “severe” and thereby requiring redoubled efforts to come into compliance. The problem appears to stem from a lack of new housing construction, especially near major job centers, and the inability of many workers to purchase the housing being produced.

Jobs-housing imbalance is not just a result of households choosing to live far from their places of employment. Although a certain number of households certainly “drive to qualify” – a term conveying the idea that homes farther out cost less than those located closer in thereby giving families more living space for their money – a significant cause of the mismatch in the Atlanta area is also due to the lack of state incentives and certain regulations that act as barriers to good land use practices.

Jobs-housing is further complicated by the “fiscalization of land use.” State tax law has created competition among cities for sales tax-generating commercial uses of land. Because of this, local governments place lower priority on accommodating residential development, and higher priority on sales tax generating uses. This may have accelerated the trend of housing production lagging job growth in many parts of the region. In combination with apprehension over multifamily housing in a number of communities, the fiscalization of land use makes it very difficult to implement strategies for promoting infill housing.

What are the consequences of not having a reasonable jobs-housing balance? Development has direct and indirect effects on the natural environment. It directly affects habitat, ecosystems, wildlife, ambient air and water quality through land consumption, habitat fragmentation, and replacement of natural cover with impervious surfaces. Development patterns and practices also indirectly affect environmental quality because urban form influences the travel decisions that people make. Increasing numbers of long distance commuters generated by land use decisions already have serious impacts

on transportation, our environment, our health and general quality of life.

All this has been exacerbated by investments in highway capacity at the expense of alternative modes. Dispersed, low-density development along with significant distances between them and jobs, schools, and shopping make walking, bicycling or use of transit difficult for most trips. The environmental consequences of vehicle travel and vehicle dependency include continued degradation of air, greenhouse gas emissions, and increased threat of global climate change and noise. Air pollution and climate change, in turn, can adversely affect water quality, habitat, and human health.

Achieving an ideal geographic relationship between the provision of jobs and housing in local communities can produce a myriad of measurable and perceived benefits for the region as a whole. These would include the following four benefits:

Reduced Traffic Congestion and Commute Times Living close to the workplace afforded by providing housing close to well paying jobs translates to lower congestion and commute times by eliminating the necessity for long-distance commutes. It also provides increased opportunities to use transit, bike, or walk to work in lieu of driving. Placing housing in close proximity to employment is no guarantee that those who live in the housing will work at the nearby jobs, or vice versa, and this would be particularly true for two income households who split the difference between the locations of their two employment destinations in choosing where to live. It does, however, eliminate barriers for those who choose to live close to work, and reduce the need for long-distance commuting and the congestion it contributes to the regional highway system.

Air Quality Benefits. One of the most pressing environmental problems in the region is ever-increasing traffic congestion and resulting air pollution. In particular, ground level ozone caused by Nox, volatile organic compounds (VOCs), and other ozone precursors, has proven resistant to the technological controls that have reduced other emissions. One clear way to reduce ground level ozones is to reduce vehicle usage during key periods of the day. By reducing vehicle miles traveled (VMTs) by daily commuters, fewer ozone precursors will be emitted and less ground level ozone will be formed, improving the air quality in urban areas. A promising way to reduce VMTs is achieving a jobs-housing balance.

Economic and Fiscal Benefits Successful implementation of job/housing balance strategies can result in reduced need for long-distance commuting and associated congestion, fewer public resources would be required for congestion mitigation improvements to the regional transportation system. Also, the reduced hours spent in long-distance travel by commuters translates to lower fuel costs and other automobile-related expenses, lower costs to employers in terms of reduced employee tardiness and higher productivity, and lower business trip costs. Further, since jobs-housing balance implies a more compact urban form with less suburban sprawl, the cost to local government of providing new facilities and services to new development is less since those facilities and services can be provided more efficiently.

Quality of Life Benefits Quality of life benefits associated with achieving a jobs-housing balance include cleaner air, reduced stress in commuting and better health, and

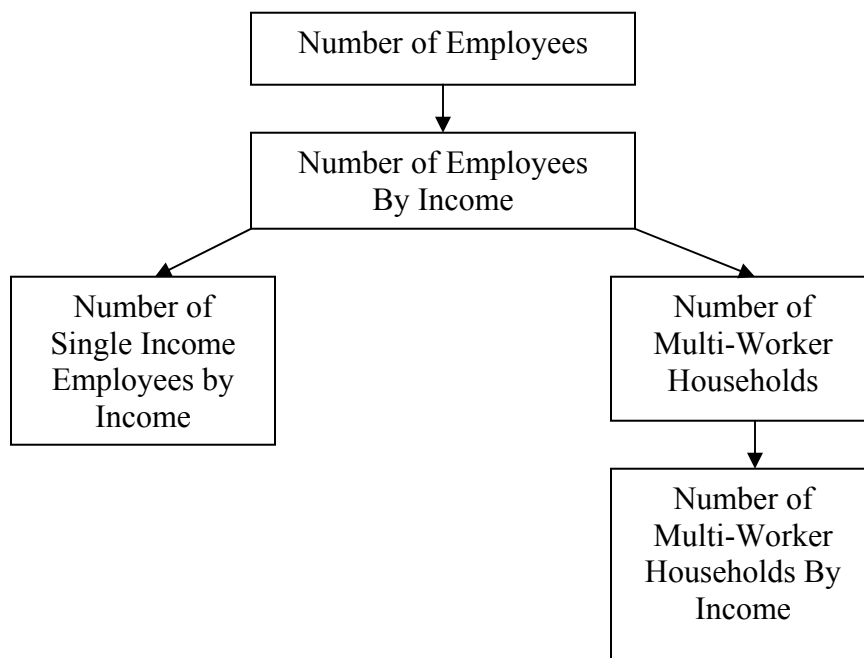
more leisure time. Families can be negatively impacted when its members are under the stress and strain of long commutes. Families in which both parents work have become the norm; longer commutes take time away from home and family members, result in higher child care expenses and reduce leisure and recreation time. The added financial and emotional pressures on the family can cause tension between family members. Increased job/housing balance can, therefore, contribute to greater family stability and cohesion.

A good geographic balance between jobs and housing also implies a more diverse, compact, and convenient urban form, without the strict segregation of land uses found in many suburban areas. Several studies have demonstrated that developing a mix of uses at employment and commercial centers reduces the portion of trips made by personal vehicles and increases transit use. Locating stores close to the workplace makes stores accessible by foot during the workday and allows efficient linking of trips. Instead of running errands after work in one's vehicle, employees may run mid-day pedestrian errands. The presence of restaurants, shops, and consumer services at or near employment sites encourages transit use and ridesharing since many workers no longer need to have a car available for mid-day or after-work trips. Many large commercial developments contain both office space and commercial development but still require a car to get around. These developments do not function well, because most of the commercial development is in large shopping centers or malls separated from office developments by wide arterials often lacking sidewalks. Quality of life is maximized for all population groups where available housing types are well matched with the wage stratification of local employment. In general, people associate diverse urban settings that are affordable and accessible to a broad range of people with cultural richness. They have increasingly negative attitudes about working and living in environments that are uniformly homogenous and lack opportunities for a variety of experiences.

### ***Workforce Housing Balance***

But jobs-housing balance per se does not fulfill its promise. It is one thing to have sufficient housing near jobs to achieve a mathematical balance but it is quite another to have people working in those jobs actually be able to live in that housing. In recent years, jobs-housing balance has been refined conceptually through the term jobs-workforce housing or, more simply, workforce housing balance. Consider what the Florida Department of Community Affairs looks to when it evaluates Developments of Regional Impact for its housing and employment impact, as illustrated in Figure 1.

**Figure 1. Florida Development of Regional Impact Workforce Housing Balance Model**



Following are the steps for estimating demand for affordable housing for a DRI in Florida. (Developers have the option of conducting their own analysis.)

1. Determine the median income and income thresholds for very low, low and moderate income households for the appropriate area.
2. Determine how many permanent, nonconstruction jobs will be created as a result of the development (including part-time).
3. Determine how many of these jobs will have salaries within the very low, low or moderate income ranges.
4. Determine the percentage of wage earners in each income category who are the head of a household for the appropriate county (see Table X, *Headship Rates by Income Level*). Use this percentage to estimate the number of employee households by income.
5. Using the percentages of *Single-worker and Multi-worker Households* from Table Y, separate the households (estimated in step 4) into single and multi-worker households.
6. The income of the single-worker households is the same as the income per SIC code (or the income estimated by distributing the employees around the average wage) determined in step. Using the percentages of *Additional Income for Multi-worker Households* in Table X, factor in the additional income to the SIC code income to estimate the income of multi-worker households.
7. Estimate housing affordability for each of the households in step 6.

The result is an estimate of the demand for housing for all people working in the DRI and also in jobs spun off from the DRI (because of the multiplier effect). The supply of housing needed in each household category by income is then determined with the deficiency in workforce housing units needed being subject to mitigation by the DRI.

## Achieving Workforce Housing Balance in Metropolitan Atlanta

While workforce housing needs to be addressed throughout the metropolitan Atlanta area, here we suggest that Livable Centers are poised to take the lead in achieving workforce housing balance. Consider the prospective role of Livable Centers in meeting regional housing and job needs envisioned by Nelson (2002) compared to the analysis done for this study in Table 12. This study posed the idea that Livable Centers could attract about a third of the region's growth over the period 2000 to 2030. Data now available indicate that Livable Centers already exceeds these targets but probably because the characteristics of Livable Centers have changed resulting in larger areas and greater activity among the Centers than anticipated in 2001. Moreover, the current conditions data are based on census tracts and not strictly on LC boundaries, resulting in over-estimation. The analysis developed in this report, however, based on more recent data, a larger number of Centers (48), and using census tracts as the unit of analysis suggests results in a revised target.

**Table 12**  
**Livable Center Target, Current Conditions, Revised Target**

<i>Category</i>	<i>LCI Target For 2020</i>	<i>Current Conditions</i>	<i>LCI Target For 2030</i>
Jobs	300,000	700,000	1,030,000
Households	200,000	315,000	680,000
People	500,000	787,500	1,700,000

In effect, to achieve workforce housing balance(at least on the census tract level), Livable Centers would need to add about 1 million more people than lived in them in 2000, and about 300,000 more jobs. The household and population targets, however, consider only households with at least one working member so this does not reflect the overall population target.

That Livable Centers will meet the projected employment projections is not in much dispute but achieving workforce housing balance will be more difficult. Why? Consider that while the number of jobs will increase by about half the number of households and residents supported by those jobs will need to more than double. How can this be done? It is appropriate here to reconsider the variety of ways in which Livable Centers should be given incentives to achieve workforce housing balance. Re-prioritizing state and federal incentives favoring residential development in Livable Centers should be considered. The following are ideas from the 2002 report on the role of Livable Centers in meeting regional development needs.

### ***Prioritize State Investments to Favor Livable Centers***

The ARC should work with relevant state and federal agencies to prioritize their investments favoring Livable Centers. Possible efforts include:

*Water and Sewer Loans.* Prioritizing Georgia Environmental Finance Authority loans to favor LCIs. Currently, GEFA loans are awarded on a combination of need and first-come, first-served bases. Given choices between loans at least within the ARC region if not much of north Georgia (such as the GRTA jurisdiction or the jurisdiction of the newly formed Metropolitan North Georgia Water Planning District), GEFA should give preference to Livable Centers.

*Low Income Housing Tax Credits.* Prioritizing state awards of federal low income housing tax credits. Currently, the DCA awards federal tax credits essentially on a first come, first served basis with some consideration given to the managerial capacities of bidders for those credits, and track records. Indeed, Georgia is not nearly as creative as other states in making strategic use of such tax credits. If Georgia were returning tax credits for lack of demand the current approach may make some sense. However, there is greater demand for tax credits than Georgia has in supply. In other states, such as California, Oregon, Washington, and Minnesota, to mention a few, tax credits are awarded based on strategic interests and there are still waiting lists to bid for them. At least for tax credits issued in the Atlanta metropolitan area, the DCA should give priority to making awards in Livable Centers.

*Subsidized Mortgages.* The Georgia Housing Finance Authority has authorization from the state to issue double tax-exempt bonds for the purpose of providing below-market mortgages to qualifying households. Priority for receiving such mortgages could be given to qualifying developments within Livable Centers.

*School Construction Financing.* The State Superintendent of Education has authority to award school construction grants. Those grants are awarded essentially on a first come, first served basis with consideration given to need. Priority for receiving such funds could be shifted at least in part to favor new or rehabilitated schools in Livable Centers. In addition, school land area standards should be reconsidered. For example, the minimum land area requirement for a new high school is 20 acres. New high schools are thus built where the land is cheap, resulting in teachers and students traveling long distances to school. Standards should be reconsidered with the principle objective being to encourage new school construction within Livable Centers or very close to them.

*Greenspace Funding.* In some situations, greenspaces included in county greenspace plans submitted to the Department of Natural Resources pass through LCIs. In these cases, existing or perhaps new state funds should be prioritized to acquire those greenspaces. This will make Livable Centers physically more

attractive. It will also probably save money as land values in Livable Centers may rise faster than the regional average if they are effective in attracting a substantial share of the region's growth.

*Property Tax Abatement and State Revenue Sharing.* Many local governments receive substantial state funds through a variety of sources. Such revenues keep property taxes in check. Unfortunately, for many types of housing property taxes are a barrier to affordability. The state could reconsider its revenue formulas to enable local governments to abate taxes for affordable housing projects in Livable Centers, replacing lost funds with an increment in state revenue sharing. This is being done statewide through the general home owner property tax relief program but should be extended to include all forms of housing in Livable Centers

*New Job State Tax Incentives.* Georgia has a three-tiered approach to encouraging formation of new jobs. Although qualifying new jobs in metropolitan Atlanta receive the least amount of incentives, it is possible that the program could be modified to provide enhanced state tax credits for the formation of new jobs in Livable Centers.

*Georgia Regional Transportation Authority Support.* The GRTA has \$2 billion in line of credit from the state to launch local transportation systems. It would seem logical that the GRTA could devise special programs to support transit improvements in Livable Centers.

There may be other state-level programs supporting local governments that could be reconsidered to give priority to Livable Centers. They should be identified. The Governor's Development Council has the statutory authority to coordinate activities of state agencies, which may include shifting their funding priorities to favor Livable Centers. More directly, the GRTA has authority to review GEFA loans within its jurisdiction. It is possible that the GRTA could establish priorities for issuing GEFA loans consistent with a regional strategy to focus a substantial share of new development into Livable Centers.

### ***Shift Federal Incentives to Support Livable Centers***

A number of federal programs could be reconsidered to give priority to Livable Centers. In some cases this requires only reconsideration by state and local officials but in other cases federal policy may need to change.

*Brownfields Economic Development Initiative.* HUD distributes about \$25 million in planning and land acquisition funds annually for brownfield redevelopment. The program is competitive. The state could work with HUD to target qualifying Livable Centers for priority brownfield funding.

*Community Development Block Grants.* About \$4.8 billion annually is given to state governments and certain entitlement communities for a wide range of uses. Georgia will get about 3 percent of those funds in the next decade. Entitlement

jurisdictions could give priority for CDBG funds to Livable Centers. The Georgia DCA could prioritize use of competitively awarded funds to Livable Centers.

*HOME Funds.* About \$1.6 billion annually is issued by HUD to local and state governments to assist them in producing affordable housing. The funds are moderately competitive but it appears that Georgia will receive about 3 percent of those funds during the next decade. The state could prioritize use of some of those funds in Livable Centers.

*Welfare-to-Work Rental Voucher Program.* About \$300 million annually is awarded by HUD to state and local housing agencies that subsidize the rent of low-income families to enable them to rent apartments near available jobs, transportation, or child care. The program is moderately competitive but it appears that Georgia will receive about 3 percent of those funds during the next decade. The state and relevant local housing authorities could give priority to subsidizing rents in Livable Centers for qualifying households.

*Economic Development Initiative.* About \$275 million annually is awarded by HUD to states and local governments to finance community and economic development initiatives such as shopping centers, restaurants, and entertainment complexes. The program is competitive among states and local governments. Working with HUD, state and local governments could give priority to using such funds in Livable Centers

It is possible that Congress could modify federal laws, or perhaps federal agencies could modify administrative rules, to give national preference to awarding federal funding to designated "priority investment areas" such as Livable Centers.

### **Outside Livable Centers**

Even if they reach their targets, Livable Centers will meet only about a third of the region's workforce housing needs. Outside Livable Centers, ARC's Regional Development Plan and associated policies can be used as a guide to achieve workforce housing. The RDP includes such policies as mixing land uses among new developments, broaden housing choice, create mixed-use and multi-modal corridors, and devise a new template for suburban residential developments.

## **NEXT STEPS**

Four steps are recommended to carry this work forward.

The analysis reported here should be expanded to include estimates of all population needs spatially with the eye to achieve “life-cycle” balanced communities. These would be communities that provide not only sufficient employment and housing opportunities in reasonably close proximity but opportunities for people and households to have housing opportunities available to them at all stages of their life.

Another step is encouraging Livable Center sponsors to begin planning now to achieve workforce housing balance. Along with this, sponsors should study ARC employment projections (based on aspirations) and consider the possibility that more jobs may be added. In any event, workforce housing needs should be addressed in a planning process. That process may use the figures developed in this study as a point of departure.

Third, ARC may consider creating more incentives to facilitate progress toward achieving workforce housing balance in Livable Centers and elsewhere.

Lastly, achieving workforce housing balance should be considered a goal with associated policies in the RDP at least as applied to Livable Centers and perhaps other centers, corridors, and large-scale master-planned communities.

## References

- Downs, Anthony. 1973. *Opening Up the Suburbs*. New Haven, CN: Yale University Press.
- Bollens, Scott A. 1992. State Growth Management: Intergovernmental Frameworks and Policy Objectives. *Journal of the American Planning Association* 58, 4: 454-466.
- Gale, Dennis E. 1992. Eight State-Sponsored Growth Management Programs: A Comparative Analysis. *Journal of the American Planning Association* 58, 4: 425-439.
- Innes, Judith Eleanor. 1992. Group Processes and Social Construction of Growth Management: Florida, Vermont, and New Jersey. *Journal of the American Planning Association* 58, 4: 440-453.
- Knaap, Gerrit J. and Arthur C. Nelson. 1992. *The Regulated Landscape*. Cambridge, MA: Lincoln Institute of Land Policy.
- Nelson, Arthur C. and James B. Duncan. 1995. *Growth Management Principles and Practices*. Chicago: American Planning Association.
- Nelson, Arthur C. 1995. Comparative Judicial Land-Use Decision-Making Processes. *The Urban Lawyer*. Spring.
- Nelson, Arthur C. 2002. *The Strategic Role of the Livable Centers Initiative*. Atlanta: Atlanta Regional Commission.

## Resources available on-line

- “Why Housing Matters,” Pp. 10-13 in Meeting our Nation’s Housing Challenges, Bipartisan Millennial Housing Commission, May 2002.  
<http://www.mhc.gov/MHCReport.pdf>.
- “Editors Note: Housing Solutions Reflect the Times” by James Carr. Fannie Mae Foundation, Housing Facts and Findings, Summer 2000, Volume 2, Issue 2,  
<http://www.fanniemaefoundation.org/programs/hff/v2i2-index.shtml>.
- “Reinventing the Company Town: Employer Assisted Housing in the 21<sup>st</sup> Century” by Stephanie A. Jennings. Fannie Mae Foundation, Housing Facts and Findings, Summer 2000, Volume 2, Issue 2, <http://www.fanniemaefoundation.org/programs/hff/v2i2-index.shtml>.
- “Sidebars to Cover Story” Fannie Mae Foundation, Housing Facts and Findings, Summer 2000, Volume 2, Issue 2, <http://www.fanniemaefoundation.org/programs/hff/v2i2-index.shtml>.

“Perspectives: EAH Benefits Employees, Employers, and Communities” by Ann D. McLaughlin. Fannie Mae Foundation, Housing Facts and Findings, Summer 2000, Volume 2, Issue 2, <http://www.fanniemaefoundation.org/programs/hff/v2i2-index.shtml>.

“America’s Housing Challenges” Pp. 14-21 in Meeting our Nation’s Housing Challenges, Bipartisan Millennial Housing Commission, May 2002. <http://www.mhc.gov/MHCReport.pdf>.

Rental Housing for America’s Poor Farther Out of Reach 2002 Than Ever, National Low Income Housing Coalition. <http://www.nlihc.org/oor2002/index.htm>.

Paycheck to Paycheck: Working Families and the Cost of Housing in America, Center for Housing Policy/National Housing Conference. Volume 2, Issue 1, June 2001. [http://www.knowledgeplex.org/kp/report/report/refiles/nhc\\_paycheck.pdf](http://www.knowledgeplex.org/kp/report/report/refiles/nhc_paycheck.pdf)

“Executive Summary” Pp. 1-9 in Meeting our Nation’s Housing Challenges, Bipartisan Millennial Housing Commission, May 2002. <http://www.mhc.gov/MHCReport.pdf>.

Examples of view different viewpoints on residential development:

Growth is Good and Homes Can Pay for Themselves, Home Builders Association of Connecticut, Inc.

<http://www.hbact.com/GovtAffairs/Smart%20Growth%20Policy%20Statement%202003.htm>

Fact Sheet Cost of Community Services Studies, American Farmland Trust, Farmland Information Center, Washington, DC. [http://www.farmlandinfo.org/fic/tas/COCS\\_9-01.pdf](http://www.farmlandinfo.org/fic/tas/COCS_9-01.pdf)

Fannie Mae Housing Facts and Findings, Volume 4, Number 2, 2002, “Workforce Housing: The New Economic Imperative?” by Carol A. Bell, <http://www.fanniemaefoundation.org/programs/hff/v4i2-workforce.shtml>

Family Home Fund, Workforce Housing: The Key to Ongoing Regional Prosperity, A Study of Housing’s Economic Impact on the Twin Cities, September 2001. <http://www.fhfund.org/Research/Workforce%20Housing.pdf>.

## **Examples of Business Involvement in the Workforce Housing Issue**

Greater Boston Chamber of Commerce, Employer Assisted Housing: A Guide for Chambers of Commerce.

Silicon Valley Manufacturer's Group, <http://www.svmg.org/Committees/Housing/>

Housing Trust Fund of Santa Clara County  
<http://www.housingtrustscc.org/>

San Francisco Chamber of Commerce,  
[http://www.sfchamber.com/workforce\\_housing\\_committee.htm](http://www.sfchamber.com/workforce_housing_committee.htm)