

# FISCAL RESEARCH CENTER

## Georgia's Aging Population: What to Expect and How to Cope



**ANDREW YOUNG SCHOOL**  
OF POLICY STUDIES

# **Georgia's Aging Population: What to Expect and How to Cope?**

A report to the Healthcare Georgia Foundation studying the impact of Georgia's aging population on medical expenses and the State Budget

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The project is funded by a grant from the Healthcare Georgia Foundation. Created in 1999 as an independent private foundation, the Foundation's mission is to advance the health of all Georgians and to increase access to affordable, quality healthcare for underserved individuals and communities.

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## I. INTRODUCTION

Due to the economic recession and a corresponding decline in state revenues, Georgia faced three consecutive years of budget reductions through Fiscal Year 2005. While the outlook for FY2006 is brighter than the previous three years, there are a number of pulls on the state budget that deserve detailed attention in order to inform the policy debate over the next several years and to increase the likelihood of long-term fiscal health in the state. As Governor Purdue stated in his December 2004 budget transmission letter, the current and future pressures on the state budget include:

- Increases in school and college enrollment;
- Growth in demand for Medicaid services; and
- Increases in the cost of health care insurance for teachers, college faculty, and state employees.

These particular pressures are due to the general growth in Georgia's population and the substantial increase in the percent of the population that is elderly. These expenditure pressures continue to grow at a time when the revenue side of the state budget has languished in comparison to previous years. The Economic Report of the Governor points out that while revenues began to increase steadily in late 2004, employment recovery has continued to be lackluster, and therefore, the future economic climate in Georgia should be viewed with cautious optimism.

This report focuses on implications of Georgia's growing elderly population on the state budget. According to "Older Americans 2000: Key Indicators of Well-being"<sup>1</sup> and the U.S. Census Bureau, by 2030, one out of five people in the U.S. will be 65 years of age or older. The size of the older population is projected to double over the next 30 years, growing to 70 million by 2030. This will result in the percentage of those over 65 rising from 10 percent to 17 percent of the population of the state by 2025. In Georgia, by 2030, one in five residents will be over the age of 60 - Georgians are growing older at a faster rate than the overall U.S. population.

These dramatic demographic shifts will have significant impacts on the way the State finances its budget and what it finances via the budget. On the revenue side, we analyze the effect of the growth in the number of elderly who are eligible under current law for various exemptions and reductions in personal income tax, sales tax (by virtue of consumption patterns), and property tax.<sup>2</sup> On the expenditure side, we focus exclusively on the implications for Medicaid expenditures. During the recent, difficult economic situation in Georgia, Medicaid expenditures increased dramatically. Medicaid's share of the state budget increased from almost eight percent of the state budget in FY 2002 to over 13.5 percent of the state budget in FY 2005. In order to balance the state budget, the Governor and General Assembly were forced to take a short-run view of health care funding. However, in spite of the short-term fiscal and budgetary crisis, in

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<sup>1</sup> Older Americans 2000: Key Indicators of Well-being; A report by the Federal Interagency Forum on Aging Related Statistics.

<sup>2</sup> Although the State collects very little state revenue from the property tax, it is one of the main sources of revenue for the local governments. As local governments feel the impact of a reduced tax base, they may turn to the State for additional revenue support. Therefore, we believe it important to point out the budget implications of the increasing elderly population on property tax revenues.

order to provide health care in an efficient and cost effective manner, the state needs to take a long-term perspective.

From both the revenue and expenditure sides of the budget, a lack of long-term planning will increase the likelihood of fiscal stress from one year to the next. Long-range planning requires information about the likely future that the state will confront. This report provides a basis for thoughtful long-term budgetary planning in the area of revenue policy and health expenditures in the face of a rapidly growing elderly population.

The remainder of this report proceeds as follows: Section II establishes the demographic trend of the aging of Georgia's population. Section III represents the analysis of the impact of the growing elderly population on current and future local and state tax revenues. In Section IV we present analyses of the health status of the elderly and in Section V, the status of current provision of health and other services for the elderly. Finally, Section VI considers policy options for dealing with the projected health care needs.

## II. SETTING THE STAGE: DEMOGRAPHIC TRENDS

The impact of demographic changes on public finances can be quite dramatic<sup>3</sup>. As people age, they spend down their savings, earn relatively little labor income, purchase different types of goods and services, and demand different types of public services. Each of these changes can, and most likely will, affect government revenues. This section is concerned with the changing demographics within the U.S., the state of Georgia as a whole and the counties within the state.

### National Aging Trends

Since 1901, the U.S. population has grown at an average rate of 1.28 percent per year (see Tables A1-A3 in the Appendix for selected additional U.S. population growth percentages). The Census Bureau's projections of population growth show consecutive slight decreases in the overall growth rate of the population through 2050 (on average, the annual growth rate will fall to 0.82 percent, see Appendix I, Table A-2). However, the population will age quite dramatically over the next 25 to 30 years (see Figure 1). By 2050, the population aged 65 or older will constitute 20 percent of the overall U.S. population. In absolute terms, this means that by 2050 the number of people over 65 years of age is expected to be 86,705,000.

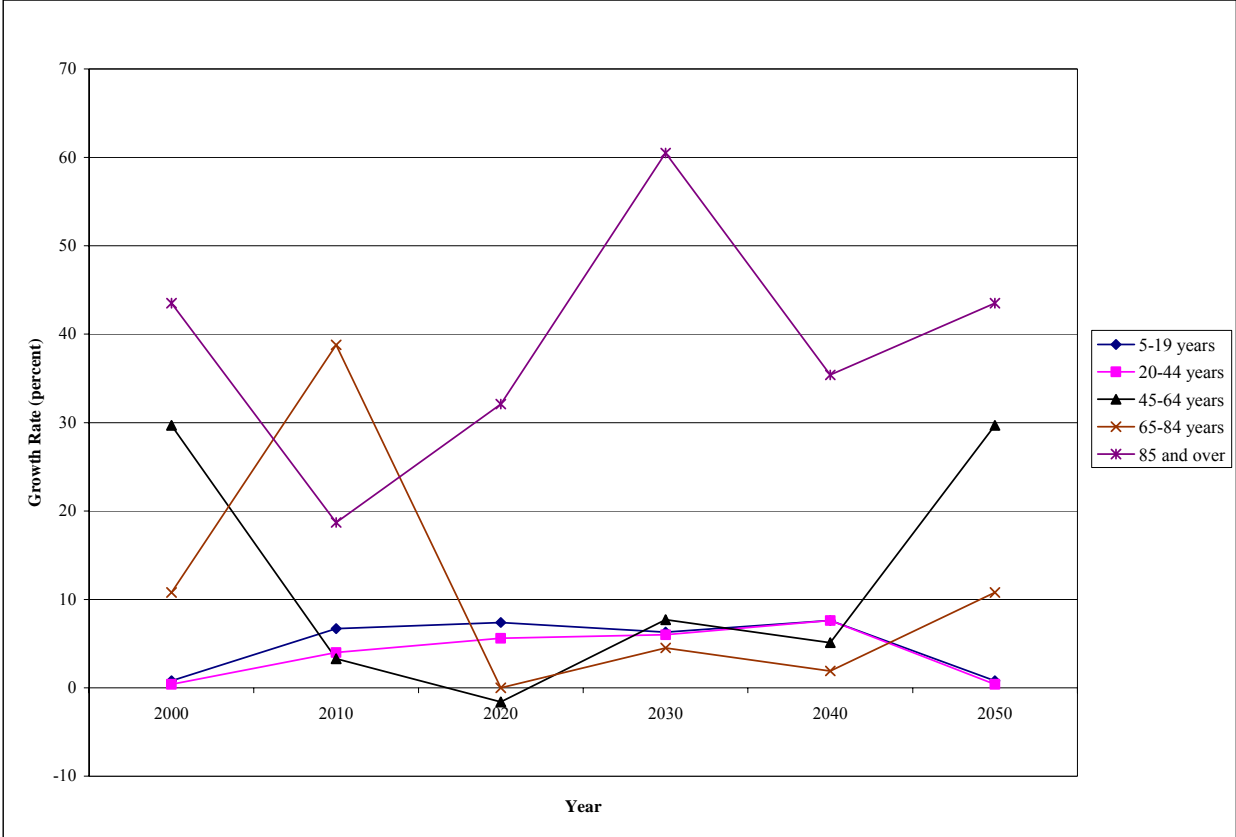
During the same time period, the age groups actively engaged in labor market activity (“20-44 years” and “45-64 years”) will become a smaller portion of the population, as these age groups will grow more slowly than the elderly population. The data also show growing polarization of the population according to age. From 2000 to 2010, 2020 to 2030, and 2030 to 2040, those 85 years of age and older (the “oldest old”) are expected to be the fastest growing age group in the U.S. From 2010-2020, the population over 65 is expected to grow faster than any other age group.

Overall, the younger aged groups show relatively sluggish growth patterns when compared to the elderly population (both the “old”, or those aged 65-84, and the “oldest old” – those 85 and older). The number of working-aged individuals (18-64 years of age) per individual over the age of 65 will decrease from 4.8 to 3.2 in the U.S. by 2025. The “population pyramid” graphs in Figure 2 show the distribution of the population by age for the U.S. – a wider foundation on the pyramid means that there are relatively more young people in the population. As the population increases in average age, the figure changes from a pyramid to a rectangle. Clearly, Figure 2 shows that the U.S. population is growing old. The U.S. pyramid is losing its triangular shape and becoming more rectangular. The general growth in the elderly population has implications for health care expenditures such as Medicaid, but the shape of the pyramid also has direct implications for other programs such as the ability to fund pension systems.

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<sup>3</sup> The literature on demographic changes and their economic effects is growing; however, there is still relatively little research that examines direct effects on state and local budgets. For an earlier review, see Wallace (1995).

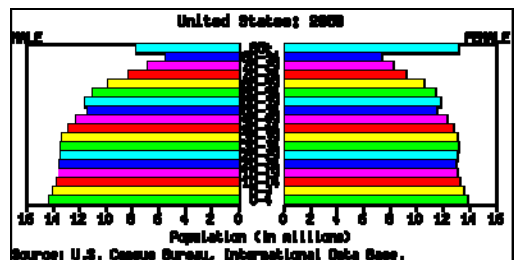
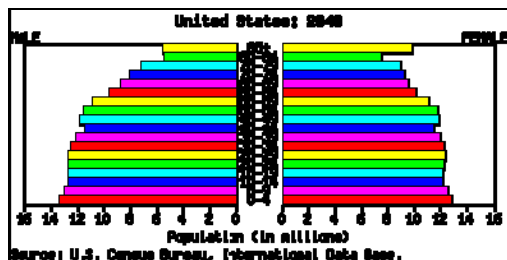
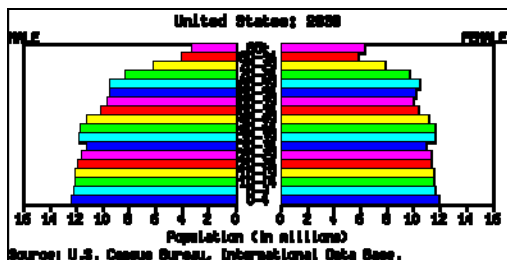
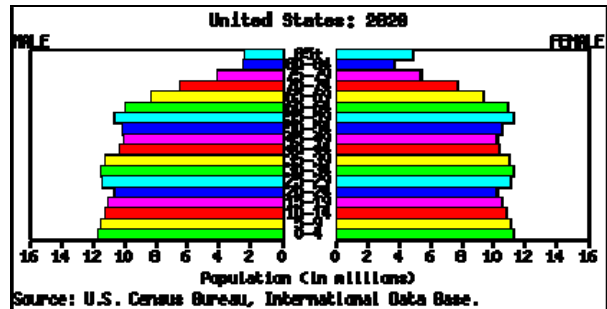
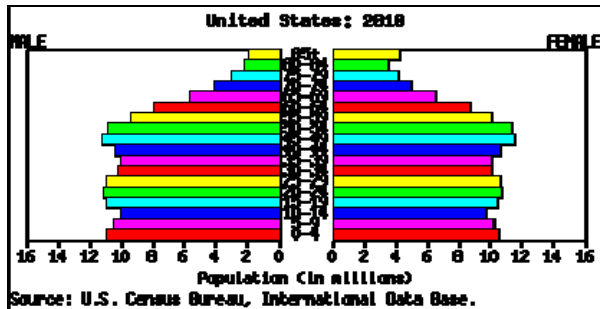
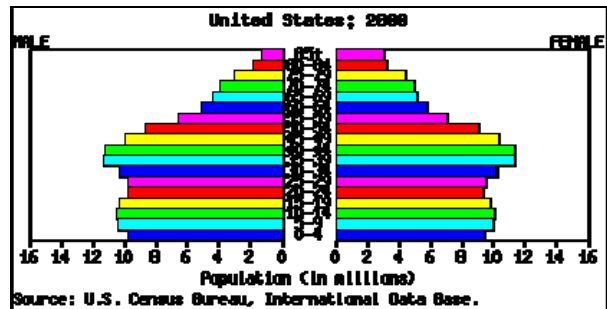
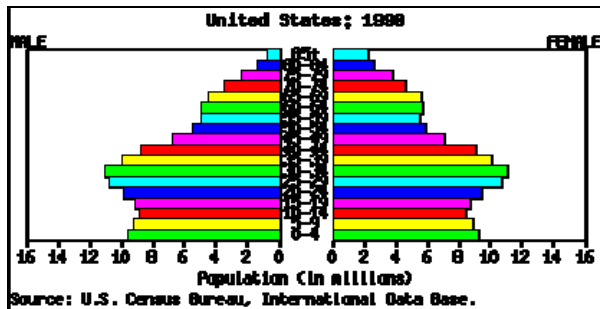
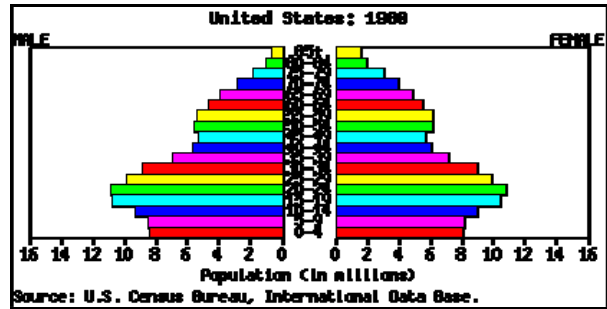
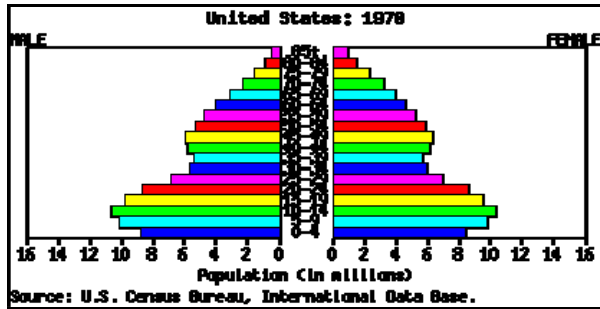
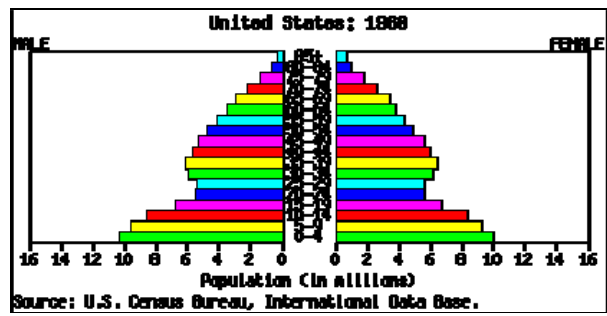
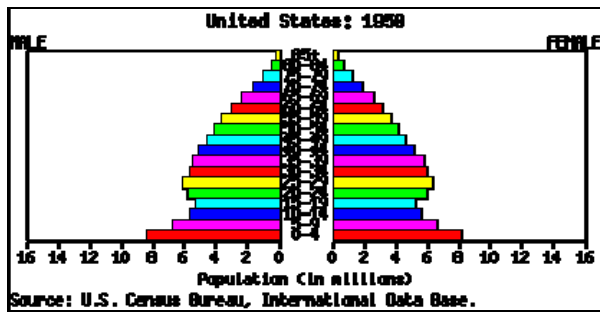
**FIGURE 1. AVERAGE ANNUAL GROWTH PER AGE GROUP**



Source: U.S. Department of Commerce, Bureau of Census.



FIGURE 2: U.S. POPULATION PYRAMIDS



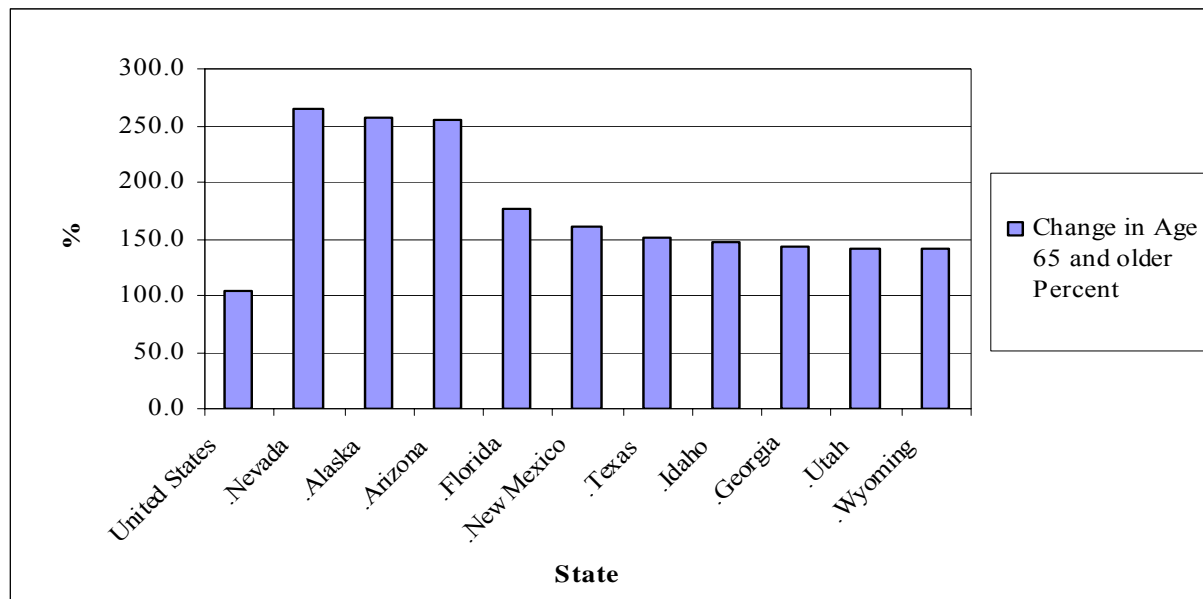
Source: U.S. Department of Commerce, Bureau of Census.

## Georgia's Demographics

Georgia is aging somewhat faster than the U.S. as a whole. Currently, Georgia is a “young” state in that it has a relatively small percent of its population aged 64 and older. The demographics of Georgia suggest that over the next 20 years, the number of working-aged individuals (18-64 years of age) per individual over the age of 64 will decrease from 6.4 to 3.5; in particular, the most recent data suggest that the old age dependency ratio (the ratio of those 65 years of age and older divided by the population aged 18-64) will increase from 15.7 percent to 28.8 percent from 2005 to 2025. According to calculations by the U.S. Bureau of the Census, in absolute terms, the elderly population (i.e. 65 and older) in Georgia will increase by 143 percent between 2000 and 2030 versus a total population increase in Georgia of 46.8 percent<sup>4</sup>. This compares to a national average of elderly population growth (those 65 years of age and older) of 104.2 percent from 2000 to 2030. In fact, Georgia is among the top ten states expected to witness larger than average growth in elderly population over the forecast period of 2000-2030, as shown in Figure 3. In absolute terms, Georgia will move from ranking 49<sup>th</sup> in terms of concentration of population aged 65 or older to a ranking of 47<sup>th</sup> among all U.S. states by 2030 - still a relatively young state, but older than it currently is.

Figure 4 indicates projected changes between 2000 and 2030 for different age groups in Georgia. The dominating growth comes for the older age groups - from 55-59 through the over 85 age group. Elderly people over the age of 85 will grow faster than any other age group.

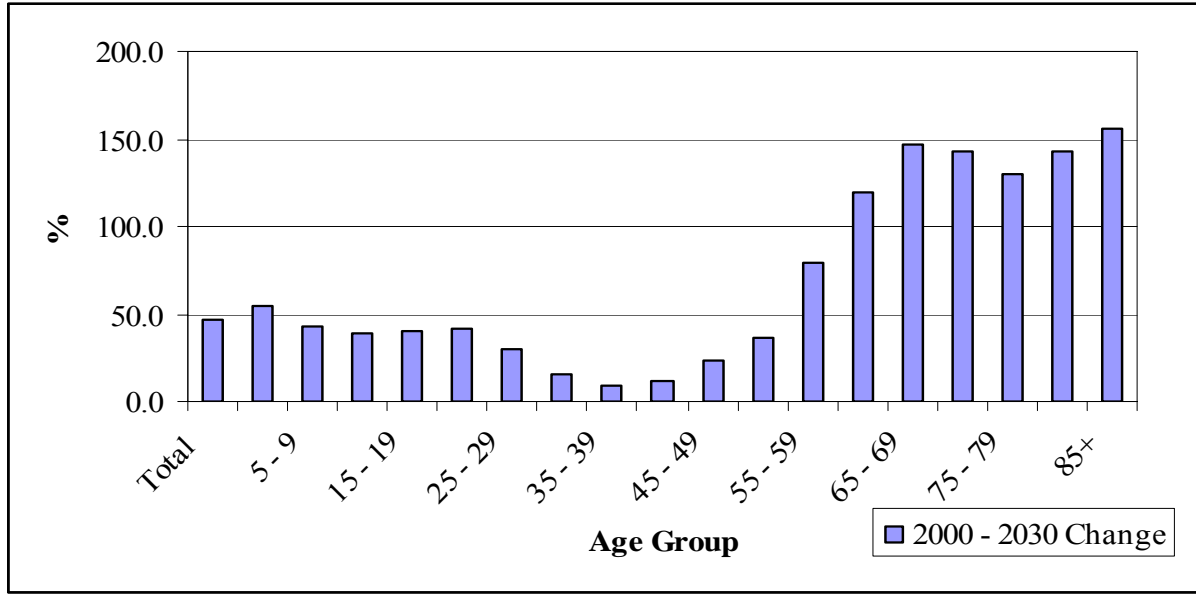
**FIGURE 3. TOP TEN CHANGES IN AGE 65 AND OLDER: 2000 - 2030**



Source: U.S. Department of Commerce, Bureau of Census.

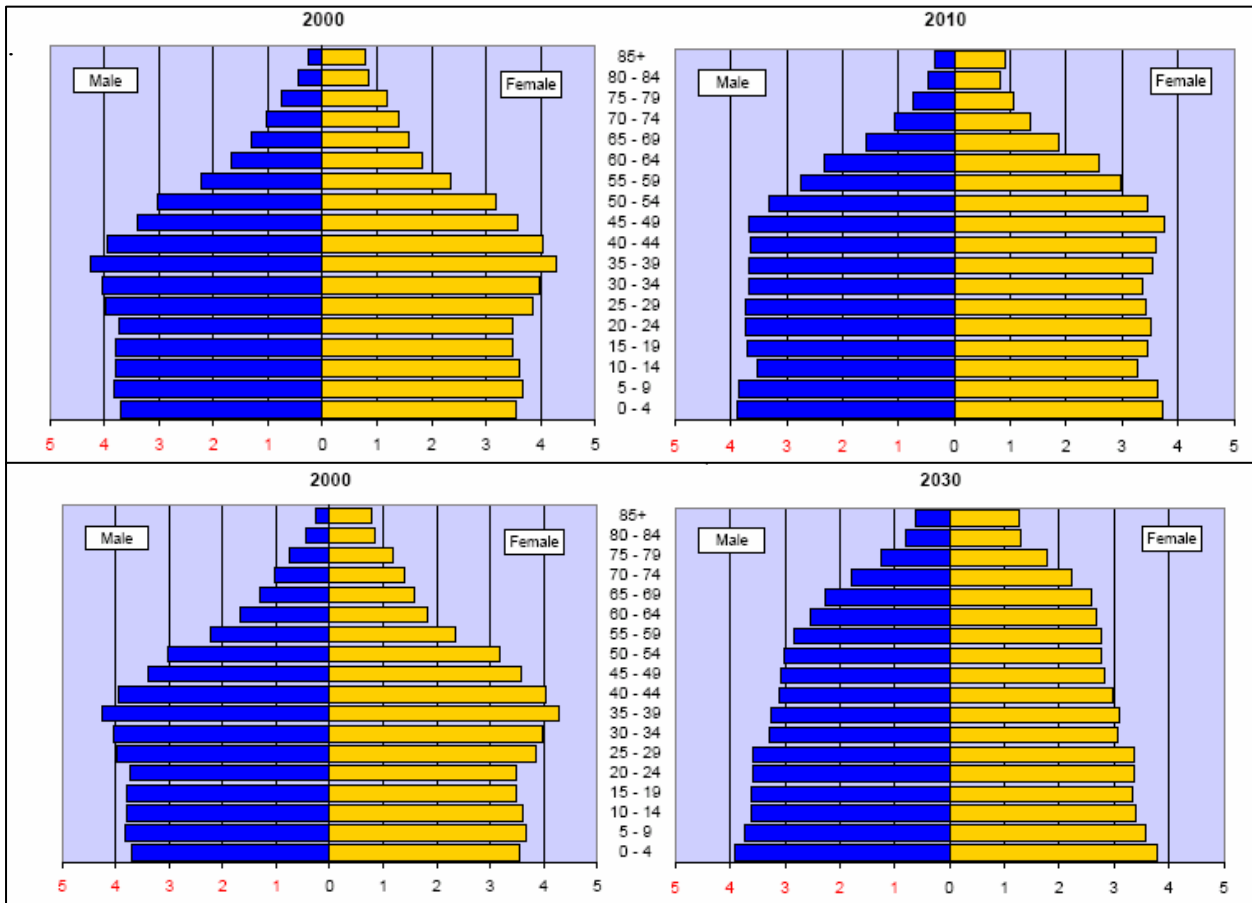
<sup>4</sup> U.S. Census Bureau, Population Division, Interim State Population Projections, 2005.

**FIGURE 4. CHANGE IN GEORGIA POPULATION: 2000 - 2030**



Source: U.S. Department of Commerce, Bureau of Census.

**FIGURE 5: GEORGIA POPULATION PYRAMIDS**



Source: U.S. Department of Commerce, Bureau of Census.

The population pyramids for Georgia provide another look at the relative shifts in the distribution of the elderly population and the younger population over time, similar to that presented for the U.S. Figure 5 reproduces the Census population data for Georgia and shows that the Georgia population pyramid is losing its triangular shape as the number of elderly population grows faster than the non-elderly population. The dependency ratio trend in Georgia is similar to that discussed above for the U.S.

As a final piece of the snapshot of age demographics in Georgia, Figure 6 presents growth (in percent) in the population age 65 to 69, and Figure 7 presents the growth in population age 85 and older for each county in the state. The distribution of the elderly population across Georgia is not uniform. As can be seen in the figures, the population aged 65-69 (“young old”) around the metropolitan Atlanta area (with the exceptions of Fulton, Clayton, and DeKalb counties) and the northern part of the state will grow fastest over the next five years. There are also pockets of growth in this age group in the southeastern part of the state including much of the Savannah metropolitan area. Forsyth County is projected to have the largest growth in population aged 65-69 at 168 percent over the period 2000-2010.

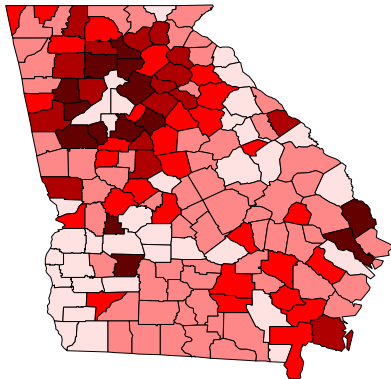
Figure 7 shows the intensity of growth in the “old old”, or those 85 years of age and older. The concentration of this growth is both in the northern part of the state as well as in the southeastern part, again including the Savannah metropolitan area. Dawson County in North Georgia has the fastest projected growth in this age group with a growth rate of 448 percent.<sup>5</sup> The figures demonstrate that getting services to the elderly over the next decade can not be concentrated in any one geographic area. Depending on the type of services to be offered to the elderly, this geographic distribution could increase the cost of services.

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<sup>5</sup> The top ten counties with the largest growth in population aged 65 to 69 over the period 2000-2010 are: Forsyth, Henry, Cherokee, Paulding, Gwinnett, Fayette, Lee, Schley, Dawson, and Bryan; those with the largest growth in population aged 85 and older are: Dawson, Chattahoochee, Paulding, Henry, White, Banks, Forsyth, Cherokee, Pickens, and Catoosa.

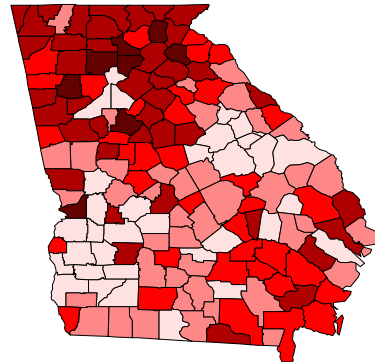
**FIGURES 6 & 7: GROWTH IN GEORGIA’S POPULATION AGE 65-69 BY COUNTY**

Percentage Growth 200-2010  
Population 65-69



Change X100  
 -0.32 - 0.082  
 0.082 - 0.315  
 0.315 - 0.587  
 0.587 - 0.936  
 0.936 - 1.683

Percentage Growth Population 85+  
2000-2010



Change X 100  
 0.35 - 0.899  
 0.899 - 1.314  
 1.314 - 1.777  
 1.777 - 2.538  
 2.538 - 4.493

Source: Georgia Office of Planning and Budget, 2005.

Where have Georgia’s elderly come from? It is important to determine whether state policies have attracted elderly or if the individuals have grown old in Georgia. Georgia offers one of the larger income tax exemptions for retirees (in 2002, the State was among the top five most generous to retirees in terms of income tax exemptions),<sup>6</sup> and we do not yet know the net impact of those exemptions on retiree migration. The impact of the exemption is likely to be more important in the future than it has been to date since the level of the exemption is set to increase substantially over the next four years. It is beyond the scope of this study to determine exact patterns of migration of the elderly and to determine their exact net fiscal impact (their public expenditure demands minus the taxes they pay). However, we can shed some light on the direction of the impact of migration by analyzing Census data on net migration into Georgia.

Table 1 presents the aggregate net migration statistics for those aged 65 and older in Georgia, between 1995 and 2000. These statistics represent the *net migration*, that is, in-migration minus out-migration. Interestingly it is the “oldest old” who are migrating to Georgia in larger percentages, although in absolute numbers, the age group 65-74 represents the most numerous in-migrants. It appears that Georgia is “growing” a significant number of its own elderly, but

<sup>6</sup> Edwards and Wallace (2004).

**TABLE 1: NET INTERNAL MIGRATION: GEORGIA, 1995-2000**

<b>Age Group</b>	<b>Net Migration</b>	<b>Population Total (2000)</b>	<b>Net Migration/ Population Total (Percent)</b>
65-74	6,590	435,695	1.5
75-84	5,132	261,723	1.96
85 and older	2,204	87,857	2.5
All 65 and over	13,926	785,275	1.77

Source: U.S. Census, "Net Internal Migration for the Population 65 Years and older for GA: 1995 to 2000."

the pattern shown in Table 1 (the in-migration of old elderly) is certainly one to monitor in the future.<sup>7</sup>

A set of companion tables, Tables 2-4, present migration statistics by income group for Georgia. The data used to develop these tables come from the decennial census "PUMS" or public use master file. This data file is a micro-level data set (a data set comprised of individual or person observations). The Census asks a question about migration between 2000 and 1995 and the individual level detail of the PUMS allows identification by characteristics including income. Table 2 shows basic income statistics for those Georgians age 65 and older who did not move in 1995, while Tables 3 and 4 show the same statistics for in-migrants and out-migrants respectively.

Some interesting patterns are identifiable when we compare the average personal and household (HH) income levels of the elderly that moved in and out of Georgia during this period. In particular, the mean HH income of the elderly that moved into Georgia from 1995-2000 was \$60,932; this is significantly higher than the average HH level income of the elderly that remained in Georgia or moved out of the state. These data might suggest that Georgia is importing some relatively wealthy elderly people. On the other hand, Georgia in general has more in-migration of the elderly than out-migration and, as such, is getting some less wealthy older migrants. Given that the state is attracting more of the "oldest old" in terms of percent of individuals migrating (Table 1), we expanded the analysis of Tables 2-4 by breaking out more detailed elderly groups by age in Tables 5 and 6. As seen in these tables, the younger elderly migrants are higher income than the middle or oldest old. Also, for the oldest old category, the average (or median) income of the out migrants is significantly larger than for the in-migrants.

<sup>7</sup> This trend is also pointed out as a national trend in the Census publication "Internal Migration of the Older Population: 1995-2000," and is summarized as follows (page 2): "Among the older population, the "oldest old" people 85 years and older in 2000, were most mobile. Between 1995 and 2000, almost one-third (32.3 percent) of the oldest old moved, which was much higher than the percentages of movers 65 to 74 or 75 to 84 years old (21.2 percent and 21.9 percent, respectively). At advanced ages, health concerns may force some people to move closer to or in with their children, to assisted care facilities, or to nursing homes." These migration statistics include in-state moves. The out-of state moves are a smaller percentage for the oldest old: 14.9 percent versus 21.2 and 17.3 for the 65 to 74 and 75 to 84 year old groups respectively.

**TABLE 2: GEORGIA NON-MOVERS: POPULATION 65 AND OLDER THAT DID NOT MOVE IN LAST 5 YEARS 1995-2000**

Persons		Households (HH)	
Number of People	596,935	Number of Households	454,760
Mean Income	\$24,867	Mean Income	\$42,078
Median Income	\$13,550	Median Income	\$27,120
Mean SS Income	\$7,184	Average # of People	
Median SS Income	\$7,000	Per HH	1.97

Source: Tabulations from Census Public Use Micro File.

**TABLE 3: GEORGIA IN-MIGRANTS: POPULATION 65 AND OLDER THAT MOVED INTO GEORGIA FROM OTHER U.S. STATES, 1995-2000**

Persons		Households (HH)	
Number of People	44,060	Number of Households	33,092
Mean Income	\$24,876	Mean Income	\$60,932
Median Income	\$13,900	Median Income	\$41,700
Mean SS Income	\$7,233	Average # of People	
Median SS Income	\$7,100	Per HH	2.53

Source: Tabulations from Census Public Use Micro File.

**TABLE 4: GEORGIA OUT-MIGRANTS: POPULATION 65 AND OLDER THAT MOVED OUT OF GEORGIA TO OTHER U.S. STATES, 1995-2000**

Persons		Households (HH)	
Number of People	28,289	Number of Households	21,611
Mean Income	\$26,201	Mean Income	\$53,663
Median Income	\$14,900	Median Income	\$36,390
Mean SS Income	\$7,767	Average # of People	
Median SS Income	\$8,000	Per HH	2.13

Source: Tabulations from Census Public Use Micro File.

**TABLE 5: INCOME DISTRIBUTION BY AGE GROUP OF GEORGIA**

	-----Individuals-----			-----Households-----		
	Age 65-74	Age 75-84	Age 85+	Age 65-74	Age 75-84	Age 85+
<b>Non-Movers</b>						
Total	338,188	198,439	60,308	278,910	176,593	54,135
Mean Income	\$26,403	\$23,463	\$20,844	\$46,084	\$39,119	\$35,640
Median Income	\$15,000	\$12,600	\$10,700	\$31,300	\$24,400	\$20,400
SS Mean Income	\$8,418	\$8,655	\$8,558			
SS Median Income	\$7,900	\$8,100	\$8,000			
<b>Moved-In</b>						
Total	23,964	14,276	5,820	20,023	11,539	4,189
Mean Income	\$27,699	\$22,317	\$19,410	\$57,853	\$61,657	\$67,658
Median Income	\$14,900	\$22,317	\$11,600	\$38,910	\$43,800	\$46,990
SS Mean Income	\$8,656	\$9,075	\$8,861			
SS Median Income	\$8,200	\$8,700	\$8,300			
<b>Moved-Out</b>						
Total	15,408	9,014	3,867	15,312	8,223	2,921
Mean Income	\$28,294	\$23,588	\$23,752	\$55,300	\$52,428	\$56,638
Median Income	\$16,800	\$14,200	\$11,700	\$38,200	\$32,000	\$38,800
SS Mean Income	\$9,204	\$9,421	\$8,465			
SS Median Income	\$9,000	\$8,700	\$8,100			

Source: Tabulations from Census Public Use Micro File.

**TABLE 6: PERCENT INDIVIDUALS IN AN INCOME BRACKET AS A SHARE OF TOTAL POPULATION OF AGE GROUP**

Income	-----Age 65-74-----			-----Age 75-84-----			-----Age 85+-----		
	Non Movers	Moved In	Moved Out	Non Movers	Moved In	Moved Out	Non Movers	Moved In	Moved Out
0	3.47	0.35	0.12	3.26	0.36	0.16	3.48	0.51	0.37
\$0-\$5,000	7.66	0.48	0.25	7.37	0.51	0.34	6.84	0.60	0.47
\$5,001-\$10,000	18.35	1.39	0.82	20.98	1.34	0.88	23.16	1.94	1.38
\$10,001-\$20,000	19.50	1.29	0.90	20.47	1.50	0.90	16.86	1.87	0.87
\$20,001-\$50,000	21.04	1.40	0.98	17.58	1.32	0.86	11.58	1.04	0.74
\$50,001-\$100,000	4.84	0.31	0.29	3.33	0.24	0.12	2.46	0.33	0.19
\$100,000+	3.04	0.27	0.16	2.71	0.15	0.14	2.25	0.10	0.22

Source: Tabulations from Census Public Use Micro File.



## Implications of Georgia's Demographics

As will be shown in more detail in the sections below, these aging demographics directly affect the projected statistics on the health status of Georgians, the need for health-related public expenditures, and state revenue to support programs. A snapshot of the elderly demographic change and health status is provided here. Tables 7 and 8 portray the elderly population and chronic health status, using Georgia population projections from the U.S. Census. The number of Georgians 65 and over with chronic conditions, as well as those living at 225 percent of the federal poverty level<sup>8</sup>, is expected to more than double between 2000 and 2025. These projections portend significant pressures on Medicaid expenditures, as well as other health care related expenditures, which are discussed in detail later in the report.

**TABLE 7. NUMBER OF GEORGIANS 65 AND OLDER**

	<b>Number of Georgians 65 and Older</b>	<b>Number of Georgians 65 and Older with Chronic Conditions</b>
2000	779,000	545,300
2005	852,000	596,400
2025	1,668,000	1,167,600

Source: U.S. Census and projections for chronic conditions based on National Health Interview Survey Data Files 1994 Disability Supplement.

**TABLE 8. NUMBER OF GEORGIANS 65 AND OLDER AT 225 PERCENT FPL**

2000	360,677
2005	394,476
2025	772,284

Source: U.S. Census and projections for chronic conditions based on National Health Interview Survey Data Files 1994 Disability Supplement.

From the information gathered and presented in this section, the age-demographic trend is clear: The U.S. and Georgian populations are growing old at a rapid pace. Georgia's elderly population is among the fastest growing as a share of overall population in the country. The budgetary implications of this growth are the focus of the remainder of this report.

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<sup>8</sup> 225 percent FPL is the approximate income level at which elderly individuals may qualify for Medicaid nursing facility care or certain Medicaid home and community-based waiver programs.

### **III. PUBLIC FINANCES: REVENUES**

#### **Nexus of Age-Demographic and Public Finances**

The aforementioned compositional changes in the age distribution of the Georgian population can have a number of serious repercussions for state and local government budgets. Some possible complications that have been identified in the public policy literature are:

1. The changing age distribution signals a potential change in popular demand for certain public services and financing mechanisms;
2. A growing elderly population is associated with changes in consumption patterns, which – in turn – will affect the revenues raised by state and local governments;
3. Many local governments grant property tax credits and exemptions to elderly homeowners, reducing the revenues raised by the property tax, and, as the population continues to age, this revenue cost grows;
4. State government individual income tax bases tend to exempt part of the income of retirees including earned income, pension income, and social security, thereby reducing the revenue take from the income tax;
5. The types of public expenditures demanded by the elderly population may differ from those of other age groups, and, as a result, governments must adjust their public service mix.

So, continued aging of Georgia's population can significantly affect state and local government budgets from a revenue, as well as an expenditure, angle. This section analyzes the revenue implications of the aging trend.

#### **Revenue Effects: Sales, Income and Property Taxes**

To analyze the potential impact of the aging of the population on state finances, we need to look at the revenue side of the budget as well as the expenditure side. As noted previously, for expenditures, we focus solely on health expenditures in the form of the pressure of rising Medicaid expenditures on the state budget, although there are obvious, other expenditure implications as well.<sup>9</sup> On the revenue side, we will focus on the individual income tax, sales tax, and property tax. For the State, the income and sales tax are the most important revenue sources in terms of dollars - in FY2006, the individual income tax is expected to bring in 44.5 percent of all revenue and the sales tax 32.4 percent.

It is useful to start this analysis with a picture of Georgia's overall fiscal health, which can be measured in a variety of ways. The growth over time in expenditures relative to revenue may

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<sup>9</sup> These could include increased expenditures for specialized transportation (assuming increased reliance on third party transportation as the population ages), as well as a relative reduction in the focus on expenditures for primary and secondary education.

suggest fiscal stress (or health). Increased tax burden per resident may be another measure of fiscal stress. *State Policy Reports* provides a comprehensive index that ranks states on their “net worth.” The analysis calculates “how much money would be left over if each state were to cease operations and pay off all of its debts” (State Policy Reports, 2005) notes that from 2002 to 2004 most states lost ground in their measure of the state solvency index. The index is calculated on a per capita basis. States which are solvent would have an index greater than one, meaning that after paying all debts, the state would have money to distribute back to citizens. In 2004, Georgia’s index was \$56 per capita, much better than most states, but substantially smaller than its 2002 index of \$1,417 per capita. This picture of Georgia’s fiscal health suggests that the state is in a weaker position from which to deal with the added pressures associated with the aging population dynamic.

### **Individual Income Tax**

Over the last two decades, many states have adjusted their income tax structures in such a way that the effective income tax rate on retirees (or elderly, as defined by each state) is significantly lower than the effective state income tax rate on non-retirees. Edwards and Wallace (2004) report that in the U.S. in 1999, the effective marginal tax rate faced by the elderly was about one percent and that by the general population of non-elderly was 2.6 percent. This wedge in tax rates comes largely from exemptions for the elderly (exemption of social security income and pension income in most cases from state income tax bases). In fact, all 43 states that levy an individual income tax offer special tax relief to the elderly by excluding some amount of retirement or other income or by providing additional deductions or credits for their older taxpayers. Some states means-test some or all of their relief so that they might afford more relief to lower income elderly. Thirty-nine states exempt some or all social security income from taxation, while exemption of pension income from taxation varies widely across the states. Thirty-six states offer additional exemptions or credits for the elderly.<sup>10</sup>

Georgia’s individual income tax is one of the more generous state individual income tax structures in terms of income exclusions for the elderly. Georgia currently allows up to \$15,000 of income (a combination of earned and unearned income) to be exempt from tax per retired tax filer, and all social security income is exempt. For taxable years beginning on or after January 1, 2006, and prior to January 1, 2007, the retirement exclusion increases to \$25,000. For taxable years beginning on or after January 1, 2007 and prior to January 1, 2008, the retirement exclusion increases to \$30,000 and increases to \$35,000 for taxable years beginning on or after January 1, 2008. The revenue cost of the exclusion is large and will increase over time as more and more Georgia tax filers are eligible for the exemption.

We project the revenue loss associated with the exemption of non-social security income separately from that for social security income and report the tax expenditures associated with this part of the tax law in Georgia. These estimates are referred to as “tax expenditures” because they are costs to the state in the form of foregone tax revenue. Tax expenditures are not necessarily bad (nor good), but simply reflect tax policy decisions that have been made and that reduce the potential revenue from any particular source.

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<sup>10</sup> Additional detail is available from Edwards and Wallace, 2004.

If we somewhat arbitrarily take 1990 tax law as our starting point, we can trace out the revenue implications of tax exemption afforded retirees in Georgia by providing an annual estimate of the cost of the retiree exemption for the state income tax. From that starting point, we add the additional tax expenditure estimates associated with increases in the retiree exemption. The results of this exercise are reported in Table 7 below. We assume a steady growth rate in elderly tax filers that is consistent with the Census projections of Georgians 65 and older. As the exemption level increases, our estimates from our Georgia microsimulation model suggest that a small percentage of filers would not have enough income to make use of the entire exemption, and that is accounted for in our estimates. This is most important in the major increases in the retiree exemption that come on-line in 2006, when the exemption jumps from \$15,000 to \$25,000.

As shown in Table 9, the revenue cost of the retiree income exemption has grown steadily because of statutory changes which have increased the exemption level as well as the growth in the number of retirees likely to qualify for the exemptions. In 2006, the aggregate value of the elderly income exemption is about \$100 million. This is very small relative to the projected level of income tax revenues of \$7.7 billion (about 1.3 percent). The growth rate in this exemption jumps in 2007 and 2008 as the new, higher exemption levels kick-in. Between 2006 and 2007, the exemption increases in cost by 31 percent and then by 21 percent from 2007 to 2008. While still very small relative to total income tax revenue, by 2008, the elderly exemption will reach about 1.8 percent of projected income tax revenue.

The social security exemption tax expenditure is calculated using Georgia individual income tax files. The tax expenditure for that exemption is approximately \$75 million in 2005. The combined impact of the elderly income exemptions is approximately 2.6 percent of income tax revenue by 2008.

**TABLE 9. TAX EXPENDITURE OF ELDERLY INCOME TAX EXEMPTION (\$)**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Additional Tax Expenditure by Legislated Change 1994 Law increasing exemption to \$11,000 for 1994 and to \$12,000 for 1995 and thereafter	7,927,235	8,125,415	8,328,551	8,536,765	8,750,184	8,968,938	9,193,162	9,422,991	9,658,566	9,900,030	10,147,530
1998 Law increasing exemption to \$13,000	7,927,235	8,125,415	8,328,551	8,536,765	8,750,184	8,968,938	9,193,162	9,422,991	9,658,566	9,900,030	10,147,530
2000 Law increasing exemption to \$13,500 for 2001 and to \$14,000 for 2002 and thereafter		3,656,437	7,495,696	7,683,088	7,875,165	8,072,044	8,273,846	8,480,692	8,692,709	8,910,027	9,132,777
2002 law increasing exemption to \$14,500 for 2002 and to \$15,000 for 2003 and thereafter			3,747,848	7,683,088	7,875,165	8,072,044	8,273,846	8,480,692	8,692,709	8,910,027	9,132,777
2005 Law increasing exemption to \$25,000 for 2006 to \$30,000 for 2007, and to \$35,000 for 2008 and thereafter							64,352,132	94,229,908	120,732,069	123,750,371	126,844,130
Total tax expenditure for retiree exemptions made since 1990	15,854,469	19,907,268	27,900,645	32,439,705	33,350,698	34,081,965	99,286,147	130,037,273	157,434,619	161,370,484	165,404,746

Source: Based on data from Georgia Income Tax Model (Fiscal Research Center).

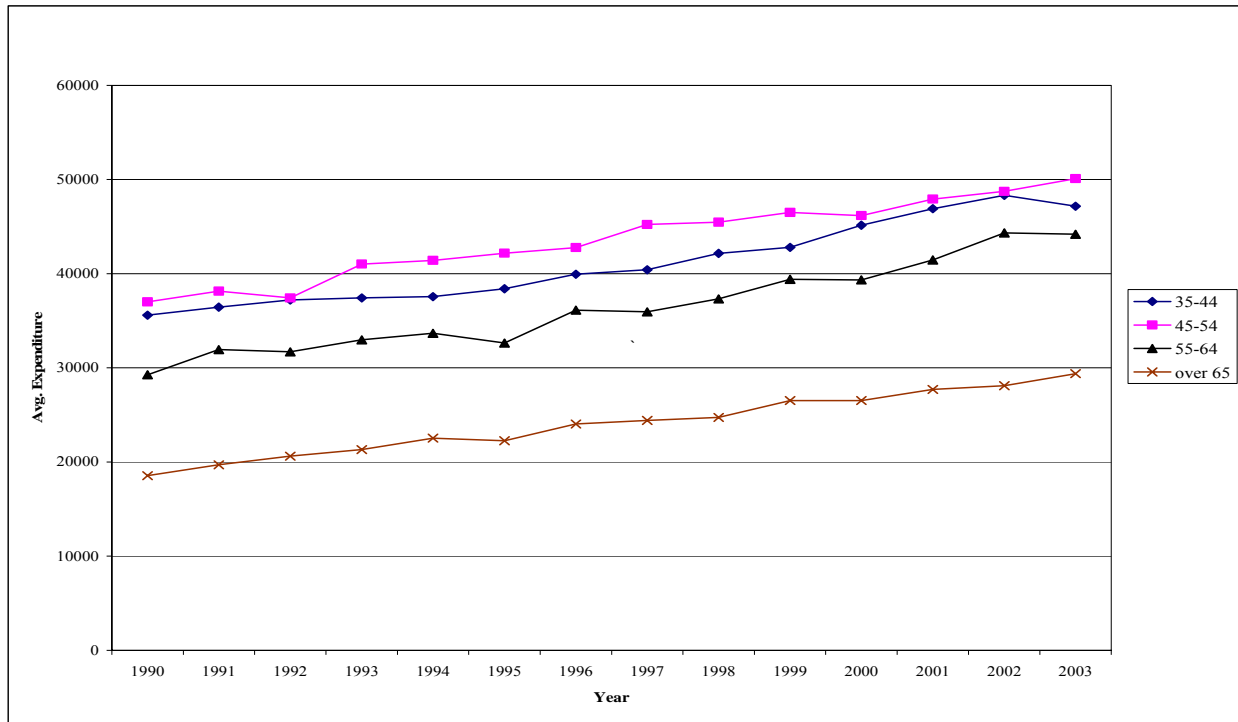
## Sales Tax

A growing elderly population is associated with changes in consumption patterns which will, in turn, affect the revenues raised by state and local governments. Details on consumption pattern changes are discussed below. To some extent, these changes in consumption patterns are associated with the graying of America. Many of the goods demanded by older citizens are not included in state and local government sales tax bases. Thus, as the country ages and naturally shifts its consumption focus away from taxable goods toward non-taxables, the growth of the sales tax base is decreased, again reducing the monies available for public expenditures.

The U.S. Bureau of Labor Statistics, Consumer Expenditure Survey (CES) tallies consumer expenditure by type and also by various demographic characteristics, including age. These data show that the elderly consume quite a different “market basket” of goods than the non-elderly. In particular, the elderly consume more services (relative to total expenditures), and, not surprisingly, more health and medical related goods and services. In most states, services and health-medical expenditures are not subject to sales tax. Georgia is no exception in that it exempts the consumption of most of these goods and services from sales tax.

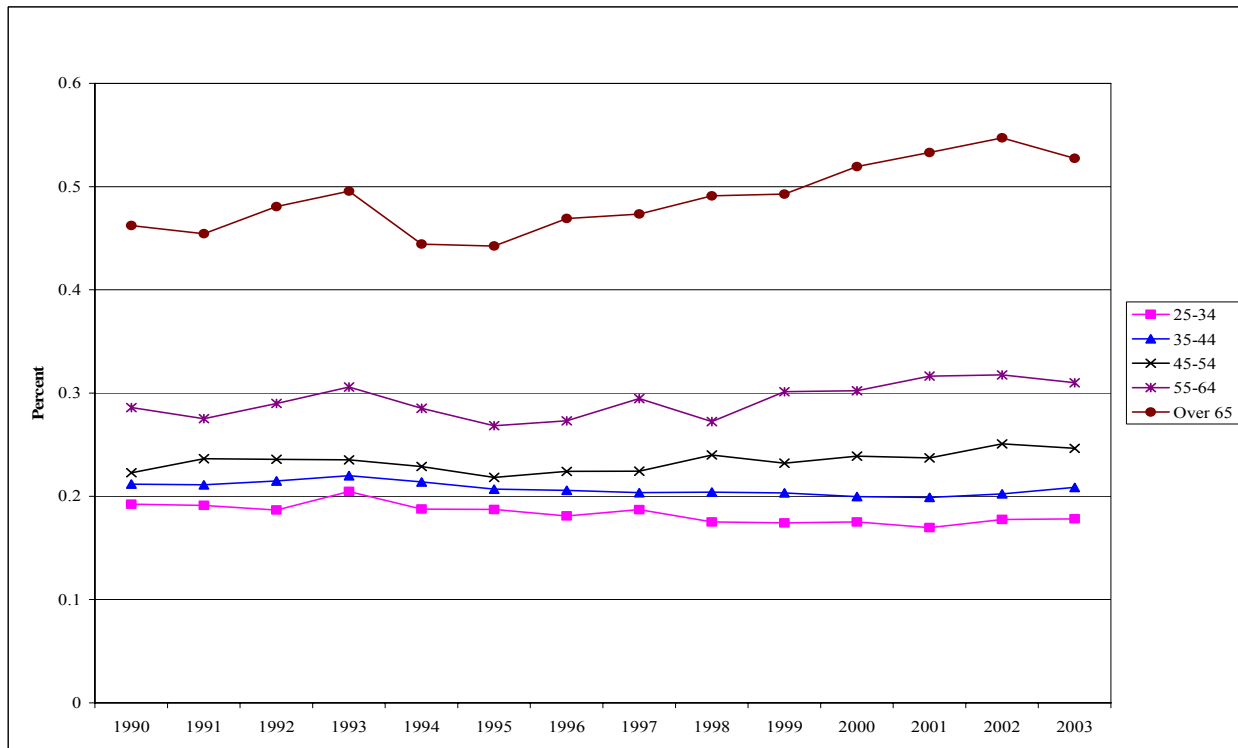
The average level of expenditures by age group is summarized in Figure 8. As seen there, the elderly consume relatively less than other age groups, although the growth rate in average annual consumption has been substantial and over the last 13 years equals the average annual growth in expenditures of the 55-64 age group (more than one percentage point higher than the other two age groups in Figure 9). While level of expenditures is important for sales tax revenue growth, the composition of income is at least as important. Figure nine shows the growth in food at home and medical and health expenditures as a share of total expenditures by age group. The numerator includes goods that are largely untaxed in Georgia, so a growth in the ratio suggests a relative decline in the sales tax base. It is obvious that the elderly consume more of these types of goods.

**FIGURE 8. AVERAGE EXPENDITURES BY AGE GROUP**



Source: U.S. Bureau of Labor Statistics, Consumer Expenditure Survey tabulations by authors.

**FIGURE 9. FOOD AND MEDICAL EXPENDITURES/TOTAL EXPENDITURES**



Source: U.S. Bureau of Labor Statistics, Consumer Expenditure Survey tabulations by authors.

Mullins and Wallace (1996) use the CES to estimate the impact of changes in demographics including changes in the proportion of the population over 65 on consumption of broad categories of goods. The results of their regression analysis are used to develop “demographic elasticities of consumption.” These are measures of the percent change in consumption by type of good divided by the percent change in a particular demographic - like the percent of the population age 65 and older. They use these results to forecast the impact, by state, of demographics on state sales tax bases. In that analysis, the elasticities of consumption for personal services, household services, and medical and health services are positively related to the percent of population over age 65. Most other categories of expenditure are found to be negatively related to population over 65.<sup>11</sup> We extend that analysis for Georgia and find that the aging dynamic coupled with the current sales tax base (which largely exempts services) eats into growth of the sales tax, holding all other demographics constant. Of the twelve consumption groups analyzed, only apparel is taxable and shows very small growth (less than 0.002 percent over the next 5 years). For all other taxable categories of goods analyzed in the study (food away from home, utilities, alcohol, and tobacco), the elderly will consume less and less according to the results of the study, which will dampen the sales tax base very slightly (less than 0.02 percentage points off of the growth of the sales tax base in the absence of the aging demographic). This means that if sales tax revenue were to grow at seven percent annually (a weighted average of the annual growth in sales tax revenue for the last three years), and if the aging demographic did not exist (i.e., the elderly grew at the same rate as they did from 1990 to 2000 and the difference in population growth came from those under age 65), then sales tax revenue could grow by 7.02 percent per year as opposed to 7.0 percent per year. This is not a large revenue growth, but represents about \$12 million by 2007.

## **Property Tax**

State and local governments allow special property tax exemptions to elderly individuals. Individuals 65 years of age or over may claim a \$4,000 exemption from all state and county ad valorem taxes if the income of that person and his/her spouse does not exceed \$10,000 for the prior year. The \$10,000 income cap does not include “income from retirement sources, pensions, and disability income up to the maximum amount allowed to be paid to an individual and his spouse under the federal Social Security Act (Georgia Code 48-5-47, <http://www.etax.dor.ga.gov/ptd/adm/taxguide/exempt/homestead.shtml>).<sup>12</sup> Local governments may, with approval by the General Assembly, increase the homestead exemption (or may disallow any homestead exemption). Individuals 62 and older may claim an additional homestead exemption for educational purposes, subject to the same income limits. Finally, those 62 and older may opt for a floating homestead exemption, which reduces property tax increases associated with increased market value of a home.

Over the last several years, there has been an increase in the number and value of property tax exemptions afforded the elderly. Most of these are means-tested (for details on exemptions by county, see <http://www.etax.dor.ga.gov/ptd/county/index.shtml>). The annual property tax digest

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<sup>11</sup> Other consumption categories include: food at home, food away from home, utilities, entertainment, apparel, alcohol, tobacco, and gas/motor oil. Housing (shelter) was excluded.

<sup>12</sup> In 2005, this maximum is \$46,536.



publishes the value of the various exemptions by local jurisdiction and, therefore, gives a ready tax expenditure of these exemptions. In 2003, the S3 and, S4 exemptions (state valued homestead exemptions for aged 62 and 65 respectively) plus the L2, L3, L4, L7, L8, and L9 exemptions totaled \$20 billion.<sup>13</sup> If we apply the state millage rate of 0.25 mills to the state level exemptions, a school millage rate of 15 mills to the exemptions reported by school district and a millage rate of 7 for all other jurisdictions, these exemptions represent a loss of revenue of approximately \$203 million to state and local governments in Georgia. This represents a small percentage of the \$6 billion property tax take. There has been some growth in the number of homestead exemptions afforded the elderly by individual counties. From 2000 to 2003, the growth in the value of exemptions was slightly over 25 percent.

### **Fiscal Capacity Comparison**

Fiscal capacity is a measure of the ability of a jurisdiction to raise revenue, given the average tax rates used by similar jurisdictions. So, a fiscal capacity measure takes the tax law as given and basically answers the question “if all jurisdictions levied the same tax rates, how much revenue could they raise given the economic base and demographic structure of the jurisdiction?” Counties with a fiscal capacity index of one or greater are able to generate more revenue than the average county (they do not necessarily generate more, but they are able to). As counties are going through tremendous changes in terms of the age distribution of their populations, those with higher fiscal capacity are in a better position (all else equal) to deal with the expenditure pressures of these changes.

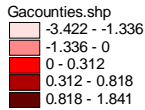
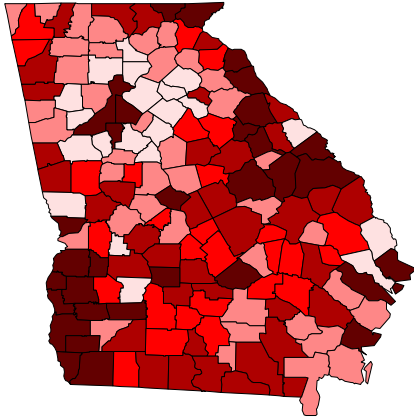
We construct an index that relates the projected change in population to the fiscal capacity as follows. We divide the fiscal capacity of each county by the average fiscal capacity for all counties based on 2003 data. If the ratio equals one for a county, then that county has the statewide average fiscal capacity. If the ratio is greater than one, the county has higher than average fiscal capacity and if it is less than one, lower than average fiscal capacity. We also normalize the change in population as follows. For each county, we compute the change in population from 2000 to 2010 (for two age groups: 65-69 and 85 and older) and divide this change by the average change for all counties. If a county has a value greater than one, then the number of elderly in that county (either the 65-69 group and/or the 85 and older group) is growing faster than the average Georgia county. Finally, we compare the fiscal capacity index to the population growth index by subtracting the population growth index from the capacity index. Counties with a negative number have less fiscal capacity (relative to the rest of the state) given its population growth than other counties. Counties with positive and larger positive numbers are in a better fiscal position to deal with their expanding elderly populations. The fiscal capacity minus population growth index is reported in Figures 10 and 11.

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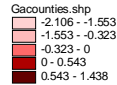
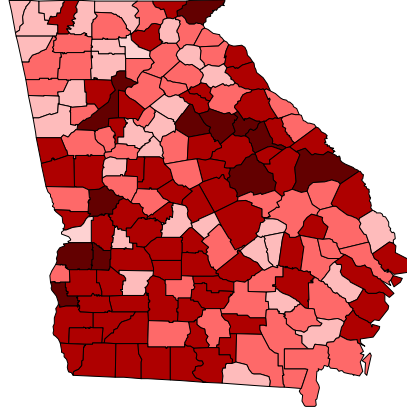
<sup>13</sup> The “L” exemptions are local exemptions for the elderly and include floating exemptions. All of these exemptions are means tested.

**FIGURES 10 AND 11: FISCAL CAPACITY AND POPULATION GROWTH**

69-69 Year-Old Population Growth/  
Fiscal Capacity Index



85+ Year Old Population Growth/  
Fiscal Capacity Index



To conclude this section, we should point out that the total revenue impacts of the growing elderly population are difficult to measure. However, the data for the most available tax expenditures (income tax and property tax) suggest that the aging demographic has eaten into the income tax base by about 2.6 percentage points and the property tax by about five percent. Other tax expenditures that are available to companies or individuals in general are at least as large (for example, \$750 million or more for the food exemption and \$150 million for various corporate tax preferences, Edmiston et. al., 2002). However, the value of the elderly exemptions will grow over time more quickly than general revenue, due simply to the age-demographic trends. It is important, therefore, for the State to consider the long-term viability of all of the tax expenditures in the system in order to do service to those Georgians in need in the next decade.

The next section turns to a discussion and analysis of the health status of Georgia’s elderly population in the next decades.

## IV. Health Status of Georgia’s Elderly

### Health Status and Income

As previously discussed, the number of elderly individuals in Georgia is projected to grow at a rate greater than the national average through 2025. Table 10 below shows that while the absolute numbers of elderly Georgians will grow through at least 2025, the rates of associated chronic conditions, limitations on activities of daily living (ADLs), and instrumental activities of daily living (IADLs)<sup>14</sup> are projected to remain fairly constant. Therefore, the likelihood of greater future demand on publicly financed health care for the elderly will be largely driven by aging growth rates.

**TABLE 10. ESTIMATED HEALTH STATUS OF THE ELDERLY POPULATION IN GEORGIA 2000 – 2025<sup>15</sup>**

	65+ <sup>16</sup>	% Female <sup>17</sup>	% 65+ with One or More Chronic Conditions <sup>18</sup>	# 65+ with Chronic Conditions	% 65+ with Chronic Conditions, Limitations on ADLs	# 65+ with Chronic Conditions, Limitations on ADLs	% 65+ with Chronic Conditions, Limitations on IADLs	# 65+ with Chronic Conditions, Limitations on IADLs
2000	779,000	60	70	545,300	3.5	19,086	10.2	55,621
2005	852,000	59	70	596,400	3.5	20,874	10.2	60,833
2010	973,302	58	70	681,311	3.5	23,846	10.2	69,494
2015	1,175,000	57	70	822,500	3.5	28,788	10.2	83,895
2020	1,404,317	56	70	983,022	3.5	34,406	10.2	100,268
2025	1,668,000	56	70	1,167,600	3.4	39,698	10.2	119,095

Source: This table builds on previous work of estimates derived by Cooney and Landers (1999) from the National Health Interview Survey State Data Files 1994 Disability Supplement.

The inability of the elderly to perform activities of daily living alone will not qualify one for state financed medical care. The primary determination of Medicaid eligibility is income and assets. (For a more complete discussion of Medicare and Medicaid eligibility, please see Appendix II.) One then must also qualify for one of several categorical groups. The most common eligibility category for poor elderly is the Aged, Blind, and Disabled category. If one meets eligibility requirements for the Aged, Blind, and Disabled categorical group, personal income can be up to approximately 75 percent of the federal poverty line (FPL) to qualify for regular Medicaid. One’s income, however, can rise up to approximately 225 percent of FPL to qualify for nursing facility care or entry into one of several Medicaid financed home and community based services (HCBS). Table 11 below displays projections of elderly Georgians that would meet these income guidelines through 2025. Again, the increases are driven largely by demographic change rather than an increase in the proportion of elderly Georgians in poverty.

<sup>14</sup> ADLs include functions such as eating, bathing, dressing, and toilet use. IADLs include activities such as using the phone, housework, and managing money.

<sup>15</sup> This table builds on previous work of estimates derived from the National Health Interview Survey State Data Files 1994 Disability Supplement.

<sup>16</sup> U.S. Census Bureau Population Estimates.

<sup>17</sup> <http://www.census.gov/population/projections/state/stpjage.txt>.

<sup>18</sup> All analyses of health status and cost assume that rates of chronic conditions do not change over time. For more information on possible changes in acuteness of illness in the future, see Cutler (2001), Wolf (2001), and Lubitz et. al. (2001).

**TABLE 11. GEORGIANS AT INCOME LEVELS FOR FEDERAL PROGRAMS**

	<b>65+ Georgia Population</b>	<b>65+ up to 75% FPL<sup>19</sup></b>	<b>65+ up to 100% FPL<sup>20</sup></b>	<b>65+ up to 225% FPL<sup>21</sup></b>
2000	779,000	33,000 <sup>22</sup>	109,060	360,677
2005	852,000	36,092	119,280	394,476
2010	973,302	41,231	136,262	450,639
2015	1,175,000	49,775	164,500	544,025
2020	1,404,317	59,490	196,604	650,199
2025	1,668,000	70,660	233,520	772,284

Source: U.S. Census Bureau, Current Population Survey, 2000-2002 Annual Social and Economic Supplements. Special tabulation by Dr. Pat Ketsche (GSU) for 225 percent FPL. Seventy-five percent FPL base projections are from <http://www.census.gov/hhes/poverty/resized%20age65%20pov%20ratios%20by%20state%2099-01.xls>.

Comments:

- (1) 75 percent (74.6) FPL = income at which one qualifies for SSI Medicaid (\$579/mo.).
- (2) 225 percent FPL (or 3x SSI Medicaid) = income at which one can qualify for Medicaid nursing facility care or waivers (\$1,737/mo.).

The data in these two tables show the magnitude of increase in health care needs for the elderly over the next 25 years. The estimates assume that the increased need will come largely from the increase number of aged in Georgia's population. Between 2000 and 2025, the number of individuals over 65 with the most intensive care needs (those with chronic conditions, limitations on IADLs) will more than double, while those with general chronic conditions will also double and top one million individuals. The expected growth in the number of those eligible for a variety of services (those with income at 225 percent of the FPL) will more than double. These estimates suggest that caring for the elderly using the inventory of health care services could double in cost if there are no innovations or increased efficiencies in the system. We turn to these issues in the next section.

<sup>19</sup> SSI Medicaid eligibility.

<sup>20</sup> FPL as of FFY03. This is the level at which Qualified Medicare Beneficiaries (QMB) are eligible for premium and co-pay assistance.

<sup>21</sup> Nursing facility and waiver eligibility. SOURCE: U.S. Census Bureau, Department of Labor, Current Population Survey, 2000-2002 Annual Social and Economic Supplements. Special tabulation by Dr. Pat Ketsche.

<sup>22</sup> <http://www.census.gov/hhes/poverty/resized%20age65%20pov%20ratios%20by%20state%2099-01.xls>.

## V. CURRENT PRACTICES AND COSTS OF CARING FOR THE ELDERLY

### Elderly Care Inventory

The elderly care inventory set forth in this report includes a current snapshot of the major long-term care services and programs available to qualifying Georgia seniors, including:

- Nursing facilities,
- Personal care homes,
- Medicaid Waiver Programs,
  - Community Care Services Program (CCSP)
  - Service Options Using Resources in a Community Environment (SOURCE), and
- Home and Community Based Services (HCBS) - non-medical services (free and reduced charge) offered to Georgians age 60+.

For each of these major services and programs, this elderly care inventory will discuss (as available data allows):

- Brief explanation of services offered,
- Current capacity in terms of numbers served and location served (urban vs. rural), and
- Labor/staffing requirements.

#### *Nursing Facilities*

Nursing facilities provide services by skilled professionals and related technology twenty-four hours a day, seven days a week to individuals certified for such a level of care. In an institutional setting, nursing facilities provide:

- Skilled nursing care and related services for residents (as needed),
- Rehabilitation services for injured, disabled or sick persons
- Other health-related care and services.<sup>23</sup>

Medicaid offers nursing facilities services as a federally mandated benefit for beneficiaries age 21 and older. Medicare offers the Skilled Nursing Facility Benefit for up to 100 days.

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<sup>23</sup> Explanation of services provided from “Final Report: The Georgia Long-Term Care Partnership 2001-2004”, Glenn Landers, Georgia Health Policy Center, June 2004.

**TABLE 12. GEORGIA NURSING FACILITIES 2005**

	<b>Facilities</b>	<b>Facilities Location</b>	<b>Age 65+ Capacity<sup>24</sup> (Beds)</b>	<b>Age 65+ Beds (%)</b>	<b>Age 65+ Min Staff Req<sup>25</sup> (FTE)</b>
Urban <sup>26</sup>	216	56%	22,537	60%	5,634
Rural	169	44%	15,094	40%	3,773
Total	385	100%	37,631	100%	9,408

Source: Nursing Facility Data as of January 19, 2005 provided by Georgia Nursing Home Association (GNHA).

Table 12 shows that most of Georgia’s nursing facilities are located in urban areas. Currently, about 40 percent of Georgia’s elderly live in rural areas<sup>27</sup> where the nursing facility elderly bed capacity is also about 40 percent. For today’s rural seniors seeking long-term care services in Georgia, nursing facilities offer the option with the most capacity.

Current staffing estimates for nursing facilities are also highlighted in Table 12. Georgia’s nursing facilities’ licensure and regulatory minimum staff requirement is 2.0 hours per patient per day (or 1 full-time staff person for every 4 patients). Sufficient nursing facility staff to meet the needs of Georgia’s growing elderly population is another capacity concern. An increase in patients will necessitate an increase in caregiver staff. See the Conclusion for further discussion on long-term care staffing.

### *Personal Care Homes*

Personal Care Homes include any dwelling that provides or arranges for the provision of housing, food service, and one or more personal services for two or more adults who are not related to the owner or administrator by blood or marriage. Personal services include but are not limited to:

- Individual assistance with and supervision of self-administered medications
- Assistance with essential activities of daily living (such as eating, bathing, grooming, dressing, and toileting).
- Scheduled transportation, and
- Recreational activities.<sup>28</sup>

<sup>24</sup> Assume that 90 percent of NF capacity for elderly based on demographics from Table 8: Selected Patient Demographics among Long-Term Care Programs "Comparative Assessment of Cost and Care Outcomes Among Georgia's Community Based and Facility Based Long-Term Care Programs, Final Report on Long-Term Care Partnership Study 1: Objective 1", Georgia State University (2003).

<sup>25</sup> Per GNHA, nursing facilities licensure and regulatory minimum staff requirement is 2.0 hours per patient per day. Staff may include any combination of management, registered nurses, and certified nursing assistants.

<sup>26</sup> Urban Georgia defined as the Metropolitan Statistical Area counties, based on the June, 2003 White House Office of Management and Budget released their listing of all-new Metropolitan Statistical Areas.

<sup>27</sup> Based on tabulations from the March 2004 Current Population Survey done by Dr. Ketsche.

<sup>28</sup> Explanation of services provided from Georgia state licensing definition for Personal Care Homes [http://www.newlifestyles.com/resources/state\\_licensing/GA.aspx0](http://www.newlifestyles.com/resources/state_licensing/GA.aspx0).

**TABLE 13. GEORGIA PERSONAL CARE HOMES 2005**

	<b>Facilities</b>	<b>Facilities Location</b>	<b>Age 65+ Capacity<sup>29</sup> (Beds)</b>	<b>Age 65+ Beds (%)</b>	<b>Age 65+ Min Staff Req<sup>30</sup> (FTE)</b>
Urban <sup>31</sup>	1,201	69%	17,146	74%	2,972
Rural	536	31%	6,007	26%	1,041
Total	1,737	100%	23,153	100%	4,013

Source: Licensed Personal Care Home Data as of January 14, 2005 provided by Vickie Flynn, Office of Regulatory Services, Georgia Department of Human Resources.

As Table 13 indicates, over two-thirds of personal care home facilities and nearly three-quarters of personal care home beds for elderly Georgians are located in urban areas. Georgia's rural seniors are underserved by the personal care home market. With less choice, Georgia's rural seniors are more likely to turn to nursing facility care.

Personal care home staffing estimates are also shown in Table 13. Georgia's personal care home regulations require at minimum one staff person for every 15 residents during waking hours and one staff person for every 25 residents during non-waking hours. The regulations also require supplemental staff to meet residents' needs (e.g., PCH that serves only Alzheimer's residents would have a lower staff to resident ratio). Sufficient personal care home staff to meet the needs of Georgia's growing elderly population is another capacity concern. An increase in patients will necessitate an increase in caregiver staff. See the Conclusion for further discussion on long-term care staffing.

### *Waiver Programs*

Home and Community-Based Waivers (authorized under Section 1915(c) of the Social Security Act) enable states to waive certain Medicaid statutory requirements in order to cover home and community-based services as an alternative to institutionalization. Under these waivers, states have broad discretion to address the needs of individuals who are eligible for costly institutional care. Waiver programs are required to keep the average per-person expenditures at or below average per-person expenditures for the level of care provided in a hospital or nursing facility.<sup>32</sup>

<sup>29</sup> Assume that 90 percent of PCH capacity for elderly based on demographics from Table 9: Selected Patient Demographics among Long-Term Care Programs "Comparative Assessment of Cost and Care Outcomes Among Georgia's Community Based and Facility Based Long-Term Care Programs, Final Report on Long-Term Care Partnership Study 1: Objective 1", Georgia State University (2003).

<sup>30</sup> Per DHR, PCH regulations minimum requirements are one staff person for every 15 residents during waking hours, one staff person for every 25 residents during non-waking hours. Regulations also require sufficient staff to meet residents' needs (which may be a lower staff to resident ration (e.g., PCH that serves only Alzheimer's residents). For purpose of FTE estimate, assume 1 day = waking hours (16 hours) and non-waking (8 hours) and 1 FTE: 15 residents for 2 shifts and 1 FTE: 25 residents for 1 shift.

<sup>31</sup> Urban Georgia defined as the Metropolitan Statistical Area counties, based on the June, 2003 White House Office of Management and Budget released their listing of all-new Metropolitan Statistical Areas.

<sup>32</sup> Explanation of services provided from "Final Report: The Georgia Long-Term Care Partnership 2001-2004", Glenn Landers, Georgia Health Policy Center, June 2004.

### *Community Care Services Program*

Since 1982, Georgia's Community Care Services Program (CCSP) has provided home and community based services to Medicaid eligible Georgians who are functionally impaired or disabled. The purpose of CCSP is to help eligible recipients remain in their homes, a caregiver's home, or other community settings for as long as possible. A CCSP recipient must meet the medical, functional, and financial criteria for nursing facility placement and receive physician approval that CCSP can meet the recipient's needs.

In lieu of nursing facility placement, CCSP provides eligible recipients with the following services:

- Assessment and Care Coordination,
- Adult Day Health Services,
- Alternative Living Services
- Emergency Response Services
- Home Delivered Meals,
- Respite Care, and
- Personal Support Services.<sup>33</sup>

CCSP services are provided in the recipient's home, licensed personal care homes, or adult day health facilities. In FY2004, Personal Support Services accounted for 75 percent of the CCSP funds and 78 percent of the CCSP recipients.<sup>34</sup> Personal Support Services include assistance with activities (e.g., light housekeeping, essential errands) and personal care needs (e.g., feeding, bathing, dressing, toileting and transferring).

Elderly CCSP recipients receive services in each of Georgia's 159 counties, coordinated by twelve Area Agencies on Aging (AAA) that report to the Aging Division, Georgia Department of Human Resources.

As Table 14 shows, elderly CCSP recipients are distributed fairly evenly among Georgia's urban and rural areas.

When given a choice between CCSP and institutional care, 94 percent of Georgians who participated in CCSP face-to-face assessments in FY2004 chose CCSP. Unfortunately, the demand for the CCSP program far exceeds available funding. In FY2004, 5,018 Georgians were on a waiting list for CCSP, up from 3,198 in FY2001.<sup>35</sup>

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<sup>33</sup>“Community Care Services Program Annual Report, State FY 2004”, Division of Aging Services, Georgia Department of Human Resources (2004).

<sup>34</sup> “Community Care Services Program Annual Report, State FY 2004”, Division of Aging Services, Georgia Department of Human Resources. Counts include non-elderly and elderly CCSP recipients (2004).

<sup>35</sup> “Community Care Services Program Annual Report”, State FY 2004, Division of Aging Services, Georgia Department of Human Resources. Counts include non-elderly and elderly CCSP recipients (2004).



**TABLE 14. CCSP IN CY 2003**

	<b>Age 65+ CCSP Recipients</b>	<b>Recipient Residence</b>
Urban <sup>36</sup>	4,783	52%
Rural	4,481	48%
Total	9,264	100%

Source: Medicaid Claims Data CY2003. Includes only CCSP patients who were 65+ years old when they received the service.

*Services Options Using Resources in a Community Environment*

In 1997, Service Options Using Resources in a Community Environment (SOURCE) was established as a home and community-based waiver demonstration program. Similar to CCSP, SOURCE seeks to serve Georgia’s seniors in their homes or communities for as long as possible. SOURCE follows a different model of care for achieving this goal. SOURCE links primary care with an array of long-term health services in the recipient’s home or community to reduce or eliminate the need for institutional care.<sup>37</sup>

In lieu of nursing facility placement, SOURCE, provides the following services:

- Case Management,
- Adult Day Health Services,
- Alternative Living Services,
- Emergency Response Services,
- Home Delivered Meals,
- Respite Care, and
- Personal Support Services.<sup>38</sup>

A key difference between SOURCE and CCSP is that only SOURCE offers physician oversight and enhanced case management services to manage the care of the eligible recipient. SOURCE assigns recipients to one of four levels of care for medical monitoring and assistance.

- Level I and II patients meet the criteria for a Georgia nursing facility and have substantial cognitive or physical impairments.
- Level III and IV patients do *not* meet the criteria for a Georgia nursing facility and have greater ability to function independently.<sup>39</sup>

<sup>36</sup> Urban Georgia defined as the Metropolitan Statistical Area counties, based on the June, 2003 White House Office of Management and Budget released their listing of all-new Metropolitan Statistical Areas.

<sup>37</sup> State of Georgia, Olmstead Strategic Plan, Governor Sonny Perdue, March 2003.

<sup>38</sup> “Community Care Services Program Annual Report, State FY 2004”, Division of Aging Services, Georgia Department of Human Resources (2004).

<sup>39</sup> Landers (2004).

**TABLE 15. SOURCE IN CY 2003**

	<b>Age 65+ SOURCE Recipients</b>	<b>Recipient Residence</b>	<b>Counties Served</b>
Urban <sup>40</sup>	1,388	56%	47
Rural	1,074	44%	73
Total	2,462	100%	120

Source: Medicaid Claims Data CY 2003. Includes only SOURCE patients who were 65+ years old when they received the service.

As Table 15 shows, elderly SOURCE recipients are slightly more concentrated in urban areas. In 1997, SOURCE was launched in Savannah, Baxley, Atlanta and Augusta. As of CY2003, SOURCE was available in 75 percent of Georgia’s counties. SOURCE was established in urban areas but continues to expand into rural Georgia. Like CCSP, funding for SOURCE is capped, but as a newer program, SOURCE does not yet have a waiting list.

### *Home and Community Based Services*

Georgia’s Department of Human Resources, Division of Aging Services (DAS) administers Home and Community Based Services (HCBS) through 12 Area Agencies on Aging that provide non-medical services (free and reduced charge) to Georgians 60 and older through the Older Americans Act.<sup>41</sup> HCBS providers use a DAS Sliding Fee Scale to assess whether eligible clients will pay part or all of the cost of the service.

As of FY2004, HCBS includes 51 individual and group services intended to help older Georgians to stay in their homes and communities. Major service provisions include:

- Adult Day Care
- Case Management
- Chore Aides
- Homemaker Services
- Information & Assistance
- Meals – Congregate and Home Delivered
- Nutrition Counseling
- Personal Care Services
- Respite Care<sup>42</sup>

Starting in FY2005 HCBS services also include Congregational Respite Training, Long Life Planning, and Grandparents Raising Grandchildren Support. Table 16 below shows the number of Georgians served statewide by HCBS services in FY2004.

<sup>40</sup> Urban Georgia defined as the Metropolitan Statistical Area counties, based on the June, 2003 White House Office of Management and Budget released their listing of all-new Metropolitan Statistical Areas.

<sup>41</sup> Georgia DHR Division of Aging Services <http://aging.dhr.georgia.gov/portal/site/DHR-DAS/>.

<sup>42</sup> “Just the Facts SFY 2004”, Division of Aging Services, Maria Greene (2004).

**TABLE 16. HCBS IN FY 2004**

<b>SERVICES</b>	<b>CONSUMERS SERVED<sup>43</sup></b>
<i>Group Services</i>	
Community/Public Education	111,808
Consumer Protection	71
Counseling	402
Elder Abuse Prevention	28,365
Exercise/Physical Fitness	3,977
Health Promotion/Wellness	18,573
Health Related/Screening	179
Information & Assistance	98,477
Intake & Screening	2,791 <sup>44</sup>
Material Aid	39,092
Medications Management	6,546
Nutrition Education	78,873
Recreation	277,423
Transportation	12,563
Volunteer Opportunities/Development	25,162
<i>Sub-Total</i>	<i>704,302</i>
<i>Individual Services</i>	
Adult Day Care/Voucher	791
Case Management/Voucher	9,204
Chore	29
Counseling	78
ERS install/monitoring	196
Exercise/Physical Fitness	1,607
Friendly visiting	76
Health Promotion/Wellness	2,779
Health Related/Screening	159
Home Management	26
Home Mod./Repair	406
Home Sharing	34
Homemaker	4,389
Material Aid/voucher	313
Medications Management	1,927
Meals Congregate/Home Delivered	29,978
Nutrition Counseling/Screening	233
Outreach	345
Personal Care	701
Placement Services	12
Respite Care/in home/out home/voucher	1,746
Telephone Reassurance	348
Transportation	3,451
<i>Sub-Total</i>	<i>58,828</i>
<b>TOTAL</b>	<b>763,130</b>

Source: FY 2004 HCBS data provided on February 11, 2005 by Arvine Brown, Program Administer, Aging Services - Planning and Evaluation, Georgia Department of Human Resources.

<sup>43</sup> Duplicated consumer count for both group and individual services. Consumers may receive more than one service.

<sup>44</sup> Intake & Screening consumer count understated since only provided by 2 (of the 12) Area Agencies on Aging (Coosa Valley/Northwest Georgia and Heart of Georgia Altamaha).

## Costs of Health Care

### *Status Quo Cost Projections*

As Georgia considers how to build an infrastructure to serve the state's increasing elderly population, it is important to consider the costs of providing health care services over the next two decades under the status quo. The cost projections for Medicaid, Public Health, and non-Medicaid transportation that follow were estimated by applying demographic and health care cost factors to 2003 baseline data.

### *Medicaid*

Over the next two decades, Medicaid costs for recipients age 65 and older are expected to increase dramatically (shown in Table 17 below). By 2025, the number of nursing facility (NF) recipients is projected to nearly double, while the average annual cost per nursing facility recipient is projected to be five times higher, using the Congressional Budget Office's assumption of nine percent annual increase in Medicaid costs. In the same year, average total Medicaid costs (i.e., including nursing facility, in-patient, out-patient, and prescription drug costs) are projected to be six times higher. In the year 2025, Medicaid costs for seniors will carry a \$16.9 billion price tag.

**TABLE 17: GEORGIA MEDICAID COST PROJECTIONS – RECIPIENTS AGE 65+**

	<b>Total NF Costs</b>	<b>NF Recipients</b>	<b>Average NF Costs</b>	<b>Total Costs</b>	<b>Total Recipients</b>	<b>Total Average Cost</b>
2003	\$764,475,077	35,847	\$21,326	\$1,250,820,381	129,092	\$9,689
2005	\$989,157,836	40,916	\$24,175	\$1,618,442,273	147,347	\$10,983
2010	\$1,658,872,912	46,742	\$35,490	\$2,714,218,043	168,326	\$16,124
2015	\$3,081,312,093	56,428	\$54,606	\$5,041,587,466	203,208	\$24,809
2020	\$5,666,248,507	67,441	\$84,018	\$9,271,013,968	242,866	\$38,172
2025	\$10,355,208,493	80,104	\$129,272	\$16,943,006,021	288,468	\$58,732

Notes: 1. 2003 data provided by Glenn Landers, Georgia Health Policy Center. Data extracted from CY2003 Medicaid claims files.

2. Cost Projections based on 2002 Factor from Boyd, Donald J. 2003. "The Bursting State Fiscal Bubble And State Medicaid Budgets" Health Affairs. 2003 - 2025 Factors from Congressional Budget Office, <http://www.cbo.gov/showdoc.cfm?index=5773&sequence=2&from=0>.

3. Demographic Projections based on nursing facility and waiver eligibility (age 65+ up to 225 percent of Federal Poverty Level, see Table 7).

4. Most elderly Medicaid recipients are eligible for both Medicare and Medicaid. In most cases, Medicaid is the primary payer for inpatient hospital claims of dually eligible recipients.

5. Total recipient source: U.S. Census Bureau, Department of Labor, Current Population Survey, 2000-2002, Annual Social and Economic Supplements. Special Tabulation by Dr. Pat Ketsche.

Applying the same projection assumptions for Georgia’s oldest seniors (age 85+) yields similar results (i.e., average nursing facility costs that are five times higher and average total costs that are six times higher) as shown in Table 18 below. It is important to note that Georgia’s oldest seniors (age 85+) account for 23.2 percent of total Medicaid senior recipients (age 65+) but 34.8 percent of total Medicaid costs and 42.3 percent of nursing facility Medicaid costs. This indicates that a greater proportion of Medicaid costs are born by Georgia’s oldest seniors. This is an interesting addition to the migration results discussed above, where it was shown that there are a substantial number of oldest old in-migrants to Georgia, especially as a percentage of that age group.

**TABLE 18: GEORGIA MEDICAID COST PROJECTIONS – RECIPIENTS AGE 85+**

	Total NF Costs	NF Recipients	Avg NF Costs	Total Cost	Total Recipients	Total Avg Cost
2003	\$323,665,710	15,729	\$20,578	\$434,730,144	29,969	\$14,506
2005	\$418,792,558	17,953	\$23,327	\$562,499,343	34,207	\$16,444
2010	\$702,338,500	20,509	\$34,245	\$943,342,800	39,077	\$24,141
2015	\$1,304,574,990	24,759	\$52,691	\$1,752,234,036	47,175	\$37,143
2020	\$2,398,992,984	29,592	\$81,071	\$3,222,196,647	56,382	\$57,149
2025	\$4,384,218,675	35,148	\$124,738	\$5,888,643,613	66,969	\$87,931

Notes: 1. 2003 data provided by Glenn Landers, Georgia Health Policy Center. Data extracted from CY2003 Medicaid claims files.

2. Cost Projections based on 2002 Factor from Boyd, Donald J. 2003. "The Bursting State Fiscal Bubble And State Medicaid Budgets" Health Affairs. 2003 – 2025 Factors from Congressional Budget Office, <http://www.cbo.gov/showdoc.cfm?index=5773&sequence=2&from=0>.

3. Demographic Projections based on nursing facility and waiver eligibility (age 65+ up to 225 percent of Federal Poverty Level).

4. Most elderly Medicaid recipients are eligible for both Medicare and Medicaid. In most cases, Medicaid is the primary payer for inpatient hospital claims of dually eligible recipients.

5. Total recipient source: U.S. Census Bureau, Department of Labor, Current Population Survey, 2000-2002, Annual Social and Economic Supplements. Special Tabulation by Dr. Pat Ketsche.

## Public Health

Unlike Medicaid, public health programs and services are not entitlements but are rather appropriated annually as part of the Georgia state fiscal budget process. Each fiscal year, state legislators and the Governor agree to increase, decrease, or maintain funding for public health programs and services utilized by Georgia’s seniors. For our baseline public health expenditures, we estimated the portion of the public health budget used by Georgians age 65 and older (see Table 19 for assumptions). We then calculated a range of public health cost projections by assuming cost growth only for the lower bound and cost and population growth for the upper bound. By 2025, the public health expenditures serving Georgia’s seniors range from \$41.0 million to \$91.6 million depending on policy decisions affecting public health services and programs.

**TABLE 19: GEORGIA PUBLIC HEALTH COST PROJECTIONS – AGE 65+ RECIPIENTS**

	<b>Total Public Health Costs (Cost Growth Only)</b>	<b>Total Public Health Costs (Cost &amp; Population Growth)</b>
2003	\$23,248,165	\$23,248,165
2005	\$23,883,489	\$27,260,901
2010	\$27,100,113	\$35,336,352
2015	\$31,109,715	\$48,970,748
2020	\$35,716,994	\$67,195,940
2025	\$41,004,304	\$91,628,024

Notes: 1. FY 2004 cost data provided by David Martin, Chief Financial Officer, Division of Public Health, DHR. DHR has no data to identify expenditures for age 65+. To identify the age 65+ portion of the public health expenditures that may have both elderly and non-elderly recipients, the 2003 ratio of age 65+ Georgians to total Georgians (based on U.S. Census Bureau, Department of Labor, Current Population Survey) was applied. For purposes of projection, assumed data as of CY 2003.

2. Cost Projection Factors based on Price Inflation Assumptions from the 2004 OASDI Report, updated March 23, 2004 Intermediate cost projections of the Consumer Price Index for Urban Wage Earners and Clerical Workers indexed to 2004 [http://www.ssa.gov/OACT/TR/TR04/V\\_economic.html#wp131314](http://www.ssa.gov/OACT/TR/TR04/V_economic.html#wp131314).

3. Demographic Projections based on nursing facility and waiver eligibility (age 65+ up to 225 percent of Federal Poverty Level).

Source: U.S. Census Bureau, Department of Labor, Current Population Survey, 2000-2002, Annual Social and Economic Supplements. Special Tabulation by Dr. Pat Ketsche.

### **Non-Medicaid Transportation**

It stands to reason that as Georgia’s elderly population increases over the next two decades, more seniors will access non-Medicaid transportation services. Using baseline data from Georgia’s Department of Human Resources Aging Services, we applied demographic factors and cost projection factors extrapolated from past experience (see Table 20 for detailed assumptions) to calculate non-Medicaid transportation cost projections. Over the next two decades, we expect the number of one-way trips to nearly double, the costs per trip to more than double, and the total costs to be more than four times higher. In 2025, the non-Medicaid transportation total costs are estimated to be \$42.8 million

**TABLE 20: GEORGIA NON-MEDICAID TRANSPORTATION – AGE 65+ RECIPIENTS**

	<b>Total Costs</b>	<b>Number One-Way Trips</b>	<b>Avg Costs</b>	<b>Recipients (Unduplicated)</b>
2003	\$8,088,755	962,947	\$8.40	7,377
2005	\$9,985,982	1,099,119	\$9.09	8,420
2010	\$13,879,239	1,255,605	\$11.05	9,619
2015	\$20,385,550	1,515,804	\$13.45	11,612
2020	\$29,642,619	1,811,634	\$16.36	13,879
2025	\$42,836,503	2,151,797	\$19.91	16,485

Notes: 1. FY 2004 cost and recipient data provided by Jim Bricker, Director, Office of Facilities and Support Services, DHR. Includes Aging Services data only. Elderly consumers of MHDDAD transportation data not available.

For purposes of projection, assumed data as of CY 2003.

2. Cost projections calculated using 4 percent rate, extrapolated from the FY01 - FY05 average one-way trip cost.

3. Demographic Projections based on nursing facility and waiver eligibility (age 65+ up to 225 percent of Federal Poverty Level).

SOURCE: U.S. Census Bureau, Department of Labor, Current Population Survey, 2000-2002, Annual Social and Economic Supplements. Special Tabulation by Dr. Pat Ketsche.

## Community Care Services Program and Services Options Using Resources in Community Environments

Within the group of programs available to seniors, there are some unique services which may be considered potential substitutes for more traditional care such as nursing facilities. For example, in addition to free and reduced charge non-medical services offered to Georgians 60 and older by Georgia's Department of Human Resources Aging Division through the Older Americans Act, Georgia's Medicaid program supports three programs to manage medical care of the elderly: the Community Care Services Program (CCSP), Services Options Using Resources in Community Environments (SOURCE), and nursing facility care. The services offered by the two waiver programs are listed in Table 21.

**TABLE 21. SCOPE OF SERVICES: CCSP AND SOURCE**

	CCSP	SOURCE
Case Management		X
Adult Day Health Care	X	X
Alternative Living Services	X	X
Emergency Response System	X	X
Home Delivered Meals	X	X
Home Delivered Services	X	X
Personal Support Services	X	X
Respite Care	X	X

Nursing facility care is an entitlement (anyone meeting defined criteria is admitted) under current Medicaid regulations, and CCSP and SOURCE are Medicaid waiver programs (enrollment is limited). Mandatory Medicaid income eligibility is 100 percent of SSI income (about 75 percent of the federal poverty level – FPL – or \$6,540 per year); while, in Georgia, nursing facility care and current Medicaid waivers are offered to individuals with incomes up to 300 percent of supplemental security (SSI) income or 225 percent FPL (about \$19,620 per year). Consequently, it is believed that because many individuals exhaust their personal savings on the cost of long-term care services, their first exposure to the Medicaid system is through the need for nursing facility or waiver program services.

A study concluded in 2004 by the Georgia Health Policy Center (GHPC) with support from the Georgia Department of Community Health and the Centers for Medicare and Medicaid Services (CMS) examined the total cost of patient care delivered in nursing facilities and care delivered through the Department's waiver programs for patients enrolled in the programs in 1999/2000. The study demonstrated that, on average, Medicare contributed 60 to 64 percent of cost to a patient's care. The annual average cost<sup>45</sup> to Medicaid for each patient enrolled in one of the programs was:

Nursing Facility: \$25,671<sup>46</sup>

CCSP: \$12,156

SOURCE: \$15,312

<sup>45</sup> Includes all Medicaid costs for patients enrolled in the programs.

<sup>46</sup> Figure is for 2003 due to data limitations.

Using the Congressional Budget Office’s annual Medicaid inflation factor of nine percent, the projected per-recipient costs of patients enrolled in the three programs through 2025 are displayed in Table 22.

**TABLE 22. PROJECTED ANNUAL PER-RECIPIENT MEDICAID COST**

	1999/2000	2005	2010	2015	2020	2025
<b>Nursing Facility</b>	\$25,671 <sup>47</sup>	\$30,607	\$47,092	\$72,457	\$111,484	\$171,532
<b>CCSP</b>	\$12,156	\$18,704	\$28,778	\$44,278	\$68,127	\$104,822
<b>SOURCE</b>	\$15,312	\$23,559	\$36,249	\$55,774	\$85,815	\$132,037

Note: Calculations based on current costs and CBO projections of Medicaid inflation.

Through use of the Diagnostic Cost Groups/Hierarchical Condition Category (DCG/HCC) risk adjustment system, the researchers showed that, while all patients admitted to one of the three programs met the institutional level of care need (as required for program admission), each program managed patients with differing levels of illness severity, as demonstrated below by DCG/HCC risk adjustment scores.<sup>48</sup> (The difference between scores is statistically significant at the 0.01 level).

Nursing Facility: 5.9

CCSP: 3.8

SOURCE: 4.0

The fact that each program manages clients with differing illness severity scores raises the concern of “apples to apples” comparisons of individuals or costs of the various programs. Each program uses a minimum level-of-care need threshold to determine whether or not an individual qualifies for care, and the threshold is the same for all three programs – the institutional level of care. However, just because the threshold is the same for all three programs does not mean that all patients are similar among programs, as demonstrated by illness severity scores. In other words, one cannot say that a nursing facility patient could be adequately served by the CCSP program at less cost because he may have conditions that are more costly to treat. However, one can use regression analysis and the DCH/HCC risk adjustment system to theoretically compare a “similar” patient across the three programs to isolate individual program effects.

The researchers in the 2004 study did just that for patients in the three programs in 1999 and 2000. Adjustments were made during the regression analysis for illness severity score, race, urban or rural residence, rehabilitation status, dual eligibility,<sup>49</sup> and mortality status. Holding these factors constant, CCSP patients were found to have 66 percent of the total cost<sup>50</sup> of nursing facility patients, while SOURCE clients had about 71 percent of the total cost. This would seem to indicate that the CCSP and SOURCE programs could manage a patient similar to the nursing facility patient at substantially less cost. Because all patients are different, it might be good policy to attempt to reach patients at risk for nursing facility placement sooner so that they might

<sup>47</sup> Figure is for 2003 due to data limitations.

<sup>48</sup> The higher the score, the more severely ill the patient.

<sup>49</sup> Eligibility for both the Medicaid and Medicare programs.

<sup>50</sup> Medicaid and Medicare reimbursement.



receive care in a less expensive program while delaying or avoiding the onset of more expensive conditions.

The differences in actual (1999/2000) and projected costs among programs may be due to the level of illness severity exhibited by each program’s patients. An abbreviated follow-up study using 2002 data indicated that Medicaid costs for the programs had increased by 25 percent for CCSP and 19 percent for SOURCE. At the same time, the DCG/HCC scores for the clients were 3.4 for CCSP and 3.7 for SOURCE.

Cost is only one factor considered when evaluating future options for long-term care service delivery in Georgia. The 1999 Supreme Court Olmstead decision instructed states to deliver care in the least restrictive environment manageable by each patient. The decision emphasized patient freedom of choice, but services delivered in a community environment must also be medically effective. The 2004 GHPC study also examined indicators of patient care. Those results are displayed in Table 23.

**TABLE 23. GEORGIA LONG-TERM CARE PROGRAM OUTCOMES: 1999 - 2000**

	Percent of Patients with Inpatient Admissions over 12 Months	Percent of Patients with 3+ Inpatient Admissions over 12 Months	Percent of Patients with ER Visits over 12 Months	Percent of Patients with 3+ ER Visits over 12 Months	Percent of Patients with Hospital Admissions due to Ambulatory Care Sensitive Conditions
<b>Nursing Facility</b>	74	19	36	17	26
<b>CCSP</b>	42	19	43	27	18
<b>SOURCE</b>	39	15	43	26	13

Source: GHPC (2004).

The waiver programs appear to do a better job at preventing hospital admissions due to Ambulatory Care Sensitive Conditions (ACSC) – conditions that should be manageable in an outpatient environment. Of the two waiver programs, SOURCE appears to be better at preventing individual and multiple hospital admissions. Combining these data with what is known through DCG/HCC scores, it would seem that SOURCE is slightly better at managing the care of frail clients, albeit at slightly higher cost than CCSP.

### Implications

The information above demonstrates that even more cost-effective long-term care programs, when combined with projected need through 2025, may outpace Georgia’s ability to support those services. A previous analysis<sup>51</sup> demonstrated that, all things being equal, the Georgia Medicaid system could be caring for 251,660 individuals over the age of 65 by 2025 – an increase of about 113 percent. Every one of those individuals could be entitled to nursing facility care if eligibility guidelines stay the same.

<sup>51</sup> Landers *Rebalancing Georgia’s Long-Term Care System* (2004).

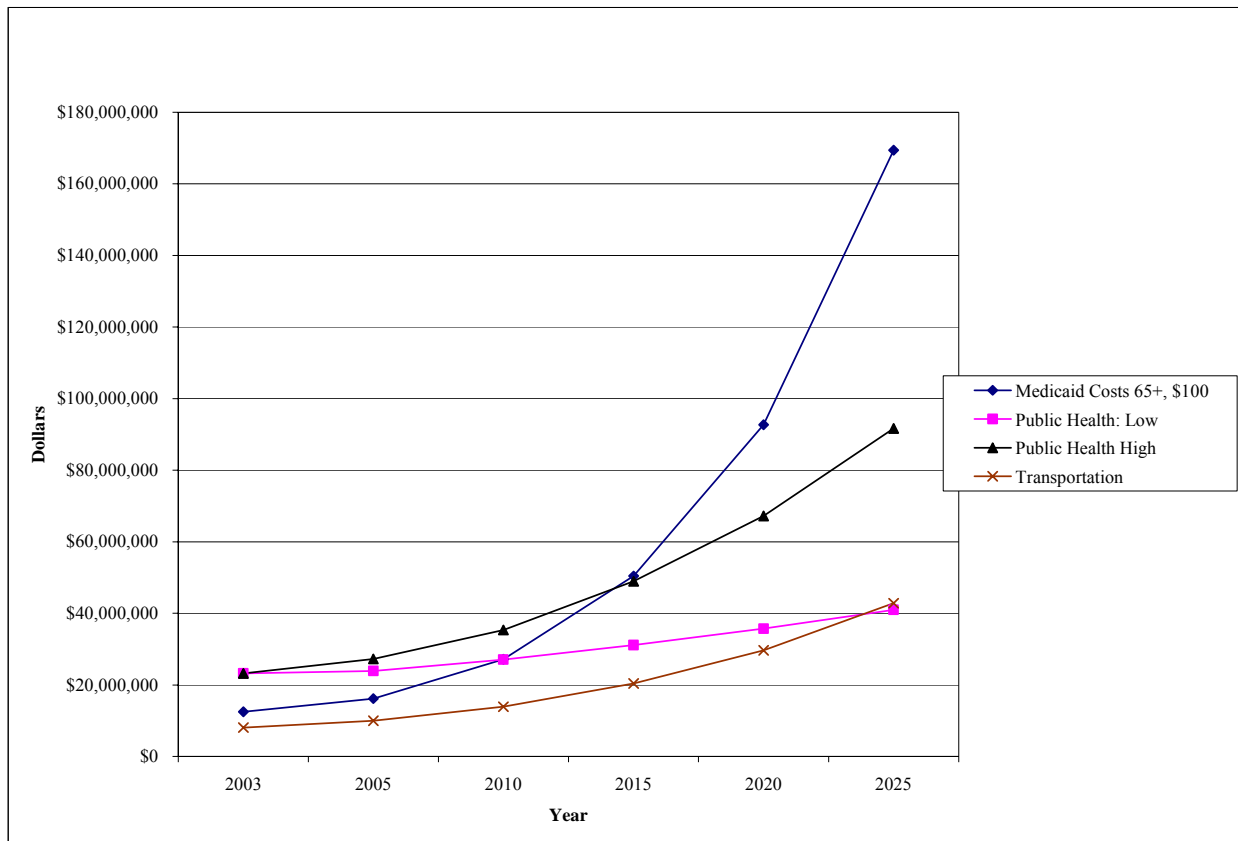
In the long-term, Georgia may be forced to restrict access to services through one of several means: further reductions in the prices paid to providers, further restrictions on eligibility (e.g. reducing nursing facility and waiver program eligibility from 300 percent SSI income to as low as 100 percent SSI income), restrictions on the frequency that patients can access services, and elimination of various optional services. In the short-term, Georgia can begin to control expenses by diverting nursing facility eligible individuals to community based waiver programs; however, the state may have to seek the expansion of the waivers through the federal process, and expanding access to waivers without restricting access to nursing facilities will only increase the state's Medicaid burden.

As Georgia's elderly population grows over the next two decades, the state needs to examine which long-term care services to expand (institutional versus Waiver programs), where to offer these services, and how to ensure sufficient staff to support these services. This current snapshot of Georgia's long-term care services provides insights into Georgia's future challenges, particularly the urban bias and staffing challenges. These issues are discussed in the final section, which summarizes the budget stress and options for dealing with the pressures associated with the growing elderly population.

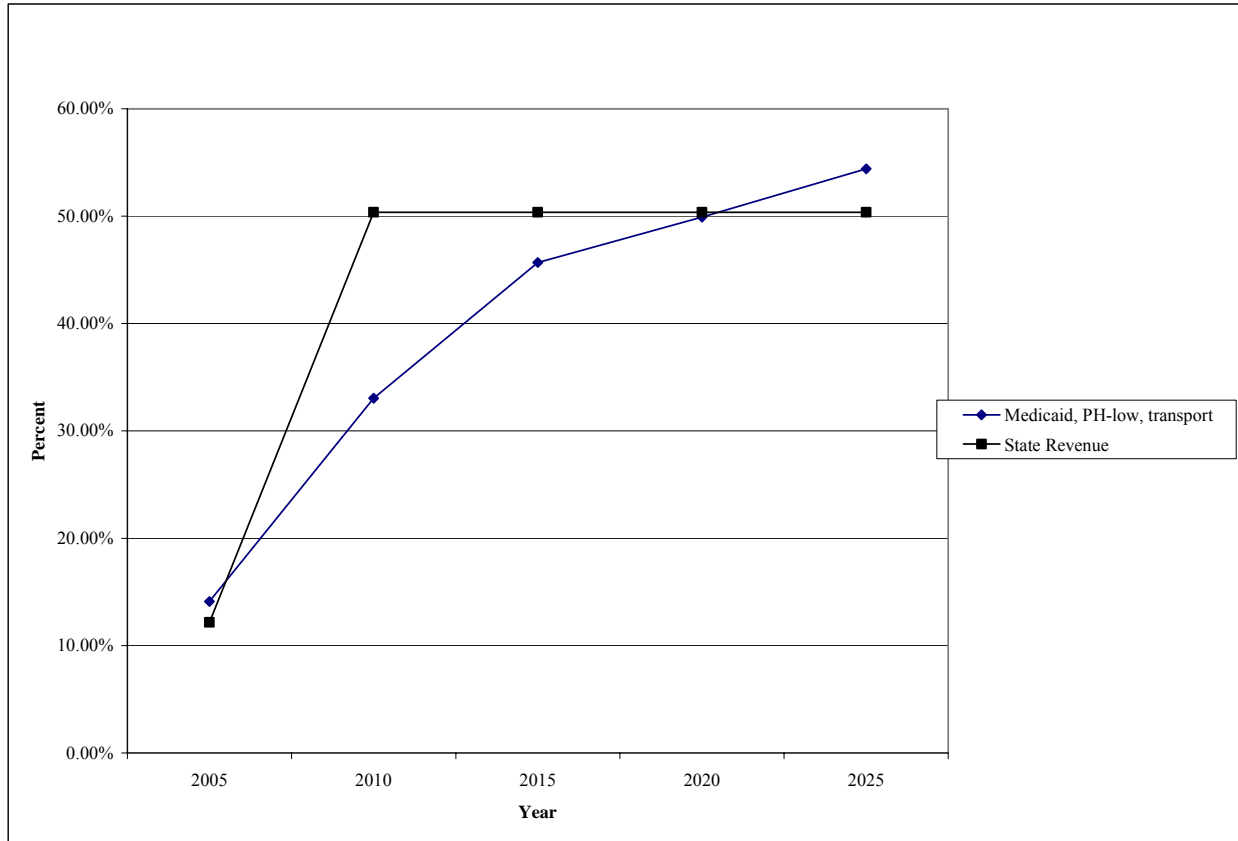
## VI. CONCLUSION: SUMMARY OF ISSUES

In the future, Georgia's State Budget is likely to undergo fiscal pressure associated with revenue and expenditure trends discussed above. The State has a number of difficult choices to make in order to increase the solvency of the Budget. In the Governor's 2006 Budget, education and health expenditures continue to top the list of projected state expenditures, encompassing 54.1 percent and 21.1 percent of FY2006 projected appropriations respectively. Medicaid expenditures are budgeted at \$7.075 billion, up somewhat from the previous year. Figure 12 summarizes the projected growth in costs for Medicaid for those 65 and older, public health, and non-Medicaid transportation through 2025. The rapid increases in costs are a function of Georgia's aging population growth as well as overall prices associated with the health care industry. There is no guarantee that the State will be able to fulfill these budgetary expenditures, and, in fact, if state revenues grow at about 8.5 percent per year (a middle-of-the road projection), by 2020, the growth in these health related expenditures will take over the growth in state revenue (Figure 13). Under these projections, the Medicaid, public health (low estimate), and transportation expenditures for the elderly will rise from 11 percent of total state revenue in 2010 to 20.1 percent in 2025.

**FIGURE 12. PROJECTIONS OF HEALTH-RELATED COSTS FOR ELDERLY**



**FIGURE 13. GROWTH IN HEALTH EXPENDITURES AND REVENUE**



There are a number of unique budgetary implications of the elderly and Medicaid in Georgia that bear review before setting out policy alternatives for dealing with the pressures of supporting the health care of the elderly in the future.

### **Urban Bias**

Most of Georgia's long-term care services are predominantly clustered in urban areas. Currently, about 40 percent of Georgia's elderly live in rural areas, whereas in Massachusetts it is five percent and in Colorado about 12 percent.<sup>52</sup> Delivering services in rural areas will be of greater concern to Georgia, where seniors currently have fewer long-term care options than their urban counterparts. With fewer choices, Georgia's rural seniors will be more likely to enter a nursing facility. Georgia can respond by expanding non-institutional alternatives (e.g. waiver programs). As evidenced by the growing CCSP waiting list, there are a significant number of seniors who prefer to receive care in their homes and communities but lack access to such care.

<sup>52</sup> Based on tabulations from the March 2004 Current Population Survey done by Dr. Ketsche.

## Staffing Challenges

Georgia's growth in elderly population will also trigger an increase in demand for staff providing care for the elderly. To date, Georgia has lagged behind the nation in terms of growth in nursing and personal care facility staff. In 1998, Georgia ranked 42<sup>nd</sup> among states in percent of health services employment in nursing and personal care facilities. From 1988 to 1998, nursing and personal care facility employment per 100,000 population over age 65 increased by 13 percent in Georgia compared to the national average of 23 percent.<sup>53</sup> From 2000 to 2010, the number of direct care workers in nursing and personal care facilities is projected to grow nationally by 26 percent.<sup>54</sup>

The increased demand for long-term care staff is occurring while the pool of potential caregivers is decreasing. According to recent analysis by The Lewin Group, there will be:

- 3.0 potential caregivers (persons age 20 to 64) for each person age 65+ in 2025 compared to 4.7 in 2005.
- 26.0 potential caregivers (persons age 20 to 64) for each person age 85+ in 2025 compared to 34.6 in 2005.

## Previous Revenue Related Decisions

Previous policy decisions regarding state revenue have resulted in a revenue structure that is growing at a slower pace with the economy than it did 20 years earlier. These decisions include elimination of food from the sales tax base, various exclusions and exemptions from the corporate tax, and individual income tax deductions. Overall, policies have increased the cost of state and local exemptions and preferential treatment by over \$2 billion since 1987 (FRC 2002).<sup>55</sup> These previous decisions may reduce the flexibility that the State has to deal with the increased expenditure pressures.

## Financing Issues

Based on the previous analysis, there are potential cost savings in the provision of health related services for the elderly in terms of programs such as SOURCE and CCSP. At the same time, the analysis above suggests that there are potential revenue increases that might be realized through reduced tax benefits for the elderly.

Using the updated data (based on 2002 information as noted earlier) on the relative costs of NF, CCSP, and SOURCE, holding factors related to health condition constant, we see that the nursing facilities alternatives may be a significant source of savings. For similar care under similar health conditions, CCSP is estimated to cost 82.5 percent of nursing facility care and SOURCE is estimated at 84.5 percent of nursing facility care. At one extreme, this could shave off 16 to 18 percent of the anticipated costs of nursing facility care, which are the lion's share of anticipated Medicaid costs. This would result in savings of up to \$2 billion in 2025. Such a

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<sup>53</sup> "HRSA State Health Workforce Profile", Georgia. December, 2000.

<sup>54</sup> "The Future Supply of Long-Term Care Workers in Relation to The Aging Baby Boom Generation, Report to Congress", May, 2003.

<sup>55</sup> For State government alone, the estimate is \$1.6 billion.

savings would reduce the cost of anticipated health related expenditures for the elderly to 17.7 percent of State revenue in 2025 (relative to the estimated 20.1 percent noted above).

These potential cost savings do not include other possible savings that might arise based on data from Table 18. As SOURCE and CCSP are better at preventing additional expense (via hospital admissions), the additional cost savings in the system could be substantial. Consider the differences: in nursing facilities, 74 percent of patients have inpatient admissions over 12 months, compared with 42 and 39 percent respectively for CCSP and SOURCE. If one quarter of NF residents moved to CCSP or SOURCE, this would represent a reduction of 34 percent of current NF resident admissions annually - or 13,000 less admissions based on 2005 data. Although it is very difficult to obtain an “average cost” of a hospital admission, we assume the average cost to be \$7,000 per visit. In 2005, 13,000 fewer admissions would save \$91 million. At the projected rate of medical cost inflation and population projections, by 2025, this saving could reach \$780 million per year. This additional saving would again reduce the claims on State revenue to 16.8 percent.<sup>56</sup>

On the revenue side, there are tax-related benefits for seniors that will increase in cost due to the aging of the population.<sup>57</sup> Elimination of the exemptions for the elderly for example may be a tough sell politically, but the state could refuse to increase the exemption further after the 2008 phase-in of the currently legislated levels (\$35,000 per person) as a way to reduce the revenue loss associated with this provision. Exemptions in the sales tax base continue to erode the consumption base of the sales tax as more and more consumption occurs in the form of services, which remain largely untaxed.<sup>58</sup> In the U.S. in 1970, about 30 percent of household consumption was of services (largely non-taxable). By 2002, services comprised 45 percent of household consumption. At current levels, this means that we consume an additional \$6,000, on average, of services per year out of average family expenditures of \$40,000 per year. If half of this increase in consumption was *taxable* consumption, at the state rate of 4 percent, this would yield \$120 more per family per year to the State, or up to \$240 million per year if these services were taxed - about five percent of current law sales tax revenues. The overall cost of exempting a wide range of services from the sales tax costs the state \$2 billion per year (based on Bahl and Hawkins, 1998).

To summarize, this report has quantified the revenue and Medicaid-related health expenditure pressures associated with the aging of Georgia’s population. The data show that the age-dynamic in Georgia projects a very large increase in the elderly needing health related care in the future. At the same time, the current revenue structure of the State is not designed to grow enough as the economy expands to cover the increased health related costs. In addition, the State needs to grapple with disparities in age related growth among counties, and, in turn, the provision of services across the State. Staffing pressures could also induce a demand for more public expenditures toward education for specialized professionals.

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<sup>56</sup> These estimates assume that the current estimates on usage represent total demand. It is possible that with expansion of services such as SOURCE and CCSP there could be an increased demand on total services.

<sup>57</sup> There are tax benefits afforded to other parts of the population as well such as the sales tax holidays for school supplies and corporate income tax incentives. Pressures on the expenditure side of the budget due to increased health care costs could be mitigated by eliminating exemptions and incentives for a more general group of taxpayers than just seniors.

<sup>58</sup> U.S. Bureau of Labor Statistics, *Consumer Expenditure Survey*.

From the information and analysis of this report, there are options for reducing the stress on the State Budget in the future. The State has the option to reduce current tax expenditures in a way that would increase the natural rate of growth of revenue - in particular by dealing with exemptions in the sales tax. An alternative not discussed here is to increase co-payments and other cost-sharing with the recipients of Medicaid and other health services. On the service side, nursing facility alternatives such as SOURCE and CCSP are potential cost-savers. Additionally, survey data suggest that these are, in fact, the alternatives that seniors prefer to nursing facilities. The State should consider focusing on ways to increase these services so that coverage could be expanded and the transition away from nursing facilities could become a reality.

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## APPENDIX I: TABLES

**TABLE A-1. U.S. POPULATION GROWTH**

Year	Population	Average Annual Percent Growth
1901	77,584,000	1.94
1959	177,829,628	1.67
1969	202,676,946	0.98
1979	225,055,487	1.10
1983	233,791,994	0.91
1995	262,803,276	0.95
1996	265,228,572	0.92
1997	267,783,607	0.96
1998	270,248,003	0.92
1999	272,690,813	0.90
2000	283,505,327	3.97
2001	286,386,085	1.02
2002	289,250,679	1.00
2003	292,069,586	0.97
2004	294,941,471	0.98
April 2005	295,777,218	--
<b>Average</b>	--	<b>1.28%</b>

Source: U.S. Census Bureau, Population Estimates Program, Population Division.

**TABLE A-2. U.S. POPULATION PROJECTED GROWTH**

Year	Population (in thousands)	Average Annual Percent Growth
2000-2010	308,936	0.93
2010-2020	335,805	0.87
2020-2030	363,584	0.84
2030-2040	391,946	0.78
2040-2050	419,854	0.69
<b>Average</b>	<b>364,025</b>	<b>0.82</b>

Source: U.S. Census Bureau, Population Estimates Program, Population Projections Branch.

**TABLE A-3. U.S. POPULATION AGE DISTRIBUTION**

Year	Number per age group (in thousands)				
	5-19 years	20-44 years	45-64 years	65-84 years	85 and over
2000	61,331	104,075	62,440	30,794	4,267
2010	61,810	104,444	81,012	34,120	6,123
2020	65,955	108,632	83,653	47,363	7,269
2030	70,832	114,747	82,280	61,850	9,603
2040	75,326	121,659	88,611	64,640	15,409
2050	81,067	130,897	93,104	65,844	20,861
Year	Average annual growth per age group (in %)				
	5-19 years	20-44 years	45-64 years	65-84 years	85 and over
2000	0.8	0.4	29.7	10.8	43.5
2010	6.7	4.0	3.3	38.8	18.7
2020	7.4	5.6	-1.6	30.6	32.1
2030	6.3	6.0	7.7	4.5	60.5
2040	7.6	7.6	5.1	1.9	35.4
2050	0.8	0.4	29.7	10.8	43.5

Source: U.S. Census Bureau, "U.S. Interim Projections by Age, Sex, Race, and Hispanic Origin."

## **APPENDIX II: MEDICARE AND MEDICAID ELIGIBILITY**

Medicare is the federal entitlement program that offers health insurance primarily to individuals over the age of 65, those under 65 who are permanently disabled, and those with end-stage renal disease. In order to receive Medicare benefits, one must have paid into the system through payroll deductions. Those deductions amount to a 2.9 percent payroll tax. Support is also provided to the Medicare system through the general fund.

Eligible recipients automatically receive Medicare Part A, which primarily covers hospitalization. Medicare Part B is optional and covers physician office visits, emergency room visits, lab work and some durable medical equipment. Beginning in 2006, Medicare Part D will also be available to provide prescription drug assistance at additional cost. All Medicare recipients are required to cost-share, and some recipients carry supplemental policies to cover that portion of the total cost. Medicare covers very few long-term care services and will pay for up to 100 days of nursing facility care only after an inpatient hospital stay. In 2003, there were 973,794 Georgians on the Medicare rolls.

Medicaid is the state-federal partnership that provides health insurance to low income individuals who also meet categorical eligibility (aged, blind, disabled, pregnant, child). In Georgia, financial eligibility is defined as annual income not more than \$6,450 for one person, and the federal government provides about 60 cents of every dollar of benefit. Medicaid is a voluntary program, but every state now participates.

States are allowed a certain amount of flexibility under Medicaid law. The federal government requires states to provide 12 mandatory services, but all states also offer a number of optional services such as drug benefits and personal care services. States can also relax financial eligibility for services. In Georgia, individuals with incomes up to \$19,350 can qualify for nursing facility care or home and community-based waiver programs. In FFY01, there were about 1,328,379 Georgians receiving Medicaid – about 15 percent of the state's population. Children account for a majority of Medicaid recipients but a minority of cost, while the aged, blind, and disabled account for a minority of recipients but a majority of cost.