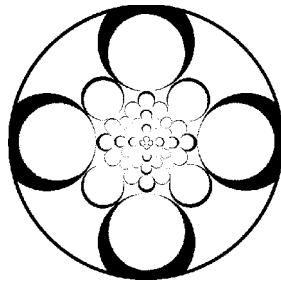


# ***Older Workers in North Carolina***



Final Report for the North Carolina Division of Aging

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and

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## ***Contents***

Executive Summary	3
Introduction	4
Older Workers in North Carolina	4
<i>Composition of NC Labor Force in 1992</i>	4
<i>Newly Arrived Older Workers</i>	6
<i>Labor Force Projections in the United States to 2005</i>	7
<i>Projections for North Carolina's Labor Force</i>	8
Work and Retirement	8
<i>Employment Choices Facing Older Workers</i>	9
<i>Retirement from Career Jobs</i>	9
<i>Special Issues Facing Older Women</i>	11
Age-Specific Cost of Employee Benefits	11
<i>Pension Plans</i>	12
<i>Pensions and Surviving Spouses</i>	12
<i>Health Insurance</i>	13
Summary	14
Notes	14
References	16

## ***Tables and Figures***

Figure 1. The State's Seven Economic Regions, as Designated by the North Carolina Partnership for Economic Development	5
Table 1a. Number and Percentage of Workers Ages 40 to 54 by Economic Region and Sex, 1990	5
Table 1b. Number and Percentage of Workers Age 55+ by Economic Region and Sex, 1990	5
Table 2a. Number and Percentage of Workers Ages 40 to 54, by Industry and Sex, 1990	6
Table 2b. Number and Percentage of Workers Age 55+, by Industry and Sex, 1990	6
Table 3a. Number and Percentage of Workers Age 40 to 54, by Occupation and Sex, 1990	7
Table 3b. Number and Percentage of Workers Ages 55+, by Occupation and Sex, 1990	7
Table 4. Relative Costs of Employing Older Workers	13

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# *Executive Summary*

**T**he population of North Carolina continues to grow older, due to the aging of the resident population, increased life expectancy, and the migration of older people into the state. As the population ages, so does the labor force. One of the most important economic challenges facing North Carolina in the twenty-first century will be the creation of employment opportunities for the increased number of older men and women seeking to remain in or return to the labor force. These talented older workers represent a significant economic resource that can be used to enhance the growth and development of the state.

The 1990 census reported that there were over two million residents of North Carolina age 40 and over, and 1.3 million of these older citizens were working. Most of them lived in the industrialized corridor of the state, which runs from the Research Triangle to the Piedmont and on to Charlotte. Almost half of these older workers were women, and about one-third of all workers age 40 and over were employed by manufacturing firms. Knowing where within the state older workers reside and the types of jobs they hold would help state planners develop appropriate employment programs to facilitate improved job opportunities for older people.

National and state projections indicate that the number of older workers will continue to increase in the coming years. Government, business, and civic leaders must recognize the importance of the aging of the labor force and the economic factors that influence employment opportunities for older persons.

Work and retirement decisions are determined by the availability of retirement income, health status, employment compensation, and job opportunities. Retirement choices may change according to shifts in government policies concerning Social Security and Medicare, as well as responding to retirement benefits provided by employers. Employment opportunities follow

fluctuations in the economic environment and corporate downsizing. Of particular importance to the decision to hire or retain older workers—those age 55 and over—is the cost of hiring older rather than younger people, because the cost of providing pensions and health insurance increases with the age of the worker.

The labor market in the United States is rapidly changing in response to international competition, technological innovation, government regulation, and new governmental policies. Workers seem less likely to remain with a single firm for long periods of time, the core labor force for many firms is declining, and the use of contingent workers is increasing. For many people, this implies a change in employment status late in their working career. Policies aimed at facilitating this transition would be very helpful for older workers.

Women are becoming a larger component of the older work force. Because of their different work histories, it is often more difficult for older women to find employment. Women may also face getting by with less retirement income than their male counterparts, because women often have had less lifetime earnings and less access to pension benefit programs. Women are also more likely to survive their spouses and have an extended period of widowhood. Increased employment opportunities for healthy older women who want to work would improve their economic well-being.

The aging of North Carolina creates new labor market problems while providing new opportunities for economic advancement. Leaders in the public and private sectors must be aware of the problems and develop solutions that increase employment opportunities for older people. Such actions will enable our state to use the productive potential of its older citizens to improve the economic well-being of all.

## ***Introduction***

**J**ob opportunities for older workers in North Carolina are influenced by general economic conditions in the state, the actual cost of hiring and retaining older workers, and the cost of employing older workers compared to the cost of employing younger workers. The supply of older workers depends on the number of older persons living in North Carolina and their desire to continue working. Over time, the number of older persons seeking employment changes due to net migration into North Carolina, the aging of the resident population, improvements in the health status of older persons, and changes in the desire of older persons to remain in the labor force.

Many managers believe that older workers are more costly to employ than younger workers. As a result, firms may be more likely to hire younger workers and more likely to terminate older workers during economic downturns or as part of corporate restructuring. Given the projected aging of North Carolina's population,<sup>1</sup> it is important to (1) understand the facts versus the fiction associated with hiring and retaining older workers, (2) determine the number of potential older workers in the state during the next decade, (3) know where in the state these older workers reside, and (4) know the industries and occupations that hire older persons.

This report examines the labor market for older workers in North Carolina and how it will change during the next decade. First, the current composition of the labor force age 40 and over in North Carolina is described. Using 1990 census data, the number of older persons in each economic region of the state is reported along with the proportion of older persons who are in the labor force. The total number of workers in each industry and occupation is presented and then this information is separated by gender. Projected increases in the number of older workers at the national level are reviewed before the outlook for older workers in North Carolina at the beginning of the twenty-first century is examined.

Next, national trends in the proportion of older persons who remain in the labor force are examined. Discussions of the major determinants of retirement, employment barriers facing older workers, and the continuing drive to downsize in many large American corporations follow presentation of the data. The report then examines costs of employee benefits and how the cost per worker of pension and health insurance plans changes with the age of the employee. Employer health care costs are found to rise with age and the increased utilization of medical services. Pension costs rise in accordance with benefit formulas, increases in tenure, and higher wages as workers approach retirement. While the provision of pension and health insurance plans are not the only employer costs that increase with age, these benefits account for a large percentage of total employee benefits in most companies.

## ***Older Workers in North Carolina***

**T**his section describes the 1990 North Carolina labor force, reviews projections of labor force trends for the United States made by the Bureau of Labor Statistics, and considers likely changes in the age composition of the labor force in North Carolina over the next decade. This analysis illustrates the growing importance of older workers to the economy of North Carolina. It also highlights the need for continued growth in job opportunities for older North Carolinians.

### ***Composition of NC Labor Force in 1992***

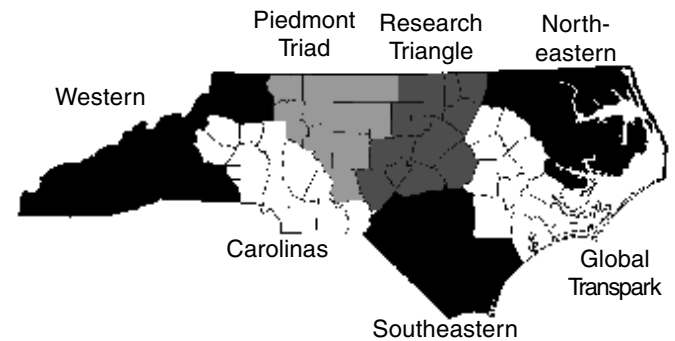
The population of North Carolina became much older during the last third of the twentieth century. The increased number of older persons has led to an aging of the labor force. In 1990, seven million people lived in North Carolina and two million of these residents were age 40 and older. Among North Carolin-

ians 40 and over, 55 percent were female, 81 percent were white, and 17 percent were African-American. Over half of these individuals age 40 and over, or approximately 1.3 million persons, were working in 1990. Slightly less than half (46 percent) of all workers age 40 and over in North Carolina were women. The majority of these workers had at least a high school education. The average hourly wage rate for workers 40 and over was \$11.82 and they worked an average of 40 hours per week. These older persons represent an important human resource to the state and make a significant contribution to the state's economic growth during the next decade.

To illustrate the number of older workers and their importance to the local economy, information is provided for each of seven economic regions of North Carolina. The state of North Carolina's Partnership for Economic Development divides the state into 7 economic regions: Western Economic Commission, Carolinas Partnership, Piedmont Triad Partnership, Research Triangle Regional Partnership, Southeastern Economic Commission, Global TransPark Region, and Northeastern Economic Commission. The location of the seven economic regions and the counties that are included in each region are shown in Figure 1.<sup>3</sup>

Tables 1a and 1b report the number of older persons working in each economic region and indicate the proportion of all older workers in the state working in that region by gender. The Carolinas Partnership region had the largest number of workers age 40 and over in 1990 (226,392 workers age 40 to 54 and 98,442 workers age 55 and over). This represented 24 percent of all workers 40 and over living in North Carolina. The fewest number of older workers was found in the Northeastern Economic Commission region which had only 47,337 workers age 40 to 54 and 23,391 workers age 55 and older. This represented only 5 percent of all workers age 40 and over in the state. Older African-American workers were most likely to reside in the Research Triangle

**Figure 1. The State's Seven Economic Regions, as Designated by the North Carolina Partnership for Economic Development\***



\*Since April 1, 1996, there have been some changes. The Western Region is now known as AdvantageWest, and Burke County, which had been part of Carolinas, has joined Advantage West.

**Table 1a. Number and Percentage of Workers Ages 40 to 54 by Economic Region and Sex, 1990**

Region	Total	Percent of Workers in NC	
		Men	Women
Western	113,547	6.37	5.68
Carolinas	226,392	12.72	11.29
Piedmont	184,482	10.33	9.24
Research Triangle	186,468	10.39	9.39
Southeastern	87,723	5.00	4.30
Global Transpark	96,690	5.63	4.62
Northeastern	47,337	2.67	2.35
<i>Total</i>	<i>942,639</i>	<i>53.11</i>	<i>46.87</i>
		<i>(500,712)</i>	<i>(441,927)</i>

**Table 1b. Number and Percentage of Workers Age 55+ by Economic Region and Sex, 1990**

Region	Total	Percent of Workers in NC	
		Men	Women
Western	52,632	6.63	6.29
Carolinas	98,442	12.09	12.16
Piedmont	83,013	9.88	10.64
Research Triangle	74,505	9.00	9.39
Southeastern	34,140	4.34	4.03
Global Transpark	40,044	5.10	4.72
Northeastern	23,391	2.97	2.77
<i>Total</i>	<i>406,167</i>	<i>55.60</i>	<i>44.40</i>
		<i>(225,843)</i>	<i>(180,324)</i>

Regional Partnership area and least likely to be found in the Western Economic Commission.

Older workers were found in each of the major industrial and occupational groups. The number of older persons employed in each major industrial group in 1990 is shown in Tables 2a and 2b. These tables also indicate the proportion of all older workers in the state by gender who are employed in the various industries. Older workers were employed in large numbers in the manufacturing and service sectors of the economy. Relatively few older workers were found in public administration, finance, insurance and real estate, mining, and construction.

The number of older workers employed in the major occupational groups is shown in Tables 3a and 3b. These tables also report the proportion of older workers by gender who are employed in each of the occupations. The largest numbers of older workers were found in (1) administrative support (mostly females), (2) precision production, craft and repair (mostly males), (3) professional, (4) executive, administrative and managerial, and (5) machine operators, assemblers, and inspectors.

In summary, almost two-thirds of all older workers in North Carolina are found in the industrialized corridor of the state running from the Research Triangle to the Piedmont and on to Charlotte (the Carolinas Partnership, Piedmont Triad Partnership, and the Research Triangle Regional Partnership regions). Important observations for policy making include: (1) older women represent 46 percent of all workers age 40 and over in North Carolina, (2) over one third of all older workers are employed by manufacturing firms and almost half of all female workers age 40 and over are in manufacturing, and (3) over 30 percent of all older female workers are employed in administrative support jobs including clerical positions. Knowing where older workers currently reside and which industries and occupations currently employ large numbers of older workers should help state planners develop appropriate employment programs to facilitate improved job opportunities for older persons.

**Table 2a. Number and Percentage of Workers Ages 40 to 54, by Industry and Sex, 1990**

Industry	Total	Percent of Workers in NC	
		Men	Women
Manufacturing	347,532	14.13	22.73
Services	181,689	10.69	8.58
Agriculture, forestry, fisheries	125,034	8.16	5.10
Transportation, communication, other public utilities	109,806	5.00	6.65
Wholesale trade	77,310	7.80	0.40
Retail trade	53,610	4.35	1.34
Construction	29,460	1.29	1.83
Mining	11,496	1.15	0.07
Finance, insurance, real estate	4,305	0.29	0.17
Public administration	2,397	0.25	0.01

**Table 2b. Number and Percentage of Workers Age 55+, by Industry and Sex, 1990**

Industry	Total	Percent of Workers in NC	
		Men	Women
Manufacturing	141,273	15.20	19.58
Services	78,933	10.98	8.46
Transportation, communication, other public utilities	77,232	9.02	9.99
Agriculture, forestry, fisheries	42,801	7.31	3.22
Wholesale trade	28,638	6.84	0.21
Retail trade	21,162	3.92	1.30
Construction	11,043	1.22	1.50
Mining	3,471	0.82	0.03
Finance, insurance, and real estate	1,572	0.26	0.12
Public administration	42	0.01	0.00

***Newly Arrived Older Workers***

Approximately one-fourth of the state's population age 40 and over (660,924 individuals) had moved into the state of North Carolina between 1985 and 1990. Of this group, 60 percent were working in 1990 compared to 52 percent of the total state population in that age group. The Carolinas Partnership gained the largest percentage of these individuals, with 26 percent of these workers migrating into this region. In addition, 21 percent moved to the Re-

**Table 3a. Number and Percentage of Workers Ages 40 to 54, by Occupation and Sex, 1990**

Occupations	Total	Percent of Workers in NC	
		Men	Women
Administrative support, including clerical	132,759	2.96	11.13
Precision production, craft, repair	130,920	12.15	1.74
Professional specialty	129,468	5.76	7.97
Executive, administrative, managerial	125,034	8.16	5.10
Machine operators, assemblers, inspectors	115,131	4.87	7.34
Sales	96,966	6.14	4.14
Other service	74,010	2.05	5.80
Transportation and material moving	41,979	4.01	0.45
Technicians and related support	29,295	1.71	1.40
Handlers, equipment cleaners, etc.	28,884	2.11	0.96
Farming, forestry, fishing	20,565	1.80	0.38
Protective service	12,213	1.14	0.16
Private household service	3,018	0.01	0.31
Armed forces	2,397	0.25	0.01

search Triangle Partnership region and 18 percent moved into the Piedmont Triad Partnership region. Of these workers, 81 percent are white and 44 percent are female.

The average hourly wage for these new workers was \$12.42 per hour, with those in the Carolinas Partnership earning a slightly higher \$13.61 per hour. These averages are higher than the average of \$11.82 for the entire work force in this age group.

With 81 percent of these new workers having at least a high school education and 15 percent having at least a bachelor's degree, this group is slightly more educated than the work force as a whole. Of the entire work force in this age group, 77 percent have at least a high school education and 14 percent have at least a bachelor's degree.

The data show that North Carolina is attracting older persons who are making an important contribution to the state's economy. The economy can grow more rapidly as talented, highly educated older persons migrate to the state. Consideration should

**Table 3b. Number and Percentage of Workers Age 55+, by Occupation and Sex, 1990**

Occupations	Total	Percent of Workers in NC	
		Men	Women
Sales	51,360	13.68	11.35
Administrative support, including clerical	51,189	6.00	20.87
Precision production, craft, repair	49,800	19.34	3.39
Machine operators, assemblers, inspectors	48,855	8.48	16.48
Other service	47,832	6.79	18.02
Professional specialty	45,210	9.65	12.98
Executive, administrative, managerial	42,801	13.15	7.26
Farming, forestry, fishing	17,892	6.80	1.41
Transportation and material moving	17,655	7.29	0.66
Handlers, equipment cleaners, etc.	13,995	4.45	2.19
Technicians and related support	8,028	1.71	2.31
Protective service	6,486	2.61	0.33
Private household service	5,022	0.05	2.73
Armed forces	42	0.02	0.00

be given to policies that enable the state to continue to foster employment opportunities for these persons and to use their talents to maintain a strong economy.

### ***Labor Force Projections in the United States to 2005***

The U.S. labor force is projected to increase from 127 million workers in 1992 to 151 million in 2005.<sup>4</sup> The diversity of the work force is expected to increase with white males composing a smaller proportion of the future labor force. Workers age 55 and older are expected to comprise 14.2 percent of the entire labor force in 2005 compared to only 12.2 percent in 1992. During this period, the average annual rate of growth of the older labor force is projected to be 2.5 percent compared to 1.1 percent for persons age 25 to 54 and 1.3 percent for workers age 16 to 24.<sup>5</sup>

After decades of rapid decline, the proportion of older men who are in the labor force has remained fairly stable since the mid-1980s. BLS projections re-

port that the percent of men age 55 to 64 who are in the labor force will increase from 67.0 percent in 1992 to 69.7 percent in 2005 and the percent of men age 65 and over will decline from 16.1 percent to 14.7 percent. The proportion of women age 55 and over who remain in the labor force is projected to increase during the coming decade. The proportion of women age 55 to 64 who are in the labor force is projected to increase from 46.6 in 1992 to 52.4 percent in 2005. The percentage of women age 65 and older who are in the labor force is projected to increase slightly from 8.3 to 8.8 percent.

These increases reflect the continued increase in the labor force of women throughout their lifetime. During the coming decade, women will comprise an increasing proportion of the total labor force. These trends indicate that future planners must devote more attention to the issues that affect older women in the work force.

These projections indicate there will be over 21 million workers nationwide age 55 and over in 2005 compared to only 15 million in 1992. This increase implies that major adjustments in employment patterns must occur if these older workers are to find productive employment consistent with their desire for working hours, job conditions, and types of employment.

### ***Projections for North Carolina's Labor Force***

The population of North Carolina is expected to increase to 7.7 million by 2000 and become older. Estimates by the Office of Budget and Management indicate that North Carolina can expect to have over 260,000 more persons age 55 and over in 2000 than in 1990 and that the median age of North Carolina residents will increase from 33.1 years in 1990 to 36.5 years in 2000. Consistent with the aging of the national population, the relative size of the older population in North Carolina will increase rapidly in the first two decades of the twenty-first century.

The aging of the population of North Carolina means that there will be more older persons seeking

employment in the next 10 to 20 years. In addition, national trends imply that a large proportion of the older population will want to remain economically active in the twenty-first century. Both of these factors increase the importance of developing effective policies for the employment of older persons.

Statewide, it is anticipated that employment in manufacturing will decline as a percent of total employment. Given the relative high concentration of older workers in manufacturing, this may increase the need to evaluate the effects of reduced manufacturing employment on the job prospects of older workers. Older workers must be prepared to shift industries and perhaps change their occupation in order to remain employed in the next decade.

## ***Work and Retirement***

**T**he work and retirement decisions of older persons are made within a framework of employment opportunities, economic incentives, and individual preferences for hours of work and working conditions. The labor supply decisions of older persons can be grouped into four types: (1) long-term employees deciding when to leave their career employer, (2) persons who have left a career job who are now looking for a new full-time job, (3) persons who have left their career job and who are now looking for temporary and/or part time employment, and (4) persons who are currently completely retired deciding whether to reenter the labor market.

The desire of older persons to remain in the labor force is directly affected by their employment opportunities. Over the past two decades, the U.S. labor market has undergone considerable change in response to increased international competition, rapidly changing technology, and increased demand for more highly skilled workers. These changes have led to firms attempting to reduce the number of workers they employ and have altered employment prospects for older workers. The downsizing of firms has

resulted in many older workers leaving their career employers years before they expected to retire while other changes in the labor market have reduced the reemployment prospects of these early retirees. In addition to understanding the desire of older persons to remain in the labor force, policy makers must be aware of changes in their employment opportunities if they are to develop successful programs to enhance the work life of older persons.

### ***Employment Choices Facing Older Workers***

Long-term employees are generally unable to move to part-time assignments with their current employer. Most firms severely restrict part-time employment opportunities among their permanent workers because fixed cost of employment make part-time workers more expensive. Also, the importance of teamwork in the production process tends to make firms less likely to offer employment that allows older persons to work nonstandard hours. Workers wanting to reduce their weekly hours generally must leave their career employers and seek part-time employment at new firms. As a result, the transition from career employment to complete retirement often includes several years in the contingent labor force. In most cases, this means less prestigious job assignments, lower wages and fewer benefits.

Once older workers have been separated from their career jobs, the nature of employment opportunities shifts from firms deciding whether to retain older workers to firms deciding whether to hire older workers. The relative magnitude of employment costs compared to the gains from hiring older workers will determine the availability of jobs. Older persons seeking part-time employment as members of the contingent labor force often are offered jobs with shorter hours, no benefits and little training. Thus, the cost of hiring older persons in these positions is much less than hiring them in full-time jobs.

The distinction between hiring new older workers and retaining existing older workers is critical to

understanding the labor market for older workers. Firms may be willing to retain long-term older workers while at the same time trying to avoid hiring new older workers.<sup>6</sup> Job opportunities for older workers after the termination of their career jobs has become increasingly important in recent years. This is attributable, in part, to the trend toward downsizing among many major U.S. corporations. The use of contingent workers by major corporations has significant implications for the labor market for older workers in the twenty-first century.

Changes in the U.S. economy, the downsizing of large manufacturing firms and the increased use of contingent workers have altered job opportunities for older workers during the past two decades. The proportion of older workers in the service sector has increased, employment in manufacturing has declined, and more older workers are employed by smaller firms. Older workers are three times more likely to be employed in firms with fewer than one hundred workers than in firms employing 500 or more employees. Also, there has been a decline in self-employment among older workers.

### ***Retirement from Career Jobs***

Older workers considering retirement from their career employer must determine the value of remaining on this job compared to the value of other employment alternatives such as full-time work on another job, part-time work or complete retirement. The total value of remaining on a career job includes cash earnings, pension compensation (the gain in the lifetime value of pension benefits associated with continued employment), the value of employer-provided health insurance while working versus the cost of health insurance in retirement and the value of any other employment benefits.

Defined benefit pension plans induce retirement from a career job by providing economic incentives that make retiring more attractive to older workers. After the worker reaches the age of early retirement, the lifetime value of pension benefits often declines;

in effect, reducing the value of workers remaining in their current jobs. This decline occurs because increases in future retirement benefits are not sufficient to offset the pension benefits that are lost when the worker remains on the job for another year.<sup>7</sup>

Pension coverage and the change in the lifetime value of pension benefits are significant influences on the timing of retirement from a career job. Similar economic incentives affecting retirement are found in social security. Key components of social security that affect retirement decisions include the ages of early and normal retirement, the reductions in annual benefits associated with beginning benefits prior to the normal retirement age, the earnings test and the gain in annual benefits from delaying the start of benefit payments. Several of these factors are scheduled to change in the coming years. These changes should encourage older persons to postpone starting social security benefits and to remain in the labor force until older ages.<sup>8</sup>

Of particular importance to many older workers is the earnings test that reduces social security benefits when earnings exceed a specified limit. Social security recipients ages 62 to 65 will still have benefits reduced one dollar for every two dollars earned in excess of \$8,280, but under P.L. 104-121, ratified this year, new limits were established for workers ages 65 to 69. The exempt amount, which is tied to the average wage, will increase each year. Amounts set until 2002 are:

1996	12,500
1997	13,500
1998	14,500
1999	15,500
2000	17,000
2001	25,000
2002	30,000

Benefits will be reduced one dollar for every three dollars earned in excess of these amounts. There is no limit on the amount individuals age 70 and over can earn.

In deciding when to retire, workers must also consider the availability of health insurance at work and in retirement. While Medicare provides basic coverage for persons 65 and over, younger persons must consider the impact of retirement on their health insurance. Many large companies offer retiree health insurance plans as one of their retirement programs. These plans often are used in conjunction with defined benefit pension plans. Both retiree health insurance and pension plans reduce the cost to older workers of leaving career jobs and encourage retirement once they have reached the age of eligibility for beginning retirement benefits.<sup>9</sup>

Pension and retiree health insurance plans are components of the human resource policies of firms. They reflect the position that many firms wish to encourage older workers to retire around specific ages. By carefully structuring these plans, firms can successfully achieve higher rates of retirement among older workers. This implies that older workers select the retirement option; however, their choice is directly influenced by firm personnel and compensation policies.

Smaller firms are much less likely to offer employer pensions and retiree health insurance than are larger firms. Among small firms that offer a pension plan, the pension is much more likely to be a defined contribution plan than a defined benefit plan. Pension coverage has remained relatively stable during the past two decades with about half of the work force being covered by some type of pension plan.

In contrast, the proportion of older workers covered by retiree health plans has declined substantially as many firms have reduced or eliminated these plans in response to rapidly rising costs. Analysts from Foster Higgins, a benefits consulting firm, report that retiree health care costs among large companies increased by 9.5 percent in 1995. The proportion of firms offering health care coverage to their early retirees declined from 43 percent in 1994 to 41 percent in 1995 while the proportion offering this coverage to those 65 and over dropped from 40 percent to 35 percent. These

changes will make it more difficult for older persons in the twenty-first century to retire early as older persons remain in the labor force to retain employer-provided health insurance.<sup>10</sup>

Poor health increases the likelihood that older workers will withdraw from the labor force. Poor health reduces productivity in the labor market, reduces employment opportunities and results in lower market wages. In addition, adverse health conditions may limit mobility, thus affecting the ability to get to work and may also increase the dissatisfaction with work itself. Within any group of older persons, those in better health are more likely to be working. Over time, improvements in average health status should enable more older persons to remain in the work force.

### ***Special Issues Facing Older Women***

Several unique problems confront older women in their work and retirement decisions. Historically, women and men have differed in their choices of when to enter the labor force and what career occupations to select. In general, women earn lower wages than men. One explanation is that women, especially women who are currently age 40 and older, are more likely to have been the primary caregiver for the family while their husbands were the principle breadwinners. This resulted in large numbers of women staying at home to care for children for long periods of time. This lower attachment to the labor force resulted in these women choosing occupations for which the penalty in terms of decline in earnings due to periods outside the labor force is minimized. These occupations tend to be lower paying, have a slower increase in annual earnings and be less likely to have pension coverage than occupations that are typically male.

Other explanations for differences in work and employment patterns between men and women include discriminatory hiring practices and differences in preferences for job amenities. Discriminatory hiring practices result in women being crowded into a small number of occupations. Fewer job opportuni-

ties reduce the employment prospects for women and also tend to lower their earnings.

Differences in preferences for job traits by gender also is an explanation for limited employment choices among women. Women have tended to place greater value on certain types of job characteristics such as flexible hours, shorter hours or the availability of day care. Therefore, they will be more likely to choose jobs with these characteristics. As a result, employment opportunities and wages may be lower than those for men who do not limit their job searches. In the past, firms that have offered these job characteristics that are attractive to women have also been less likely to offer pension coverage or provide retiree health insurance.

Lower wages and limited job opportunities produce fewer years of work, lower pension benefits, and lower social security benefits. These outcomes leave women less financially prepared for retirement. Lower retirement income and the need for health insurance provide economic incentives for older women to remain at work or to return to the labor force after retirement. Economic and demographic changes that have been occurring in the United States have altered the lifetime pattern of work by women. Younger women are more likely to be in the labor force and to remain employed throughout their career. Their occupational choices and work decisions are now much closer to those of men. Thus, future generations of older women should be better prepared for retirement.

### ***Age-Specific Cost of Employee Benefits***

**F**ederal law requires that firms provide benefits that do not discriminate against older workers. Nondiscrimination provisions require that workers be offered the same coverage and benefit levels regardless of their age. Offering the same benefit plans to workers of all ages results in very different costs per worker

at alternative ages.<sup>11</sup> The primary benefits that affect the relative cost of hiring older workers are defined benefit pension plans and health insurance plans. This section examines each of these benefits and provides evidence that real employment costs do increase with age of workers.

### ***Pension Plans***

Income from company pensions is a major component of retirement income for many older persons. The proportion of households age 65 to 74 with pension income increased from 35 percent in 1980 to 47 percent in 1990. During the same period, the proportion of households age 75 and over with pension income increased from 29 percent to 40 percent.<sup>12</sup>

Employer provided pension plans can be divided into two basic types: defined contribution and defined benefit plans. Defined contribution plans are funded by regular employer contributions. Typically these contributions are a fixed percentage of salary. Thus, the employer costs of defined contribution plans tends to remain a constant percentage of labor cost as workers age. Benefits in retirement are based on the accumulated value in these funds. In most cases, workers are quickly vested and have a direct ownership stake in the fund itself. These plans tend not to have economic incentives that alter worker decisions concerning quitting the firm or the timing of retirement.

Defined benefit plans promise workers a specified benefit at retirement based on tenure, earnings and age at retirement. These plans have economic incentives that reduce turnover and alter the timing of retirement.<sup>13</sup> In addition, defined benefit plans directly affect the cost of hiring younger workers compared to the cost of hiring older workers. In these plans, the cost of providing pension coverage rise rapidly with age and tenure. The cost of pension coverage can vary from less than one percent of earnings at young ages to over 20 percent as the worker nears retirement. Thus, for individuals with the same annual earnings, the total

cost of employing an older worker would significantly exceed the total cost of hiring a younger worker.<sup>14</sup>

The pension cost of employment is a function of various plan characteristics. Coordinating company pension plans with social security typically reduces the pension benefit for workers with lower annual earnings.<sup>15</sup> For equivalent salary history, using a career average benefit formula substantially reduces the retirement benefit for workers with many years of job tenure.

### ***Pensions and Surviving Spouses<sup>o</sup>***

An important issue that affects the retirement income of many older women involves their rights to benefits from their husband's pension in the event of divorce or death of the husband. This right of widows and divorcees to income from their spouses' pensions is very important to their economic well-being in retirement. Federal law requires that private pension plans have, as a first option, the selection of a joint and survivors option.<sup>17</sup> This means that a pension benefit will continue as long as either spouse survives. A single life annuity can be selected only if the spouse waives his or her right to the pension benefit in writing. In addition, federal legislation allows divorce decrees to divide current and future pension benefits between the worker and his or her spouse.<sup>18</sup>

This protection of spousal claims on pension benefits applies only to private pensions. Because state pension plans are not subject to federal law, state government may not require the spousal consent. Only 11 states have adopted legislation requiring spousal consent to the waiver of a survivor pension. Five states achieve spousal consent through administrative actions and seven states have instituted policies that necessitate spousal acknowledgment, but not consent. Three states have mandatory survivor's benefits. This leaves 24 states, including North Carolina, that have no legislation or administrative policy governing spousal consent of retirement benefits.

Thirty states, including North Carolina, have enacted legislation that requires state pension plans to comply with court orders awarding a portion of pension benefits to a divorced spouse. Nine states do not have such legislation, but the state plans will honor court orders mandating the division of pension benefits. However, state pension plans in 11 states will not honor court divorce settlements that order the division of pension benefits.

### ***Health Insurance***

Health insurance is provided by most large employers. In 1993, 82 percent of full-time employees working for firms with 100 or more employees had health insurance.<sup>19</sup> However, the proportion of workers with health insurance had declined sharply from the 92 percent in 1989. Small business are much less likely to offer health insurance to their workers. In 1992, only 72 percent of full-time workers employed by firms with fewer than 100 employees had health insurance.

Of the participants in health care plans in firms with more than 100 employees, 45 percent were in plans that extended coverage to retirees beyond that required by the Consolidated Omnibus Budget Reconciliation Act of 1985 while only 15 percent of medical plan participants in small firms had coverage in retirement.<sup>20</sup>

Studies of utilization of health care indicate that the cost of health care programs for employees increase with the age of the worker. A study by the U.S. Senate, Special Committee on Aging (1984) reported that the claims costs rose steadily by the age of the employee. Comparing the cost of various age groups to those age 45 to 49 years old illustrates this relationship. The values shown in table 4 are their estimates of the cost of health insurance for each age group as a percentage of the cost for workers age 45 to 49.

Further confirmation concerning the age-specific cost of health insurance is provided by The Wyatt Company which developed the Health Policy PreView Model (HPP) to estimate health care expenses for various types of medical plans. HPP can also be used

**Table 4. Relative Costs of Employing Older Workers**

<b>Age</b>	<b>Percent of Cost for Worker Age 45 To 49</b>
under 45	80.0
45 to 49	100.0
50 to 54	112.5
55 to 59	125.0
60 to 64	160.0
65 to 69	225.0

to examine the impact of changes in tax policy. A special analysis using this model was conducted for the authors to estimate the cost of a typical health plan in 1992 by age and sex. The model predicts the covered charges and payments for a representative active employee population of a company including both workers and covered dependents. Payments for male employees increase with age from \$993 for employees age 25 to 29 to \$1,901 for employees 45 to 49 and further to \$4,408 for employees 65 and over. The age differences for female workers are less pronounced primarily because of the influence of maternity expenses on the insurance costs for younger women.<sup>21</sup>

These differences are reported in absolute dollar cost of payments through the plan. If the earnings of older workers are greater than those of younger workers, differences in the cost of health care payments with age, as measured by a percent of salary, will be smaller than these absolute differences in cost. However, comparing the cost of hiring younger and older workers for the same position and at the same salary, these costs would be an accurate reflection of the increased cost of hiring older workers.

A similar relationship between age and the cost of health care was examined in a study of the 1987 National Medical Expenditure Survey.<sup>22</sup> This report estimates that in 1994, the average employer cost for insured males between the ages of 55 and 64 was \$3,960 compared to \$1,500 for workers 25 to 34. As a percent of earnings, the health cost for older male workers will be 14.5 percent while employer expendi-

tures for the younger male workers is expected to be only 6.1 percent of salary. The employer health care cost for female workers age 55 to 64 are estimated to be \$2,300 or 7.7 percent of earnings. The cost for these older women is lower than the health care costs for female workers between 35 and 54.

Firms that extend health insurance to retirees also must consider the implied cost of this benefit when hiring workers. The value to the worker of being included in these plans depends on the generosity of the plan and the age at which the worker can retire and continue to be covered by the firm's health insurance. For today's workers who are eligible for coverage by retiree health insurance in their 50s, the present value of coverage between retirement and age 65 when the retiree becomes eligible for Medicare is likely to be \$20,000 to \$30,000.

In most cases, retiree health insurance plans provide the same benefits to all qualified persons regardless of the number of years of service. Thus, workers with fewer years of service will have a higher cost per year of service than workers who have more years of service. As a result, the annual accrued cost of providing retiree health insurance will be greater for these workers.

## ***Summary***

**T**he continued aging of the population will increase the proportion of North Carolina's population of persons 55 and over. Changes in public and private retirement plans, along with improvements in health status, will result in more older persons seeking to remain in the labor force until older ages. As a result, the number of older persons seeking employment in North Carolina will increase substantially in the next two decades. Policy makers must be aware of these changes and develop appropriate state policies that will facilitate the employment of older workers and assist in the matching of older workers with firms that demand and need their services.

## ***Notes***

1. North Carolina Division on Aging (1995) provides a discussion of the projected aging of the North Carolina population. The analysis indicates that the proportion of the population 65 and older will increase from 12 percent in 1990 to 14 percent in 2010 and further to 22 percent in 2030.
2. The information described in this section is from the North Carolina segment of the 1990 Public Use Micro data Sample gathered as part of the 1990 decennial Census. These data are based on a representative sample of six percent of the state's population. In the data files, each individual is weighted to represent a specified portion of the state's population. The weighting allows analysts to estimate the composition of the state's population for individual characteristics such as race, gender, and location.
3. In a few cases, the Census data did not provide individual data for each county. In these cases, data were combined for two counties. If both counties were in the same economic region, this did not present a problem for this analysis. However, when one county was in one region and the second in another, the population for both counties was assigned to the region of the largest county. (Note that since April 1, 1996, the Western Economic Commission has taken the name Advantage-West, and Burke County, which was part of Carolinas, has joined them.)
4. These projections are based on models developed by the Bureau of Labor Statistics. See Fullerton (1993) for a complete discussion of these labor force projections.
5. These projections of the future labor force are based on trend analysis of projected changes in the population and labor force participation rates. Errors can enter the forecasts due to unanticipated fluctuations in these components. For

- evaluations of these BLS labor force projections, see Fullerton (1988) and Levine (1993).
6. The differences between hiring and retaining older workers is examined by Hutchens (1986, 1988). His analysis is based on the use of long term employment contracts. Using these contracts, firms retain existing older workers, but are reluctant to hire new, older workers.
  7. Retirement incentives from pension plans are examined in considerable detail by Kotlikoff and Wise (1989).
  8. Primary changes include the gradual increase in the normal retirement age from 65 to 67 during the next 30 years and the increased gain in annual benefits from delaying the initial receipt of benefits. The increase in the normal retirement age results in lower annual benefits for early retirees.
  9. Retirement incentives associated with retiree health insurance are examined by Clark, Ghent, and Headen (1993). They show how coverage by a retiree health insurance policy makes older workers more likely to retire.
  10. Trends in participation in pension plans are examined by Clark and McDermed (1990). They document a significant trend towards greater use of defined contribution plans and a sharp decline in the use of defined benefit plans. Clark, Ghent, and Headen (1995) report a decline in coverage by retiree health plans in the 1980s and discuss the reasons for this change.
  11. The Special Committee on Aging of the U.S. Senate (1984) provides a detailed examination of the age-specific costs for employee benefits.
  12. Hirschler (1993) presents a detailed analysis of the sources of income and expenditure patterns among older households.
  13. Allen, Clark, and McDermed (1993) report that pension coverage and the potential loss in lifetime pension benefits significantly deter both quits and layoffs.
  14. Until recently, the cost of pension compensation for many employers actually became negative after the age of normal retirement. This occurred because increases in future benefits, due to additional years of service and higher average earnings, were eliminated for workers beyond the normal retirement age (U.S. Senate, Special Committee on Aging 1986). This policy is now illegal. Limits on the total years of service that are included in the calculation of the pension benefit are still permitted. Thus, for workers with substantial job tenure, the change in the present value of lifetime pension benefits may still become negative.
  15. This coordination of pensions with social security is called integration. The extent that pensions can be integrated with social security is limited by federal government regulations.
  16. This section is based on material in AARP (1994).
  17. The Retirement Equity Act of 1984 created the requirement of spousal consent in the selection of the form of the benefit annuity.
  18. In general, federal legislation does not permit the assignment of pension benefits to third-party creditors.
  19. Periodically, the Bureau of Labor Statistics conducts surveys of employee benefits that are offered by firms. This data is reported in Bureau of Labor Statistics (1990, 1994a, 1994b). For the purpose of the Employee Benefits Survey, medium and large firms are defined as those with 100 or more employees and small employers are those with fewer than 100 employees.
  20. Clark, Ghent, and Headen (1995) examine the tendency of firms to offer retiree health plans and how coverage rates changed during the 1980s.
  21. Clark (1994) provides a detailed discussion of this model and the cost projections.
  22. See Stapleton, Kenell, and Iovanna (1993).

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