

Faculty Early Retirement Incentive Programs  
in Selected Virginia Universities

by

Douglas DeWayne Martin

Dissertation submitted to the Faculty of the Virginia  
Polytechnic Institute and State University in partial  
fulfillment of the requirements for the degree of


Doctor of Education

in

Higher Education Administration

APPROVED

  
M. David Alexander, Chair

  
S. Kern Alexander

  
Don G. Creamer

  
Gerald W. McLaughlin

  
Jerald F. Robinson

March, 1993

Blacksburg, Virginia

Faculty Early Retirement Incentive Programs  
in Selected Virginia Universities

by

Douglas DeWayne Martin

M. David Alexander, Chair

Administrative and Educational Services

(ABSTRACT)

The primary purpose of this study was to ascertain institutional and individual responses to legislated changes in faculty retirement policies. This study focused on the impact and influence of early retirement incentive programs on faculty retirement behavior in selected Commonwealth of Virginia Universities.

Fundamental changes in federal and state statutes directly affected the staffing and retirement patterns of tenured faculty in higher education. Some changes in the retirement process purported to save institutional dollars while other changes broached broader philosophical issues regarding the role of older workers and retirees in an aging society; the issue of productivity of younger and older workers; the compatibility of the tenure system with the elimination of mandatory retirement; and related issues pertaining to the faculty supply/demand equilibrium.

This study described the legal and organizational domains of the faculty retirement process in the Commonwealth of Virginia and identified pertinent federal and state statutes applicable to the early retirement process. Selected state and university officials provided insight into their processes for adapting retirement legislation to institutional goals, needs, agenda, and expectations. Faculty staffing patterns and retirement trends were analyzed in detail for one of the participating institutions and analyses of institutional and personal variables relative to the faculty retirement process were provided.

The results of the research confirmed that the State-authorized faculty Early Retirement Incentive Program served its purpose in selected instances. Similarly, the Governor's one-time early retirement window successfully encouraged attrition from the faculty ranks. Consistent with other findings, the federal legislation raising the mandatory retirement age had little affect on faculty retirement behavior; however, the need for state legislative action applicable to the retirement process to be consistent and compatible was evident.

## Acknowledgements

For me, the pursuit of a terminal degree at mid-career can be equated with a long distance run. Throughout the run there are peaks and valleys; the urge to quit; the urge to change pace. During such an exercise, one must draw on internal strengths and external support. While there is no great insight into the source of internal perseverance, the external support is easy to identify - it stems from those few individuals who steadfastly supply the encouragement. My external support came from three distinct groups and to each of you I express my appreciation.

My committee members (perhaps unknown to you) served not only as advisors but were among my first graduate mentors when I initially returned to graduate school. You have had significant influence on my professional development as well as my academic progress.

Several of my professional colleagues provided ongoing encouragement as they too shared in this academic experience. A close-knit group that included Mrs. Carolyn Pratt, Mrs. Ella Mae Vaught, Mrs. Kathy Gibson, Mrs. Vivian Poff, Mrs. Louise Garman, and Mr. Albin T. Butt, continually displayed a loyalty and a concern that served as a source of strength. I had the luxury of two unofficial mentors in Wendy Weisend, retired University Sports Information

Director, and Al Payne, retired Director of Religious Affairs. They served as friends and confidants before and during this exercise and their continuing encouragement and friendship served as a motivating force and a refreshing break from the pressures associated with being a mid-career student and a full-time university staff member.

My immediate family members each contributed in a unique way. My wife, Donna, was steadfast in her support combining a patient but continuing encouragement. With my oldest son, Perry, we share a mutual respect for each other's accomplishments that includes an innate understanding of the effort and dedication that goes into our life's endeavors. My youngest son, David, personifies determination and perseverance as he has begun his own academic pursuits - now in the second grade. My mother, Bernice S. Martin, exemplifies the terms "Mother" and "Friend" as she couples a constant concern for the well-being of her family with a quiet pride in family accomplishments.

To each of you, I express my appreciation and gratitude for the opportunity to share this experience with you.

Table of Contents

Chapter		Page
1.	Introduction .....	1
	Commonwealth of Virginia Action .....	7
	Statement of the Problem .....	9
	Selection of Participating Institutions....	15
	Significance of the Study .....	16
	Assumptions .....	18
	Definitions .....	20
	Limitations .....	27
2.	Review of Related Literature .....	29
	Background .....	30
	Early Development .....	33
	Institutional Perspective .....	40
	Institutional Considerations .....	43
	Legal Domain .....	44
	Age Discrimination Legislation 1986-1990 ..	48
	State Legal Action .....	49
	Removal of Mandatory Retirement - State (Senate Bill 478) .....	51
	Voluntary Early Retirement Incentive Programs (House Bill 122) .....	52
	Attorney General Criteria .....	55

	Page
State Council of Higher Education	
Overview .....	59
Additional Changes in State Retirement	
Plans .....	62
One-Time Early Retirement Window .....	63
State of Virginia Legal Issues .....	66
Retirement Plan Design .....	67
Early Retirement Incentive Programs .....	70
Early Retirement Models and Retirement	
Behavior .....	74
Voluntary Early Retirement Incentive	
Options Models .....	76
Full Retirement Model .....	77
Partial/Phased Retirement .....	78
Higher Education Retirement Plans	
in Virginia .....	79
Personal Preparation .....	82
Retirement Incentives Study Group .....	85
Summary .....	87
3. Research Design and Methods .....	90
Design of the Study .....	91
Research Questions .....	93
Population .....	96
Data Collection Procedures .....	97

	Page
Methods of Analyses .....	100
Summary .....	103
4. Results .....	105
Research Question One .....	107
Research Question Two .....	128
Research Questions Three and Four .....	135
Research Question Three .....	136
Research Question Four .....	151
Research/Instructional Faculty .....	155
Retirement Patterns by College .....	158
Personal Variables .....	161
Final Salary .....	162
Marital Status .....	164
Gender .....	164
Retirement Options .....	166
Length of Service .....	170
Type of Retirement Plan .....	172
Proportion of Final Salary Replaced by Pension Income .....	173
Conclusion .....	176
Classification .....	176
Retirement Projections .....	181
Research Question Five .....	184
5. Findings, Summary, Conclusion .....	188



	Page
Research Question One .....	190
James Madison University Model .....	190
University of Virginia .....	191
Virginia Polytechnic Institute and State University .....	192
Summary .....	192
Research Question Two .....	194
Consequences for Institutions and Faculty .....	196
Retirement Incentive Policies .....	198
Pensions .....	199
Research Questions Three and Four .....	200
Research Question Five .....	202
Conclusion .....	203
Areas for Additional Studies .....	208
Lessons Learned .....	211
References .....	214
Appendices .....	226
Vita	

## List of Tables

Table	Page
1.	Effects of Financial Contributions on Retirement Income ..... 86
2.	Faculty Participation in the Early Retirement Incentive Plan - James Madison University ..... 129
3.	Faculty Participation in the Early Retirement Incentive Plan - University of Virginia ..... 131
4.	Faculty Participation in the Early Retirement Incentive Plan - Virginia Polytechnic Institute and State University ..... 133
5.	Aggregate Annual Costs of Health Care Enhancement - Virginia Polytechnic Institute and State University ..... 134
6.	Number of Tenured Faculty by Age and Academic Area (December 1991) ..... 137
7.	Distribution of Tenured Faculty by Age and Academic Area (December 1991) (Percentages) ..... 138
8.	Number of Female Tenured Faculty by Age and Academic Area (December 1991) ..... 140
9.	Number of Male Tenured Faculty by Age and Academic Area (December 1991) ..... 141
10.	Analysis of Variance by College (December 1991) ..... 142
11.	Tenured Faculty Age Distributions 1983-1986 ..... 147
12.	Tenured Faculty Age Distributions 1987-1992 ..... 148
13.	Tenured Faculty Age Distributions - Male ..... 149

	Page	
14.	Tenured Faculty Age Distributions - Female ..... 150	150
15.	Average Age of Retirement, College by Year, 1980-1991 ..... 152	152
16.	Analysis of Variance - Year of Retirement ..... 154	154
17.	Average Age of Retirement, College by Year, Teaching and Research Faculty, 1980-1991 ..... 156	156
18.	Analysis of Variance Year of Retirement - Research and Instructional Faculty ..... 157	157
19.	Average Retirement Ages by College ..... 159	159
20.	Analysis of Variance by College (December 1991) ..... 160	160
21.	Average Retirement Ages by Year (1980- 1991), Virginia Polytechnic Institute and State University ..... 163	163
22.	Retirement Age Patterns by Gender ..... 167	167
23.	Retirement Age Patterns by Gender and Marital Status ..... 168	168
24.	Average Retirement Age by Retirement Option ..... 169	169
25.	Annual Retirement Income Based on Age and Type of Plan ..... 174	174
26.	Projected Annual Pension Income - Defined Benefit - Defined-Contribution Plans ..... 177	177
27.	Comparison of Average Retirement Ages Classified Employees - Tenured Faculty, 1980-1991 ..... 179	179
28.	Comparison of Faculty and Classified Retirement Age Patterns, 1986-1991 ..... 180	180

	Page
29. Retirement Projections, Virginia Polytechnic Institute and State University, 1992-2003 .....	182

## List of Figures

	Page
Figure	
1. Age Distribution - 1992 Tenured Faculty . . . .	143
2. Box Plots Comparing Age Distribution of Male/Female Faculty . . . . .	144
3. Salary Comparisons, Active vs. Retiree . . . . .	165
4. Comparison - Length of Service to Age of Retiree . . . . .	171
5. Comparison of Income Based on Type of Pension Plan . . . . .	175
6. Comparison of Aging and Retirement Patterns . . . . .	201
7. Faculty Retirement Planning Model . . . . .	204
8. Individual Faculty Retirement Planning Model . . . . .	205

## Chapter 1

### INTRODUCTION

Retirement has been depicted as a fluid phenomenon that flows differently across age cohorts as social conditions change. In higher education, the phenomenon of retirement has followed an evolutionary course consistent with changes in social norms. However, the legal exceptions applicable to tenured faculty and the disparity of views regarding age-based retirement for faculty in higher education generated debate regarding the role of retirement in the higher education setting. Accordingly, the interplay of a contract of unlimited tenure, the uncapping of mandatory retirement, and the addition of early retirement incentive programs resulted in the retirement process in higher education being one of critical concern.

Retirement issues are important components in discussions regarding the faculty supply/demand equilibrium for colleges and universities. The retirement process must be managed in conjunction with other higher education concerns to assure that appropriate faculty resources are available to meet the program and mission needs of higher education. Federal and state legislated changes in the faculty retirement process have not always been compatible with either short-term or long-term faculty staffing issues as perceived by higher education planners. Therefore, higher

education planners must anticipate faculty actions and reactions to statutory changes in retirement policies as they address related issues such as budgetary limitations, changes in student enrollment patterns, the numbers of graduates entering academic fields, and similar issues.

In the Commonwealth of Virginia, faculty retirement issues are an integral part of an overall commitment to faculty excellence in the public higher education setting. Demographic trends for faculty in the Commonwealth indicate significant turnover in faculty resources in the near future. State public colleges and universities experienced a growth era in the 1960s and early 1970s with increases in student enrollment resulting in corresponding increases in the hiring of new faculty. Many of these faculty are now entering a period in their careers where they are candidates for normal retirement. It is projected that one half of the current higher education faculty in the Commonwealth of Virginia will have to be replaced by the year 2005 (State Council of Higher Education in Virginia, 1989). Effective management of the retirement process is a crucial element in maintaining overall faculty excellence.

At the institutional level, the retirement process is a major component in organizational planning - planning that must accommodate an internal configuration of faculty, staff, students, and alumni and an external environment that wields

economic, social, and political power. Internally, staffing practices, affirmative action programs, hiring strategies, budget allocations, tenure ratios, academic programs, compensation practices, strategic planning, diversity programming, and related academic and administrative issues interact with the overall process of retirement. Externally, factors such as the aging of the nation coupled with greater demands for accountability and closer financial and political scrutiny interact with time-honored traditions of academic freedom, the tenure process, and individual and institutional autonomy to force a rethinking of the role of retirement in the overall management of faculty resources.

During the last decade, the retirement process has undergone a transformation as a result of political, social, and economic influences. At the federal level, amendments to the Age Discrimination in Employment Act and tighter controls generated through tax-reform legislation altered many of the precepts fundamental to the retirement process. In 1986, the United States Congress passed legislation amending the Age Discrimination in Employment Act (ADEA) of 1967 to prohibit mandatory retirement on the basis of age for practically all workers. After debate between those individuals who favored the elimination of all age-based discrimination versus those who feared that colleges and universities would become increasingly ineffective and stale



without the influx of new faculty and new ideas, Congress included an exception in the ADEA amendment. This exception permitted the mandatory retirement of any employee who is serving under a contract of tenure at a higher education institution and is 70 years old (ADEA, Section 12 (d), 1986). The federal exception applicable to tenured faculty is slated to end January 1, 1994.

A review of related retirement literature confirms a need for detailed study of faculty retirement behavior as institutions and individuals act and react to legislated changes that affect the retirement process. The American Association of University Professors (1987) concluded in one of its studies on the uncapping of mandatory retirement age that "the undeveloped state of research and knowledge regarding probable retirement behavior. . . is a deficiency that approaches scandal" (American Association of University Professors, July - August, 1987, p. 47). A 1988 article in The Chronicle of Higher Education that bore the title "College Officials are Worrying about an Aging Faculty but Few Have Plans to Deal with Issue, Study Finds" expressed concern about the state of development of early retirement incentive plans (Mooney, 1988). A more recent study (1989) reported that ". . . our knowledge about uncapping's impact on college and university administrations and on faculty remains depressingly inadequate" (Holden & Hansen, 1989, p.

2). Early retirement incentive programs used to counter the effects of the removal of mandatory retirement have been depicted as "complex, difficult, deceptive, yet all the more vital due to recent legislation and the expectation of more such legislation. The issues of fairness, academic freedom, vitality, and accountability are inextricably woven together here" (Chronister, 1987, XIV).

Recognizing that the higher education community was divided on the faculty mandatory retirement issue, Congress included in the 1986 ADEA amendments a directive to the Equal Employment Opportunity Commission to study the removal of mandatory retirement in higher education. Accordingly, the National Academy of Sciences (NAS), using the National Research Council (NRC) as its principal operating agency, analyzed "the potential consequences of the elimination of mandatory retirement in institutions of higher education" (ADEA, Section 12(c), 1986). The National Research Council study was a complex and complicated undertaking because of the need to assess the future effects of the removal of mandatory retirement on more than 3,200 colleges and universities and to assess the behavior, under new circumstances and at a future date, of nearly 300,000 tenured faculty (Hammond & Morgan, 1991).

The National Research Council's advice to Congress was to allow the ADEA exception for tenured faculty to expire on

January 1, 1994 as planned. The following key conclusions and recommendations were offered:

1. At most colleges and universities, few tenured faculty would continue working past age 70 if mandatory retirement is eliminated.
2. At some research institutions, a high proportion of faculty would choose to work past age 70 if mandatory retirement is eliminated.
3. If mandatory retirement is eliminated, some research universities are likely to suffer adverse effects from low faculty turnover, increased costs, and limited flexibility to respond to changing need and to support new fields by hiring new faculty.
4. Administrators and faculty can best assess the potential impact of uncapping at their own colleges and universities by studying their faculty distributions, retirement patterns, and hiring needs.
5. Retirement incentive programs are clearly an important tool for increasing turnover; they should be considered by any college or university concerned about the effects of faculty working past age 70.
6. The committee recommended that colleges and universities offer retirement incentive programs

and individual retirement incentive contracts only to tenured faculty age 50 and over.

7. The committee recommended that colleges and universities offer pension plans designed to provide retired faculty with a continuing retirement income from all sources equal to between 67 and 100 percent of their preretirement income (Hammond & Morgan, 1991, pp. 103-107).

The Commonwealth of Virginia - a state where mandatory retirement has been abolished for tenured faculty since 1987 - provides a setting for testing the National Research Council conclusions and recommendations. For this study, the National Research Council research is used as a resource to assess early retirement incentive programs and related retirement policy changes in higher education institutions in the Commonwealth of Virginia.

#### Commonwealth of Virginia Action

The Commonwealth of Virginia was one of a few states that went beyond federal law and abolished mandatory retirement for practically all individuals and groups. The state legislative action (Senate Bill 478) that abolished mandatory retirement was effected retroactively to January 1, 1987 (Acts of the General Assembly of the Commonwealth of Virginia, 1987) and included college and university tenured

faculty. College and university policy-makers were required to adapt to an academic environment absent the concept of involuntary retirement. Contrary to federal practices, this mandate did not provide the benefit of a grace period prior to implementation of change.

To provide some management control over the retirement process and to counter the effects of legislated changes in retirement policy, the 1988 Virginia General Assembly authorized an early retirement incentive program applicable to college and university faculty. House Bill 122 permitted each institution to design an early retirement incentive program that would permit individual faculty to effect retirement benefits and receive additional retirement incentives simultaneously. Faculty meeting the following criteria could participate in the Early Retirement Incentive Program.

1. Eligible faculty must be tenured.
2. They must be at least 60 years old.
3. They must have at least 10 years of service.
4. Each institution can earmark up to one percent of budgeted salary money for funding the early retirement incentive program.
5. Payouts can be made up to one and one-half times current salary.

6. Payouts will occur occur over the twenty-four month period immediately after retirement.
7. Executive approval is required for each institutional program. (Acts of the General Assembly of the Commonwealth of Virginia, 1988)

It is recognized that early retirement incentive programs can provide a way to regain some management control over faculty resources. Such programs can influence retirement behavior and can be instrumental in encouraging or stabilizing faculty turnover and controlling costs. An early retirement program can be used to address individual faculty needs and serve as a tool for allocating or reallocating faculty resources. Holden & Hansen concluded in their study of the removal of mandatory retirement in higher education that "the carefully constructed ERIs (early retirement incentives) offer the best solution for meeting the competing goals of institutional personnel policies and of faculty members who want to continue their affiliation, while at the same time assuaging generalized fears that changing the MRA (mandatory retirement age) will have dire consequences" (Holden & Hansen, 1989, p. 49).

#### Statement of the Problem

The purpose of (higher education) retirement plans . . . for faculty members and administrators is to help educators and their families maintain their

standard of living following retirement and to withstand the financial effects of illness and death. The purpose of such plans for institutions is to increase the educational effectiveness of the college or university (American Association of University Professors, January - February, 1988, p. 37).

The revised Statement of Principles on Academic Retirement and Insurance Plans adopted by the Council of American Association of University Professors (AAUP) in November 1987 pinpoints the dual role of academic retirement plans and surrounding policies: (1) maintaining standards of living for retirees and their families and (2) increasing the educational effectiveness of colleges and universities. College and university policy makers have proposed a number of retirement options and plans, incorporating the AAUP Statement of Principles, within the legal structure that emerged with changes in retirement legislation.

Recent changes in federal and state laws applicable to the retirement process addressed economic, philosophical, and political agendas. Any substantive changes in institutional retirement policies must meet legal scrutiny prior to, during, and after implementation. Federal and state legislative changes revised the retirement process to the

point that institutions and individuals must rethink the overall concept of retirement.

At the individual level, economic and non-economic variables must be closely evaluated as faculty weigh retirement options. Accessibility to facilities and colleagues, leisure time plans, health risks, family support, and related considerations comprise part of the overall scheme of retirement planning. Institutional commitments to provide parking privileges, office space, clerical support, and similar perquisites to retirees must be considered as retirees compete with active faculty for available resources. Policy makers must be aware that the act of retirement is not a single event but a process that involves a succession of decision-making steps and culminates with a major career decision. Institutional policy makers and individual faculty must carefully weigh each component of the retirement process and the interaction of retirement policy changes with retirement behavior.

From an economic perspective, a number of factors affect the monetary realities of retirement. At the individual level, a combination of a constant-dollar income and inflation can erode a retiree's purchasing power. At the institutional level, attempts to encourage retirement with financial incentives can increase costs to the institution and reduce funds that typically would be used in other areas.



Retirement incentive programs that encourage early retirement may negatively affect individual Social Security benefits, require individual subsidy of health-care premiums, and have negative tax consequences. Likewise, in an aging society, an institutional commitment to maintain health benefits, provide long-term care, or provide economic support beyond that available through pension plans can generate financial and legal obligations beyond expectations. Early retirement incentive programs can exacerbate staffing problems and decimate certain academic areas if the incentive programs are adopted without considering the demographic composition of faculty and institutional mission needs.

The problem identified in this study is that legislated changes by the Virginia General Assembly authorizing faculty early retirement incentive programs interacted with federal legislation and other state legislation to create an environment of uncertainty. In the Commonwealth of Virginia, the impact on faculty retirement behavior and the implications for educational institutions have not been clearly determined.

The purpose of this study is to ascertain the institutional responses to legislated changes in retirement policy in public colleges and universities in the Commonwealth of Virginia and the changes in faculty retirement behavior that occurred during the legislated

transition period. This study focuses on the addition of early retirement incentive programs in selected Virginia universities. Three public universities, James Madison University, the University of Virginia, and Virginia Polytechnic Institute and State University, were the first institutions to receive formal approval of their early retirement incentive programs and serve as models for this study.

The following research questions address the purpose of the study:

1. What retirement strategies did Virginia college and university policy makers who received formal approval of their early retirement incentive programs employ as they structured their retirement policies to meet institutional/individual needs and objectives?

2. (a.) What changes in faculty retirement behavior have been noted as federal and state laws changed mandatory retirement options and authorized early retirement incentive programs?

- (b.) How did the noted changes in faculty retirement behavior relate to the intent of the institutional early retirement policy?

Virginia Polytechnic Institute and State University personnel were actively involved in the state-wide move to establish an early retirement incentive program for public

colleges and universities. This university provided readily accessible demographic and retirement information and was chosen from among the model institutions in this study for indepth analyses of retirement and aging patterns. Using the December 1991 demographic composition and detailed analyses of the actual retirement practices of the faculty of Virginia Polytechnic Institute and State University over a twelve-year period (1980-1991), the following questions are designed to provide detailed insight into the faculty retirement behavior as individuals act and react to legislative and institutional changes in the retirement process. Such analyses are recommended in the related literature and serve to validate the National Research Council findings as they apply to this one university.

3. (a.) What is the December 1991 demographic profile of tenured Virginia Polytechnic Institute and State University faculty?

(b.) What demographic changes occurred in the faculty population of Virginia Polytechnic Institute and State University over the period 1983-1991?

4. Using the personal variables of age, age at retirement, final average salary, marital status, gender, length of service, replacement income, classification, and year of retirement and the institutional variables of college of employment and type of appointment (instruction, research,

or public service), how do the retirement patterns that are discernible relate to the legal mandates and policy changes that occurred at Virginia Polytechnic Institute and State University over the period January 1980 through December 1991?

5. Using the conceptual, legal, and technical components of the overall faculty early retirement incentive program authorized by state statute and the assessments of institutional early retirement strategies, what are the essential elements of a rational institutional faculty early retirement plan?

#### Selection of Participating Institutions

Three universities - James Madison University, The University of Virginia, and Virginia Polytechnic Institute and State University - were the first institutions to submit early retirement incentive programs authorized by state legislation. They serve as models for this study. As directed by legislation (House Bill 122), the State Attorney General's office and State Council of Higher Education personnel must review and approve each institutional early retirement incentive program. Approval was granted after minor modifications for the three institutional programs and they have served as models for other public higher education institutions in Virginia considering early retirement

options. Each model plan addresses distinct and differing needs based on individual institutional features. Insight into the individual institutional characteristics of the model institutions is provided in brief histories included in Appendix D of this study.

#### Significance of the Study

In recent years, a concerted effort has been made to change existing laws pertaining to faculty retirement policy. These mandates have generated fundamental changes in the overall concept of retirement as a process and affect the efficacy of existing retirement plans to meet previously-defined institutional and individual goals. In the same vein, retirement plans and retirement changes are often accepted by individuals without pertinent questioning of the economic intricacies of such plans. Proposed policy changes are based upon premises that need further study. Some changes purport to save institutional dollars. Others either directly or indirectly broach more philosophical issues such as the role of older workers and retirees in an aging society, the per capita institutional costs for retaining older workers, the issue of the level of productivity of older versus younger workers, the compatibility of retirement programs with the tenure system, and the use of incentives

to change the mindset of individual faculty regarding the actual retirement date.

This study assesses the early retirement incentive policy authorized by state statute and the actions of officials of the three model institutions as they designed, developed, and implemented their institutional early retirement policies and programs for their tenured faculty. The research questions are arranged sequentially with later questions building and drawing on the findings addressed in the literature and/or in the initial questions. The legal domain is established in the review of literature which identifies the pertinent federal and state statutes applicable to the faculty retirement process. The legal review provides the foundation and format for inquiries directed to Attorney General and State Council of Higher Education personnel. State officials, in turn, provide the parameters for assessing the responses of institutional representatives as they designed and developed faculty retirement and early retirement programs. After the legal and organizational domains are identified, individual data is assessed to ascertain retirement patterns and trends during an era of retirement transition. Retirement attributes identified from the legal, organizational/political, and data domains are used to develop an institutional early retirement model.

A descriptive study of the higher education retirement process in the Commonwealth of Virginia is timely. The abolition of mandatory retirement in Virginia generated a greater demand for alternative programs to replace the structure inherent in mandatory programs. Other Virginia public college and university planners can benefit from this study as they plan their faculty staffing strategies. Higher education institutions outside of Virginia still operating within federal law constraints permitting mandatory retirement can also benefit from the experiences of Virginia-based institutions if the federal law is abolished January 1, 1994, as expected.

#### Assumptions

In this study, retirement plans are assessed using the two primary categories of retirement plans, defined-contribution plans and defined-benefit plans. The designation "Optional Retirement Plan (ORP)" is used to typify a defined-contribution plan and the Virginia Retirement System (VRS) is cited as an example of a defined-benefit plan. It is assumed that the Optional Retirement Plan and the Virginia Retirement System represent the two categories of retirement plans with the acknowledgement that a number of combinations and variations of such plans exist within the higher education community.

In the State of Virginia, public agencies including colleges and universities, as of July 1, 1992, contributed 8.98% of salary on behalf of each faculty member into the defined-benefit Virginia Retirement System or 10.4% into the defined-contribution Optional Retirement Plan, as appropriate. Projections and calculations are based on these figures with the acknowledgement that employer contributions are examined at least once every six years and some institutions use funds other than general funds, tuition, or fees to pay up to an additional 2.17% of creditable compensation for each individual faculty member as authorized by state code (Acts of the General Assembly of the Commonwealth of Virginia, 1991, House Bill 1935, approved March 13, 1991, Chapter 217, p. 300).

House Bill 122 provided the basic framework for the early retirement incentive program for Virginia public colleges and universities and will be used as a basis for this study.

With the acknowledgement that the choice of a retirement age is an individual decision, the assumption is that age sixty-five is the normal and the expected retirement date.

Survivor options are available in defined-benefit and defined-contribution retirement plans. The assumption is made that the decision to choose a survivor option is a dichotomous choice: to have or not to have a survivor option.



If a survivor option is chosen, it is assumed that it is the option that maximizes the retirement income to the surviving beneficiary. In practice, VRS and the ORP offer many variations of survivor benefits.

In estimating survivor options, it is assumed that the retiree and the named beneficiary are the same age. The designation of younger or older beneficiaries for survivor benefits will change the income of the retiree - typically .8% percent for each year of difference in age (Virginia Supplemental Retirement System, Handbook for Members, 1987).

Landgrant institutions have public service components including the one with Virginia Polytechnic Institute and State University identified as extension service. In this study and in the university organizational structure, extension personnel are included as part of the College of Agriculture. Typically, extension personnel participate in federal retirement programs and this distinction will be noted as the data are presented.

#### Definitions

Accumulation period - The period of working time during which employer and/or employee contributions are made to an individual pension plan.

Average Final Compensation (AFC) - The average annual compensation of a member during . . . (the) thirty-six

highest consecutive months of creditable service (Code of Virginia of 1950 and the 1988 Cumulative Supplement, 51.11.10:01 (16)).

Basic Benefit - Under the Basic Benefit, the retiree receives a benefit amount based on a defined-benefit formula (1.5% of the first \$13,200 of Average Final Compensation (AFC) plus 1.65% of AFC in excess of \$13,200 multiplied by number of years of creditable service). The only survivor entitlement is a lump-sum refund of any accumulations that remain in the retiree account.

Defined-Benefit/Defined-Contribution Plans - In a technical sense, the pension plan component of retirement programs has two basic classifications. An understanding of the differences in these classifications is fundamental to discussions regarding overall pension planning. These classifications are identified as defined-contribution plans and defined-benefit plans.

Defined-contribution plans are those plans that calculate the value of retirement income an individual receives using the aggregate of employer/employee contributions made to the employee's retirement account plus the investment earnings on those contributions. The ultimate benefit derived by the retiree depends on the investment performance of the accumulated assets. The individual

faculty member assumes the risks associated with the investment (Commission on College Retirement, 1986).

Defined-benefit plans, a second classification of pension plans, provide income to the retiree based on a formula that includes the following variables: length of service in the pension plan, a salary figure that is typically an average of either the last several years of service or the highest several years of service, and the age of the retiree. The annual pension is a percentage of the average salary. The employer assumes the responsibility for having the appropriate funds available to finance a defined-benefit retirement plan. Many defined-benefit programs include Social Security in the calculations and are identified as integrated plans.

Defined-contribution plans fluctuate with economic conditions and carry the inherent features of possible gains or losses associated with changes in market conditions. Conversely, defined-benefit plans offer the assurances of stability for the individual retiree and predictability for the institution by being formula driven. Defined-benefit plans often lack the portability that is desired in the academic community as faculty evaluate job opportunities across institutions.

It is against this backdrop of defined-benefit and defined-contribution plans that retirement programs are

assessed. Many early pension planners used components of these two concepts to develop retirement programs. Current planners continue to design retirement programs that incorporate defined-benefit and defined-contribution features, and some innovative planners are proposing hybrid programs that include the portability concepts of a defined-contribution plan with the security features of a defined-benefit plan.

Faculty - Full-time tenured salaried individuals.

Normal Retirement Age - The age at which an institution's benefit objective will have been met for a career of service and at which retirement is not considered early (TIAA Research Dialogues #4, June 1985).

Normal Retirement Date - A member's (of the Virginia Retirement System) sixty-fifth birthday (Code of Virginia of 1950, 51-111.19).

Optional Retirement Plan (ORP) - Defined-contribution retirement plan available to faculty that may be selected in lieu of the state defined-benefit retirement plan.

Partial retirement - The faculty member draws a retirement benefit and a salary or wage during a period of reduced employment.

Payout period - The period of time that an individual retiree or beneficiary draws retirement income from a pension plan.

Phased retirement - The faculty member continues to work with a reduced workload but delays effecting retirement income until reduced work ends.

Retirement age - Retirement age is defined as the age at which a person is working less than full time and is receiving a pension (Palmore, 1985).

Retirement options - Retirees are offered several options or alternative methods of receiving retirement benefit payments. Typically, the Virginia Retirement System benefit will be paid monthly for as long as the retiree lives. Options designated as Option two or Option three are survivor options and provide continuing benefits after the death of the retiree to a person designated as the contingent annuitant.

Sequential retirement - The process of drawing retirement benefits from former pension plan(s) while continuing to work and participate in the pension plan of the current employer.

Survivor option - The designation of a beneficiary to receive retirement benefits to begin at the demise of the retiree or later. The following survivor options are the primary ones utilized by retirees of the Virginia Retirement System:

Option two - Under Option two, the retiree receives a retirement benefit that is less than the Basic Benefit with

the reduced amount depending on the difference between the retiree's age and the age of the contingent annuitant. At the death of the retiree, the same monthly benefit continues to the contingent annuitant.

Option three - Under Option three, the retiree receives a retirement benefit that is higher than the Option two benefit. At the death of the retiree, half of the retiree's monthly benefit continues to the contingent annuitant. (Virginia Retirement System, Handbook for Members, September 1990).

Teachers Insurance Annuity Association/College Retirement Equity Fund - TIAA-CREF - Teachers Insurance and Annuity Association (TIAA) was founded by the Carnegie Foundation for the Advancement of Teaching in 1918 as a non-profit pension plan for colleges and universities. It was the outgrowth of a free Carnegie pension plan established in 1906. The College Retirement Equity Fund (CREF) was founded by TIAA in 1952 to provide an equity-based component for college and university pension plans (TIAA-CREF, Report of the TIAA-CREF Ad Hoc Committee on Goals and Objectives to the Joint Board of Trustees of TIAA-CREF, 1984).

Virginia Retirement System - The Virginia Retirement System has two definitions. Prior to March 1952, the state retirement system was known as the Virginia Retirement System. However, participants in this public retirement plan

were prohibited by law from participating in the federal Social Security program. In order to meet the criteria to participate in the Social Security program at that time, retirement plans could only supplement Social Security. In early 1952, the Virginia Retirement System was dissolved and the Virginia Supplemental Retirement System was established with participants being permitted to participate in the state retirement plan and Social Security. Ironically, in 1990, the Virginia General Assembly established the Virginia Retirement System again and removed any supplemental ties with the federal Social Security program.

Virginia Supplemental Retirement System - VSRS - The Virginia Supplemental Retirement System was the successor organization to two previous Virginia public retirement systems - the Retired Teachers Fund and the Virginia Retirement System. It was created on March 1, 1952 as a supplemental system to Social Security. Virginia was the first state to cover its public employees under Social Security (Virginia Supplemental Retirement System, Benefits and Payroll Reporting Manual, March, 1985). The Virginia Supplemental Retirement System (VSRS) was redesignated as the Virginia Retirement System (VRS) in 1990 (Acts of the General Assembly of the Commonwealth of Virginia, Chapter 832, 1990).

## Limitations

This study has the following limitations.

1. Gross pay instead of net pay is used in retirement calculations. Net pay can vary significantly among individuals and can be a better benchmark at the individual level for determining optimal spending power.

2. No attempt was made to consider work with other employers. Income from other pension plans can be an important component in the individual retirement decision.

3. Personal investments which often comprise an important part of retirement income are not included in this study. The role of personal planning and personal investments is an integral part of overall preretirement planning and an important individual component in determining the optimal retirement time.

4. No attempt was made to factor in the issue of uncertainty. Unexpected economic and non-economic changes influence the ultimate retirement decision, often in sudden and unanticipated ways.

5. Partial and phased retirement plans are used in a number of settings to enhance or influence the retirement decision and are a logical alternative to complete retirement. This study assesses earnings and pensions as separate entities and does not factor in part-time or phased income.



6. Social Security income was not included in this study. Social Security is an important component in an overall assessment of retirement income, especially for lower-paid personnel where Social Security can provide a greater portion of total retirement income.

7. The effects of aging on faculty performance have been identified as a broad area for study when issues relating to the removal of mandatory retirement and the addition of early retirement incentive programs are discussed. The relationship of aging to performance is beyond the scope of this study.

8. The relationship of tenure to the elimination of mandatory retirement is not included in this study. It is recognized that the concept of a contract of unlimited duration coupled with the removal of age-based mandatory retirement is of concern and debate in the higher education.

9. Adequacy of health care coverage is a major issue in the overall process of retirement but is not directly addressed in this study. Health care plans vary depending on the age of the retiree and the number and ages of dependents. Some discussion of the influence of health care availability on the timing of individual retirements will be presented.

## Chapter 2

### REVIEW OF RELATED LITERATURE

Our whole life . . . is divided into three periods. The first period is that of 'getting an education', the second period is that of 'going to work and earning a living,' and the third and last period is that of 'living in retirement' (Bolles, 1978, p. 5).

The quotation above from Richard Bolles' Three Boxes of Life places the retirement process in the prestigious position of being one of three major components in an individual life cycle. As with other major life-cycle events, there are positive and negative connotations associated with the concept of retirement. From an individual perspective, retirement at any age has been depicted as a profound and stressful lifetime change as well as a welcomed transition into newly satisfying and rewarding opportunities (TIAA Research Dialogue #18, July 1988).

As an institution, retirement has had no single purpose in American history. From its beginning in the late nineteenth century, formal retirement has been the product of its appeal to institutions and other groups with disparate goals and viewpoints (Graebner, 1980). Changes in social values modified by demographic, political, and economic circumstances resulted in the institution of retirement being changed to meet the needs and preferences of particular eras or agendas. Consistent with this dynamic view of retirement,

the retirement process continues to change according to societal and cultural norms.

Within recent years, the retirement concept in higher education has been modified to meet societal and cultural changes; however, the exceptions that applied to tenured faculty have generated serious debate. Amendments to the Age Discrimination in Employment Act (ADEA) included exceptions that signaled the unique position of tenured faculty in the higher education structure. Higher education researchers pose questions such as the following:

- Should faculty have full protection against age discrimination?
  - Would an aging professoriate be unremoveable because of the tenure system even if they were less effective?
  - Would basic institutional research be affected?
- (Hammond & Morgan, 1991).

These and other similar questions focus on the importance of the retirement process to higher education organizations and the individuals in those organizations.

### Background

Conceptually, retirement has been identified as an event, a process, a role, or a phase of life (Atchley, 1976). For this study, retirement is defined as a process that includes the preparation for retirement, the decision to

retire, and the actual retirement event. Post-retirement activities and behaviors are also identified as part of the retirement process but are beyond the scope of this study.

The acceptance of the concept of retirement as a viable part of career planning is contingent on several prerequisites. First, there must be an economy capable of supporting the retirement of disabled and older workers. Second, the retirement process must be institutionalized through pension programs designed to incorporate the economics of pension planning with the philosophical acceptance of retirement as a viable part of life-cycle planning. These prerequisites remain an integral part of overall retirement planning.

The American Association of University Professors (AAUP) has defined the salient features that should be a part of a faculty retirement plan:

1. Institutional retirement plans should coordinate with Social Security benefits.
2. They should permit mobility between higher education institutions without financial loss in accrued benefits.
3. An expected or normal retirement date should be articulated.

4. They should provide for a mandatory retirement age greater than or equal to normal retirement age subject to state and federal law.
5. They should offer early retirement at the faculty member's option.
6. They should provide for phased retirement.
7. There should be full and immediate vesting.
8. Pension payouts should be in the form of an annuity.  
(American Association of University Professors,  
January - February, 1988, p. 38)

The designers of retirement plans are recognizing that such plans must accommodate a changing legal and demographic environment. Demographic analyses of the academic community reveal an aging work force with the fastest growing cohort in colleges and universities being that of retired faculty (Albert, 1986). This cohort differs from its predecessors in that life spans are projected to be longer. The retirement process must recognize the needs of this diverse clientele and provide the appropriate flexibility needed to address the concerns and preferences of many constituents before and after retirement. Retirement ages, retirement incomes, and retirement attitudes are important components of policy discussions related to the management of faculty resources.

## Early Development

Historically, retirement as a concept or a process is relatively new. In the late 1800s, corporate America organized the work force into more manageable units and a strong work ethic coupled with a basic economic need to continue to work throughout a lifetime was gradually replaced by a formal retirement program (Graebner, 1980). The Social Security Act of 1935 gave legitimacy to the retirement concept and reinforced the European custom that originated in Germany in 1875 of using age 65 as the expected retirement date (Daniels & Daniels, 1990).

College and university retirement programs followed a developmental course similar to that of the corporate sector. In 1906, philanthropist and steel magnate Andrew Carnegie sought to improve the economic status of college professors by establishing a free pension system through a \$10,000,000 endowment to the Carnegie Foundation for the Advancement of Teaching (Brubaker & Rudy, 1976). The outgrowth of this effort was the Teachers Insurance Annuity Association (TIAA) organized in 1918. This organization continues to be a primary provider of pension plans for college and university faculty.

In 1918, the TIAA retirement plan was one of a small number of retirement plans available to educators and included several innovative concepts. Faculty members had

vested rights in this plan which eliminated the perception of retirement plans as employer gratuities. Full funding was provided with death benefits and survivor options for named beneficiaries being included in the plan (TIAA-CREF, Report of the TIAA Ad Hoc Committee on Goals and Objectives to the Joint Board of Trustees of TIAA-CREF, 1984).

The retirement process has been an evolutionary one catering to institutions and individuals with diverse goals, viewpoints, and expectations. Until 1930, economy, efficiency, modernization, and depersonalization were the primary reasons for providing retirement plans. Since that time, personal security and social welfare have been the dominant considerations for developing and providing retirement programs (Graebner, 1980).

The Social Security Act of 1935 provided a break from past inhibitions by formalizing the role of the federal government in the social welfare of individuals. From that time, retirement was sanctioned as a process for addressing the needs of an elderly populace.

During the 1920s, 1930s, and 1940s, little change occurred in college and university retirement plans. Efforts were directed toward developing social legislation while coping with the spinoff from the Great Depression and preparing for a major war effort. In the Commonwealth of Virginia, the focus of this study, the Retired Teachers Fund

that provided benefits for public school teachers went bankrupt and was replaced on July 1, 1942 with the Virginia Retirement System, the forerunner of the Virginia Supplemental Retirement System established in March, 1952 (Virginia Supplemental Retirement System, Benefits and Payroll Reporting Manual, March, 1985).

In 1942, war-time wage controls provided the impetus for employers to expand or add benefits instead of providing pay increases. Congress, through the Revenue Act of 1942, approved legislation regulating the types of pension plans that received favorable tax treatment. The law contained strict requirements to eliminate discrimination in favor of the more highly compensated.

In the 1950s, consistent with private sector trends, college and university retirement plans underwent significant change. TIAA added the College Retirement Equity Fund (CREF) to serve as an inflation hedge and to keep pace with post-war price increases (Brubaker & Rudy, 1976). Similarly, other types of public sector retirement plans made necessary adjustments. In Virginia, the vestiges of a relatively weak retirement plan were replaced by the Virginia Supplemental Retirement System, with the supplemental component designed to permit the integration of Social Security with the state pension program. State employees, including college and



university faculty, were permitted to join this defined-benefit program.

In 1958, in recognition of faculty in higher education, Congress passed tax legislation providing tax-deferred pension/investment programs for non-profit entities. These plans, known as Section 403b tax-sheltered plans, were combined with the 1954 federal legislation that encouraged the development of tax-deferred pensions for colleges and universities to provide more flexibility in retirement planning. These plans were exempt from non-discrimination provisions of earlier legislation allowing employer and faculty member to shelter large amounts of money and defer taxes on that money.

Legislation in the 1980s removed the favored tax treatment of college and university faculty. The rigid non-discrimination philosophy of the 1942 legislation designed to prevent preferential treatment of the more highly compensated was applied to the non-profit sector. The Tax Reform Act of 1986 changed the complexion of retirement planning for college and university faculty. As of January 1, 1987, Congress approved changes designed to limit the dollar amounts that could be invested and to limit access to pension plans and related investments. Among the more stringent requirements were the following:

1. Individual contributions to the 403b tax shelter program were limited to \$9,500 with a catch-up provision available for faculty with 15 or more years with the current employer.

2. Individual Retirement Accounts (IRA) are no longer available on a tax-sheltered basis for married tax payers in a pension plan if their adjusted gross income is \$50,000 or greater. Single tax payers are limited to an adjusted gross income of \$35,000.

3. A 10% surtax is applied to early withdrawals from 403b tax shelters.

As of January 1, 1989, early withdrawals were prohibited from 403b tax-sheltered plans with the exceptions of separation, death, disability, or financial hardship. Beyond age 70.5, certain individuals not beginning minimum distributions of assets by April 1 after the individuals reach age 70.5, whether or not retired, are subject to a 50% surtax on amounts not withdrawn.

Several themes permeate recent legislative efforts. Pension plans, among other benefits programs, may not favor the more highly compensated. Pension plans are to provide protection during the retirement years with penalties in place to discourage the use of pensions as temporary tax shelters or as early retirement vehicles. Similarly, the minimum distribution requirements are intended to force

individuals to use their tax-shelter programs as subsidies for their own retirements, not instruments for estate planning.

Faculty retirement patterns have changed as federal and state retirement legislation refocused retirement policies applicable to faculty. Since 1950, a movement towards early retirement has increased in intensity with the opportunity to draw reduced Social Security benefits at age 62 and some pension plans adding early retirement components. Recent studies by TIAA-CREF personnel confirm that trends toward early retirement continue (TIAA Research Dialogues, Issue 18, July 1988). Other studies document that men and women are continuing to retire earlier; however, the trend has not been as pronounced among women in the work force (Clark, 1981). By 1980, about one half (47.7%) of all men aged 63 or younger were not in the work force, a change from 20.2% in 1950. For those men age 65 and under, the exodus was even greater. More than seventy percent (71.7%) of men were in the work force in 1950 and by 1980 the number had decreased to 35.2% (Burkhauser, 1982). In higher education, a 1991 study revealed that 43% of faculty retired under age 65 with another 24% retiring at age 65. (TIAA Research Dialogues, Issue #31, October 1991). Some researchers detect dual retirement trends by college and university personnel with an increase in retirements above age 65 (from 28% in 1978 to

just above 31% in 1988) and an increase in retirements at or below age 64 (just over 30% in 1978 to almost 43% in 1988). In aggregate, researchers are concluding that recent federal legislative changes to raise the mandatory retirement age have not made a great impact on overall retirement patterns (TIAA Research Dialogues, Issue # 24, January 1990).

Student demographic trends and budget capacities affect faculty staffing patterns. The current faculty retirement patterns relate to faculty staffing that occurred in the growth era of the 1950s, 1960s, and early 1970s. At that time, higher education planning and administrative efforts were directed towards recruiting and retaining faculty. Some institutions established flexible retirement plans that permitted individual faculty to work beyond stated normal retirement dates (Patton, 1979). The confluence of declining enrollment, uncertain federal and state support, inflation, and changing student demographic patterns brought the growth era to a halt in the mid-1970s. Retrenchment became a common concern and a concentrated area of study.

Beginning in the early 1980s, legal, economic, cultural, philosophical, and practical issues began to focus on the retirement process resulting in a reorientation of retirement thinking. The chronology provided in Appendix A reflects the recency of major retirement legislation.

The higher education community continues to examine and monitor retirement legislation because of short-term and long-term staffing and mission implications. Recent retirement legislation "left the education community in transition and riddled by uncertainty" (Holden & Hansen, 1989, p. 1). The Commission on Retirement established in the mid-1980s to study faculty retirement legislation offered the following conclusion: "Uncertainty still surrounds the interface between tenure, retirement, the use of chronological age as a criterion either for the end of tenure or for the beginning of retirement. Colleges and universities and their faculties by their own actions can do much to dispel this uncertainty. If they fail to do so, . . . the opportunity will shift to the Congress and the courts" (Ruebhausen, 1990, p. 166).

#### Institutional Perspective

Institutional policy makers are nearing a critical juncture regarding the role of retirement in the overall management of faculty resources. The retirement process has been an integral component in determining human resource needs. Staffing flexibility, tenure ratios, affirmative action efforts, hiring practices, diversity efforts, and related human resources activities directly or indirectly interface with the retirement process. A weakening economy

is forcing labor-intensive educational institutions to rethink staffing needs with downsizing, rightsizing, furloughs, and layoffs becoming a part of the institutional vocabulary.

To meet recruiting needs and to develop and maintain flexibility in academic programming, institutional policy makers are evaluating alternative courses of action including changes in retirement policies. However, changes involving human resources must be carefully reviewed to assure compliance with legal mandates and convey to individual faculty a recognition of the personal sensitivity needed in the retirement decision. Retirement issues are an integral part of any current institutional review of human resource needs.

Incumbent on institutional policy makers is the need to assess mandated changes as they apply to the specific and often unique needs of each institution. Such assessments are important components in determining how changes in retirement policies interact with institutional needs. A number of general and specific questions pertaining to retirement issues are pertinent:

1. Why do faculty retire when they do?
2. What is the prevalence and meaning of a Mandatory Retirement Age (MRA) in higher education?

3. What is the relative influence of pensions and MRA on the age when faculty retire?
4. What is the likely first-round effects of raising the MRA?
5. What are the most effective ways of encouraging faculty to consider early retirement (Holden & Hansen, 1989)?
6. Would some faculty work past the (federal) mandatory retirement age of 70 if they could?
7. Are faculty in some types of colleges or universities more likely to continue working into their 70s if permitted to do so? How would this affect average retirement age in those institutions?
8. What would the major effects be on colleges, universities, and higher education, in general, if faculty worked past age 70?
9. How might faculty retirement patterns vary among different fields and colleges and universities?
10. What are the implications for tenure?
11. Would colleges and universities need to reassess the use of performance evaluations in response to the end of mandatory retirement?

12. How can faculty retirement policies help institutions and individuals meet the consequences of eliminating mandatory retirement?
13. What factors other than financial ones affect the retirement decision?
14. How can colleges and universities continue hiring new faculty and supporting new fields (Hammond & Morgan, 1991)?

#### Institutional Considerations

The retirement process embodies economic, psychological, sociological, and political reasoning. It is incumbent on each institution to formulate retirement policy consistent with existing legal parameters, yet cognizant of the interplay among the variables of retirement, personal goals, and the overall institutional mission. Morale perceptions, staffing needs, political ramifications, and other related issues that comprise the overall strategy for human resources planning must be incorporated into a rational retirement policy. The introduction of economic incentives designed to encourage early retirement can change the delicate chemistry that exists between the university as employer and faculty members individually and collectively. If early retirement incentive programs are presented or perceived by faculty as being benefit entitlements, attempts



to alter or end such programs can lead to long, difficult, and sometimes heated debate among faculty groups, administrators, and members of the Boards of Trustees (Lohmann, 1991). With the intent of early retirement incentive programs being to change faculty retirement behavior, it is necessary that retirement policy changes be congruent with overall institutional strategies.

### Legal Domain

#### Age Discrimination in Employment Legislation

Legislated changes that first prohibited discrimination based on age (Public Law 90-202, 1967), then advanced retirement ages (Public Law 95-2256, 1978) and finally abolished mandatory retirement (ADEA, Section 12 (d), 1986) are a result of, and a reaction to, substantial social and political pressures. The ultimate retirement decision has now been returned to the individual. Prior to provisions for mandatory retirement, higher education historians documented delicate and somewhat amusing communications between institutional executives and aging faculty regarding the capabilities and capacities of some faculty to continue to work into their advanced years (Kinnear, 1972). The addition of mandatory retirement plans had relieved university officials of the arduous task of determining when and how aged faculty should retire. Some current researchers caution

that certain faculty working beyond age 70 will likely test the managerial acumen of academic administrators (Lozier & Dooris, 1989).

The groundwork to eliminate age-based retirement programs was established during the 1961 White House Conference on Aging. During that conference, the steps to prevent compulsory retirement at an arbitrarily designated age were discussed (White House Conference on Aging, 1961). Age discrimination became a national agenda item with the Age Discrimination in Employment Act (ADEA) providing the foundation that led to later changes abolishing mandatory retirement. The higher education community was divided and lobbying efforts were conflicting as legislation to uncap retirement was proposed. The American Association of University Professors (AAUP) viewed mandatory retirement rules as a labor allocation matter, not a civil rights matter, and expressed concern that the uncapping of retirement would diminish the job opportunities for young adults and younger faculty. The American Council on Education (ACE) pushed for a longer exemption of 15 years for tenured faculty from ADEA amendments. Their aim was to buy enough time to handle the large bulge of faculty hired in the 1960s and slated to retire in the 1990s. The American Federation of Teachers (AFT), unlike other higher education groups, supported the uncapping legislation and used their

labor-oriented influence to counter the position of other national associations (Pratt, 1989).

Evidence of the uncertainty of the role of retirement in the higher education community was reflected in the 1978 and 1986 amendments to the ADEA exempting college and university faculty for a period of time. Among the concerns expressed was that the elimination of mandatory retirement would reduce turnover and impair the ability to hire young scholars (Patton, 1979), would prevent colleges and universities from hiring new faculty who typically are sources of new ideas, and an aging professoriate would become ineffective but difficult to remove because of tenure (Hammond & Morgan, 1991). The seven-year exemption for tenured faculty included in the 1986 ADEA amendment has been viewed as symbolic in nature with the prevailing mood being that the issue of mandatory retirement for tenured faculty has finally been settled (Holden & Hansen, 1989).

In the late 1970s, the mandatory retirement issue was discussed in conjunction with the financial difficulties of the Social Security program. High unemployment combined with high inflation placed a serious financial strain on the Social Security system. One popular solution offered was to eliminate mandatory retirement. A savings of \$2.25 billion could be realized without any costs to the taxpayer (Altman, 1977). Economists and political planners were able to couple

the Social Security stability issue with the issue of mandatory retirement and effect further revisions in the ADEA. In 1978, Congress voted to raise the mandatory retirement from 65 to 70. However, in response to higher education opposition, tenured faculty could be required to retire by age 65 through June 30, 1982. After June 30, 1982, tenured faculty could work until age 70 (Public Law 95-2256, 1978).

Further discussions and refinements regarding the philosophical and financial implications of mandatory retirement resulted in additional legislation in 1986 that altered many of the fundamental precepts of faculty retirement. This legislation, the 1986 Amendment to the Age Discrimination in Employment Act, in part, mandated that Section 12 of the Age Discrimination in Employment Act of 1967 (29 U.S.C. 631) be amended by adding the following subsection:

(d) Nothing in this Act shall be construed to prohibit compulsory retirement of any employee who has attained 70 years of age, and who is serving under a contract of unlimited tenure (or similar arrangement providing for unlimited tenure) at an institution of higher education (as defined by section 1201(a) of the Higher Education Act of 1965).

(b) Termination Provision.- The amendment made by subsection (a) of this section is repealed December 31, 1993.

(c) Study Required.- (1) The Equal Employment Opportunity Commission shall, not later than 12 months after the date of enactment of this Act,

enter into an agreement with the National Academy of Sciences for the conduct of a study to analyze the potential consequences of the elimination of mandatory retirement on institutions of higher education.

(2) The study required by paragraph (1) of this subsection shall be conducted under the general supervision of the National Academy of Sciences by a study panel composed of 9 members.

In summary, the 1986 amendment to the 1967 Age Discrimination in Employment legislation eliminated mandatory retirement for tenured faculty with an effective date of January 1, 1994. College and university officials were given a grace period of seven years to prepare for this change. The amendment to the ADEA was effective January 1, 1987 for other employees with the exception of tenured faculty and some employees covered under collective bargaining agreements.

#### Age Discrimination Legislation 1986 - 1990

The Age Discrimination in Employment Act (ADEA) was a culmination of a study mandated by the Civil Rights Act of 1964. Protection against discriminatory practices based on age initially applied to persons age forty to sixty five. The upper age limit was amended in 1978 to age seventy with college and university faculty being excepted until July 1, 1982. The 1986 amendments to the ADEA eliminated mandatory retirement with faculty again being excepted until January 1, 1994.

The Omnibus Budget Reconciliation Act of 1986 (OBRA) amended the Age Discrimination in Employment Act (ADEA) by requiring (effective with plan years beginning on or after January 1, 1988) that pension benefit accruals and/or contributions can not be reduced or discontinued because of the attainment of any age. In many cases, the highest salary occurs at the end of a career; therefore, some of the largest pension costs and some of the greatest financial gains in pension plans occur in later years.

In October 1990, Congress passed and the President signed the Older Workers Benefit Protection Act. Basically, the Act established that the ADEA is intended to bar age discrimination in employee benefits and employee benefit plans with certain narrow exceptions. One of these exceptions permits employers to use early retirement incentive plans if the purposes of the ADEA are recognized. This Act overrode the Supreme Court's decision in Public Employees Retirement System of Ohio v. Betts, 109 S. Ct. 2854, 1989. In the Betts case, the Supreme Court had held that the ADEA permitted arbitrary age discrimination in employee benefits plans.

#### State Legal Action

The issue of mandatory retirement had attracted the attention of higher education planners throughout the ADEA

debate; however, the educational community was divided. In the Commonwealth of Virginia, action was begun in 1983 by representatives of the major higher education institutions to establish an early retirement option designed to counter the increase in the legal retirement age from 65 to 70 that occurred July 1, 1982 (Stepka, 1983). Their action finally reached fruition in 1988 with the passage of an early retirement incentive program. Ironically, the Virginia General Assembly had already gone a step further in 1987 and abolished mandatory retirement for practically all individuals including tenured faculty.

Throughout the 1980s, higher education planners in the Commonwealth of Virginia addressed changes in federal retirement laws while trying to simultaneously address varying long-term and short-term state agendas. These agendas resulted in legislation that altered primary retirement policies and strategies for faculty in higher education. However, the following major pieces of legislation that changed the retirement structure for faculty in the public colleges and universities in the Commonwealth of Virginia sent conflicting signals to higher education planners.

- Senate Bill 478, effective January 1, 1987, eliminated mandatory retirement.

- House Bill 122, effective March 1988, permitted higher education institutions to design and offer early retirement incentive programs for certain faculty in higher education.
- House Bill 1499, effective July 1991, authorized a one-time bonus of five additional years of credited service plus \$100 per month to age 62 for all state employees including faculty age 50 or older with 25 years or more of state service credit on or before September 1, 1991 if they would retire during the period July 1, 1991 through June 30, 1992.

Removal of Mandatory Retirement - State  
(Senate Bill 473)

On March 27, 1987, Senate Bill 478 was approved to amend and reenact Section 51-111.54 of the Code of Virginia relating to mandatory retirement. In essence, this amendment removed any reference to compulsory service retirement except where age was a bonafide occupational qualification (BFOQ) reasonably necessary to the normal operation of the particular business or that an employee is incapable of performing his duties in a safe and efficient manner. The provisions of this act became effective January 1, 1987 (Acts of the General Assembly of the Commonwealth of Virginia, Chapter 571, 1987). Therefore, Senate Bill 478 effected at



the state level on January 1, 1987 what the 1986 amendment to the 1967 ADEA is slated to do nationwide January 1, 1994 for all tenured faculty. Public college and university officials in the Commonwealth of Virginia were required to adapt to an environment without the concept of mandatory retirement or the benefit of a grace period prior to the removal of mandatory retirement.

Voluntary Early Retirement Incentive Programs  
(House Bill 122)

On March 23, 1988, the General Assembly approved House Bill 122 that amended the Code of Virginia by adding Section 23-9.2:3.1, relating to incentives for voluntary early retirement. It reads as follows:

& 23-9.2:3.1. Authority to establish incentives for voluntary early retirement; eligibility; contents of plans.-A. The board of visitors or other governing body of any public institution of higher education may establish a compensation plan designed to provide incentives for voluntary early retirement of teaching and research staff employed in non-classified, faculty positions. Participation in such compensation plan shall be voluntary for eligible employees and no employee shall be penalized in any way for not participating.

B. In order to qualify for participation in such compensation plan, an eligible faculty employee shall (i) be at least 60 years of age; (ii) have completed at least 10 years of full-time service at the institution offering the plan; (iii) have been awarded tenure or have a contractual right to continued employment; (iv) agree to withdraw from active membership in the Virginia Supplemental Retirement System; and (v) comply with any additional criteria established by the governing body of the institution.

C. Any compensation plan established pursuant to this section shall include the institutional needs and objectives to be served, the kind of incentives to be offered, the source of available funding for implementation, and any additional qualifications required of eligible faculty employees established by the governing body of the institution. Any such compensation plan shall explicitly reserve to the governing body of the institution the authority to modify, amend or repeal the plan. However, no such amendment, modification or repeal shall be effective as to any individual who retires under the plan prior to the effective date of the amendment, modification or repeal.

D. The cash payments offered under any such compensation plan shall not exceed 150 percent of the employee's base annual salary reflected in the Personnel Management Information System at the time of election to participate. Any such payments shall be allocated over at least two years. Such compensation may include payment of insurance benefits until the participant reaches the age of sixty-five. The total cost of any fiscal year for any compensation plan established under this section shall not exceed one percent of the institution's corresponding fiscal year state general fund appropriation for faculty salaries and associated benefits.

E. The Governor may establish, with the assistance of the State Council of Higher Education, uniform criteria for such compensation plans. Prior to the adoption, modification, amendment or repeal of any such compensation plan, the Governor's approval shall be obtained by the governing body of the institution. All compensation plans shall be reviewed for legal sufficiency by the Office of Attorney General prior to adoption, modification, amendment or repeal.

F. The Administrative Process Act (& 9-6.14:1 et seq.) shall not apply to the establishment of such compensation plan or any implementing regulations or criteria.

G. Each public institution of higher education establishing such compensation plan shall report to the Governor on the implementation of the plan by October 31 of each year. A report on approved plans shall be provided by the Governor to the Chairmen of the House Appropriations and Senate Finance Committees by December 15 of each

year (Acts of General Assembly of the Commonwealth of Virginia, Chapter 246, 1988).

House Bill 122 represented the culmination of efforts over a six-year period by representatives of the major public educational institutions in the Commonwealth of Virginia to reestablish some managerial control over the retirement process. It is the one piece of recent major retirement legislation that focused on the crucial role of faculty in the higher education system in the Commonwealth of Virginia. The impetus for this action came from a cross section of representation from major colleges and universities and governmental planners who foresaw difficult financial times ahead for higher education. By design, House Bill 122 provided enough latitude to allow each public college or university to design an early retirement incentive program that would meet the management and/or program needs. Logistically, the early retirement legislation established an approval mechanism that assured review by those state agencies with the expertise and vested interest in the design of institutional early retirement incentive plans. Specifically, the act mandated that the approval of the Governor was to be obtained after review by the State Attorney General's office for legal sufficiency and review by State Council of Higher Education personnel for uniformity.

## Attorney General Criteria

The primary criteria and the review process used by the Attorney General's office to determine if an institutional early retirement incentive plan meets the legal sufficiency requirement was obtained by a personal interview with with the Assistant Attorney general. This individual is charged with the responsibility to review and approve/disapprove institutional early retirement incentive programs from a legal posture. The following criteria are applicable. As outlined in State Code 23-9.2:3.1, Section G, the Attorney General's office assesses institutional early retirement incentive programs using the criteria incorporated into the following checklist:

Checklist for the Review of Early Retirement  
Compensation Plans

The plan states or the university certifies that:

	YES	NO	COMMENTS
1. Only non-classified faculty are eligible to participate in the plan.			
2. The participants will meet these criteria:			
a. At least 60 years of age;			
b. Completed 10 years of full time service, including paid leave of absences but not including unpaid leaves of absence;			
c. Tenured, or have contractual rights to continued employment;			
d. Will agree to withdraw from active membership in the Virginia Supplemental Retirement System			Also includes withdrawal from TIAA-CREF
3. Criteria in addition to the above that the institution may have that is reasonable and appropriate			Advice from SCHEV and VSRS would be helpful.
4. Participation in the plan is voluntary.			
5. Penalties are not in place or contemplated by the plan or the			

university for nonparticipation.

6. The plan includes the following:

a. A clear statement of needs and objectives to be served which is reasonable and appropriate.

b. A clear description of the incentives to be offered and the incentives are reasonable and appropriate.

Advice from SCHEV and VSRS would be helpful.

c. An explanation of the sources of funding available to finance the plan.

d. Any additional qualifications established by the institution are reasonable and appropriate.

Advice from SCHEV and VSRS would be helpful.

7. The institution certifies that only the Board of Visitors has authority to adopt, modify, amend or repeal the plan but that no changes shall apply to individuals who retired prior to the action to adopt, modify, amend or repeal.

8. Payments made under the plan will not exceed 150% of the employee's base annual salary as reflected in the

Personnel Management Information System at the time the employee elected to participate.

9. Payments will be allocated over at least 2 years and may include insurance benefits until age 65.
10. The institution certifies that its costs to implement the plans in any fiscal year will not exceed 1% of the corresponding fiscal year's general fund appropriation for faculty salaries and fringe benefits.
11. For the Attorney General only.  
The plan meets legal sufficiency.

Early retirement incentive plans are also reviewed by the Attorney General's office to assure compliance with ADEA legislation, Affirmative Action legislation, and Equal Protection as granted by the 14th amendment to the United States Constitution. Any language that implies or alludes to practices that may be construed as being discriminatory is cited. In addition to a review for legal sufficiency, the Attorney General's office provides oversight on the nuances of funding and the configurations of payouts that are included in some institutional early retirement incentive programs.

#### State Council of Higher Education Overview

According to State Code 23.9.2:3.1, Section G, institutional early retirement incentive plans are to be reviewed for uniformity. The Financial Coordinator, State Council of Higher Education in Virginia (SCHEV), is responsible for this review process and provided the following guidelines similar to those utilized by the Attorney General's office to evaluate institutional early retirement incentive plans.



Early Retirement Incentive Plans for Institutions  
of Higher Education Statutory Requirements

1. The plan must receive approval by the institution's governing board.
2. Participation in the plan must be voluntary.
3. Only non-classified teaching and research staff are eligible to participate in this plan. This has been expanded (per October 18, 1988 letter from the Secretary of Education to University of Virginia personnel) to include administrative faculty.
4. Participants must be at least 60 years of age.
5. Participants must have at least ten years of full-time service.
6. Participants must be tenured or have contractual right to continued employment.
7. Participants must agree to withdraw from active membership in VSRS.
8. Participants must agree to comply with additional criteria established by the board.
9. The plan must include a statement of institutional needs and objectives to be served.
10. The plan must identify the sources of available funding.
11. The plan must explicitly reserve the right of the governing board to modify, amend, or repeal the plan.
12. Incentive payments under the plan cannot exceed 150% of the participant's base salary.

13. Payments under the plan must be allocated over two years. The term "years" is not defined in the legislation. It is assumed that calendar years, fiscal years, or academic years can be used for this program.
14. Compensation may include health insurance up to age sixty-five.
15. Total cost of compensation may not exceed 1% of general fund appropriations for salary and benefits.
16. Governor must approve adoption, modification, amendment or repeal.
17. Each institution is to report to the Governor by October 31 of each year.

State Council of Higher Education personnel respond to and report to the Secretary of Education with their suggestions and recommendations. Other officials from the State Department of Planning and Budget and/or the Virginia Retirement System may be requested to address technical, budgetary, or procedural questions that may arise as the early retirement incentive plans are reviewed by state officials.

If corrections, modifications, or additions are indicated, the Secretary of Education will return the early retirement incentive program to the institution for appropriate action. If and after suggested changes are incorporated into the early retirement incentive document,

the review process is then repeated. According to state code, changes can not apply to faculty who retired prior to the action to adopt, modify, amend, or repeal an institutional early retirement incentive program.

#### Additional Changes in State Retirement Plans

On July 24, 1989, the Office of Attorney General issued a memorandum to institutions of higher education interpreting Section 51-111.28(a) of the Code of Virginia with regard to optional retirement plans. Basically, this interpretation of the Code allowed each institution of higher education to establish an alternative retirement plan or arrangement that may incorporate a range of products offered by more than one vendor (Guthrie, 1989). Following this ruling, several actions were taken with the end result being that six companies - Fidelity, Great West, Metropolitan, TIAA-CREF, T. Rowe Price, VALIC - were authorized to provide retirement programs to faculty in higher education in Virginia under the Optional Retirement Plan (ORP).

In December 1990, another issue arose regarding the differences between the defined-benefit Virginia Retirement System plan and the defined-contribution Optional Retirement Plan. Section 51.1-126 of the Code of Virginia stated that the Commonwealth's contribution from general funds to the Optional Retirement Plan could not exceed the contributions

to the Virginia Retirement System (Dyke, 1990). After legal debate, a decision was made to decouple the contribution rates with the VRS rate being 10.12% of salary and the ORP rate being lowered from 12.57% to 10.40% of salary. The VRS rate has since been lowered to 8.98% of salary.

#### One-Time Early Retirement Window

Conceptually, early retirement incentive programs were designed to be used at the discretion of each institution as management tools to meet program or faculty staffing needs. The focus of this study is to ascertain the effects of such programs on faculty retirement behavior. However, during the course of the study, a one-time early retirement incentive plan was offered to all state employees including tenured faculty who met certain age and length of service criteria. Even though the one-time window complicated the assessment of the effects of the institutional early retirement incentive programs on faculty retirement behavior, insight is gained into the reaction of faculty to such "golden parachute" offerings that are commonplace in public and private sectors. The information from House Bill 1499 identifies the criteria for participation in this one-time early retirement program and the budgetary rationale and program implications resulting from the passage of this bill by the 1991 Virginia General Assembly.

(House Bill 1499)

The 1991 Session of the General Assembly through House Bill 1499 established a one-time opportunity for participants in the Virginia Retirement System (VRS) to take advantage of an Early Retirement Program that provided enhanced retirement benefits for those individuals age 50 or older with at least 25 years of credited service. Individuals meeting the age requirements and the following criteria could apply for this program:

- Must be employed in a full-time position covered by the Virginia Retirement System on January 1, 1991. (Faculty participating in the Optional Retirement Plan were not eligible for this program.)
- Applicants must apply between the dates of July 1, 1991 and September 1, 1991.
- Effective retirement date for teaching and research faculty may be from July 1, 1991 to July 1, 1992. Other individuals must retire between the dates of July 1, 1991 and October 1, 1991.

Individuals that met the eligibility criteria and chose to retire received the following benefits:

- additional five years of service credit towards retirement regardless of age,
- no financial penalties for early retirement,
- survivor options may be chosen, and
- individuals receive an additional \$100 per month to age 62. (Virginia Retirement System Memo to Members, 1991 Special Edition)

The one-time window addressed a state-wide budgetary shortfall and was considered a success in financial terms. The one-time early retirement window was politically more palatable to state employees by lessening the need for layoffs if there was adequate participation in the early retirement program. If only 50% of those eligible for early retirement were replaced, the savings to the Commonwealth was projected to be \$12,000,000 annually (Martin, 1990). Pension funding for those individuals retiring under the one-time early retirement plan was deferred until 1994 then the unfunded liability is to be amortized over the next forty

years. In essence, the current financial needs would be passed on to the tax payer over the next generation unless retirees were not replaced (Jordan, 1992).

The faculty early retirement incentive program had been designed to permit institutions to address staffing and program needs as perceived by the institution. The capability to target certain disciplines or groups of faculty provided an instrument that could be used as needed. The one-time early retirement opportunity was applicable to all eligible faculty; therefore, institutional prerogatives to design early retirement incentive programs applicable to university preferences were overridden by a state need to encourage early retirements to resolve budget difficulties.

#### State of Virginia Legal Issues

Several legal concerns arose during discussion of an early retirement incentive plan for faculty in the public colleges and universities in the Commonwealth of Virginia. One fundamental legal question to be addressed was the following: Would a state-approved early retirement plan that applied solely to faculty be in violation of the Equal Protection clause of the Fourteenth Amendment to the United States Constitution? Representatives from the Attorney General's office further refined the discussion into several legal questions (McFarlane, 1984):

1. Would the Equal Protection clause be violated if particular employees are extended benefits while others are not?

2. Would there be a violation of the 14th Amendment if faculty of one or more colleges or universities are extended early retirement benefits when one or more other colleges or universities do not offer such programs to their faculty?

The legal opinion stated that a rational basis must be shown to justify a differentiation among state employees. Citing a U.S. Supreme Court Case Royster Guano Co. v. Virginia, 257 U.S. 412, 415 (1920), it was stated that classification of employees can be used; however, the classification must be reasonable, not arbitrary, and must rest upon some ground of difference having a fair and substantial relation to the object of the legislation, so that all persons similarly situated shall be treated alike. The linchpin to the constitution was whether a rational basis could be demonstrated for the disparate treatment. State legal officials continue to address the equal protections issues as they review the early retirement incentive programs presented by individual institutions for approval.

#### Retirement Plan Design

The elimination of mandatory retirement changed some of the fundamental precepts of retirement design. Pension plans



have been designed to be prefunded during a working period (accumulation period) by a combination of employee-employer contributions and returns on investments. Actuarial calculations have been used to determine payouts with the intent being to disperse the pension assets over the life expectancy of the retiree and/or designated beneficiaries. Income replacement ratios are common indicators used in planning pension plan payouts. For example, the AAUP suggests that individuals with 35 years service should receive at the normal retirement age at least two-thirds of disposable annual income including Social Security benefits (American Association of University Professors, January-February 1988). The Harvard pension plan recommends that an individual faculty member with at least 25 years of service receive at normal retirement an after-tax income of 70-80% of net final year salary (O'Brien & Woodbury, 1988). Without mandatory retirement, adequacy of retirement income will be left to the discretion of the individual.

With the retirement decision now an individual determination, there is a fear that procrastination will lead to postponed retirement. Individuals typically do not plan for retirement (Patton, 1979). Private savings are on the decrease and are disappointingly low (Bernheim & Shoven, 1988). The fact that retirement plans are age sensitive creates a great financial incentive to continue in the work

force. In some instances, the retirement income for an individual who works until age 80 is ten times the income available at age 65. Such increases are inconsistent with the rationale that retirement income should provide appropriate support over an individual and/or surviving beneficiary life cycle (Biggs, 1983).

While income differences due to length of service are not as pronounced in defined-benefit plans, the additional service time and potentially higher final average salary can encourage participants in defined-benefit plans such as the Virginia Retirement System to remain actively employed. The Omnibus Budget Reconciliation Act of 1986 (OBRA), which amended the ADEA, prohibits the practice of reducing or discontinuing benefits accruals or contributions to pension plans for those individuals who have attained the normal retirement age (Public Law 99-509, 1986). The intent of a rational pension plan is to assure adequate income replacement consistent with the salary earned during working years. A general rule accepted by the AAUP and the Association of American Colleges is that a pension, combined with Social Security, should provide an after-tax income equal to two-thirds of after-tax income before retirement (American Association of University Professors, July - August 1987). Overfunding of retirement benefits for those

individuals who remain in the work force beyond normal retirement age is a distinct possibility.

Conversely, during times of economic need, pension plan assets can be tapped to meet current budget deficits. Such actions could have negative effects on individual pension plan accumulations. In Massachusetts, the unfunded liability for the defined-benefit state retirement plan exceeds ten billion dollars and represents a significant burden on future tax revenues (Ruebhausen, 1990). Without the structure of a clearly-defined mandatory retirement age, institutional policy makers and individual faculty will need to be more aware of the significance that changes in retirement programs will have on retirement behavior and retirement assets individually and collectively.

#### Early Retirement Incentive Programs

The recent addition of early retirement incentive programs designed to encourage selected individuals to retire early complicates the overall retirement process. Economic variables weigh heavily in the ultimate retirement determination. However, as with many major decisions, there is a mindset that must be addressed in the retirement decision-making process. There is an anticipatory socialization that is a part of retirement planning and this socialization evolves in proximity to the anticipated

retirement date (Evans, Ekerdt, & Bosse, 1985). Legislated changes and economic incentives may alter the ground rules for determining when an individual can retire; however, the need for the personal preparation, including an appropriate frame of mind, necessary to effect the individual act of formally retiring must be recognized.

Technically, incentive early retirement programs are an arrangement between the employer and the employee that provides a tangible inducement or reward for early retirement (Chronister, 1987). Such programs must be voluntary for the employee and may be either formal or ad hoc in design. Early retirement incentive programs, by nature, are complex. Institutional attempts to influence a major individual decision in a manner that meets organizational needs and individual preferences is difficult. Similarly, to design a retirement plan that provides opportunities for faculty with diverse personal and professional capabilities at varying levels of productivity while maintaining the institutional mission can be a complex undertaking.

Institutional policy makers are advised that establishing an early retirement program is a multidimensional undertaking and must be justified on the basis of institutional needs and objectives and the relevant characteristics of faculty and staff (Chronister, 1987). The culture of the institution must be understood and the agendas

of all of the constituencies affected by changes in the retirement program must be considered if the program is to be a successful one.

An early retirement incentive program is recognized as one of the preferable options available to administrators and faculty as they determine optimal retirement times. An effective early retirement program can be used to address a number of institutional and individual objectives. Overall, the objectives of an early retirement incentive program can be classified within three broad areas: academic, fiscal, and fringe benefits (Chronister, 1987):

#### Academic objectives

1. Maintain average age of faculty, or lower the average age of faculty from \_\_\_\_\_ to \_\_\_\_\_.
2. Reallocate positions among departments by creating retirement vacancies.
3. Increase overall quality of faculty.
4. Provide more opportunity for younger faculty to obtain tenure while not increasing the percentage of tenured faculty.
5. Retain some desired faculty through a phased retirement program.
6. Add new blood.
7. Address diversity goals by increasing the number of minorities and women in the faculty ranks.

### Fiscal objectives

1. Reduce institutional budget.
2. Reallocate faculty salary savings.
3. Change and/or maintain student/faculty ratios.

### Fringe Benefit Objectives

1. Enhance retirement benefits thereby increasing retirement income for retiring faculty.
2. Permit faculty to reduce work load through phased retirement.
3. Enhance ancillary benefits such as health insurance, life insurance.

Early retirement incentive programs can be integrated into the institutional fiscal policy. In an era of stabilized or declining budgetary resources, an early retirement program can be used to lower payroll and fringe benefit costs by reducing staff. The Governor of Virginia's one-time early retirement window passed by the 1991 Virginia General Assembly projected a \$12,000,000 annual savings and was designed to reduce layoffs among state employees (Martin, 1990). Some faculty may utilize early retirement incentive programs to engage in new careers, change positions, enhance current and retirement income, relocate, or devote more time to leisure (McDonagh, 1987).

Many scholars view any early retirement program as a short-term endeavor (Patton, 1979). Demographers predict that a recent problem of overstaffing is short-term and as society ages, older workers will be needed to fill staffing voids (Weiler, 1987). If early retirement programs are successful, the pool of potential retirees decreases and the institution could be in the position of enhancing early retirement to the detriment of institutional staffing. Some researchers forecast a disproportionate loss of experienced faculty over the next decade due to retirement. At this same time, there is an expected increase in student enrollment (Western Interstate Commission for Higher Education, 1991) and only a slight increase in new Ph.Ds (TIAA Research Dialogues, January 1992). Based on these forecasts, early retirement incentive programs will need to be developed with extreme care. Used in conjunction with other policies, encouraging early retirement can be a pragmatic decision for the institution and the individual in selected situations.

#### Early Retirement Models and Retirement Behavior

Economic incentives influence retirement behavior and the retirement variable primarily controlled by the individual i.e. the age of retirement. The employer can indirectly influence the retirement decision by controlling salaries, pay raises, workloads, and other economic and

non-economic incentives. However, the removal of mandatory retirement makes the ultimate retirement decision an individual one.

Studies of early retirees from faculty ranks indicate that they are satisfied with their decision. In a 1977 survey, it was found that 98% of early retirees were satisfied or very satisfied with their decision to retire early (Patton, 1979). A later TIAA-CREF study (1990) revealed that, in general, respondents were satisfied with retirement; however, 20% indicated that they would or might have considered a different retirement age with a majority indicating a preference for retiring later. Eighty percent of the individuals who thoroughly planned for retirement indicated that they were very satisfied with retirement while only 35% of those who did not plan for retirement indicated that they were very satisfied with retirement. (TIAA Research Dialogues, Issue #31, October 1991).

Some researchers concluded that individuals with higher base wealth retire earlier and individuals who expect to gain more by postponing retirement retire later (Fields & Mitchell, 1984). A number of reasons are offered to support the contention that wealthier people retire earlier. It is hypothesized that wealthier people can buy more leisure; that because of diminishing marginal utility of income, wealthier people would value extra income less; and that wealthier



people tend to own more goods to complement their retirement; thus, a greater marginal utility of leisure (Fields & Mitchell, 1984).

Higher education researchers found that the retirement patterns of tenured faculty have remained relatively stable with some variance noted based on type of institution, type of retirement program, or geographical area (Western Interstate Commission for Higher Education, 1992). However, there is compelling evidence that faculty members with fewer publications and lower salaries expect to retire earlier than their more productive colleagues (Holden & Hansen, 1989). The experience in higher education runs counter to the economic models that show higher-salaried individuals retiring earlier. In an analysis of male tenured faculty age 50-60 at one major eastern university, the researcher concluded that higher salaries and greater vitality led to a higher intended age of retirement (Sgro, 1990).

#### Voluntary Early Retirement Incentive Options Models

Voluntary early retirement incentive models use incentives to promote or encourage retirement, typically prior to normal retirement age. These plans are divided into two major categories: full retirement and partial/phased retirement with the following specific features.

- Full retirement - These options do not require the individual to perform any duties beyond the retirement date.
- Partial/phased retirement - These options require some performance of duties, typically no more than half load.

#### Full Retirement Model

Full retirement models are classified into two categories - pension adjustment or bonus/bridge/transitional payments. Pension adjustment models can be tailored to either defined-benefit or defined-contribution retirement plans. In defined-benefit plans, the typical approach is to purchase or add additional years of credited service. The one-time early retirement window utilized by the Commonwealth of Virginia in 1991 is an example of a pension adjustment plan. Adding five years of credited service increased individual retirement benefits by 7.5% to 8.25%. Another pension adjustment mechanism is the purchase of a supplemental retirement annuity designed to replace retirement income lost due to early retirement. Combinations of annuities are available to meet employer and employee needs and preferences.

Defined-contribution pension adjustment plans typically follow one of two models. One model, known as a contribution

model, is based on the employer continuing to make contributions typically at the normal contribution rate into the pension plan. The contribution rate could be more or less depending on management goals. The second plan, a target payment model, requires that the employer determine the pension contributions needed to produce a pension equivalent to the payout that the faculty member would have received had he/she continued in a regular employment status until normal retirement age.

Bridge/transition payments/bonuses provide either a lump-sum payment or payments over a certain period of time or until a certain age. Many configurations of bridge/transition payments/bonuses are utilized depending on the goals of the early retirement incentive program.

#### Partial/Phased Retirement

Partial/phased retirements are beneficial to the employer and the employee. The faculty member as employee is not faced with a sudden change in life style associated with complete retirement. The college or university as employer does not lose expertise and experience that is often irreplaceable without a transition period. The typical phased retirement model includes pro-rata compensation based on a proportion of a full-time normal teaching load. As with other incentive plans, many variations of such programs are

being utilized. A partial/phased retirement plan will typically be for a fixed period and may offer a possibility of being renewed.

In determining optimal retirement age, the individual must evaluate the trade-off between potential earnings and potential changes in the asset value of pensions (Burkhauser & Quinn, 1980). Increases in life expectancy and the effects of inflation are major items to consider as individuals contemplate retirement. Institutional managers evaluating the role of retirement in the overall strategy for managing human resources recognize a trend towards early retirement and a second trend towards later retirement. Accordingly, the role of early retirement incentives must be carefully assessed by institutions and individual faculty to assure that such incentives accomplish the desired outcomes.

#### Higher Education Retirement Plans in Virginia

In March 1952, the Commonwealth of Virginia established the Virginia Supplemental Retirement System and university faculty, among other state employees, were allowed to join this system and participate in the federal Social Security program. Some faculty had been earlier participants in the Virginia Retirement System, the forerunner of the Virginia Supplemental Retirement System (VSRS) but were precluded from participation in the Social Security program (Virginia

Supplemental Retirement System Payroll and Benefits Reporting Manual, March, 1985).

Initially, the Virginia Supplemental Retirement System plan had a 15-year vesting period and was the only retirement plan available to faculty. The vesting period was later reduced to five years. Periodic college and university self studies made references to the need to improve faculty retirement programs (Virginia Polytechnic Institute Self Study, 1965-66; The University Self Study, 1975-76). In response to such requests, the TIAA-CREF Optional Retirement Plan (ORP) was authorized in 1986 and made available to faculty members of the state colleges and universities. All faculty then employed (1986) were permitted to switch at that time or a later date to the TIAA-CREF plan. New faculty were required to elect either the TIAA-CREF or the VRS program within 90 days of being hired or be placed in the VSRS system without any future opportunities to change programs (Code of Virginia of 1950, Section 51-111.28(a) and the 1988 Cumulative Supplement).

At the same time that the Optional Retirement Plan was being added, officials of the primary state educational institutions persuaded the Virginia General Assembly to authorize early retirement incentive programs for teaching and administrative faculty at the state colleges and universities in the Commonwealth. A twelve-person study

group composed of representatives of the State Council of Higher Education (SCHEV), the coordinating board for public higher education in the Commonwealth; the Virginia Supplemental Retirement System; the Virginia Community College System; and several representatives of senior public institutions recommended a voluntary early retirement incentive program. Their program was primarily designed as a management tool to enable institutional officials to promote faculty turnover and reallocate faculty resources to meet management needs (Jackameit, 1991). During the 1988 General Assembly session, legislation was approved without any separate funding to offer early retirement incentive programs to tenured faculty 60 years old or older with 10 years of full-time service with that institution. This legislation represented the culmination of major efforts by state colleges and universities to create an early retirement incentive program. First such efforts were begun in 1982 as Virginia college and university leaders and planners sought methods and avenues to combat the federal changes in mandatory retirement from age 65 to age 70 (Stepka, 1982). At the same time, some state officials determined that difficult fiscal times were on the horizon for colleges and universities (Casteen, 1982).

## Personal Preparation

Retirement preparation is a personal undertaking. In a life-cycle context, of the three categories of education, work, and retirement, retirement typically has less preparation. The formal education component of a life cycle is legally mandated through compulsory school attendance. Societal pressures dictate and reward a strong work ethic. However, the retirement process, especially without the structure of a mandated retirement age, has no formal stimulus to encourage preparation or participation. The act of retirement has been identified as one of the top ten stress inducers (TIAA Research Dialogues #Issue 18, July 1988); yet, many individuals and employers approach the retirement process without proper consideration of either the financial implications or the psychological adjustments that may be required.

Retirement preparation has been equated with the preparation needed to prepare for a career. Goals, objectives, long-term plans, contingency plans, formal study, and discussions with peers, colleagues, family, mentors, and advisors should be part of the overall retirement planning process.

The concept of retirement is still undergoing an evolutionary change. It is identified as a process of preparing for living in later life but does not necessary

involve a complete cessation from work. Partial retirement, phased retirement, and similar terms are common components in the current retirement process.

Individual retirement preparation includes two distinct approaches. One approach is retirement education which includes inquiry into the operating details of pension plans, Social Security, health care programs, survivor entitlements, and the minutiae that personalize the act of retirement. In addition to retirement education, retirement counseling can be beneficial in making an orderly transition from employee to retiree.

For many individuals, their job is their preoccupation that provides the structure, the framework, and the purpose for their existence. In essence, work organizes people's lives. Retirement counseling can assist individuals in preparing for separation from a work activity and preparing for other activities that may involve a combination of work and leisure.

Pension plans per se are an important component of overall retirement planning. Personal planners depict retirement income as a three-legged stool comprised of Social Security, pensions, and personal savings (Liebig, 1984). Retirees that receive pensions enjoy a much higher standard of living (Zedlewski, 1984). The role of pensions in retirement planning has been enhanced by recent legislation.



Social security laws have changed to require individuals to wait longer before beginning benefits (Social Security Publication No. 05-10011, January, 1988). Similarly, recent tax reform legislation reduced or eliminated the tax advantages of the Individual Retirement Accounts (IRA) used by many faculty. The 403b tax shelter program was capped at \$9,500 per year for those faculty with less than 15 years service (Bryan & Cash, 1987). Such restrictions leave pension plans as the primary source of funding for future retirement income.

Practically all educational institutions offer individual faculty the choice between defined-benefit plans and defined-contribution plans. Individual faculty, prior to choosing a retirement plan, should assess career goals and the importance of such issues as mobility, portability, and control of retirement assets. Individuals that choose to participate in defined-contribution retirement plans are, in essence, agreeing to take market risks. They are willing to have immediate vesting of all employer and employee retirement contributions then allow investments plus the return on investments determine retirement income. In contrast, defined-benefit participants assume a political risk, i.e., the retirement income is guaranteed by formula and the formula is changed only by legislative or administrative action. However, if the contribution rates

are changed in defined-contribution plans, those individuals who agreed to accept market risks are also being subjected to political risks. Table 1 shows the potential impact on individual retirement income of a participant in a defined-contribution plan based on the 1990 General Assembly action that reduced employer ORP pension plan contributions from 12.57% to 10.4%.

Table 1 reveals two trends. A reduction of 2.17% in contributions to the retirement plan made 20.78% difference in individual retirement benefits. By working an additional 10 years, retirement benefits were increased by 158%.

#### Retirement Incentives Study Group

In December 1982, the State Secretary of Education, John Casteen, sent a memorandum to state-supported college and university presidents citing strategies to be used by higher education planners to cope with a predicted and projected revenue shortfall. Among the items proposed was the request for consideration of an early retirement plan (Casteen, 1982).

Following dialogue among institutional and state officials regarding a course of action for developing an early retirement incentive plan, the State Council of Presidents comprised of the presidents of public-supported colleges and universities in the Commonwealth of Virginia

Table 1

Effects of Financial Contributions on Retirement Income

Retirement Age	<u>Monthly Retirement Income</u>		
	Age 60	Age 65	Age 70
Contribution @ 12.57%	\$5,334.00	\$8,557.00	\$13,784.00
Contribution @ 10.4%	\$4,417.00	\$7,087.00	\$11,415.00

Assumption: Individual faculty member, age 30, starting salary of \$40,000, 4% annual pay raises, 6% return on investment.

appointed a Retirement Incentives Study Group identified in Appendix E. This group represented the major higher education institutions in Virginia and included some of the state and national experts involved in retirement planning for faculty.

A series of meetings followed over the next several years with enabling legislation being introduced during the 1985 General Assembly session in the form of Senate Bill 652. After debate and lobbying, Senate Bill 652 was defeated in the House of Delegates. Revised legislation was introduced with final passage of an early retirement incentive program for public college and university faculty occurring in 1988.

With legislation in place, some colleges and universities immediately proposed and submitted early retirement plans for executive approval as required by the enabling legislation. The three institutions serving as models for this study, James Madison University, The University of Virginia, and Virginia Polytechnic Institute and State University, received formal approval for their early retirement incentive programs.

#### Summary

Retirement issues are entwined with the major issues facing an aging society. Legislative efforts send conflicting signals. Federal and state legislation

eliminated mandatory retirement; Social Security legislation extended the age for receiving full benefits; many public sector and private sector organizations including colleges and universities are providing incentives to encourage early retirement. The 1989 session of the Virginia General Assembly funded a study designed to assist individuals who retired early in pursuing post-retirement employment (Senate Bill 647, Chapter 257, Acts of Assembly, 1989) while the 1990 General Assembly authorized additional early retirement incentives.

The decision to retire is a complex one that includes many personal and professional factors - health status, family relationships, community involvement, finances, work environment, and others. Early retirement plans offer alternative courses of action for individuals while providing institutional options for addressing staffing, budget, and related needs.

The aging populace is creating economic problems; yet, many older persons seek meaningful social roles and are capable of greater productivity. Intergenerational equity is becoming an issue. Policy makers responsible for social and retirement legislation need to evaluate the total ramifications of change. Early retirement incentive plans are appropriate to meet faculty and institutional needs including the need to support new fields, allocate resources

wisely, and respond to faculty concerns about retirement  
(Hammond & Morgan, 1991).

## Chapter 3

### RESEARCH DESIGN AND METHODS

Legislated changes altered the fundamental structure of the retirement process in higher education in Virginia. Accordingly, institutional policy makers are evaluating a wide array of options as they strive to generate flexibility in and control over the management of faculty resources.

This study is designed to enhance our understanding of the effects of federal and state retirement legislation and related policy changes as they impact on institutional retirement programs and individual faculty retirement behavior. The methodology addresses three time spans - the past, the present, and the future.

Knowledge of relationships among those variables that affect the individual retirement decision and the overall retirement process is beneficial to institutional policy makers. The ability to forecast the effects of retirement policy changes on faculty demographics and to determine the organizational consequences if retirement patterns are altered will assist policy makers. An examination of the consequences of the addition of early retirement incentive programs is in order.

## Design of the Study

The purpose of this study is to ascertain the institutional responses to legislated changes in retirement policy and the changes in faculty retirement behavior that occurred during the legislated transition period. This study focuses on the influence and impact of early retirement incentive programs. Such programs counter the effects of federal changes in mandatory retirement in 1982 that raised the mandatory retirement age from 65 to 70 and the Commonwealth of Virginia action in 1987 that removed mandatory retirement for all tenured faculty in Virginia.

The study is designed to identify the overarching federal and state legal framework applicable to faculty retirement and early retirement incentive programs. Using the established legal framework, institutional and state policy makers act in concert to flesh out institutional retirement policies. This study analyzes the institutional early retirement incentive programs utilizing structured interviews of representatives from the state Attorney General's office, State Council of Higher Education, and those institutional officials who determine institutional courses of action for faculty retirement programs. After the primary federal and state statutes applicable to the early retirement incentive programs are identified, the focus turns to state and institutional retirement actions. Information



obtained from the interviews, analysis of each institution's early retirement incentive plan, reviews of formal reports, and analyses of institutional faculty and retiree data is combined to describe, compare, and contrast the early retirement incentive models used by the institutions under study. The concluding component identifies the elements and attributes of a prototype early retirement incentive program.

The research questions are arranged sequentially with the specific institutional questions and data analyses drawing on the broader legal and administrative foundations established in the review of related literature. After the legal and administrative domains are identified, institutional retirement plans are assessed utilizing the structure provided by legal documents and the parameters identified by those state officials with the authority to approve/disapprove institutional early retirement programs.

The first two research questions address the institutional early retirement incentive efforts including the identification of three approved early retirement incentive models. Research Questions three and four narrow the study's focus to one institution and provide a comprehensive demographic analysis of current tenured faculty and a detailed analysis of retirement patterns for tenured faculty over a 12-year period. The review of literature confirmed the need for each institution to complete an

internal assessment of faculty, including an age profile and the prevalence of any retirement patterns or trends. The concluding question, Question five, identifies the components and attributes of a rational early retirement incentive program.

#### Research Questions

The following research questions are used to address the purpose of the study:

1. What retirement strategies did Virginia college and university policy makers who received approval of their early retirement incentive programs employ as they structured their retirement policies to meet institutional/individual needs and objectives?

The framers of the legislative action that established the early retirement incentive programs recognized that each institution may have unique needs, differing demographics, changing missions, or other reasons to tailor an incentive program to meet the particular needs of that institution. Question one is designed to explore the mindset and the rationale used by individual institutions as they designed retirement programs to meet their needs and goals.

2. (a.) What changes in faculty retirement behavior have been noted as federal and state laws changed mandatory

retirement options and authorized early retirement incentive programs?

(b.) How did the noted changes in faculty retirement behavior relate to the intent of the institutional early retirement policy?

The responses to Question two provide a descriptive assessment of individual faculty actions and reactions to changes in the retirement process as it was restructured to be compatible with new federal and state regulations and policies. Changes in faculty retirement behavior are noted and assessed to determine the compatibility of changes with outcomes desired by policy makers. Where Question one identifies the purpose of early retirement incentive programs, Question two assesses the outcomes of those programs.

Research Questions three and four are designed to determine, in detail, the retirement patterns, relationships, and demographic trends for one Virginia-based research university, Virginia Polytechnic Institute and State University.

3. What is the current demographic profile of tenured Virginia Polytechnic Institute and State University faculty and what demographic changes have occurred in the faculty population from 1983-1991?

The purpose of this question is to ascertain the demographic spread of current faculty based on age and to identify aging changes in the faculty population over the last nine years. Descriptive statistics are presented to show any concentrations of faculty in certain age groups and/or according to disciplines and to identify aging trends that may exist.

4. Using the personal variables of age at retirement, final average salary, marital status, gender, length of service, replacement income, classification, and year of retirement and the institutional variables of college of employment and type of employment i.e. instructional, research, or public service, how do the retirement patterns that are discernible relate to the legal mandates and policy changes that occurred for faculty that retired over the period January 1980 through December 1991?

The responses to Research Question four document the actual retirement practices of faculty over a twelve-year period as the retirement process underwent change. Changes in faculty retirement behavior can be noted and relationships among a number of individual and institutional variables can be observed.

5. Using the conceptual, legal, and technical parameters identified in the policy environment and the assessments of institutional retirement strategies, what are

the essential elements of a rational institutional faculty early retirement plan?

Research Question five addresses the elements and the processes that individual institutional representatives can consider as they develop their institutional early retirement policies and submit them for executive approval.

#### Population

Three institutions were selected from the population of all state institutions of higher education in the Commonwealth of Virginia. The institutions selected for this study are those that initially presented formal early retirement incentive plans to the State Attorney General's office for official review and approval and approval was granted.

Virginia polytechnic Institute and State University was selected for indepth analyses of retirement and aging patterns. This university provided readily accessible data for the time period of the study and was a primary player in the development of the early retirement incentive concept among state colleges and universities.

The population for determining retirement trends from 1980 - 1991 is the total number of tenured faculty retiring from Virginia Polytechnic Institute and State University over that 12 year period. For comparative purposes, samples were

drawn from a population of all tenured faculty and classified employees (non-faculty) who retired from Virginia Polytechnic Institute and State University over the period 1980-1991. The total number of tenured university faculty as of December 1991 is used as the population for making current demographic analyses and projections. Data were available for full-time tenured faculty for the years 1983 - 1991. Extrapolations are made from the 1991 information to determine 1992 figures. This information was used to measure the aging of the faculty population and to identify areas where an early retirement incentive program may be applicable.

#### Data Collection Procedures

Institutional data bases available through the Personnel Management Information System (PMIS) were used as data sources for demographic analysis. Retirement handbooks, self-study reports, and related publications including those provided by the Virginia Retirement System and the Optional Retirement Plan carriers were used to augment data from the information systems.

Faculty retiring from Virginia Polytechnic Institute and State University were identified through a combination of sources. The Personnel Management Information System provided basic employment information such as hire date, salary information, termination date, job title, and date of

birth. The Virginia Retirement System provides a monthly report for all institutional retirees retiring from that system. Their report includes name, social security number, the length of service, average salary for the highest three years, the monthly retirement income amount, the final salary applicable to life insurance, the retirement option selected, and beneficiary designations. Cross checks and data base comparisons were made among institutional listings, Virginia Retirement System listings, and payroll listings to ascertain the accuracy of information and to determine if all individuals to be included in the study were identified. The EXAMINE procedure from SPSS was used to identify outliers and possible errors in the recording and posting of data.

The legal domain is established through a review of federal and state codes applicable to the retirement process in higher education in Virginia and structured interviews with representatives from the State Attorney General's office and the State Council of Higher Education. The legal domain provides the foundation for the research questions that address institutional and individual responses to the early retirement incentive concept.

Information for Research Questions one and two was obtained through structured interviews of those institutional policy makers and administrators who designed and implemented early retirement incentive programs. These individuals and

their university affiliation are identified in Appendix C. Each institutional early retirement incentive plan was analyzed for content to determine the emphasis and focus of each plan. Annual or other internal and external reports including those reports required by the state code were reviewed to ascertain the performances of the institutional early retirement incentive programs.

Information for Research Question three is obtained from reports and information available through the University Office of Institutional Research and from analysis of information available in the Personnel Management Information System data base. Extracts from the Personnel Management Information System data bases were used to determine demographic profiles. The formal university Personnel/Payroll system provided complete information from 1987 to date. Records and reports from the Office of Institutional Research were used to obtain information prior to 1987.

Information for Research Question four was obtained from two sources:

- The existing Personnel Management Information System data base provided information pertaining to hire date, birth date, retirement date, gender, and salary information.



- A monthly report from the Virginia Retirement System provided personal data including name, social security number, retirement option, average salary, date of retirement, years and months of service, monthly income benefit, and beneficiary designations.

Research Question five was addressed through a synthesizing of the literature and information obtained from analyses of Research Questions one through four. The components, methods, and models utilized by the institutions under study were used in conjunction with other models and attributes to identify the ingredients of a conceptual early retirement incentive plan.

#### Methods of Analyses

The review of literature established the legal domain (federal and state) applicable to the early retirement process. Pertinent federal legislation and the portions of the Code of Virginia applicable to the early retirement process are presented in detail. Specifically, those state statutes and rulings that permitted the addition of the Optional Retirement Plan, the elimination of mandatory retirement for faculty, and authorized the development of early retirement incentive programs were identified and presented.

Interview information obtained from those officials in the State Attorney General's office and the State Council of Higher Education identified the criteria, policies, and procedures used to evaluate and approve/disapprove institutional early retirement programs. A template was presented that could be used by institutional and/or state officials to determine if institutional early retirement incentive programs comply with established administrative and legal criteria.

Research Question one is designed to elicit information from those institutional policy makers who developed early retirement incentive programs consistent with state legislation. Question one is a descriptive assessment of policy changes by individual institutions. Institutional documents effecting retirement policy changes were reviewed and formally analyzed for content. Structured interviews were conducted with those institutional representatives responsible for the design, development, implementation, and administration of institutional retirement policies. The data collected for Research Question one focused on the legal, technical, and conceptual components of the early retirement incentive program developed by each of the three institutions included in the study. Descriptive information was presented in tables with each institutional plan being specifically identified.

Research Question two was addressed by analyzing the number and types of participants in the early retirement incentive programs, the costs of the programs, and the compatibility of changes with intent or focus of individual institutional programs. Where available, the annual institutional reports to the Governor pertaining to the institutional early retirement incentive program were analyzed.

The responses to Research Question three document the demographic changes in the faculty of one university for the period 1983 through 1991. The aging of the faculty can be verified, any clustering of faculty by age can be substantiated, and any aging of faculty according to discipline can be determined. A knowledge of the demographic profile of current faculty can assist policy makers in the design of early retirement programs and may indicate specific clusters of faculty by age warranting special attention. Descriptive statistics depict changes in the faculty profile and similarities and differences that currently exists between and/or among colleges within the university.

The findings for Research Question four are used to provide insight into the first-hand and first-round experiences of faculty who retired from one university over the period 1980 through 1991. Descriptive statistics, correlational analyses, and analysis of variance are

provided, using personal and institutional variables to identify retirement trends and patterns that occurred during this time. The twelve-year time frame was selected to assess retirement trends before and after the mandated retirement age changed from age 65 to age 70 (1982); mandatory retirement was abolished (1987); and early retirement incentives were authorized (1988).

The findings pertaining to Research Question five provide the parameters and identify the attributes and components to be considered as individual institutions design, develop, and implement retirement programs compatible with management goals and current legislation.

#### Summary

The data and background information for this study were obtained from structured interviews of state and institutional officials, analyses of individual institutional early retirement incentive programs, and analyses of personnel/payroll data bases. A data base was established for faculty retirees using a combination of monthly reports provided by the Virginia Retirement System, internal institutional reports, and institutional personnel/payroll data bases. Data were analyzed using the SPSS package to obtain descriptive statistics, correlational analyses, and analysis of variance. QUATTRO and HARVARD

GRAPHICS software packages were used to calculate and depict current and projected trends and patterns.

## Chapter 4

### RESULTS

The purpose of this study is to ascertain the institutional responses to legislated changes in retirement policy in public colleges and universities in the Commonwealth of Virginia and to assess the changes in faculty retirement behavior that occurred during a legislated transition period. This study focuses on the influence and impact of early retirement incentive programs on faculty retirement behavior in selected public universities in the Commonwealth of Virginia. Such early retirement incentive programs restored some of the management control lost when federal and state laws changed then abolished mandatory retirement for practically all individuals, including tenured faculty. This study tests the findings of the Congressionally-mandated National Research Council study authorized to determine the consequences of the federal law that removes mandatory retirement for all tenured faculty nationwide as of January 1, 1994.

Relevant information was obtained from the research of pertinent federal and state statutes, a review of related literature and institutional documents pertaining to early retirement incentive programs, and interviews with state and institutional representatives responsible for individual institutional early retirement incentive programs. Analyses

of data from personnel and retiree information systems provided demographic and individual information needed to complete the study. Institutional officials from James Madison University, the University of Virginia, and Virginia Polytechnic Institute and State University participated in structured interviews. Interviews were also conducted with officials from the State Attorney General's office and the State Council of Higher Education to determine the criteria and the applicable policies and procedures utilized to evaluate and approve institutional early retirement incentive programs.

Five research questions, arranged in a chronological sequence, were an outgrowth of the legal foundations identified in the review of related literature pertaining to the faculty retirement process. The initial research question, Question one, captured the actions of institutional officials as they designed, developed, implemented, and administered early retirement incentive programs consistent with federal and state legislation. Research Question two was designed to ascertain the faculty responses to institutional early retirement incentive programs. Research Question three identified a demographic profile of the faculty of Virginia Polytechnic Institute and State University, the institution chosen for detailed study. Research Question four documented faculty retirement behavior

over the twelve-year time frame for Virginia Polytechnic Institute and State University. The concluding question, Research Question five, identified the components of a rational early retirement incentive program. The National Research Council study, completed at Congressional request, provided access to expert opinion regarding the impact of federal legislation that abolishes mandatory retirement for tenured faculty as of January 1, 1994. This study assessed the National Research Council findings against the actual faculty retirement experiences that are occurring in a state that abolished mandatory retirement for faculty in 1987.

#### Research Question One

Research Question one addressed the strategies employed by individual institutional officials as they designed, developed, implemented, and administered their individual institutional early retirement incentive programs for faculty.

Interviews with state and institutional officials and analyses of institutional early retirement incentive programs revealed three distinct models in use in the Commonwealth. Each model is identified and comparisons and contrasts are provided. Information obtained from interviews with institutional officials is used to amplify the analysis of



the individual institutional early retirement incentive plans.

Interviews with institutional officials also provided insight into the purposes of each institutional early retirement incentive program, the involvement of constituent groups in the decision-making process, and the rationale for the specific components included in the institutional early retirement incentive program.

#### James Madison University

James Madison University's Early Retirement Incentive Program for Faculty was approved by then-Governor Gerald Baliles on May 17, 1989. The James Madison University plan, as amended, is shown in Appendix B. Analyses of institutional position papers, annual reports to the Governor, and interviews with the Director of Resource Planning and Policy Studies at James Madison University provided information and insight into the institutional early retirement incentive plan. The Director of Resource Planning and Policy Studies was a member and chair of the committee that designed and implemented the institutional plan in 1989 and remains involved in the management of the institutional early retirement incentive process.

In a March 1989 analysis of faculty aging, institutional researchers determined that James Madison University faculty

aging patterns had changed dramatically over the last two decades. In 1966-67, 51% of the university faculty were less than 40 years old. In 1988-89, 27.5% were less than 40 years old - a 23.5% decrease. At the other end of the age scale, faculty over 60 years old had decreased from 11.2% in 1966-67 to 7.3% in 1988-89. Over this period, the mean age of faculty increased from 42 to 45 (JMU Research Notes, 1989). Overall, the James Madison University faculty was an aging faculty with the average ages becoming more compressed. An Early Retirement Incentive plan could provide a means to address a staffing problem.

In 1989, with the passage of Early Retirement Incentive legislation by the Virginia General Assembly, Dr. Ronald Carrier, the James Madison University President, and Dr. Russell Warren, the Academic Vice President, established a committee to design and develop an institutional early retirement incentive program. A four-person committee that represented a cross section of campus constituents was appointed. Committee members included the Speaker of the Faculty Senate, the Assistant Vice President for Resource Planning and Policy Studies, an Associate Dean, and the Director of Employee Relations.

The University Office of Institutional Research provided assessments of faculty demographics, including analyses of age differences in general, age differences across

disciplines, and modeling designed to determine aging patterns over the next one to two decades. The Early Retirement Incentive Committee sought input from faculty groups and ultimately designed an early retirement incentive program that offered a straight-forward buyout to selected faculty. The analyses had shown an aging population in certain disciplines and decreasing faculty/student ratios in certain areas. These areas were targeted for participation in the early retirement incentive program.

After the first year, several administrative adjustments were approved to remove some the restrictive language. The James Madison University Plan differed from other models in that no dates were established for reviewing, changing, or terminating the plan.

Analysis of James Madison University Early Retirement  
Incentive  
Plan for Faculty  
(Revised April 11, 1989)

The James Madison University Early Retirement Incentive Plan for Faculty has served as a model for a number of similar plans within the Commonwealth. The plan is consistent with governing legislation and is a straight-forward approach to addressing institutional and individual retirement needs. It is clearly identified as a management tool designed to address the following three objectives:

1. To provide the University with increased flexibility in the allocation of faculty positions among the disciplines in order to better meet enrollment demands.

2. To facilitate the hiring of new faculty members who have the credentials and experience which best support and enhance the mission of the University.

3. To help alleviate the financial hardship of early retirement which currently prevents some faculty who would like to do so from retiring early (James Madison University Manual of Policy and Procedures, Policy # I:03:28, August 1, 1989, Retirement incentive plan for faculty).

Criteria for selecting participants from among eligible applicants were developed by the Academic Council chaired by the Vice President for Academic Affairs and based on the objectives listed above. Applications for early retirement are reviewed by the candidate's department head and dean. The Vice President recommends selected participants to the President and Board of Visitors for approval.

Approved applicants who elect to participate in the Early Retirement Incentive Program execute a Retirement Decision Contract that permits eligible faculty members to enter into an agreement to retire at a specified age in the future in return for which the university will provide a contract payment to the individual. The complete contractual

agreement is shown in Appendix B. Some of the following salient features are applicable:

1. The participant will contract to retire at an age not earlier than age 60. Retirement may take place at the end of the academic term or at a time mutually agreeable to the faculty member and the university.

2. An eligible faculty member should submit his or her application for retirement at least 90 days prior to the effective date of retirement, and the University will notify the applicant within 60 days of the action taken on his or her application. The retirement contract must be signed within thirty days of the notification of approval.

3. Applicants who are approved for retirement will receive a retirement cash payment upon retirement at the contracted age. Such payments may include, at the election of the participant and provided that the applicant is not drawing VSRS retirement, payment of health insurance until the participant reaches age sixty five. Applicants who will be drawing VSRS benefits should have their insurance premiums deducted from their VSRS checks.

4. The maximum allowable amount of the retirement incentive payment including the payment of health insurance premiums will not exceed 150 percent of the participant's base salary during the 12 months immediately preceding the date of retirement. The actual percentage allocated for each

participant accepted into the plan may vary depending the number of eligible applicants, the availability of funding, and the needs of the University at the time the individual's contract is negotiated. When the participant is employed under a twelve-month contract, the annual salary will be converted to a 9-10 month basis using a factor of .818 for determining the salary base upon which the retirement payment will be made. The retirement payment will be paid over a minimum of two years. Payments are subject to federal, state, and FICA tax withholding. Should the retiree wish to exercise the option of having the university remit Commonwealth of Virginia health insurance premiums until the participant reaches 65, the retirement payment must be phased so that it is not fully paid until the retiree reaches 65. The cash retirement payment will be adjusted to compensate for changes in the cost of medical insurance premiums.

#### Conclusion

The James Madison University Early Retirement Incentive Program is a classic example of a full retirement plan with bonus. Its straight-forward features with clear ties to the enabling state legislation resulted in this plan serving as a primary state model. It has been emulated by other state institutions developing and implementing early retirement incentive programs.

## University of Virginia

University of Virginia personnel were involved in the initial plans to establish an Early Retirement Incentive Program for public colleges and universities in the Commonwealth of Virginia. Mr. Ray Hunt, University of Virginia Vice President for Business and Finance, was a member of the initial sub-committee established in 1983 by the Council of Presidents to study early retirement options. Dr. Jay Chronister, a University of Virginia faculty member, was and is recognized for his expertise in the area of faculty retirements and served the university and the broader state committees as the early retirement incentive concept evolved.

The University of Virginia Early Retirement Incentive program was the first one submitted for state approval under the 1988 legislation and served as the initial model for other institutional programs. The initial program had a three-year life span (1989-92) and a new program has been submitted for state approval. The University of Virginia program had to accommodate faculty participating in the defined-benefit VRS program and other faculty participating in the defined-contribution TIAA-CREF program. A complete copy of the original program and a copy of the proposed program are found in Appendix B.

Analysis of the University of Virginia Program  
Information for the University of Virginia Early Retirement Incentive Plan was obtained through interviews with University of Virginia officials responsible for developing and administering the University of Virginia Early Retirement Incentive Plan. Interview findings were complemented with reviews of the Annual Reports to the Governor and minutes and related correspondence pertaining to the proceedings of the committee acting of behalf of the Council of Presidents to establish a state-wide early retirement incentive plan.

Dr. Jay Chronister, Chair, Department of Education and Leadership Studies, chaired several institutional committees assessing early retirement incentive programs for the University prior to the 1988 General Assembly action. At the request of the President, an Early Retirement Incentive study was begun with participants from a number of campus areas. Faculty representation, representation from the Provost's office, Vice President for Business and Finance representation and individuals from the Benefits Committee were part of the study team.

Assessments were made to determine faculty age distributions and retirement patterns over the last five years. Interviews with retirees were conducted to determine



their satisfaction with retirement. The proposed Early Retirement Incentive program was presented to the deans and the Faculty Senate for their input. With endorsements from the University Board of Visitors, the Faculty Senate, the Benefits Council, and the Deans, the Early Retirement Incentive program was submitted for state approval and, after minor modifications, approval was granted.

The University of Virginia program was explicitly designed as a management tool and not a benefit entitlement. An initial expiration date was built in to the program. The selection process was quantified and included a management factor that permitted the targeting of selected academic areas. The following assumptions and methodology were applied in the selection process:

#### I. Assumptions

The process will be a centralized one.

Funding for each retiree will come from the individual's school in the year in which the pay-out occurs.

Retirement Decision payments are made on the basis of 85% and 15% of the last salary.

Faculty who have given written notice of retirement prior to application of the Incentive Retirement Program are not eligible for consideration.

## II. Methodology

Eligible Pool: All faculty 60 years old or older at the time of the application deadline and who are employed full-time with ten years of service are eligible to apply for the early retirement incentive program. The entire pool is scored in accordance with the agreed upon criteria and weighing. Once an individual enters into a contract, his/her name is removed from the pool. Each year, new individuals meeting the criteria are added to the pool and the entire pool is rescored.

### Variables

Age: The ages of all eligible faculty are normalized over 100 points. A faculty member's age score is his/her normalized age weighted by 33.33% (the higher the age, the higher the score).

Years of Service: Years of service from last hire date are calculated for each member of the eligible pool and the set of service years is normalized over 100 points. If there is a history of prior UVA service earlier than the last hire date on the record, a manual adjustment is made to include those years. A faculty member's service score is his/her normalized years of service weighted by 33.33% (the more years of service, the higher the score).

Salary History: The average percent increase in salary (adjusted to 9 months) between fall 1984 and fall 1989 is calculated by school for all eligible faculty. All non-instructional faculty are included as one unit and the average computed. Each faculty member's percent increase is subtracted from his/her school mean, and all the differences are normalized over 100 points. A faculty member's salary history is his/her normalized difference from the school mean weighted by 33.33% (the greater the difference above the school mean, the lower the score).

Management Needs: Upon careful and thoughtful consideration of program and management needs by the Vice President and with advice, as appropriate, from deans and heads of major units, up to 20% of the applicants in a fiscal year may be given a ranking higher than that determined on quantitative variables only.

### III. Application of Methodology

The scores for individuals in the eligible pool are calculated using a 33-33-33 weighting. The applicants are then ranked by score, highest to lowest, by beginning year of cost.

Applicants requesting retirement in December are costed with the applicants in the next fiscal year, e.g. a December 1991 retire date was ranked in the 1992-93 applicant group.

The vice presidents then apply the management needs variable and the rankings are reordered. Those applicants who fall above the cut off point as determined by total funds to be expended in that year are accepted into the program.

The Associate Provost is responsible for administering the institutional Early Retirement Incentive Plan. Her role is to utilize the plan as a management tool to meet program and faculty staffing needs. The University of Virginia Early Retirement Incentive Plan has been recently revised to meet some changing needs of the university. Complete copies of the original and revised University of Virginia plans are found in Appendix B.

#### Virginia Polytechnic Institute and State University

Individuals from the Provost's Office developed and administer the University Early Retirement Incentive Plan. Interviews with university officials and a review of the minutes of the Retirement Incentives Study Group revealed that Virginia Polytechnic Institute and State University had

an interest in the early retirement incentive concept from the initial stages in 1983. Dr. Philip Sheldon from the University Office of Institutional Research was actively involved in the design and development of the formal state Early Retirement Incentive Program and represented the University on the initial committee established by the State Council of Public College and University Presidents. The university administration followed the early developments state-wide through the work of Dr. Sheldon.

In preparation for the passage of an Early Retirement Incentive Program by the Virginia General Assembly, the University decision-making process included the following:

1. Should the University offer an Early Retirement Incentive Plan at all?

Any funding for an Early Retirement Incentive Plan would come from the institutional general appropriations and would limit funds destined for other areas.

2. When should such a program be offered? What do aging and retirement patterns indicate?
3. What is the target population? Should certain sub-groups be targeted?
4. How much funding should be allocated to the program?
5. What forms of incentives should be offered?
6. What types of non-financial incentives should be included in the package? (Sheldon, 1985).

After General Assembly approval of a state-wide early retirement incentive program, institutional level committees were established to include representation from the Faculty Senate, the Office of Institutional Research, Employee Relations Department, and the Provost's Office. Demographic assessments were supplied by the Office of Institutional Research. Analyses of demographic and retirement patterns revealed that the institution did not have an aging problem and that faculty were retiring as expected. By design, the University's Early Retirement Plan was a modest one that had two primary objectives: the payment of health care benefits authorized by state statute and the utilization of partial retirement when such an arrangement would be beneficial to the institution. The complete institutional Early Retirement Incentive Plan is shown in Appendix E.

### Conclusion

The three institutional plans approved by the Governor incorporated all of the components needed to meet the criteria for legal sufficiency and administrative approval. Yet, each plan focused on the individual and perhaps unique program and managerial needs of the individual institution. The framers of the enabling legislation, by design, incorporated enough flexibility to allow institutions to design programs that addressed their needs or preferences for

managing their faculty resources. To this end, the Early Retirement Incentive legislation has been a success.

A summary of each institutional early retirement plan is provided. These three plans have served as models and are utilized by state and institutional officials as new programs are proposed or old programs are changed.

Analysis of James Madison University Model

Type Early Retirement Incentive Plan: Full retirement model with a bonus payment.

Selection Procedure: Selections from the pool of eligible applicants is made by the Vice President for Academic Affairs after review by deans and department heads.

Payout Procedures: Payouts are made in lump sums over a 19 month period.

Academic Objectives: Two academic objectives are offered:

1. Increased flexibility in the allocation of faculty positions among disciplines based on student enrollments.
2. To facilitate the hiring of new faculty to meet mission needs.

Fiscal Objectives: None stated.

Benefits Objectives: The benefits objective is to provide a financial incentive that may help alleviate a possible individual financial hardship associated with early retirement.

Time frame of plan: Indefinite



Year	Number of Participants	Costs		
1989-90	5	\$252,000		
1990-91	2	155,096		
1991-92	1	85,616		
Total	8	\$492,712		
Components: Health Care      Phased Retirement      Lump Sum				
Yes - at                              No                              Yes				
retirees				
expense				

#### Comments

James Madison University officials were successful in using their Early Retirement Incentive Program as a management tool. Eight positions were reallocated across disciplines which addressed a management need. Lump-sum payments were used to enhance individual retirements which addressed an individual need to maximize retirement income.

#### Analysis of University of Virginia Model

Type Early Retirement Incentive Plan: The University of Virginia Plan offers the following two options designed to address differences between defined-benefit and defined-contribution plans.

1. Phased retirement option - TIAA-CREF participants can not work more than 5 years or beyond June 30 after

reaching age 70, whichever is earlier. Participants carry, on average, a 50% workload but receive benefits based on full salary. Virginia Retirement System participants will carry a 50% workload but will receive full salary and benefits. Their arrangement can not exceed 2 years or June 30 after reaching age seventy, whichever is earlier.

2. Full retirement option with bonus - Participants in this plan receive 150% of annual base salary in return for agreeing to retire on a selected date.

Selection procedure: Eligible applicants are selected based on age, service, salary and management needs.

Payout Procedures: Payouts will be in two installments over two fiscal years but one tax year based on a formula designed not to exceed to 150% of base annual salary.

Academic Objectives: The academic objectives are to increase staffing flexibility, hire more women and minorities, reallocate positions, and hire new faculty.

Fiscal Objectives: None stated.

Benefits Objectives: None stated.

Time frame of plan: May 1989 - June 30, 1992.

Year	Number of Participants	Costs
1989-90	27	\$1,000,000
1990-91	12	1,000,000

Analysis of Virginia Polytechnic Institute and  
State University Model

Type Early Retirement Incentive Plan: Partial retirement  
model with benefits (healthcare) enhancements.

Selection procedure: All faculty who meet the state  
criteria for participation in the Early Retirement Incentive  
Program were included in the Virginia Polytechnic Institute  
and State University program. Selected faculty or selected  
disciplines were not targeted.

Payout Procedures:

Eligible faculty are mailed monthly checks to the home  
address as reimbursement for the monthly employer portion of  
health care benefits. Confirmation has been received that  
these payments are not subject to federal or state tax.

Components:

Health Care	Yes
Partial/Phased retirement	Yes
Lump Sum	No

Academic Objectives: None stated

Fiscal Objectives: None stated

Benefits Objectives: The Benefits Objective is to pay  
the employer's portion of health care from the date of  
retirement to age 65.

Time frame of plan: July 1989 - June 1993

Year	Number of Participants	Costs
1989	4	
1990	8	
1991	18	
1992	20	
Total	50	\$290,391

Analysis of University of Virginia Proposed Model Type Early Retirement Incentive Plan: Partial retirement model with full benefits.

Selection procedure: Selection is limited by funding that cannot exceed 1% of budget for faculty salaries and benefits. A priority system that includes age, salary, length of service, recent pay raises, and management needs is used to select from the eligible pool of applicants.

Payout Procedures: The participant continues to receive full salary during the period of part-time work.

Components:

Health Care	No
Partial/Phased retirement	Yes
Lump Sum	No

Academic Objectives: The academic objectives are to increase staffing flexibility, hire more women and minorities, reallocate positions, and hire new faculty.

Fiscal Objectives: None stated

Benefits Objectives: Full benefits are maintained if the faculty member is employed for at least half time until full retirement occurs.

Time frame of plan: July 1992 - June 1995

#### Research Question Two

Research Question two addressed noted changes in faculty retirement behavior and the relationship of faculty retirement behavior to the intent of Early Retirement Incentive Plans.

Analyses of institutional data, information obtained from interviews with institutional officials, and annual reports to the Governor provided the requested information:

#### James Madison University

The James Madison University Early Retirement Incentive Plan has been labeled as successful. Faculty participation to date is shown in Table 2.

James Madison University officials advise that the one-time window authorized by the Virginia General Assembly in 1991 may have lessened the need for an institutional early retirement incentive plan, and the impact of the window is still being assessed. The James Madison University plan, by design, is a management tool and can be utilized as needed by institutional management.

Table 2

Faculty Participation in the Early Retirement Incentive Plan  
James Madison University

Faculty Member	Retirement Date	Final Salary	Early Retirement Benefit	Percentage of Final Salary
#1	06/30/89	\$52,400	\$29,400	56%
#2	08/01/89	61,125	75,000	123%
#3	06/30/90	62,400	36,750	59%
#4	01/01/90	42,200	63,300	150%
#5	06/30/90	31,700	47,550	150%
#6	07/01/91	54,200	80,200	148%
#7	01/31/92	49,930	74,896	150%
#8	09/01/92	69,776	85,616	123%

## University of Virginia

University of Virginia personnel report that their initial Early Retirement Incentive Program has been successful. Their results are shown in Table 3.

University of Virginia personnel report that some faculty are working beyond age 70 as permitted by state law. While the overall Early Retirement Incentive Program has been successful, short-term savings realized have been used to meet budget short falls and have not been available to address staffing or other faculty needs within the institution. The University of Virginia plan was constrained by the legislated annual fiscal limitation of 1% of funding appropriated for faculty salaries and benefits.

## Virginia Polytechnic Institute and State University

Virginia Polytechnic Institute and State University officials determined that an aging problem was not prevalent among tenured faculty; therefore, the early retirement incentive program was designed primarily to provide an enhancement of health-care benefits. The University Provost at the time the initial early retirement incentive program was developed and the primary author of the institutional program reported that the university Early Retirement

**Table 3**  
**Faculty Participation in the Early Retirement Incentive Plan**  
**University of Virginia**

<b>Year</b>	<b>Number Eligible Faculty</b>	<b>Number Applications</b>	<b>Number Selected</b>	<b>Number Accepted</b>
<b>1989-90</b>	<b>209</b>	<b>64</b>	<b>28</b>	<b>27</b>
<b>1990-91</b>	<b>178</b>	<b>43</b>	<b>14</b>	<b>12</b>



Incentive program was designed to assure that specific groups were not targeted.

Recent studies have confirmed that the availability of health-care benefits weighs heavily in the individual decision to effect retirement (Daniels & Daniels, 1992). However, with the addition of a special one-time early retirement program offered to all state employees age 50 with at least 25 years of service, more Virginia Polytechnic Institute and State University faculty accepted early retirement than was projected resulting in the health-care enhancement being more costly than anticipated. Tables 4 and 5 show the number of these participants in the Early Retirement Incentive Program and the costs of the health-care enhancement for the period initially approved by the University Board of Visitors (July 1989 - June 30, 1992).

Virginia Polytechnic Institute and State University's Early Retirement Incentive Program placed an emphasis on partial retirement. The partial retirement concept has been utilized on a limited basis but is not unique to the participants in the formal Early Retirement Incentive Plan. It is estimated that 12 faculty have participated in the partial retirement arrangements. Such arrangements have been beneficial to individual faculty by offering a reduced work load and beneficial to the institution by providing continuity to certain programs at reduced costs. The partial

**Table 4**  
**Faculty Participation in the Early Retirement Incentive Plan**  
**Virginia Polytechnic Institute and State University**

	July 1989 - June 1992				
	1989	1990	1991	1992	Total
Participants	4	8	18	20	50

Table 5

Aggregate Annual Costs of Health Care Enhancement  
Virginia Polytechnic Institute and State University\*

Year	Costs
1989	\$ 1,924
1990	6,209
1991	30,088
1992	69,450
1993	73,709
1994	54,058
1995	32,696
1996	16,470
1997	4,083
1998	1,704

\*Prior and current costs are based on actual expenditures through June 30, 1992.

Projections are based on July 1, 1992 rates without adjustments for inflation or premium increases.

retirement concept incurred some difficulty when the state-authorized one-time early retirement window program initially discouraged institutions from retaining participating retirees in the workforce.

### Conclusion

In general, the Early Retirement Incentive Programs have been successful. State colleges and universities have had the opportunity to use these programs as management tools to meet faculty staffing needs. Other public colleges and universities in the Commonwealth of Virginia have submitted or are in the process of developing similar programs designed to meet their faculty staffing needs. The one-time early retirement window approved by the 1991 General Assembly confounded the intent of House Bill 122 that authorized institutional early retirement plans. However, the intent of early retirement incentive legislation from its inception was to address projected revenue short falls, to provide for faculty diversity, and to encourage early retirement. To this end, the several pieces of legislation have acted in concert to accomplish this intent.

### Research Questions Three and Four

Research Questions three and four addressed the recommendations found in the National Research Council study

and other related literature that each institution should complete a demographic analysis and an analysis of retirement trends. Virginia Polytechnic Institute and State University was chosen from among the three institutions under study for indepth analyses of current faculty demographics and recent retirement patterns. Such analyses were timely in that the original early retirement incentive plan approved by the University Board of Visitors on August 13, 1990 expired June 30, 1992. It was recommended to the University Board of Visitors that the university early retirement incentive program be extended one year through June 1993. This extension was approved by Board action on April 3, 1992 with the statement that "during 1992-93, the program will be evaluated to determine, in consultation with the Commission on Faculty Affairs, if the program should be continued and if changes are advisable" (Minutes, Board of Visitors, Virginia Polytechnic Institute and State University, April 3, 1992).

### Research Question Three

The first portion of Research Question three provides insight into the current age distribution (December 1991) of tenured faculty for Virginia Polytechnic Institute and State University. Table 6 shows an age profile by age and college; Table 7 depicts the same information using percentages

Table 6

Number of Tenured Faculty by Age and Academic Area (December 1991)

College	AGE RANGES					TOTAL	AVE.	SD.
	30-39	40-49	50-59	60-69	70-79			
Agriculture	33	113	88	32	0	266	49.14	8.02
Architecture	4	17	17	8	0	46	50.76	8.19
Arts & Sciences	44	163	147	36	3	393	49.43	7.81
Business	13	30	22	2	0	67	46.36	7.05
Education	7	28	43	16	0	94	51.86	7.55
Engineering	28	64	71	30	1	194	49.99	8.78
Human Resources	5	20	12	5	0	42	48.62	7.56
Library	3	12	5	2	0	22	46.95	7.06
Veterinary School	12	19	14	5	1	51	47.63	9.15
Other*	0	6	21	3	0	30	53.57	5.89
TOTAL	149	472	440	139	5	1205	49.49	8.02

\*Tenured faculty serving in administrative positions.

Table 7

Distribution of Tenured Faculty by Age and Academic Area  
(December 1991)  
(Percentages)

College	AGE RANGES				TOTAL	AVE.	SD.	
	30-39	40-49	50-59	60-69				70-79
Agriculture	12.4	42.5	33.1	12.0	0	266	49.14	8.02
Architecture	8.6	36.9	36.9	17.4	0	46	50.76	8.19
Arts & Sciences	11.2	41.4	37.4	9.2	0.8	393	49.43	7.81
Business	19.4	44.8	32.8	3.0	0	67	46.36	7.05
Education	7.5	29.8	45.7	17.0	0	94	51.86	7.55
Engineering	14.4	33.0	36.6	15.5	0.5	194	49.99	8.78
Human Resources	11.9	47.6	28.6	11.9	0	42	48.62	7.56
Library	13.6	54.6	22.7	9.1	0	22	46.95	7.06
Veterinary	23.5	37.3	27.4	9.8	2.0	51	47.63	9.15
Other*	0	20.0	70.0	10.0	0	30	53.57	5.89
TOTAL	12.4	39.2	36.5	11.5	0.4	1205	49.49	8.02

\*Tenured faculty serving in administrative positions.

instead of absolute numbers. Tables 8 and 9 provide a further refinement by displaying the age distribution of faculty by age by discipline by gender. Descriptive statistics are provided to show differences across disciplines and between genders.

An Analysis of Variance across the colleges revealed that the differences in the average age of tenured faculty among the colleges was significant. The ANOVA computation provided an F Ratio of 3.4622 with a probability of .0002. The ANOVA and related Tukey-B test identified significant differences between the younger College of Business faculty and the older Education, Engineering, and those tenured faculty in non-college positions classified as "Other". The newest college, the College of Veterinary Medicine, carries a faculty that, on average, is younger than those faculty in the "Other" category. (See Table 10.)

The ages of Virginia Polytechnic Institute and State University tenured faculty, in aggregate, are close to being normally distributed. With a skewness of .201 and a kurtosis of -.601, the distribution is positively skewed with the negative kurtosis indicating that fewer cases fall into the tails of the distribution. The histogram (Figure 1) indicates that the distribution is close to normal. Age compression is evident, based on the leptokurtic profile of the distribution of faculty by age.



Table 8

Number of Female Tenured Faculty by Age and Academic Area  
(December 1991)

College	AGE RANGES					TOTAL	AVE.	SD.
	30-39	40-49	50-59	60-69	70-79			
Agriculture	2	7	6	2	0	17	49.83	8.29
Architecture	0	1	2	1	0	4	53.75	8.73
Arts & Sciences	12	24	3	0	0	39	43.08	5.43
Business	3	4	0	0	0	7	39.57	3.21
Education	3	11	5	0	0	19	46.84	7.00
Engineering	1	1	0	0	0	2	40.00	2.83
Human Resources	5	11	7	4	0	27	48.11	8.27
Library	1	6	3	1	0	11	47.82	7.28
Veterinary School	3	2	0	0	0	5	39.80	3.83
Other	0	2	0	0	0	2	44.50	6.36
Total	30	69	26	8	0	133	45.84	7.32

Table 9

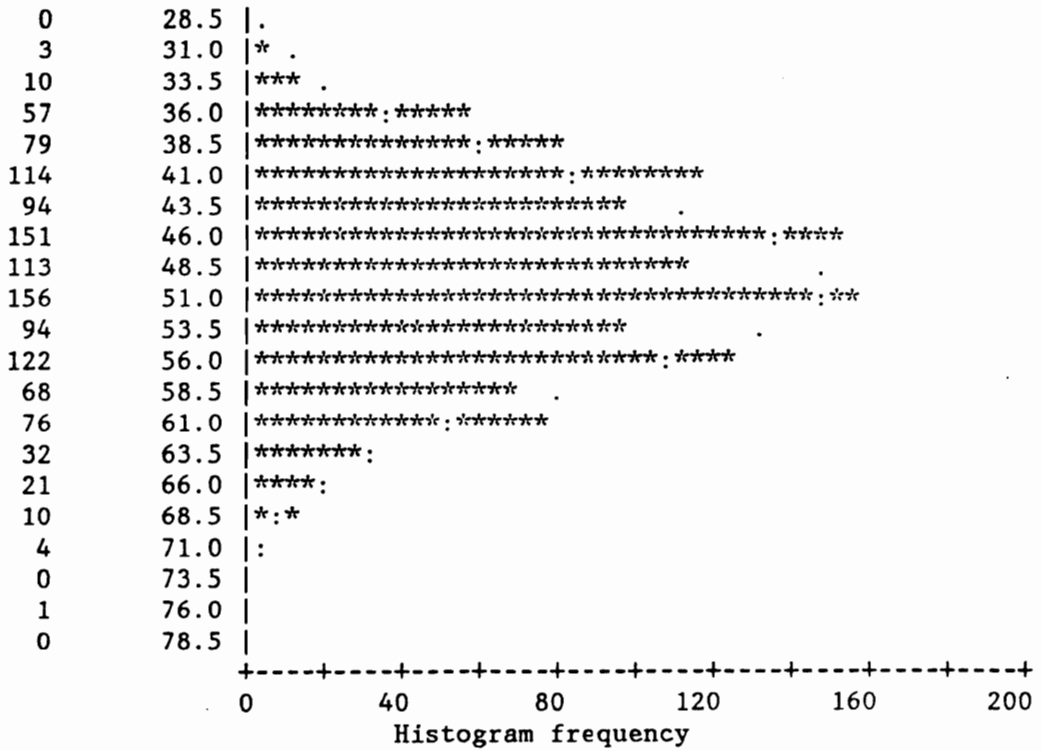
Number of Male Tenured Faculty by Age and Academic Area  
(December 1991)

College	AGE RANGES				TOTAL	AVE.	SD.
	30-39	40-49	50-59	60-69			
Agriculture	31	106	82	30	249	49.16	7.99
Architecture	4	16	15	7	42	50.48	8.19
Arts & Sciences	32	139	144	36	354	50.13	7.72
Business	10	26	22	2	60	42.15	6.96
Education	4	17	38	16	75	53.13	7.19
Engineering	27	63	71	30	192	50.09	8.77
Human Resources	0	9	5	1	15	49.53	6.25
Library	2	6	2	1	11	46.09	7.07
Veterinary School	9	17	14	5	46	48.48	9.17
Other	0	4	21	3	28	54.21	5.40
Total	119	403	414	131	1072	49.94	7.99

Table 10

Analysis of Variance by College (December 1991)

Source	D.F.	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between Groups	10	2182.3886	218.2389	3.4622	.0002
Within Groups	1194	75262.7699	63.0342		
Total	1204	77445.1585			



Valid cases      1205                    Missing cases      0

Figure 1. Age Distribution - 1991 Tenured Faculty

AGE OF FACULTY MEMBER

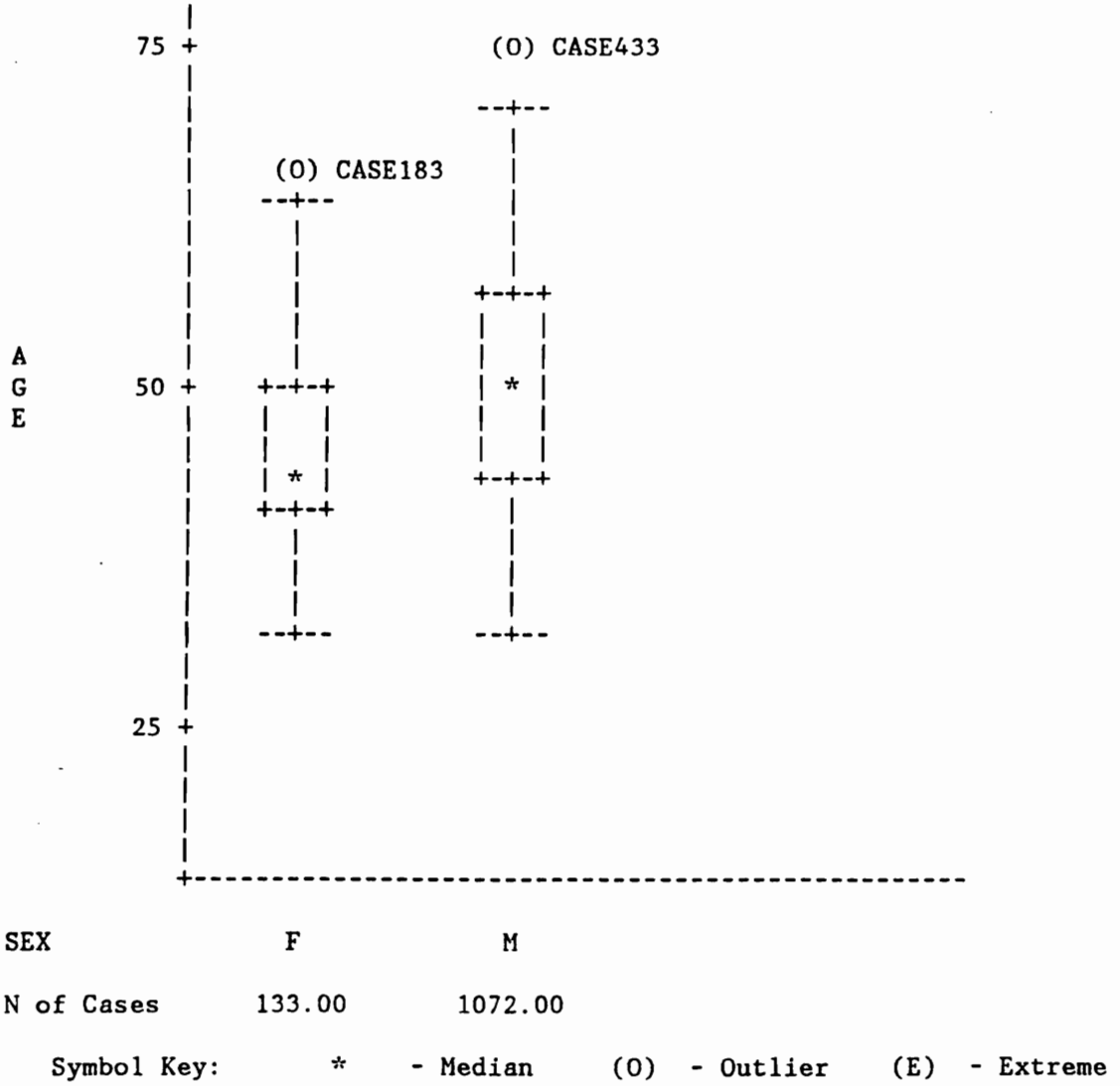


Figure 2. Box plots Comparing Age distribution of Male/Female Faculty

The box plots (Figure 2) for female and male faculty depict the range of ages by gender with the median for each group being indicated by the asterisk. The boxes outlined identify 50% of the distribution. As indicated, female faculty are younger than their male colleagues. The outliers indicated are research faculty which lends credence to several findings that research faculty continue to work beyond the normal retirement age.

### Conclusion

In aggregate, the analyses of the ages of active faculty indicate a close to normal distribution by age. Female faculty are approximately 4 years younger, on average, and differences in the percentages of female and male faculty across disciplines are evident. In reviewing the current age profile by disciplines, several distinct patterns can be observed. In absolute numbers, the College of Arts and Sciences with 39 tenured faculty age 60 or older may be a candidate for a targeted early retirement incentive plan. However, the purpose of federal and state legislation has been to eliminate any age-related biases; therefore, the decision to target certain disciplines or areas for retirement incentives is to be based on an assessment of management goals and/or program implications. Several other trends are evident. College of Business faculty are

significantly younger than faculty in several of the other colleges. The concentration of 45.7% of faculty in the College of Education in the age group 50 - 59 could have program implications if this group follows the normal retirement patterns as they have in the past.

#### Research Question Three (b)

Research Question three (b) addresses demographic changes that occurred in the faculty population over the period 1983 - 1991? Tables 11 and 12 reflect the aging of tenured faculty over this nine-year period. Tables 13 and 14 provide a further refinement of aging trends by gender over a five-year period 1987-1991 with 1992 projected from 1991 figures.

#### Conclusion

Tables 11, 12, 13, and 14 reveal several trends. The overall age of tenured faculty and the average ages of female and male tenured faculty are increasing each year; however, the standard deviations are decreasing. In essence, an older faculty with age compression is evident. A trend towards downsizing is evident as the number of faculty decreased each year from 1987 through 1991.

Table 11

Tenured Faculty Age Distributions  
1983-1986

Year	Total	AGE RANGES								Ave	
		<26	26-35	36-45	46-55	56-60	61-65	66-70	70>		Unknown
1983	1462	10	381	552	363	107	68	8	0	0	42.7
1984	1454	4	341	550	382	107	71	14	0	1	43.4
1985	1470	3	332	549	398	113	75	19	0	1	43.8
1986	1464	3	308	554	406	125	75	21	0	1	44.4

Source: Virginia Tech Institutional Research and Planning Analysis,  
IRPA Vol. 88-89, No. 12. August 23, 1988.



Table 12

Tenured Faculty Age Distributions  
1987 - 1992

Year	Total	AGE RANGES					Ave.	SD	
		<29	30s	40s	50s	60s			70s
1987	1370	9	327	510	383	140	1	46.70	9.07
1988	1356	8	281	535	399	130	3	47.26	8.82
1989	1320	2	251	518	415	131	3	47.58	8.58
1990	1284	0	213	502	423	142	5	48.57	8.44
1991	1205	0	149	472	440	139	5	49.49	8.02
1992*	1160	0	105	460	452	137	6	50.00	7.73

Source: Virginia Tech Personnel/Payroll Data Base

\*Assumes no replacements for those faculty committed to retire by July 1, 1992. The 1991 faculty were aged one year to determine 1992 figures.

Table 13

Tenured Faculty Age Distributions - Male

Year	Total	AGE RANGES						Ave.	SD
		<29	30s	40s	50s	60s	70s		
1987	1221	6	271	459	358	126	1	47.13	8.98
1988	1207	6	234	474	373	117	3	47.62	8.75
1989	1177	2	207	454	391	120	3	48.24	8.55
1990	1145	0	175	438	396	132	4	49.00	8.40
1991	1072	0	119	403	414	131	5	49.94	7.99
1992*	1027	0	84	388	422	127	6	50.41	7.69

\*Assumes no replacements for those faculty committed to retire by July 1, 1992. The 1991 faculty were aged one year to determine 1992 figures.

Table 14

Tenured Faculty Age Distributions - Female

Year	Total	AGE RANGES										70s	Ave.	SD
		<29	30s	40s	50s	60s								
1987	149	3	56	51	25	14	0	43.79	9.31					
1988	149	2	47	61	26	13	0	44.40	8.88					
1989	143	0	44	64	24	11	0	44.45	8.08					
1990	139	0	38	64	27	10	0	45.02	7.98					
1991	133	0	30	69	26	8	0	45.84	7.32					
1992*	133	0	21	72	30	10	0	46.84	7.32					

\*Assumes no replacements for those faculty committed to retire by July 1, 1992. The 1991 faculty were aged one year to determine 1992 figures.

#### Research Question Four

Research Question four used the personal variables of age at retirement, final average salary, marital status, gender, survivor option, classification, replacement income, length of service, and year of retirement and the institutional variables of college of employment and type of employment (instruction, research, or public service), to discuss how retirement patterns relate to the legal mandates and policy changes that occurred at Virginia Polytechnic Institute and State University for the period January 1980 through December 1991?

From 1980-1991, 417 Virginia Polytechnic Institute and State University tenured faculty retired under the regular retirement program administered by the Virginia Retirement System. Another 45 faculty received disability retirement or died while in an active employment status and are excluded from this study. During this 12 year period (1980-1991), the federal ADEA was amended to raise the retirement age for tenured faculty from age 65 to age 70 (July 1982); the Commonwealth of Virginia abolished mandatory retirement for tenured faculty (January 1987); added early retirement incentive programs (1988); and offered a one-time early retirement window (1991). Table 15 shows the average retirement age and the standard deviation for each of the 12 years included in the study.

Table 15

Average Age of Retirement  
College by Year, 1980-1991

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	AV	SD
Agri	61.5	62.3	60.6	61.5	63.0	60.6	61.4	60.5	61.5	62.2	61.0	55.9	60.0	5.0
Arch	67.3	-	65.7	70.0	58.0	-	-	-	66.5	65.0	62.6	-	66.0	3.5
Bus.	66.0	64.3	63.0	-	62.5	57.0	66.0	-	62.0	56.0	63.5	-	62.8	3.3
Educ	63.0	-	65.3	60.0	57.7	65.0	-	59.5	65.0	63.5	-	61.0	61.8	3.6
Engi	66.0	61.0	63.3	65.0	63.0	63.0	-	65.7	62.8	66.7	65.5	62.2	63.4	3.8
HRS	66.0	66.0	-	63.0	-	67.0	-	65.0	64.5	64.5	62.0	56.0	63.7	2.9
A&S	-	65.0	65.3	66.0	63.0	68.0	63.3	64.7	64.7	65.8	59.7	64.5	64.3	3.5
VetS	-	-	65.0	61.0	-	-	-	-	65.0	55.0	-	55.0	60.2	5.0
Lib.	-	65.0	-	65.0	62.0	55.0	62.0	-	-	63.0	-	66.0	62.6	3.7
Oth.	62.0	64.0	65.0	67.5	64.5	60.7	63.0	60.0	60.8	64.2	-	58.5	62.4	3.9
Total	21	19	23	20	24	30	30	42	48	42	40	78	417	
Ave.	63.1	63.3	63.4	63.5	62.2	61.3	62.1	62.0	62.7	63.2	61.1	57.4	61.5	4.8
Med.	63.0	65.0	65.0	65.0	62.5	62.0	62.5	61.0	64.0	65.0	62.0	56.0	62.0	
S.D.	3.52	3.43	3.26	3.98	3.28	4.26	3.74	4.61	4.22	4.42	4.44	5.36	4.78	

Age of retirement is the dependent variable under study. A one-way ANOVA was used to determine if the age of retirement differed significantly across the years under study. While a significance was observed, further tests revealed that only the year 1991 differed significantly from the others. The results of the ANOVA with those faculty with federal appointments included are shown in Table 16 below.

This study, by design, considered institutional variables and personal variables as they affect age of retirement. One of the variables under consideration was the one designated as "Agency". The university chosen for detailed study of retirement patterns was technically three agencies: an instructional agency, a research agency, and an extension or public service agency. Funding sources were different among the agencies and the extension faculty (public service) had access to separate benefit packages including access to federal retirement programs. It was determined that their retirement programs differed from those faculty with instructional or research assignments. By removing those faculty participating in the Civil Service Retirement System (CSRS) or the Federal Employees Retirement System (FERS) programs from this study, a clearer picture of the retirement patterns of faculty charged primarily with teaching and research could be observed. National studies concentrated on these two categories of faculty as

Table 16

Analysis of Variance - Year of Retirement

Source	D.F.	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between Groups	11	1830.5603	166.4146	8.7991	.0000
Within Groups	405	7659.6747	18.9128		
Total	416	9490.2350			

assessments have been made (Hammond & Morgan, 1991). By removing the 158 extension faculty, the average age of retirement for the remaining instructional and research faculty increased from 61.49 to 63.46 years. Remaining analyses will exclude faculty with federal appointments.

A one-way analysis of variance of retirement patterns for teaching and research faculty for 1980-1991 revealed significant differences in average retirement ages by years. The ANOVA and the related Tukey-B test revealed that the years 1982, 1987, and 1989 differed significantly from year 1991. Table 17 indicates the average retirement ages by year for each college and the average retirement ages by year and by college. Standard deviations are provided by college and by year. The ANOVA is provided in Table 18.

#### Research/Instructional Faculty

Consistent with the findings of other researchers (Hammond & Morgan, 1991), those faculty identified as research faculty have a slightly higher retirement age than those faculty identified as instructional faculty. Instructional faculty had an average retirement age of 63.39 and a standard deviation of 4.99. Research faculty had an average retirement age of 64.67 and a standard deviation of 3.79.



Table 17

Average Age of Retirement  
College by Year  
Teaching and Research Faculty, 1980-1991

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	AV	SD
Agri	63.2	65.0	63.3	66.0	65.0	64.3	65.4	65.0	64.3	66.4	64.0	59.4	63.3	4.6
Arch	68.5	-	65.7	70.0	-	-	-	-	66.5	65.0	-	-	66.8	2.7
Bus.	66.0	64.3	63.0	-	64.0	57.0	66.0	-	62.0	56.0	63.5	-	62.9	3.4
Educ	63.0	-	65.3	60.0	57.5	65.0	-	59.5	65.0	63.5	-	61.0	62.0	3.4
Engl	66.0	61.0	63.3	65.0	63.0	63.0	-	65.7	62.8	63.7	65.5	62.2	63.4	3.8
HRS	66.0	66.0	-	63.3	-	67.0	-	65.0	64.0	65.6	62.0	-	64.5	2.1
A&S	-	65.0	65.3	66.0	63.0	68.0	63.3	64.7	64.7	65.8	59.7	64.5	64.3	3.5
Vets	-	-	65.0	61.0	-	-	-	-	-	55.0	-	-	60.3	5.0
Lib.	-	65.0	-	65.0	62.0	55.0	62.0	-	-	63.0	-	66.0	62.6	3.7
Oth.	62.0	64.0	65.0	67.5	63.0	60.7	65.0	60.0	62.0	64.0	55.0	58.5	62.5	3.9
Total	13	16	19	15	15	16	15	23	35	34	20	38	259	
Ave.	64.5	63.9	64.5	64.7	63.3	62.6	64.2	64.4	63.5	64.5	62.7	60.9	63.5	4.0
S.D.	2.96	2.84	2.29	3.06	3.11	4.73	2.83	3.96	4.13	3.52	4.70	5.02	3.99	

**Table 18**  
**Analysis of Variance Year of Retirement - Research and**  
**Instructional Faculty**

Source	D.F.	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between Groups	11	401.4259	36.4933	2.4199	.0071
Within Groups	247	3724.8984	15.0806		
Total	258	4126.3243			

## Retirement Patterns by College

Other studies (Hammond & Morgan, 1991; Western Interstate Commission for Higher Education, 1991) have found that retirement patterns varied across disciplines. Table 19 shows the mean age of retirement by college with standard deviations.

The analysis of variance of age of retirement by college revealed some differences in retirement patterns across colleges. However, the Tukey-B procedure found no two pairs of retirement ages significantly different across colleges at the .05 level. (See Table 20.)

### Arts and Sciences

Recent research has focused on the retirement behavior of Arts and Sciences faculty because of the large number of such faculty hired during the growth era of the 1950s and 1960s (Western Interstate Commission for Higher Education, 1991). A review of the numbers and ages of Arts and Sciences faculty at Virginia Polytechnic Institute and State University indicates that college may be a candidate for an early retirement incentive plan. A review of the university faculty demographics as of December 1991 showed 36 tenured faculty age 65 or older with 5 of the 36 age 70 or older. Eighteen of these faculty were eligible for the one-time early retirement window in 1991-1992 with 11 of the 18

Table 19

Average Retirement Ages by College

College	Number of Retirees	Mean	SD
Agriculture	84	63.2857	4.6324
Architecture	11	66.8182	2.7136
Arts & Sciences	39	64.3333	3.5194
Business	14	62.9286	3.3847
Education	16	62.0000	3.6332
Engineering	44	63.4091	3.7807
Human Resources	16	64.5000	2.0656
Library	7	62.5714	3.6904
Other	25	62.4800	3.9383
Veterinary School	3	60.3333	5.0332

Table 20

Analysis of Variance by College - 1980-1991

Source	D.F.	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between Groups	8	262.1093	32.7637	2.1101	.0348
Within Groups	243	3758.8550	15.4605		
Total	251	4020.9643			

effecting retirement. Of the remaining 18 not eligible for the one-time bonus, none had retired prior to July 1, 1992. Three of the five faculty age 70 or older elected not to retire and all three of these faculty are members of the College of Arts and Sciences. Ten of the 31 faculty between the ages 65 to 69 are members of the College of Arts and Sciences and only two of the 10 opted to retire. In absolute numbers and in possible salary savings, Arts and Sciences faculty for Virginia Polytechnic Institute and State University may be candidates for retirement incentives.

#### Personal Variables

Personal variables have been identified as instrumental in determining age of retirement. While considering benchmark legislation that changed the ground rules regarding retirement age, personal variables were identified for their effects on age of retirement. This study considered final average salary, marital status, gender, replacement income, retirement survivor options, classification (faculty or staff), and length of service as additional independent variables.

The aging of faculty for Virginia Polytechnic Institute and State University was documented earlier in this study. This finding is consistent with the national longitudinal Survey of Doctorate Recipients by the National Research

Council that showed an overall increase in faculty ages (Hammond & Morgan, 1991). However, as Table 21 indicates, chronological age alone is becoming less of a predictor of age of retirement.

Table 21 reveals several trends. The number of retirees has increased over the last four years with approximately one half of the total retirees over the last twelve years retiring during the period 1988 through 1991. The changes in standard deviations over the 12 years are divided into three distinct periods. For 1980 through 1983, the standard deviation remained around 3; from 1984 through the 1987, the standard deviation showed greater variance but averaged about 3.5 years; for the last four years, the standard deviation, on average, increased to more than 4 years. The widening standard deviation is indicative of changes in retirement patterns and is an indicator that chronological age alone is becoming less of a predictor of the decision to retire.

#### Final Salary

Some higher education researchers conclude that, on average, higher-paid faculty work longer than their lower-paid colleagues (Holden & Hansen, 1989). A correlational analysis for Virginia Polytechnic Institute and State University revealed two patterns. For those faculty who retired, the overall Pearson Product Moment Correlation

Table 21

Average Retirement Ages by Year (1980-1991)  
Virginia Polytechnic Institute and State University

Year	n	Age of Retirement	SD
1980	13	64.5385	2.9613
1981	16	63.9375	2.8395
1982	19	64.4737	2.2942
1983	15	64.6667	3.0628
1984	15	63.3333	3.1091
1985	16	62.6250	4.7311
1986	15	64.2000	2.8335
1987	23	64.3913	3.9628
1988	35	63.5429	4.1327
1989	34	64.4706	3.5268
1990	20	62.7000	4.7027
1991	38	60.8684	5.0198



Coefficient of age of retirement to average salary was  $-.1227$  for the twelve-year period of the study, significant at the  $.05$  level. The negative correlation indicates that of those faculty who retired, younger faculty had the higher salaries. There is also a significant relationship between age and salary of those faculty who remained in the workforce ( $r = .3470$ , significant at the  $.01$  level, for the 1991 tenured faculty). Using the normal retirement age of 65 as a starting point, Figure 3 shows the annual salary of faculty age 65 and over who continued to work versus the final annual salary of those faculty who retired at age 65 and over for the period 1987 through 1991.

This study agrees with the findings of other researchers who determined that, in the higher education sector, higher-paid faculty work to an older age.

#### Marital Status

Of the 259 retiree population, 15.1% (39) were single at the time of retirement. The single retiree had an average retirement age of 62.74 and the married retirees had an average retirement age of 63.59.

#### Gender

For the institution under study, only a small number of female tenured faculty have retired over the period

# Faculty Salaries - 1987 - 1991

## Active vs Retiree

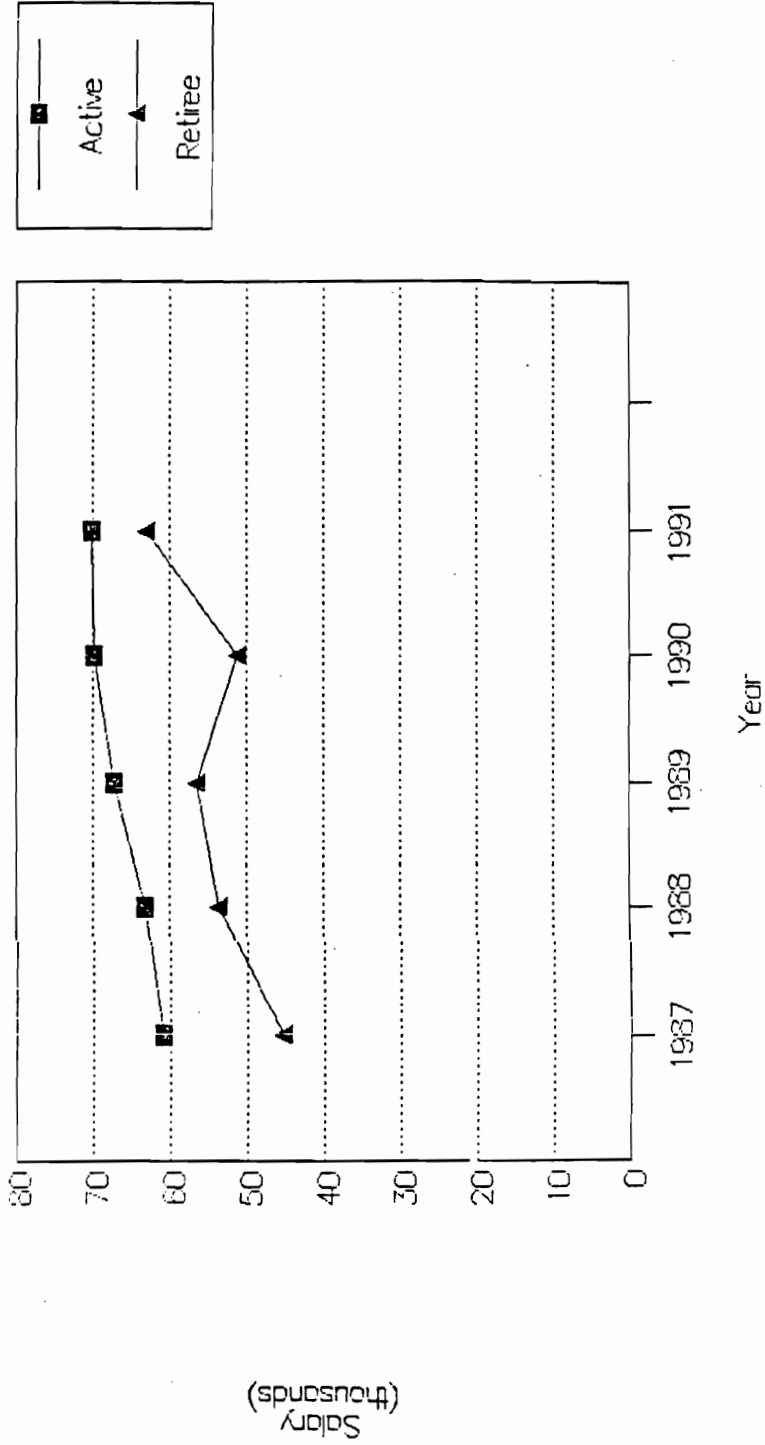


Figure 3. Salary Comparisons, Active vs. Retiree

1980-1991. As Table 22 indicates, the average retirement ages and standard deviations are similar.

A further refinement (Table 23) reveals that single males retire earlier than their married male colleagues and earlier than either married or single females.

#### Retirement Options

Public sector retirement plans differ from private sector plans in that private sector plans covered under the Employee Retirement Income Security Act (ERISA) (1974) require that a spouse must be designated as a beneficiary for at least 50% of the retirement income unless the spouse waives that right (Foulkes, 1982). Those retirement plans not covered under ERISA such as public colleges and universities do not require that a survivor be designated to receive retirement benefits and do not place any limits on who may be designated for survivor entitlements. Table 24 indicates the types of retirement options selected and the age of retirement based on type of retirement option.

Further analyses revealed that sixty-seven percent of the married retirees age 60 and under chose the Basic or the Social Security Options which do not provide survivor benefits. For those married faculty over age 60, only 29% elected the Basic or Social Security Options. In summary, those faculty who retire at older ages provide more

**Table 22**

**Retirement Age Patterns by Gender**

<b>Type</b>	<b>Number Retirees</b>	<b>Mean</b>	<b>Standard Deviation</b>
<b>Female</b>	28	63.2143	3.3814
<b>Male</b>	231	63.5021	4.0579
<b>Total</b>	259	63.4713	3.9860

Table 23

Retirement Age Patterns by Gender and Marital Status

Marital Status	Gender	Number of Cases	Mean	Standard Deviation
Married	Male	213	63.6009	4.0429
Married	Female	7	63.1429	3.7161
Single	Male	18	62.1667	4.3148
Single	Female	21	63.2381	3.3601

Table 24

Average Retirement Age by Retirement Option

Type Option	Number Faculty	Percent	Mean Retirement Age
Basic (no survivor option)	109	42.1%	61.9906
Full Survivor (Opt. 2)	73	28.2%	65.2055
Half Survivor (Opt. 3)	70	26.6%	64.2143
Social Security Option	7	2.7%	60.5714
Total	259	100.0%	63.4595

pension-plan income for their survivors than those who retire at earlier ages.

### Length of Service

Length of service is a vital component in determining retirement income. For example, in the Virginia Retirement System, the length of service variable is an integral part of the retirement plan and a main ingredient in the formula for calculating retirement benefits - with each year of service enhancing retirement benefits by 1.5% to 1.65%. The Virginia Retirement System has a five-year vesting period. Individuals age 55 or older with 30 years of service can receive full retirement benefits i.e. benefits with no actuarial reduction for retiring early. Individuals age 65 or older with at least five years of credited state service can receive full benefits. Individuals with at least five years of credited service and between the ages of 55 and 65 can receive reduced retirement benefits.

Educational researchers have concluded that entitlement to full (unreduced) benefits is an important component in the decision to retire (Western Interstate Commission on Higher Education, 1991). The average number of years of work for individual faculty who remained in the work force and for those faculty who retired declined in a linear fashion until 1990. Figure 4 is a plot of the ages and length of service

	RETIREMENT AGE BY YEARS WORKED																	
	5	10	15	20	25	30	35	40	45									
71.875+				1	1	1												
68.75+																		
A		1																
G		2				1												
E																		
A		1	2	2	1	1	1	1	3	2	6	2	2	1	2	2	1	1
T																		
R			1	1	1	1	1	1										
E			2	1	1	1	1	1	2	1	2	1	1	1	1	1	2	1
T																		
I			1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1
R																		
E																		
M		1	1	1	2	2	1	1	1	1	3	1	1	2				
E																		
N			1	1														
T																		
56.25+		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
+																		
5																		

YEARS WORKED

Figure 4. Comparison - Length of Service to Age of Retirement



of the 259 retirees in this study. Over 75% of the retirees received full (unreduced) benefits. Over 35% of the retirees worked 20 or more years before retiring.

#### Type of Retirement Plan

This research focused on retirement patterns exhibited by participants in the defined-benefit Virginia Retirement System. However, beginning in 1986, all faculty employed by the public higher education institutions in the Commonwealth of Virginia were offered the choice of the state defined-benefit retirement plan or a new defined-contribution retirement plan. For Virginia Polytechnic Institute and State University, practically all faculty hired after 1986 have elected to participate in the Optional Retirement Plan program. By 1991, 980 faculty out of 2463 total faculty opted for the defined-contribution plan that became available in 1986. This change can portend some changes in length of service and/or retirement ages of faculty. Researchers have found that participants in defined-contribution plans are retiring later than participants in defined-benefit plans. In a 1991 study, researchers remarked that defined-benefit participants are retiring, on average, about one and one-half years sooner than participants in defined-contribution plans. Researchers caution, however, that blanket statements about the direct effects of type of retirement plan on retirement

age do not appear to be warranted (Western Interstate Commission on Higher Education, 1991).

Insight into the possible rationale for the differences in retirement ages based on type of retirement plan is depicted in Table 25. If changes are anticipated in retirement patterns, the role of early retirement incentives may need to be reoriented.

Using the calculations presented in Table 25 below, the defined-contribution plan offered the greatest retirement income at the time of retirement. However, defined-contribution plans typically provide level retirement income while defined-benefit plans typically provide for cost-of-living raises after retirement. Figure 5 depicts the changes in retirement income after retirement using a typical 3% annual increase in cost of living income for the defined-benefit plan. Calculations are based on a retirement age of 65 presented in Table 25.

#### Proportion of Final Salary Replaced by Pension Income

Pension plan income is an important component of total retirement income and weighs heavily in the decision to retire. Total replacement income is derived from the combination of pension income, Social Security income, and income from personal investments. The pension income can be readily ascertained by using the software designed to project

Table 25

Annual Retirement Income Based on Age and Type of Plan

	Retire @ age 55	Retire @ age 60	Retire @ age 65
Defined Benefit Plan*	\$16,752	\$33,396	\$45,965
Defined Benefit Plan* (with job change @ fifteen years)	\$ 9,156	\$18,317	\$35,711
Defined Contribution plan**	\$19,488	\$31,104	\$49,284

\* Retirement income based on highest consecutive three years of salary.

\*\*Retirement income based on contributions plus earnings.

# Retirement Projections

## Defined Benefit - Defined Contribution

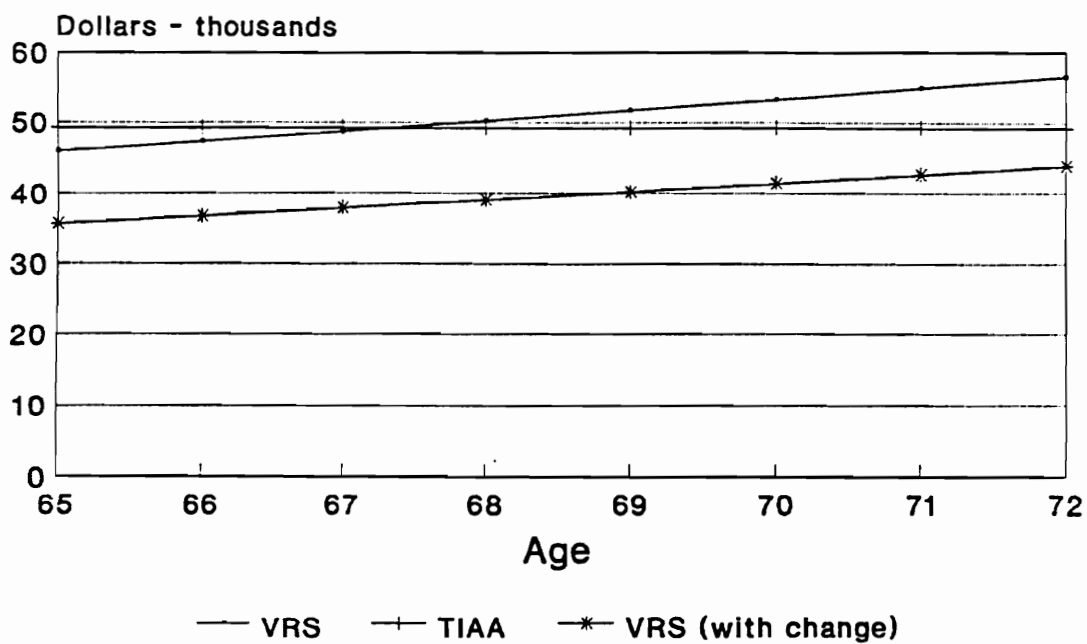


Figure 5. Comparison of Income Based on Type of Pension Plan

pension benefits. Social Security and personal investment income are beyond the scope of this study but should be included in individual retirement planning. Using the assumption of a starting salary of \$30,000, 3% pay raises, 6% return on investments, and the current TIAA mortality rates, Table 26 shows replacement income in percentages of final salary and in current dollars for a defined-benefit plan (VRS) and a defined-contribution plan (TIAA).

#### Conclusion

An overall analysis of replacement income indicates that the formulas and plans are designed to meet the recommended guidelines for providing an adequate income for retirees. Using the data depicted in Table 26, the Virginia Retirement System provides a pension replacement at retirement at age 65 with 35 years of service of 57.75% of final average salary.

#### Classification

Any college or university is comprised of many classifications of personnel beyond those of faculty. In the Commonwealth of Virginia, classified employees are under the jurisdiction of state laws pertaining to retirement but are excluded from the ADEA federal exceptions that applied to tenured faculty only. Classified employees in the

Table 26

Projected Annual Pension Income Defined-Benefit  
- Defined-Contribution Plans

Retirement Age	Final Salary	TIAA	% Replacement	VRS	% Replacement
Entry Age 30					
65	\$81,957	\$49,284	60.1%	\$45,965	56.1%
66	84,416	54,048	64.0%	48,697	57.7%
67	86,948	59,282	68.2%	51,551	59.3%
68	89,557	65,064	72.7%	54,532	60.9%
69	92,244	71,424	77.4%	57,647	62.5%
70	95,011	78,444	82.6%	60,899	64.1%
Entry age 45					
65	\$52,605	\$14,148	26.9%	\$16,464	31.3%
66	54,183	15,828	29.2%	17,820	32.9%
67	55,809	17,676	31.7%	19,236	34.5%
68	57,483	19,728	34.3%	20,736	36.1%
69	59,208	21,996	37.2%	22,296	37.7%
70	60,984	24,516	40.2%	23,940	39.3%

Assumptions: Starting salary - \$30,000, 3% annual pay raises, 6% annual return on investments, and current TIAA Mortality Tables.

Commonwealth of Virginia were also excluded from the Early Retirement Incentive Programs authorized by state statute in 1988. In order to ascertain if the retirement patterns of tenured faculty differed from those classified employees not affected by the ADEA exclusions and the Early Retirement Incentive Programs developed by institutions, a random sample was drawn from a population of all tenured faculty and those classified employees who retired from Virginia Polytechnic Institute and State University for the period 1980 through 1991. Comparisons were made of the retirement patterns of the two groups with the following results from an independent t-test (see Table 27).

Based on a random sample of classified employees and faculty retirees over the period 1980-1991, no significant difference in retirement ages was detected. A further refinement of this analysis was completed by year to determine if the early retirement incentives made available to faculty in 1988 and thereafter made a detectable difference in the retirement patterns of faculty when compared to classified employees (Table 28).

The random sample by year revealed no significant difference between faculty and classified retirements over the period 1986 through 1991.

Table 27

Comparison of Average Retirement Ages  
Classified Employees - Tenured Faculty, 1980-1991

	MEAN	SD	t
Faculty	61.45	4.72	
Classified	62.05	4.26	-1.35



Table 28

Comparison of Faculty and Classified Retirement Age  
Patterns, 1986-1991

Classification	Mean	SD	t
<u>1986</u>			
Faculty	62.0000	3.916	-.99
Classified	63.2759	2.359	
<u>1987</u>			
Faculty	61.7500	4.064	-.80
Classified	63.0000	4.055	
<u>1988</u>			
Faculty	62.3571	4.288	-.89
Classified	63.3462	3.919	
<u>1989</u>			
Faculty	62.3333	4.622	-.24
Classified	62.6071	3.292	
<u>1990</u>			
Faculty	61.1905	4.823 9	-1.11
Classified	62.7647	3.945	
<u>1991</u>			
Faculty	58.0238	5.676	-.91
Classified	59.0204	4.603	

## Retirement Projections

Several factors are occurring simultaneously that affect the faculty supply/demand equilibrium and may have implications for an early retirement incentive program. Among the issues of concern is the projected increase in the number of faculty retirements over the next ten to twelve years. Some researchers have projected that, across disciplines, the largest number of retirements over the next 15 years will occur from 1998 through the year 2002-2003. In Virginia, estimates are that one-half of current faculty will retire by about the year 2005 (State Council of Higher Education, The Virginia Plan for Higher Education, 1989). Using the December 1991 cohort and institutional retirement and quit rates for 1987 through 1991, retirement projections are offered for Virginia Polytechnic Institute and State University in Table 29.

Other researchers modeling faculty retirement patterns have used differing sets of assumptions because precise quit rates and retirement rates were not known. A 1991 Western Interstate Commission on Higher Education study uses three sets of assumptions:

- A high survival assumption based on the assumption that all faculty who separate over age 50 do so through retirement.

Table 29

Retirement Projections  
Virginia Polytechnic Institute and State University  
1992 - 2003

YEAR	RETIREMENT AGES													TOTAL							
	55	56	57	58	59	60	61	62	63	64	65	66	67		68	69	70	71	72	73	
1992	2	1	0	0	1	3	2	3	2	2	2	8	2	1	0	1	4	1	1	0	34
1993	1	1	0	0	1	3	2	3	2	2	5	6	0	0	1	1	2	0	0	0	33
1994	2	1	0	0	1	4	2	4	3	2	7	4	1	0	1	1	2	0	0	0	34
1995	2	1	0	0	1	3	3	4	3	3	7	5	1	0	0	0	2	0	0	0	35
1996	2	1	0	0	1	3	2	5	3	3	8	6	1	0	0	0	0	0	0	0	36
1997	2	1	0	0	1	4	2	4	4	3	9	6	1	0	0	1	0	0	0	0	38
1998	2	1	1	0	1	3	4	3	3	4	8	7	1	0	0	0	0	0	0	0	38
1999	2	1	1	0	1	4	2	5	2	3	13	6	2	0	0	0	0	0	0	0	42
2000	2	1	1	0	1	4	3	4	4	2	8	9	2	0	0	1	0	0	0	0	42
2001	2	1	0	0	1	5	3	5	3	4	6	7	2	0	0	1	0	0	0	0	40
2002	1	1	0	0	1	4	4	5	4	3	12	6	2	0	0	1	0	0	0	0	44
2003	2	1	0	0	1	5	4	6	3	4	8	12	1	0	0	1	0	0	0	0	46

- A standard survival ratio that assumes that 1% of faculty between age 50 through age 64 exit for reasons such as death or voluntary terminations; and 2% of the faculty age 65 and over exit through non-retirement transitions.
- A low survival ratio that assumes a non-retirement exit rate of 2% for faculty between the ages of 50 through 64 and a 3% rate for faculty age 65 and over.

Using the three standards presented, researchers have estimated retirement rate increases of 44%, 24% and 9% respectively (Western Interstate Commission on Higher Education, 1991). This study calculated precise quit and retirement rates for Virginia Polytechnic Institute and State University using exit data for the period 1987 through 1991. Using the ratios calculated, it was determined that retirements will increase by 18% over the period 1992 through 2003 when compared to the period 1980 through 1991. For Virginia Polytechnic Institute and State University, it is projected that 462 faculty out of the 1205 as of December 1991 will retire by the year 2003. That projects to 38.3% of tenured faculty on board as of December 1991 being replaced by the year 2003.

Virginia Polytechnic Institute and State University will experience an increase in the number of retirements over the

next twelve years. However, the increase is not as great as being predicted by some researchers.

#### Research Question Five

The findings of Research Question five provided insight into the essential elements of a rational institutional early retirement plan.

Analyses of individual early retirement incentive plans coupled with the legal criteria found in federal and state statutes identified the following essential elements of an institutional early retirement incentive plan.

#### Participants

<u>Element</u>	<u>Legal Basis</u>
1. Must be a non-classified faculty member.	Section A, Code of Virginia 23-9.2:3.1
2. May be an Administrative and Professional faculty member.	Letter, Secretary of Education to University of Virginia.

#### Participant Criteria

1. Must be at least 60 years old.	Section B, I, Code of Virginia 23-9.2:3.1
2. Must have completed at least 10 years of full-time employment	Section B, II, Code of Virginia 23-9.2:3.1

which can include paid leaves of absence.

3. Must be tenured or have contractual right to continued employment.

Section B, III, Code of Virginia 23-9.2:3.1

4. Participant must agree to withdraw from active membership in the Virginia Retirement System, Optional Retirement Plans, or applicable federal programs.

Section B, IV, Code of Virginia 23-9.2:3.1

5. Participants must agree to other additional and appropriate criteria approved by the institutional Boards of Visitors

Section B, V, Code of Virginia 23-9.2:3.1

#### Plan Components

1. Participation must be voluntary.

Section A, Code of Virginia 23-9.2:3.1

2. Penalties are not in place or contemplated for non-participation.

Section A, Code of Virginia 23-9.2:3.1

3. Plan identifies a clear statement of needs and objectives.

Section C, Code of Virginia 23-9.2:3.1

4. Plan must identify a clear description of the incentives to

Section C, Code of Virginia 23-9.2:3.1

be offered and the incentives are reasonable and appropriate.

5. An explanation of the source of funding available to finance the plan is provided. Section C, Code of Virginia 23-9.2:3.1

6. The plan must explicitly reserve the right of the governing board to modify, amend, or repeal the plan. Section C, Code of Virginia 23-9.2:3.1

7. Incentive payments under this plan cannot exceed 150% of the participant's base salary as identified by the Personnel Management Information System. Section D, Code of Virginia 23-9.2:3.1

8. Payments under this plan must be allocated over a two year period. (Years can be calendar years, fiscal years, or school years - the legislation does not specify). Section D, Code of Virginia 23-9.2:3.1

9. If health insurance is paid, payments must terminate at age 65. Section D, Code of Virginia 23-9.2:3.1

10. Plan must not include language contrary to federal or state statutes. Section D, Code of Virginia 23-9.2:3.1

11. The costs to implement the plan Section D, Code of  
in any one fiscal year can not exceed Virginia 23-9.2:3.1  
1% of the corresponding fiscal year  
general fund appropriation for faculty  
salaries and fringe benefits.

#### Approval Procedures

1. The plan must meet the Attorney Section E, Code of  
General's approval for legal Virginia 23-9.2:3.1  
sufficiency.
2. The plan must meet State Council Section E, Code of  
of Higher Education approval for Virginia 23-9.2:3.1  
uniformity.

#### Reporting Procedures

1. Institutions are to file annual Section G, Code of  
reports to the Governor by Virginia 23-9.2:3.1  
October 31 of each year.
2. The Governor reports to the Section G, Code of  
Chairmen of the House Virginia 23-9.2:3.1  
Appropriations and Senate  
Finance Committees by December 15  
of each year.



## Chapter 5

### FINDINGS, SUMMARY, CONCLUSION

An imbalance in the supply/demand for faculty could create serious difficulties for the educational community and for society in general (TIAA Research Dialogues, Issue # 32, January 1992). To address a trend towards earlier retirement and second trend towards later retirement, institutional officials are evaluating the need for flexible retirement policies that provide incentives for early retirement and procedures that can encourage delayed retirement. The large number of faculty hired in the 1960s and 1970s are approaching normal retirement age and the use of incentives to either persuade faculty to consider retirement or to dissuade faculty from retiring can play an important role in addressing faculty supply/demand issues.

The purpose of this study addresses faculty supply/demand issues as they interface with the retirement process. The purpose is to ascertain the institutional responses to legislated changes in retirement policy in public colleges and universities in the Commonwealth of Virginia and to assess the changes in faculty retirement behavior that occurred during the legislated transition period. This study focused on the influence and impact of early retirement incentive programs on faculty retirement behavior in selected colleges and universities in the

Commonwealth of Virginia. Early retirement incentive programs were designed to restore management flexibility to offset the effects of federal and state legislation that changed or eliminated mandatory retirement. Such a study is timely with public colleges and universities in the Commonwealth of Virginia operating in an environment absent mandatory retirement while many colleges and universities outside the Commonwealth still operate under the constraints of the federal law that permits mandatory retirement of tenured faculty at age 70 until January 1, 1994.

Five research questions were designed to accomplish the following:

- To document the the actions and reactions of institutional officials as they tailored retirement programs to meet their management needs.
- To ascertain the first-hand and first-round experiences of those institutions that implemented early retirement incentive programs.
- To ascertain in detail the demographic and retirement patterns for one institution - Virginia Polytechnic Institute and State University - during the retirement transition period 1980 -1991.

- To identify the components and attributes of a proto-type early retirement incentive program.

The Congressionally-mandated study of the effects of the removal of mandatory retirement on tenured faculty retirement patterns conducted by the National Research Council provided a backdrop for this study. Their research combined with the findings of this study to provide insight into the effectiveness of three separate early retirement incentive models utilized by the public universities in the Commonwealth of Virginia.

#### Research Question One

Research Question one addressed the retirement strategies employed by university policy makers that received approval of their early retirement incentive programs as they structured their retirement process to meet institutional/individual needs and objectives?

Three distinct early retirement incentive models were identified - each addressing the specific needs and situations for the institution developing the model.

#### James Madison University Model

James Madison University officials are reassessing the impact of the one-time early retirement window on their

faculty staffing patterns. Their initial institutional early retirement incentive plan successfully addressed a need to encourage retirement of targeted groups. The plan continues to offer that option and can be implemented as needed.

#### University of Virginia

University officials confirm that their early retirement incentive program is strictly a management tool designed to promote faculty turnover in areas of need. Changes in the University of Virginia Early Retirement Incentive program proposed for the period July 1993 through June 1996 are indicators of the flexibility and the resilience built into the enabling legislation. The proposed plan is applicable to defined-benefit VRS participants and defined-contribution ORP participants. The lump-sum provision of the initial plan has been removed and replaced with a phased or partial retirement component. The proposed plan is less costly; yet, the proposed plan provides for the phased retirement concept which can benefit employer and faculty member. The feature of continuing full benefits during a period of reduced work eliminates the negative impact that early retirement incentive programs can have on long-term individual pension income.

## Virginia Polytechnic Institute and State University

Recent studies concluded that providing fully-paid health insurance is a major or critical factor in the decision to effect retirement. With the growing national concern about the adequacy of and access to health insurance, the opportunity to maintain health insurance weighs heavily in the decision to retire. However, the University will need to evaluate the tradeoff of providing health care with the escalating costs to all faculty who meet the eligibility criteria or targeting specific areas where attrition may be indicated based on assessments of programs, student demands, or related criteria.

### Summary

Each of the three Early Retirement Incentive Programs served the needs of the individual institutions. The University of Virginia model offered an academic focus designed to address curricula and staffing needs. The James Madison University model with its straight forward buy out features allowed institutional officials to target selected academic areas successfully and addressed an academic need. The James Madison University model also helped to identify flaws in the state system for counting faculty positions. James Madison University officials were able to effect a change in the state coding system that now permits payment

to non-working faculty without having to count that portion of a position as being a filled position.

Contrasted with the University of Virginia and James Madison University programs, the Virginia Polytechnic Institute and State University plan offered a modest incentive - the payment of the employer portion of health care until age 65. However, if that incentive serves to encourage only several faculty to retire early, it could effect enough savings in salaries and benefits to make it a financially-feasible program. The phased/partial retirement concept has been beneficial to faculty members and the university. The review of literature confirms that institutions need to take greater efforts to assure that retirees retain ties to the institution. While the partial retirement provides a short-term bond, concepts such as emeriti colleges or retirement centers can make the retirement process more palatable to faculty and provide an accessible source of talent for the institution.

In summary, the Early Retirement Incentive programs coupled with the one-time early retirement window offered in 1991 have accomplished some of the initial goals established by the enabling legislation and early state and institutional planners. Attrition has been encouraged and a budget savings has occurred at a needed time. However, the program

implications due to the early departure of some faculty have not yet been ascertained.

#### Research Question Two

Research Question two addressed changes in faculty retirement behavior as federal and state laws changed mandatory retirement options and authorized early retirement incentive programs. The purpose of Research Question two was to ascertain the changes in faculty retirement behavior, if any, that occurred during a period of legislated transition. The second component of Research Question two was to determine the impact, if any, of institutional Early Retirement Incentive Programs on faculty retirement behavior during this transition period.

A succinct answer to Research Question two is that faculty, on average, are retiring earlier and the standard deviation is increasing which is indicative of a broader range of retirement ages. Federal and state legislated changes provided the opportunity for faculty to work longer and the widening standard deviation confirms that some faculty are choosing to retire at an later age. In the same vein, institutional officials confirm that Early Retirement Incentive Programs have met a need by establishing a mechanism for targeting certain areas for early retirement.

From a broader perspective, analyses of faculty retirement behavior and the interaction of Early Retirement Incentive Programs and faculty retirement behavior provides a setting for assessing the Congressionally-mandated National Research Council study designed to determine the impact of the removal of mandatory retirement in higher education. By applying the conclusions and recommendations presented by the National Research Council to the findings of this study from a state that abolished mandatory retirement in 1987, the following conclusions are offered.

The National Research Council study concluded that the elimination of mandatory retirement would affect colleges and universities in two key ways:

(1.) At most colleges and universities, few tenured faculty would continue working past age 70 if mandatory retirement is eliminated.

The three institutions under study confirmed that, for their institutions, few faculty were continuing to work beyond age 70. James Madison University had only one faculty member continuing to work past age 70. The University of Virginia Virginia had 10 faculty age 70 or older continuing to work and Virginia Polytechnic Institute and State University had five tenured faculty age 70 or older continuing to work in a full-time capacity. Overall, the age 70 and over faculty comprised less than .5% of the total



tenured faculty population - well below the 1.6% found in the National Research Council study. (Hammond & Morgan, 1991).

(2.) At some research universities, a high proportion of faculty would choose to work past age 70 if mandatory retirement is eliminated.

For the institutions under study, the overall proportion of faculty working to age 70 and beyond is small. However, of those faculty age 70 and over, a major portion are research faculty. Three of the five faculty age 70 or older at Virginia Polytechnic Institute and State University that continued in the work force were research faculty.

#### Consequences for Institutions and Faculty

In addition to the two major conclusions presented by the National Research Council study, the following additional conclusions and recommendations were among those offered:

1. If mandatory retirement is eliminated, some research universities are likely to suffer adverse effects from low faculty turnover, increased costs, and limited flexibility to respond to changing needs and to support new fields by hiring new faculty.

Virginia Polytechnic Institute and State University had 36 tenured faculty 65 years old or older as of December 1991. Eighteen faculty were eligible for the one-time bonus of five

years and eighteen were not eligible. Eleven faculty of the 18 eligible for the bonus accepted the incentive and effected retirement. Of the 18 not eligible for a retirement bonus, none retired. The individuals that chose to retire had an average salary of \$65,181 and an average length of service of 35.72 years. The individual faculty member age 65 Or older that did not retire had an average salary of \$72,440 and an average length of service of 20.84 years. The faculty remaining in the work force were more costly in terms of salary and benefits.

2. Administrators and faculty can best assess the potential impact of uncapping at their own colleges and universities by studying their faculty age distributions, retirement patterns, and hiring needs.

Each educational institution possesses a personality that contains distinct and perhaps unique attributes. No one retirement policy can be applicable across institutions. Therefore, legislators and administrators need to build flexibility into retirement policies so that institutional and individual needs can be recognized and accommodated.

3. An increase in the number of faculty over age 70 or, more generally, an increase in the average age of faculty does not necessarily affect institutional quality.

The relationship of performance and age was beyond the scope of this study. However, as presented earlier, those

faculty, in general, working to age 70 and beyond are research faculty. Such faculty typically obtain external funding to maintain their programs with such funding being made available to those researchers who are in demand.

4. Eliminating mandatory retirement would not pose a threat to tenure.

With the intent of tenure being to protect academic freedom and provide due process, there is no indication that an aging faculty has affected the tenure process. However, the tenure - mandatory retirement issue was beyond the scope of this study.

#### Retirement Incentive Policies

5. Retirement incentive programs are clearly an important tool for increasing turnover; they should be considered by any college or university concerned about the effects of faculty working past age 70.

Retirement incentive programs are the focus of this study. The three model institutions in this study confirm that such programs serve as effective management tools. However, the review of literature and detailed studies of individual institutions reflect a number of changing patterns. Increases in student enrollments, changes in the number of terminal degrees awarded, and related changes in the number of terminal degree recipients entering the higher

education teaching profession couple with changes in retirement behavior to remind researchers that retirement issues must be integrated with broader issues that address the overall faculty staffing picture.

### Pensions

6. We recommend that colleges and universities offer pension plans designed to provide retiring faculty with a continuing retirement income from all sources equal to between 67 and 100 percent of their preretirement income.

This recommendation is consistent with the design of many pension programs. However, the removal of mandatory retirement coupled with changes in individual access to retirement contributions places the ultimate responsibility for adequate post-retirement income with the individual retiree. With mid and late career moves in vogue, individuals will need to assess the effects of job changes on pension plan entitlements. Changes in divorce laws, the inclination for faculty to move to and from foreign countries, and the addition of various types of sabbatical and study-research leaves can complicate the retirement income picture. Recent and planned changes in the Social Security program can adversely affect the retirement income stream and the timing of retirement. While employers can provide a variety of retirement plans and offer some

expertise is assessing pension plans, the adequacy of retirement income will be an individual responsibility.

#### Research Questions Three and Four

Research Question three addressed the demographic composition of Virginia Polytechnic Institute and State University faculty and changes in the demographic patterns over the 1980 - 1991 period. Research Question four assessed the relationship of personal variables to the age of retirement for faculty over the same period of time. The analyses of Research Question three, parts a and b, can be combined with Research Question four to provide some projections of interactions of aging patterns and retirement patterns. The increase in the overall aging of faculty has been steady and linear in nature with the standard deviations of ages narrowing each succeeding year. In essence, the overall faculty is aging but the ages are more compressed.

By contrast, the age of retirement has been decreasing with a widening standard deviation. There is a trend to retire earlier but the range of retirement ages is become wider. Figure 6 depicts the aging and retirement trends with possible interaction being indicated before the year 2000.

## Faculty Aging and Retirement Patterns 1987 - 1991

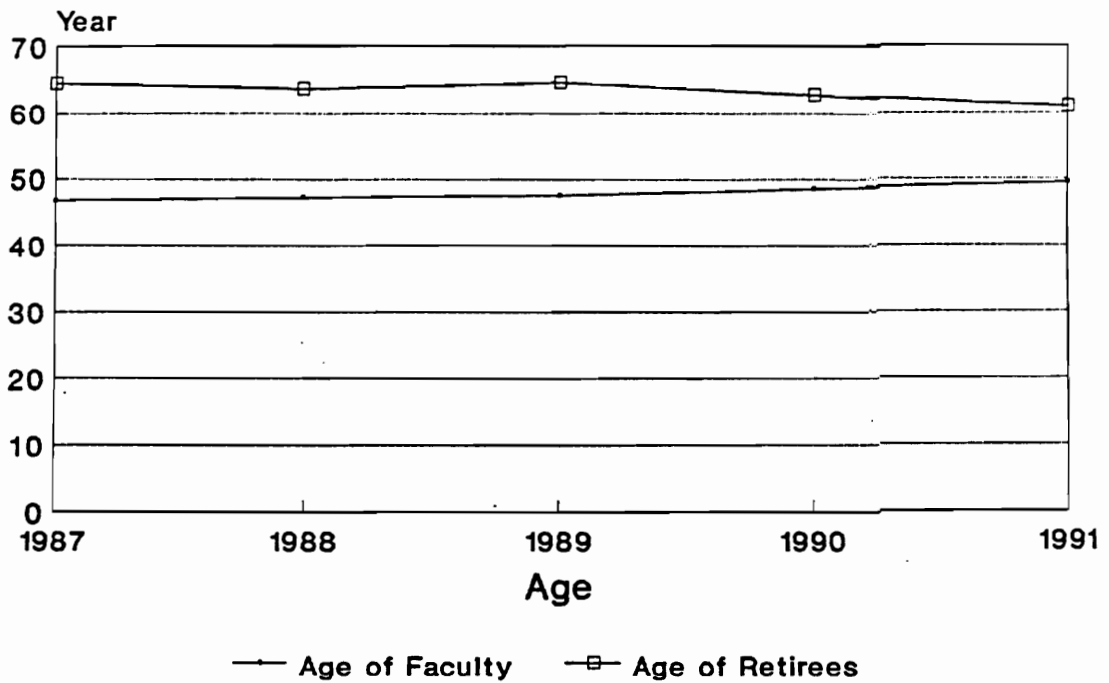


Figure 6. Comparison of Aging and Retirement Patterns

### Research Question Five

Research Question five utilized the conceptual, legal, and technical components of the overall faculty early retirement incentive program identified by state statutes and assessments of institutional early retirement incentive programs to determine the essential elements of a rational institutional early retirement plan.

The factors affecting the individual retirement decision can be classified into two distinct categories - structural variables and subjective variables. Structural variables include demographic characteristics such as age, gender, race, marital status and job characteristics, rank, pay and length of service. Subjective variables include such items as attitude of family, relationships with co-workers, satisfaction with work, perceived wealth or income, health status, attitude towards retirement, attitude towards self, health status of family, loyalty to organization and/or individuals.

Structural and subjective variables provide tangible and intangible inducements that may provide a push towards retirement from the internal organization or a pull towards retirement from external forces. Some researchers concluded that subjective variables play a greater role than structural variables for individuals considering early retirement (Daniels & Daniels, 1992). For those individuals planning

to retire around the normal retirement age of 65, structural and subjective variables are of equal importance.

Using the template identified earlier to assure conformity with federal and state statutes, a conceptual retirement model (Figures 7 and 8) provides insight into the retirement planning process for individuals and institutions.

Figure 8 identifies those variables considered by individual faculty as they plan the retirement process. Demographic, socio-economic status, health, job, and attitude variables are indicated.

### Conclusion

Analyses of the individual and institutional variables substantiate changes in the retirement process. While the recent legislated changes can not be directly identified as the causal agent, some the prevailing retirement trends are now possible because of changes in the governing statutes pertaining to the retirement process.

The analysis of variance revealed that retirement ages differed significantly in 1991 when compared to the years 1980 through 1990. Such differences could be a result of the incentives offered by the one-time early retirement window. This study confirmed that higher-paid faculty are working longer than their lower-paid colleagues for the institution under study. Those faculty remaining in the workforce have



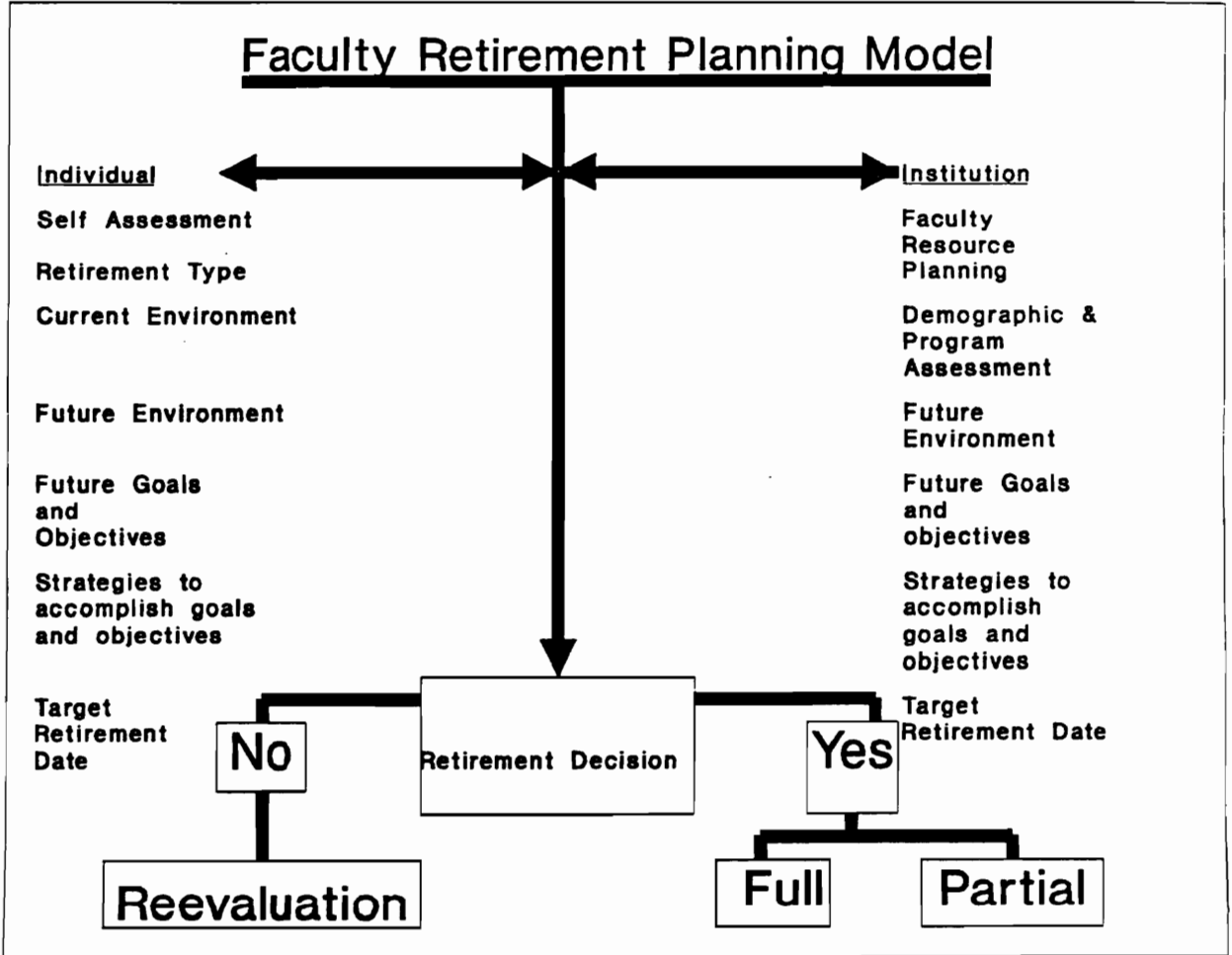
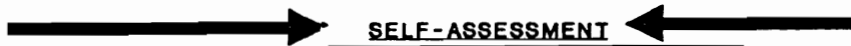


Figure 7. Faculty Retirement Planning Model

# Faculty Retirement Planning Model

Individual faculty member



## SELF-ASSESSMENT

### Structural Variables

1. Age (1)
2. Gender (1)
3. Race (1)
4. Marital status (1)
5. Salary (4)
6. Equipment (4)
7. Office (4)
8. Research (4)
9. Admin support(4)
10. Tenure (4)
11. Perf. rpts (4)
12. Pay raises (4)
13. Work load (4)
14. Length of svc (4)
15. Retirement plan (4)
16. Financial Obligations (2)
17. Children under age 18 (1)

- RETIREMENT OPTIONS
- CURRENT ENVIRONMENT
- FUTURE ENVIRONMENT
- GOALS AND OBJECTIVES
- STRATEGY TO ACCOMPLISH GOALS AND OBJECTIVES
- TARGET DATES

### Subjective Variables

1. Attitude (5) of employer
2. Family (5) relationships
3. Co-worker (5) relationships
4. Work (5) satisfaction
5. Perceived (5) wealth
6. Health (3)
7. Health (3) Family
8. Loyalty to (5) organization
9. Perceived (5) worth
10. Other (2) opportunities
11. Probability of moving (2)
12. Community ties (2)
13. Sense of (5) accomplishment
14. Adequacy (2) of retirement income.

### Legend

- 1 - Demographic variable
- 2 - Socio-economic Status Variable
- 3 - Health status variable
- 4 - Job status variable
- 5 - Attitude variable

Figure 8. Individual Faculty Retirement Planning Model

fewer years of service with their current employing institution.

For Virginia Polytechnic Institute and State University, the College of Arts and Sciences could be a candidate for an early retirement incentive program due to the large number of older faculty. The College of Education with a large cluster of faculty in the age range 50 - 60 could benefit from a retirement incentive program designed to spread the potential attrition across a broader age range.

The analysis of personal retirement variables reveals an increase in the number of retirees and a widening standard deviation in retirement ages. A trend toward earlier retirement is detectable with the widening standard deviation indicating that some faculty are now working to older ages as permitted by statute.

For the university under study, only slight differences in retirement ages were detected among married and single individuals or between genders. However, the types of survivor options differed based on retirement ages with younger retirees providing fewer survivor benefits.

The years of service variable was an anomaly. The years of service for active faculty decreased from 1987 through 1990 then rose in 1991. Turnover analysis revealed that increasingly larger numbers of faculty left during the period 1987 through 1991. However, further study is needed in order

to determine the changes that are occurring in the length of service with a single institution.

Projections of retirement income between defined-benefit and defined-contribution plans offers a possible explanation for differences in the average retirement ages in the two types of plans. However, the defined-contribution plan has been available since 1986 with utilization primarily by younger faculty; therefore, retirement patterns have not been established.

Projections were made of replacement income to ascertain the proportion of working income that was being replaced by pensions benefits. While, in general, the replacement retirement ratios were consistent with recommended standards, an analysis of actual retirement income for 1991 retirees revealed pension income much lower than the recommended norms. Additional study is needed to determine if retirees have other pension income or other sources of income to assure that overall retirement income is adequate.

For comparative purposes, a random sample of retiring classified employees (non-faculty) was compared with a sample of retiring faculty over the period 1980-1991 to ascertain differences in retirement ages. No significant differences between the two groups were noted even though the faculty had exclusive access to an early retirement incentive program.

Using 1987-1991 exit data, quit rates and retirement rates were calculated for exiting faculty. These rates were applied to the 1991 active faculty cohort. The 1991 cohort was aged through the year 2003. This process projected that over one-third of the current faculty (38%) is projected to retire over the next 12 years.

In summary, the retirement process will need to be managed over the foreseeable future and an early retirement incentive program can be an effective tool for maintaining the faculty supply/demand equilibrium. However, undetermined retirement patterns by females and minorities coupled with on-going changes in retirement patterns within the white male population will require continuing study of the concept and the process of retirement.

#### Areas for Additional Studies

Faculty supply and demand issues are critical ones because of a predicted forthcoming faculty shortage. The retirement process is a major component in addressing the faculty supply/demand issues as a large number of faculty hired in the 1960s and 1970s reach normal retirement age in the 1990s. However, any attempt to influence the individual decision to retire/not retire must be consistent with existing legislation. A functional early retirement incentive program can serve as an effective management tool for maintaining the faculty supply/demand equilibrium.

Retirement has been depicted as a fluid phenomenon; however, the removal of mandatory retirement with its inherent structure can eliminate the smooth and orderly transition from active faculty member to retiree that fluid implies. As the United States work force ages, retirement issues will receive added emphasis. With national trends indicating a gradual decrease in the age of retirement and an increase in average life expectancy, adequacy of retirement income will be of greater concern. Age of retirement is a major concern for those planners that have to ascertain the future fiscal obligations of pension plans, Social Security, and related programs. Other non-fiscal patterns such as the projected increase in the number of students makes faculty staffing an ongoing issue.

Many areas for concentrated study relating to faculty retirement behavior can be readily identified. The adequacy and the role of health care in general and especially for the elderly must be addressed in the near future. The role of tenure and the use of performance evaluations in the management of faculty resources will need further attention. Single parents, the sandwich generation that has responsibilities for several generations older and younger, changing life styles, and related issues impinge on retirement practices and retirement needs. The role of diversity within the university broaches retirement issues

and retirement policies. The concept of sequential retirement needs to be explored as faculty move among institutions and/or to and from the private sector.

This study is a descriptive presentation of the legal, organizational, and data domains of faculty retirement and early retirement processes in higher education. Other research is needed to assess early retirement plans for other institutions and other states. Simulations are recommended to assist planners in determining faculty supply/demand issues. Additional studies are recommended to determine satisfaction with retirement by those individuals participating in incentive programs. With longer life expectancy, additional studies are needed to ascertain the adequacy of retirement income.

In reviewing the population of tenured faculty retiring over the period 1980-1991, it was noted that 45 faculty received disability retirement or died in service - 32 disabilities and 13 deaths. Some deficiencies in the survivor benefits where death-in-service occurs were noted and additional legislation may be in order to correct these deficiencies. In a related matter, two tenured faculty and one professional staff person died within one, three, and eight months after accepting the one-time early retirement window. While perhaps not statistically significant, the literature does indicate an abnormal increase in mortality

shortly after retirement. Preparation for retirement including preparation for early retirement can help in addressing the sudden and often stressful changes in life style associated with retirement.

As those colleges and universities operating under the constraints of the ADEA amendments that permit mandatory retirement at age 70 approach January 1, 1994, knowledge of institutional retirement patterns and knowledge of those individual and institutional variables that affect retirement behavior can be beneficial in determining an institutional course of action. Early retirement incentive options can serve as the catalyst to encourage individuals to consider retirement if incentives are compatible with individual and institutional needs.

#### Lessons Learned

Retirement in higher education is a process still in transition but remains an integral component in the overall strategic management of faculty resources. The initial fear that abolishing mandatory retirement would result in the accumulation of faculty deadwood has been replaced by a concern about the availability of appropriate faculty resources to staff colleges and universities into the 21st century.

Early retirement incentives are recognized as positive additions to the overall faculty retirement process.



However, each institution needs to conduct a self-assessment to determine the capacity and capability of existing faculty to meet current and projected mission needs. Several observations and initiatives are recommended to higher education planners:

- A significantly larger proportion of faculty will reach retirement age in the next 10 - 12 years; therefore, there must be a comprehensive understanding of the retirement issues, relationships, personalities, and cultures if qualified faculty are to be maintained.
- Early retirement incentives can be effective tools for institutional management in selected instances to encourage retirement.
- For the three model institutions included in this study, the James Madison University Early Retirement Incentive Plan was cited as the ideal plan because of its attention to the detail of the enabling legislation and the compatibility of the incentives to institutional and individual needs.
- Several common threads are prevalent in the literature and in this study: The decision to retire is a voluntary

one to made by the individual contemplating retirement. Early retirement incentives offer opportunities to individuals and institutions in selected areas where attrition may be desired, and that principles such as dignity, compassion, and concern need to be integrated into the overall retirement process.

## References

Acts of the General Assembly of the Commonwealth of Virginia.

(1987). Senate Joint Resolution No. 478.

Acts of the General Assembly of the Commonwealth of Virginia.

(1988). House Bill 122.

Acts of the General Assembly of the Commonwealth of Virginia.

(1988) Senate Bill 647, Chapter 257, pp. 320-321.

Acts of the General Assembly of the Commonwealth of Virginia.

(1990) Chapter 832, p.1369.

Acts of the General Assembly of the Commonwealth of Virginia.

(1991). House Bill 1499.

Acts of the General Assembly of the Commonwealth of Virginia.

(1991) House Bill 1935, Chapter 217, p. 300.

Albert, S. P. (1986). Retirement: From rite to right.

Academe, pp. 24-25.

Altman, J. (1977, July 9). Social Security: The worst is yet

to come. New York Times, p. 17.

American Association of University Professors, (1988,

January-February). Statement of principles on academic retirement and insurance plans. Academe, pp 37-38.

American Association of University Professors, (1987, July -

August) Academe, 47.

American Association of University Professors, (1988, July -

August). 1988 Report of the council committee on retirement. Academe, pp. 34-35.

- Atchley, R. (1976). The society or retirement. New York. Schenkman.
- Biggs, J. H. (Summer 1983). Designing pension plans to incorporate recent legislation. Educational Record, pp. 32-36.
- Bolles, R. N. (1978). The three boxes of life. Berkley, CA.: Ten Speed Press.
- Brubaker, J. S. & Rudy, W. (1976). Higher education in transition. New York: Harper and Row.
- Bryan, E. L., & Cash, L. S. (1987, January-February). Sheltering retirement income. Academe, pp. 14-15.
- Burkhauser, R. V. (1982). Effects of actual and anticipated policy changes on retirement. In K. A. Anderson (Ed.), Retirement policy and planning for change, Information Series No. 242. Columbus: ERIC Clearinghouse on Adult, Career, and Vocational Education, National Center for Research in Vocational Education, The Ohio State University.
- Casteen, J. T. III, (1982). Memorandum to Presidents of Public Colleges and Universities.
- Chronister, J. L., & Kepple, T. R., Jr. (1987). Incentive early retirement programs for faculty. ASHE-ERIC Higher Education Report No. 1. Washington, DC: Association for the Study of Higher Education.

Clark, R. L., & Barker, D. T. (1981). Reversing the trend toward early retirement. Washington, DC: American Enterprise Institute.

Code of Virginia, s 51-111.19 (1950).

Code of Virginia, s 51-1-126.

Code of Virginia of 1950 and the Cumulative Supplement, 51.1110:01 (16).

Commission on College Retirement. (1986, May). A pension program for college and university personnel. New York: author.

Covert-McGrath, D. (1984). NACUBO Report: Early and phased retirement. Business Officer, 17(12), 13-16.

Daniels, C.E., & Daniels, J.D. (1992, Spring). College faculty: The retirement decision and retiree health benefits. Journal of the College and University Personnel Association, 43, 1-9.

Daniels, C. E., & Daniels, J. D. (1990 September - October). Uncapping: Threat or opportunity. AGB Reports, pp. 24-27.

Dyke, J. W. (1990). Faculty retirement plan option. Memorandum to presidents and chancellor, Virginia state-supported colleges and universities.

Evans, L., Ekerdt, D. J., & Bosse, R. (1985, March). Proximity to retirement and anticipatory involvement:

- Findings from the normative aging study, Journal of Gerontology, 40(3), 368 - 374.
- Fields, G. S., & Mitchell, O. S. (1984) Retirement, pensions and social security. Cambridge, MA.: The MIT Press.
- Foulkes, F. K. (Ed.). (1982). Employee benefits handbook. Boston: Warren, Gorham & Lamont.
- Graebner, W. (1980). A history of retirement: The meaning and function of an American institution, 1885-1998. New Haven, Ct.: Yale University Press.
- Greenough, W. C., & King, F. P. (1959). Benefits plans in American colleges. New York: Columbia University Press.
- Guthrie, R. C. (1989). Optional retirement plans. Memorandum to university and college presidents, chancellor, Virginia Community College System.
- Hammond, P.B., & Morgan, H. P. (Eds.). (1991). Ending mandatory retirement for tenured faculty: The consequences for higher education. Washington, DC: National Academy Press.
- Holden, K. C., & Hansen, W. L. (1989, Spring). The end of mandatory retirement: Effects on higher education. New Dimensions for Higher Education, No. 65.
- Jackameit, W. P. (1991, April). Designing and implementing a faculty early retirement incentive plan: A case study. Paper presented to the Society for College and University Planning, Baltimore, MD.

James Madison University (1989, March). The greying of the faculty. JMU Office of Planning and Analysis Research Notes, Volume 4, Number 1.

James Madison University (1989). Report on faculty early retirement incentive plan - Fiscal Year 1988-89. Annual report to the Governor of Virginia. Harrisonburg, VA: James Madison University.

James Madison University (1990). Report on faculty early retirement incentive plan - Fiscal Year 1989-90. Annual report to the Governor of Virginia. Harrisonburg, VA: James Madison University.

James Madison University (1991). Report on faculty early retirement incentive plan - Fiscal Year 1990-91. Annual report to the Governor of Virginia. Harrisonburg, VA: James Madison University.

James Madison University. (1992). Undergraduate catalog, 16, No 1.

Jordan, A. (1992, July). The "Gold watch plan" for cutting budgets. Governing, pp. 25-26.

Kinnear, D. L. (1972). The first 100 years: A history of Virginia Polytechnic Institute and State University. Blacksburg, VA: Virginia Polytechnic Institute Educational Foundation, Inc.

- Liebig, P. S. (1984). The three-legged stool of retirement income. In Dennis, H. (Ed.), pp. 43-52. Retirement preparation. Lexington, MA: MA: D.C. Heath and Company.
- Lohmann, C. K. (1991, May-June). Retrenchment, retirement, benefits and the faculty role. Academe, pp. 18-21.
- Lozier, G. G., & Dooris, M. J. (1988-89). Elimination of mandatory retirement: Anticipating faculty response. Planning for Higher Education, 17(2), 1-13.
- Martin, R. G. (1991, December 15). Statement of the Secretary of Administration to Joint Senate Finance and House Appropriations and Finance Committees.
- McDonagh, E. C. (1987, June). A comparison of benefits and perquisites of emeriti faculty at Ohio state rnriversity with a sample of 74 land-grant colleges and/or members of the national association of state universities. Columbus: Ohio State University.
- McFarlane, W.. (1984) Correspondence to Retirement Issues Study Group.
- Mooney, C. J. (1988, January 6). College officials are worrying about an aging faculty but have few plans to deal with issues, study finds. Chronicle of Higher Education, A 11, p. 13.
- O'Brien, T., & Woodbury, R. (1988, September 8-9). Retirement benefits for university employees: Evaluating



- the trade-offs. Paper presented at the National Pension Issues Conference, Washington, DC.
- Ohio v. Betts 109 S. Ct. 2854 (1989).
- Palmore, E. B., Burchett, B. M., Fillenbaum, G. G., George, L. K., & Wallman, L. M. (1985). Retirement causes and consequences. New York: Springer Publishing Company.
- Patton, C. V. (1979). Academia in transition: Mid-career changes or early retirement. Cambridge, MA: Abt Books.
- Pratt, H. J. (1989, Spring). Uncapping mandatory retirement: The lobbyists' influence. In K. C. Holden & W. L. Hansen (Eds.) The end of mandatory retirement: Effects on higher education. New Directions for Higher Education, No. 65, pp. 15-32.
- Royster Guano Co. v. Virginia 257 US 412; 415 (1920).
- Ruebhausen, O. M. (1990). Pension and retirement policies in colleges and universities. San Francisco: Jossey-Bass Publishers.
- Sheldon, P. B. (1985, April 4). The future of early retirement. Memorandum to William E. Lavery, President, Virginia Polytechnic Institute and State University.
- Sgro, B. H. (1990). Variables affecting early retirement. Doctoral dissertation, Virginia Polytechnic Institute and State University, Blacksburg.
- Social Security Administration (1988). Social Security Publication No. 05-10011.

State Council of Higher Education in Virginia. (1989). The Virginia plan for higher education. Richmond, VA: author.

Stepka, W. (1982). Early retirement incentive options. Position Paper.

Stepka, W. (1983). Memorandum to retirement incentives study group.

Teachers Insurance and Annuity Association - College Retirement Equities Fund. (1984). Report of the TIAA-CREF ad hoc committee on goals and objectives to the joint board of trustees of TIAA-CREF. New York: author.

Teachers Insurance and Annuity Association - College Retirement Equities Fund. (1988, July ). Voluntary incentive early retirement program. Research Dialogues, Issue # 18.

Teachers Insurance and Annuity Association - College Retirement Equities Fund. (1990, January). Income and other factors in delayed retirement. Research Dialogues, No. 24.

Teachers Insurance and Annuity Association - College Retirement Equities Fund. (1991, October). The NACUBO/TIAA-CREF survey of college and university retirees. Research Dialogues, No. 31.

Teachers Insurance and Annuity Association - College Retirement Equities Fund. (1992, January). Faculty supply

and demand - data sources and data needs. Research Dialogues, No. 32.

Teachers Insurance and Annuity Association - College Retirement Equities Fund. (1985, June). Research Dialogues, No. 4.

U.S. Congress (1986, October 31). Public Law 99-592. Age Discrimination in Employment Act Amendments of 1986.

U. S. Congress (1986, October). Public Law 99-509.

U. S. Congress (1987). Public Law 90-202. Age Discrimination in Employment Act.

U. S. Congress (1978, April 6). Public Law 95-2256. Age Discrimination in Employment Act Amendments of 1978.

University of Virginia (1991). Undergraduate record, 1991-1992.

Virginia Polytechnic Institute and State University. (1992, April 3). Minutes, University Board of Visitors. Blacksburg, VA: Virginia Tech.

Virginia Polytechnic Institute. (1966) Self study. Blacksburg, VA: Virginia Tech.

Virginia Polytechnic Institute and State University. (1976) The university self-study, 1975-76. Blacksburg, VA: Virginia Tech.

Virginia Retirement System (1990) Handbook for members. Richmond, VA: author.

Virginia Retirement System (1991). Memo to members, Special Edition. Richmond, VA: author.

Virginia Supplemental Retirement System. (1985).

hpl.Benefits and payroll manual. Richmond, VA: author.

Virginia Supplemental Retirement System. (1987) Handbook for members. Richmond, VA: author.

Weiler, W. C. (1987). Economic issues in faculty retirement plans in American higher education institutions. Economics of Education Review, 207-225.

White House Conference on Aging. (1961). Policy statement and recommendations. Washington, DC: U. S. Department of Health, Education and Welfare, pp. 150-155.

Western Interstate Commission for Higher Education (1991) Faculty retirement projections beyond 1994. Boulder, CO: Author.

Zedlewski, S. R. (1984). The private pension system to the year 2020. In H. J, Aaron & G. Burtless (Eds.) Retirement and economic behavior, pp. 315-344. Washington, DC: The Brookings Institution.

## Appendices

Appendix A

<u>Policy/Program</u>	<u>Year Enacted</u>	<u>Purpose</u>
Carnegie Advancement for Teaching	1905	To provide free pension for college teachers.
Teachers Insurance Annuity Association (TIAA)	1918	TIAA began operations as a non-profit legal reserve life insurance company to continue the broad pension concepts of the Carnegie Foundation for Teaching
Social Security established	1935	Cornerstone of United States retirement policy. Designed to provide a program of old age pensions and a federal-state system of unemployment insurance.
Revenue Act of 1942	1942	Prohibited discrimination in favor of the more highly compensated in private sector pension plans.
Virginia Supplemental Retirement System established	1952	Designed to provide a retirement plan to state employees including college and university faculty.
College Retirement Equities Fund was established by TIAA.	1952	Designed to provide retirement annuities based on common stock investments.
403b tax shelter plans established.	1958	Designed to provide to the non-profit sector a tax-shelter mechanism.
Age Discrimination in Employment Act	1967	The Age Discrimination in Employment Act of 1967 (Public Law 90-202) prohibits virtually any form of discrimination because of age in hiring, discharge, compensation, terms and condition of employment, referral or advertising.

Employment Retirement Income Security Act	1974	ERISA established governmental standards for private pension plans with the design being to protect the pension rights of employees. Authorizes Individual Retirement Accounts (IRA).
ADEA Amended	1978	Age Discrimination in Employment Act of 1967 was amended to raise the cut-off age from 65 to 70. Under an exception, the amendments permitted the mandatory retirement of tenured college and university faculty to remain at age 65 until July 1, 1982.
Economic Recovery Act	1981	Extended Individual Retirement Account (IRA) to all workers and raised maximum annual amount to \$2,000.
ADEA exception for faculty ends	July 1982	Mandatory retirement age for faculty changes from 65 to 70.
Employer pays total cost of retirement VSRS	Oct. 1983	Total contribution into Virginia Supplemental Retirement System assumed by employer
Optional Retirement Plan (ORP) permitted in Virginia for faculty	1986	Faculty permitted to participate in the TIAA-CREF defined contribution plan in lieu of the Virginia Supplemental Retirement System
Age Discrimination in Employment Act again amended	1986	Mandatory retirement eliminated. Faculty excluded until January 1994.
Tax Reform Act of 1986	1986	Restricted contributions to 403b tax shelter programs and limited access to IRAs.
Mandatory retirement abolished in Virginia	1987	Mandatory retirement eliminated in Commonwealth of Virginia for tenured faculty among others.

Early retirement incentive program authorized for certain faculty.	1988	Early retirement incentive program authorized for tenured faculty in Commonwealth of Virginia's public colleges and universities.
Older Workers Benefit Protection Act	1990	Bars age discrimination in Employee Benefit Plans. Allows for voluntary early retirement plans.
One-time Early Retirement Window	1991	Authorized five years of added service credit to those individuals age 50 or older with 25 years of credited state service.
Retirement contributions decoupled	1991	Differing contributions to state optional retirement plans permitted.
Number of ORPs increased in Virginia	1991	Attorney General authorized additional retirement options for college and university faculty.
Federal exception for faculty to eliminate mandatory retirement to expire.	1994	Exception in ADEA that allowed mandatory retirement for faculty at age 70 slated to end.



## Appendix B

### University of Virginia Incentive Retirement Plan for Faculty

The University of Virginia Incentive Retirement Plan for faculty (the "Program") has been established to meet institutional needs to increase flexibility in faculty staffing. The program is designed to foster intellectual renewal within the University, to provide for increased opportunities to hire women and minorities, to reallocate positions in keeping with programmatic needs, and to facilitate the hiring of new faculty in support of the enhancement of teaching and research. The objectives of this program are in keeping with the Academic Plan of the University.

This program will apply to Retirement Agreements executed from May 1, 1989 through June 30, 1992. The total cost in any fiscal year of providing incentives under the program may not exceed one percent (1%) of the institution's corresponding fiscal year state general fund for faculty salaries and benefits categories.

The Program consists of two options that have been designed to meet the management needs of the University and the needs of the faculty. The two options are a phased retirement option and a Retirement Decision Contract option. Eligible faculty members may choose to participate voluntarily in either option. After the faculty member signs the contract for retirement, his/her election to participate and the choice of options is irrevocable. Since the program is voluntary, there are no penalties for nonparticipation.

#### Definitions

FACULTY MEMBER shall mean each full-time tenured faculty member or a full-time faculty member serving under a contract of continued appointment, and each full-time administrator holding tenured faculty status. General faculty members including administrators with that classification, who under university policy serve with the expectation of continued employment, are included in this definition of faculty.

YEARS OF COVERED FULL-TIME SERVICE shall mean each contract year of full-time service as completed by the faculty member, including approved leaves of absence.

FISCAL YEAR shall mean the twelve month period beginning July 1 of each year.

ANNUAL SALARY shall mean the basic contracted nine month salary for faculty members with academic year appointments, and the basic contracted twelve month salary for faculty with fiscal year appointments.

RETIREMENT under this plan, subject to eligibility criteria set forth in Sections I.B and II.B. of this document herein shall mean the conclusion of employment with the University. Such conclusion shall require: (1) the withdrawal from active membership in VSRS by VSRS members; or (2) cessation of contributions to TIAA-CREF by the University of Virginia (or any other agency of the Commonwealth of Virginia) to the account of TIAA-CREF participants.

RETIREMENT AGREEMENT shall mean the binding and irrevocable agreement entered into between the faculty member and the University, in which the faculty member selects one of the following retirement options and makes all applicable elections.

## I. PHASED RETIREMENT OPTION

### A. Option Objectives

1. To provide a flexible retirement plan that will facilitate retirement by meeting faculty members' changing needs and professional interests in the latter stages of their careers through a gradual disengagement from full-time duties of their position while protecting their long-term retirement income.

2. To provide the University more flexibility in hiring new faculty members without losing the talents and expertise of senior faculty.

## B. Eligibility

1. Participants must be full-time faculty as set forth in definitions above.

2. Participants must be at least 60 years of age and have 10 years of full-time service with the University.

3. Participants may not enter after their 68th birthday.

## C. Contract Conditions, TIAA-CREF Participants

This set of conditions applies to faculty members who are enrolled in TIAA-CREF only. The option provides for the phased reduction of workload and salary with the consent of the faculty member's department head and dean. The conditions of the agreement are as follows:

Participation may not be for a period exceeding five years or may not continue beyond June 30 of the fiscal year in which age 70 is attained. Full retirement from the University will take place at the conclusion of such a period.

2. During the period of participation, the faculty member's workload shall be 50% of that required immediately before the beginning of such period. Alternatively, such workload during the period of participation may consist of annual non-increasing levels which average fifty percent (50%) over the period. Such levels are to be determined by the faculty member's department head and the dean prior to the beginning of the period of participation.

The workload may be renegotiated only at the initiative of the University. An increase in the workload will be granted only at the convenience of the University. Increased efforts supported by external funding also is subject to University approval.

3. Salary paid will be proportional to contracted work effort but benefits will be continued as if the participant were a full-time employee.

### 4. Benefits

a. Contributions to TIAA-CREF will be continued on an annual basis in an amount equal to the maximum permitted by the Internal Revenue Service for the faculty

member's compensation during each year of phased retirement.

b. Medical benefits will continue in full during the period of participation.

Coverage provided by the TIAA group life and Total Disability Insurance Plans will continue with disability coverage based on the full-time equivalent of proportional salary.

5. Merit adjustments to salary may be granted during the period of participation.

During the period of participation, administrative support such as office space, secretarial support and travel funds will be available to the faculty member.

#### D. CONTRACT CONDITIONS: VSRS PARTICIPANTS

This set of conditions applies to faculty members who are enrolled in the Virginia Supplemental Retirement System.

1. Participation may not be for a period exceeding two years or may not continue beyond June 30 of the year in which age 70 is reached. Full retirement from the university must take place at the conclusion of the period of participation. Faculty members must withdraw from active membership in VSRS upon retirement.

2. Phased retirement requires the faculty member to work not less than 50% of the full-time equivalent effort for a period not to exceed two years.

3. A full salary will be paid during the period of participation.

4. All benefits will remain in effect during the period of participation.

5. Merit salary adjustments may be granted during the period of participation.

6. During the period of participation, administrative support such as office space, secretarial support and travel funds will be available to the faculty member.

## II. RETIREMENT DECISION CONTRACT OPTION

### A. Option Objectives

1. To facilitate retirement planning by allowing the faculty member to establish a firm retirement date and by providing a financial transition to retirement income.

2. To provide the University lead time in adjusting to faculty retirements and to allow the University time to plan recruitment of replacement faculty members, as needed.

### b. Eligibility

1. Participants must be full-time faculty members as set forth in definitions above.

2. Participants must be at least 62 years of age and have at least 10 years of covered full-time service with the University at the time they select this option.

### C. Contract Conditions

The Retirement Decision Contract permits an eligible faculty member to enter into an agreement to retire at an age specified in the Retirement Agreement, in return for which the University will provide the faculty member a retirement payment. The Contract Conditions applicable to this option are as follows:

1. The faculty member will commit to retire no earlier than the year in which age 65 is attained and no later than the year in which age 67 is attained. The date to which the faculty member commits shall be specified in the Retirement Agreement. For this purpose, such date is described in condition 2 below.

2. The time between the date in which the faculty member signs the contract to select this option and actual retirement must be at least 24 months during which period the faculty member will continue full employment with the University. Retirement must take place at the end of the fiscal year for twelve-month appointments and the end of the academic year for nine-month appointments.

3. In return for fulfilling the conditions of this option the faculty member will be entitled to a cash retirement payment as described in sub-section II D. herein. The amount of the Retirement payment will be

calculated according to the methods in Sub-section II. D. herein.

4. Except as provided in Sub-section II. C. 5, a faculty member who, after selecting this option, retires before the end of the fiscal or academic year in which he/she has committed to retire, shall forfeit the retirement payment.

5. In the event that a faculty member dies or is declared to be permanently and totally disabled before the end of the fiscal or academic year in which the faculty member was committed to retire, the University will pay the Retirement Payment in the manner described in Sub-section II. D. 2 as if the faculty member retired at the end of the fiscal year in which he/she committed to retire.

#### D. Retirement Payment

1. Except as provided in paragraph 2, the Retirement Payment will be paid in two installments: the first by July 31 of the year in which retirement occurs and the second by February 1 of the succeeding year.

2. If the member dies or is declared permanently and totally disabled after signing the Retirement Agreement, but before the contracted retirement date, then the Retirement Payment will be paid to the faculty member or the faculty member's beneficiary in the case of the faculty member's death in two installments: the first by July 31 of the year in which retirement occurs and the second by February 1 of the succeeding calendar year.

The amount of the Retirement Payment shall be determined under the contractual conditions listed in Sub-section II. C. and shall be calculated by one of the two following methods, whichever provides the greater retirement payment. For the purposes of this calculation, "salary" shall be the annual salary for the academic or fiscal year, whichever is applicable, during the last year of active employment. In the case of a faculty member who was declared permanently and totally disabled after signing the Retirement agreement, but before the contracted retirement date, "salary" shall be the academic or fiscal year (whichever is applicable) for the last full fiscal or academic year prior to the faculty member's death or disability. In no case shall the Retirement Payment exceed 150 percent of the faculty member's applicable academic or fiscal year salary.

a. Percent of Salary Formula: Payment under this method is calculated to be one hundred percent (100%) of the applicable academic or fiscal year salary in the year of retirement. Retirement must occur no later than the end of the year in which the faculty member attains age 67. Such years is described in Sub-section II C. 2.

EXAMPLE: At age 62, a faculty member contracts to retire at the end of the fiscal year in which he/she attains age 67. The faculty member's salary for the fiscal year in which he/she attains age 67 is \$55,000. If, after entering the contract, the faculty member retires at age 65, individual will not receive any retirement payment because retirement occurred prior to the committed retirement date.

b. Percent of Salary Increase Formula: An alternative method for calculating the Retirement Payment is provided for faculty who have received limited salary increases in recent years. In certain situations, this method provides a larger Retirement Payment than Method "a" above.

A faculty member who has received an average annual salary increase over the immediate preceding five years that is less than fifty percent (50%) of the average increase for faculty members over the same period will receive a larger Retirement Payment using this method.

The Retirement Payment is based upon the relationship between (a) the faculty member's average annual salary increase percentage for the immediately preceding five years and (b) the average of the annual salary increase percentage for the faculty members of the university for the same period. The Retirement Payment is a percentage (P) multiplied by the faculty member's salary. The formula for "p" is as follows:  $P = (1-X/Y)$ .

Here "X" is the faculty member's average annual percent of salary increase for the immediate preceding five year period and "Y" is the corresponding average annual percent of salary increase for all faculty members in the University for the same period. In no event can "P" exceed 1.50.

EXAMPLE: A faculty member at age 62 contracts to retire at the end of the fiscal year in which he/she attains age 66. The faculty member's salary in the year in which he/she attains age 66 is \$45,000. Over the past five years, the faculty member's average salary increase has been 2.5% while the average of the University has

been 7.30%. Because the 2.5% is less than 50% of the University average, the percent of salary increase formula for calculating the Retirement Payment is used. The calculation of the Retirement Payment is:  $P = (1 - .025/.073)^2$ .  $P = (1 - .343)^2$ .  $P = (.657)^2$ ;  $P = 1.314$ . Retirement Payment is \$45,000 times 1.314 or \$59,130.

If the faculty member chooses to retire at age 65, the faculty member will receive no retirement payment.

### III. FIRST YEAR TRANSITION RULES FOR THE RETIREMENT DECISION CONTRACT OPTION

In the interest of equity, all eligible faculty age 60 and older will be given the opportunity to apply for participation during the first year the program is available according to the following conditions:

1. During the transition year, the twenty-four month employment requirement may be reduced or waived.

2. Any faculty member who applies for the Incentive Retirement Program during the transition year and is not selected will remain eligible to apply in subsequent years.

### IV. PRIORITY SYSTEM FOR CHOOSING PARTICIPANTS

In the event that funding constraints limit the number of applicants who can participate in the Incentive Retirement Program for Faculty, a priority system has been established to choose among applicants.

### V. DEFERRAL OF FACULTY PARTICIPATION

The University reserves the right to delay implementation of a faculty member's retirement under the Retirement Decision Option by up to twelve months when such an action is in the best interest of the University. In the event the University exercises that right, neither the Retirement Payment nor related benefits will be reduced for the affected faculty member.

As approved May 1989



## James Madison University

### Early Retirement Incentive Plan for Faculty (Proposal revised on April 11, 1989)

The James Madison University Early Retirement Incentive Plan for Faculty has been designed to provide incentives for voluntary early retirement for faculty. It is the needs of the University and not the availability of funds, however, that will determine whether the early retirement funds available in any year will be allocated. Only non-classified teaching and research staff are eligible to participate in the plan and participation is entirely voluntary. This plan has been approved by the Board of Visitors of James Madison University which reserves the right to modify, amend or repeal the plan.

It is the responsibility of the participant to determine how the election of this early retirement plan will affect his or her retirement benefits. Participants should contact the Employee Relations Office for assistance in retirement planning.

#### I. Objectives

1. To provide the University with increased flexibility in the allocation of faculty positions among the disciplines in order to best meet enrollment demands.

2. To facilitate the hiring of new faculty members who have credentials and experiences which best support and enhance the current mission of the University.

3. To help alleviate the financial hardship of early retirement which currently prevents some faculty who would like to do so from retiring early.

#### II. Participation Eligibility

To be eligible to participate in this early retirement plan, a participant must

1. be at least sixty (60) years of age.
2. be tenured or have contractual right to continued employment.

3. have at least ten (10) years of full-time service with JMU, and
4. agree to comply with any criteria established by the Board of Visitors of James Madison University.

Retirement under this plan shall be subject to the above eligibility criteria and shall mean the conclusion of fulltime employment with the University by the participant, and such conclusion shall require (1) the withdrawal of active membership in the Virginia Supplemental Retirement System (VSRS) by VSRS members or (2) the cessation of contributions to the account of TIAA-CREF participants by James Madison University (or any other agency of the Commonwealth of Virginia).

### III. Source of Funds and Annual Costs

Each year, up to one percent (1%) of the University's General Fund appropriation for faculty salaries and benefits may be allocated to the Early Retirement Incentive Plan for Faculty and the cost of early retirement contracts awarded for the year will not exceed this amount.

### IV. Selection of Participants

Criteria for selecting participants from among eligible applicants will be developed by the Academic Council chaired by the Vice President for Academic Affairs and will be based on the objectives stated in Section I above. Applicants for early retirement must be reviewed by the candidate's department head and dean. The Vice President for Academic Affairs will recommend selected participants to the President and the Board of Visitors for approval.

### V. Early Retirement Decision Contract

The Early Retirement Decision Contract permits eligibility faculty members to enter into an agreement to retire at a specific age in the future in return for which the University will provide the individual an early retirement payment. The contract conditions are as follows:

1. The participant will contract to retire at an age not earlier than age 60. Retirement must take place at the end of an academic year (June 30) and it becomes effective the next day (July 1).

An eligible faculty member must submit his or her application for early retirement by July 1 of the year preceding the effective date of retirement, and the University will notify the applicant on or before November 1 of the action taken on his or her application. (A sample application letter is attached.) The early retirement contract must be signed by the applicant within thirty days of the notification of approval.

3. Applicants who are approved for early retirement will receive an early retirement cash payment (see section 5 below) upon retirement at the contracted age. Such compensation may include, at the discretion of the participant, payment by James Madison University of Commonwealth of Virginia health insurance premiums until the participant reaches age sixty-five.

4. In the event that a faculty member becomes permanently and totally disabled after signing the early retirement contract but before actually retirement, the University will be responsible for providing early retirement payments under the contract. However, in the event that a faculty member dies after signing the early retirement contract but before the actual retirement, the university shall not be liable for any early retirement payments under the contract.

5. The maximum allowable amount of the early retirement incentive program will be 150 percent of the participant's annual salary during the year immediately preceding the date of retirement. The actual percentage allocated for each participant accepted into the plan may vary depending on the number of eligible participants and the needs of the University at the time the individual's contract is negotiated. When the participant is employed under a twelve month contract, the annual salary will be converted to a 9-10 month basis using a factor of .818 for determining the salary base upon which the early retirement payment will be made. The early retirement payment will be paid in four lump sum installments: one in July of the year of retirement, one in January and one in July of the calendar year following the year of retirement, and a final payment in the following January (in the nineteenth month following the date of retirement).

JAMES MADISON UNIVERSITY  
RETIREMENT INCENTIVE CONTRACT

This contract for retirement between James Madison University and \_\_\_\_\_ (faculty member) is to provide and incentive to retire prior to the normal retirement date as defined by the Commonwealth of Virginia. The faculty member shall terminate full-time employment with the University on \_\_\_\_\_.

In consideration for retirement prior to the normal retirement date, the University agrees to a total retirement payment of \$\_\_\_\_\_. This payment will be in the following installments on the specified dates:

	Amount	Month	Year
1.	\$ _____	_____	19 _____
2.	_____	_____	19 _____
3.	_____	_____	19 _____
4.	_____	_____	19 _____
5.	_____	_____	19 _____
6.	_____	_____	19 _____
Total	\$ _____		

The above amounts are subject to social security , state and federal taxes as required by law and to any approved benefit withholdings requested by the faculty member.

The faculty member shall meet all participation eligibility requirements in the plan as contained in the James Madison University Manual of Policies and Procedures. Additionally, the faculty member will: (1) withdraw from active membership in the Virginia Supplemental Retirement System (VSRS) and/or (2) cessation of contributions to the account of TIAA-CREF participation by James Madison University or by any other agency of the Commonwealth of Virginia. In the event that the faculty member becomes permanently and totally disabled after signing this retirement contract but before the actual retirement, the University will be responsible for providing the retirement payments under the terms of this contract. However, in the event that the faculty member dies after signing the contract but before the effective retirement date, the University shall not be liable for any payments under this contract.

The faculty member acknowledges the terms and other conditions as contained in the referenced policy in the James Madison University Manual of Policies and Procedures.

\_\_\_\_\_  
Faculty Member                      Date

\_\_\_\_\_  
Ronald E. Carrier                      Date  
President

Virginia Polytechnic Institute and State University

FACULTY RETIREMENT TRANSITION PROGRAM

BACKGROUND

The Virginia General Assembly passed legislation in the Spring, 1988, making it possible for institutions of higher education in the Commonwealth to propose retirement incentive plans for tenured faculty over the age of 60. Any such program would be funded by the institution's own resources up to a limit specified in the legislation. Retirement incentive programs are viewed as crucial by many institutions faced with a highly tenured and aging faculty for whom there is no longer a mandatory retirement age. Virginia Tech is not in such a position. As a whole, our faculty is reasonably well distributed by age -- more than half (53.3%) of the full-time instructional faculty is 45 years of age or younger; 30.6% is 46 through 55 years of age; only 16.1% of the faculty is 56 years or older. Seventy percent of the full-time permanent instructional faculty is tenured. Thus, national trends that have led to serious problems on some campuses are not reflected in crisis proportion here at Virginia Tech.

As a result, the University has an opportunity to shape a program to assist our long-term, tenured faculty in their transition from full-time service to retirement and emeritus status in many cases. This approach is reflected in the proposed title and benefits of the program. The program is viewed as a substantive service to valued employees considering retirement. It is, quite deliberately, a modest program, in recognition of the many pressing needs awaiting scarce University resources. The program will be evaluated between now and the 1991-92 academic year to determine its effectiveness and the possible advantages in providing further enhancements; in particular, a study will be made of the profile of faculty in each academic department to determine the anticipated flexibility of hiring opportunities.

Creating further opportunities for involvement and recognition of those emeriti faculty who wish to maintain a connection with the University is a related issue which needs additional attention. The Provost will establish a task force in the near future to examine current status and benefits for our emeriti faculty and to make recommendations for their improvement as needed.

## OVERVIEW OF THE PROPOSED RETIREMENT TRANSITION PROGRAM

There are three major aspects of the proposed program:

Enhancement of retirement counseling for all employees including confidential personal financial counseling.

Continuation of medical benefits paid by the University until age 65 for those who retire earlier.

Phased retirement including contracts for part-time employment at proportional salary for faculty who want to reduce their full-time commitment but not abruptly sever their ties with the University.

These proposed elements of the plan are discussed in greater detail below:

### PROGRAM OBJECTIVES

To facilitate the transition of faculty from full-time active service to retirement through continuation of medical benefits and, if mutually agreeable, through gradual disengagement from professorial responsibilities. To provide the University some added flexibility in hiring new faculty members without completely losing the talents and experience of valued senior faculty.

### ELIGIBILITY FOR PARTICIPATION IN THE PROGRAM

Participants in the program must:

be at least 60 years of age

be a faculty member or administrator with tenure or a contractual right to continued appointment (such as librarians and Extension faculty with "Continued Appointments").

Have at least ten years of full-time service at Virginia Tech (full-time service may include periods of leave with full or partial pay but not periods of leave without pay).

Agree to withdraw from active membership in the Virginia Supplemental Retirement System (VSRS); i.e. whether or not the faculty member chooses at that time to draw on the retirement annuity from VSRS or TIAA, the University will cease making payments to VSRS or TIAA.

Comply with any additional criteria established by the Board of Visitors.

The program will apply to retirements becoming effective July 1, 1989 through June 30, 1992. Participation in the program is voluntary.

## MAJOR PROGRAM ELEMENTS

### Enhancement of Retirement Counseling Services

Employee Relations currently offers faculty and classified employees the benefit of individual counseling prior to retirement. Periodically, programs are offered for prospective retirees to answer questions about available retirement benefits and helpful ways to plan for retirement. As more employees approach retirement age, more of these and additional services will be needed for prospective retirees to examine their options and determine the optimal time of retirement. Faculty often have multiple sources of retirement income making it a complex task to determine what the consequences would be of retiring before age 65, for example. Additional resources would allow the office to take a more proactive approach to pre-retirement counseling and financial advising. "Additional resources" may be in the form of new staff or contracted services with financial advisors in the community, and additional funds to purchase or modify software that would allow users to examine a variety of retirement scenarios appropriate to their circumstances. (These services would be available to any university employee considering retirement and would not be limited to those meeting eligibility criteria above.)

### Continuation of Medical Benefits to Age 65

For many prospective retirees, the loss of employer-paid medical benefits can be a significant factor in their decision to postpone retirement to age 65. Under this program, eligible faculty members will be guaranteed continuation of payments by the University of the same contribution toward health insurance premiums as for active full-time faculty, until age 65 whether they opt for complete or phased retirement.

### Phased Retirement

Phased retirement is considered a desirable option by many faculty members who would like to continue their professorial roles but with a reduced workload. For those faculty members with many years of service credit in VSRS,



retirement followed by part-time employment at proportional salary could result in an INCREASE in take-home pay, a fact many faculty overlook. In promoting phased retirement, the University hopes to make it possible for long-time faculty to remain actively involved in the life of the University, while reducing their professorial responsibilities. The following guidelines apply to the phased retirement program.:

1. Part-time employment following retirement is not a faculty right, but may be available on mutual agreement of the faculty member and the department head, with the approval of the dean.

2. A primary criterion in the approval of a Phased Retirement must be the enhancement of the academic program of the department.

3. Any agreement for Phased Retirement must be in writing. The agreement may be year-to-year, with renewal on mutual agreement of the faculty member and the department head, or the agreement may be multi-year.

If the contract is multi-year, there should be recognition that the faculty member (with reasonable notice) may resign from the agreement, but the department head can terminate the employment before the end of the agreement only on the basis of evidence that the quality of teaching or other assignment has deteriorated markedly from that which was recognized at the time of the agreement; the criteria for making such judgement should be specified in the agreement. In such as case, the faculty member may invoke the grievance procedure.

A multi-year agreement should specify whether the faculty member's salary is subject to annual merit adjustment. It is assumed that the initial salary is proportional to the faculty member's last full-time salary though other arrangements may be agreed upon with the approval of the Dean and the Provost.

4. The part-time employment shall not exceed 50% except under unusual circumstances and with specific approval of the Dean and Provost. The percentage of employment shall be based on departmental standards of assigned teaching loads, with no release time for unfunded scholarly research or for committee assignments. Funded research or extension assignments may be used as bases for a portion of the employment, however. Specific departmental, college, or university administrative responsibility may be used as part of the assignment.

Uneven assignments in different portions of the year are possible, if they match departmental needs, but the FTE position and salary will be spread evenly across the year.

5. The FTE positions released by a retirement and not committed to the part-time employment of a Phased Retirement agreement will be available for faculty replacement purposes except in cases of clear over-staffing of the Department or the College as determined by the Dean or Provost.

6. Appropriate office space (perhaps shared) and reasonable access to clerical support and departmental operating resources are expected to be furnished.

7. Full medical benefits will be continued until age 65, as provided in the previous section. The total cost in any fiscal year of providing full medical benefits under this Program shall not exceed one percent (1%) of the University's corresponding fiscal year state general fund appropriation for faculty salaries and benefits category.

8. The Board of Visitors reserves the right to modify, amend or repeal this program.

University of Virginia

Phased Incentive Retirement Program for Faculty

Pending Approval July 31, 1992

The University of Virginia Phased Incentive Retirement Program for Faculty (the "Program") has been established to meet institutional needs to increase flexibility in faculty staffing. The program is designed to foster intellectual renewal within the University, to provide for increased opportunities to hire women and minorities, to reallocate positions in keeping with programmatic needs, and to facilitate the hiring of new faculty members in support of the enhancement of teaching and research. The objectives of this program are in keeping with the Academic Plan of the University.

This Program will apply to Retirement agreements executed from July 1, 1992 through June 30, 1995. The total cost in any fiscal year of providing incentives under the Program may not exceed one percent (1%) of the institution's corresponding fiscal year state Educational and General appropriation for faculty salaries and benefits categories.

The Program has been designed to meet the management needs of the University and the needs of the faculty. Eligible faculty may choose to participate voluntarily in the Program. After the faculty member signs the contract for retirement, his/her election to participate is irrevocable. Since participation is voluntary, there are no penalties for nonparticipation.

Definitions

FACULTY MEMBER shall mean each full-time tenured faculty member, or a full-time faculty member serving under a contract of continued employment, and each full-time administrator holding tenured faculty status. General faculty members, including administrators with that classification, who under University policy serve with an expectation of continued employment, are included in this definition of faculty.

YEARS OF COVERED FULL-TIME SERVICE shall mean each contract year of full time service as completed by the faculty member, including leaves of absence.

FISCAL YEAR shall mean the twelve month period beginning July 1 of each year.

ANNUAL SALARY shall mean the basic contracted nine month salary for faculty members with academic year appointments, and the basic twelve month salary for faculty with fiscal year appointments.

RETIREMENT under this plan, subject to eligibility criteria set forth in Sections I.B of this document herein shall mean the conclusion of employment with the University. Such conclusion shall require: (1.) the withdrawal from active membership in VRS by VRS members; or (2) cessation of contributions to the Optional Retirement Plan by the University of Virginia (or any other agency of the Commonwealth of Virginia) to the account of the the Optional Retirement Plan participants.

RETIREMENT AGREEMENT shall mean the binding and irrevocable agreement entered into between the faculty member and the University, in which the faculty member makes all applicable elections.

#### Phased Retirement Option

##### A. Option Objectives

1. To provide a flexible retirement plan that will facilitate retirement by meeting faculty members' changing needs and professional interests in the latter stages of their careers through a gradual disengagement from the full-time duties of their positions while protecting their long-term retirement income.

2. To provide the University more flexibility in hiring new faculty members without completely losing the talents and experience of senior faculty.

##### B. Eligibility

1. Participants must be full-time faculty as set forth in definitions above.

2. Participants must be at least 60 years of age and have 10 years of covered full-time service with the University.

3. Participants may not enter after their 68th birthday.

C. Contract Conditions: Optional Retirement Plan  
Participants

This set of conditions applies to faculty members who are enrolled in an Optional Retirement Plan only. The option provides for the phased reduction in workload and salary with the consent of the faculty member's department head and dean. The conditions of the agreement are as follows:

1. Participation may not be for a period exceeding five years or may not continue beyond June 30 of the fiscal year in which age 70 is attained. Full retirement from the University must take place at the conclusion of such period.

2. During the period of participation, the faculty member's workload shall be 50% of that required immediately before the beginning of such period. Alternately, such workload during the period of participation may consist of annual non-increasing levels which average 50% over the period. Such levels are to be determined by the faculty member's department head and dean prior to the beginning of the period of participation.

3. The workload may be renegotiated only at the initiative of the University. An increase in the workload will be granted only at the convenience of the University. Increased effort supported by external funding also is subject to University approval.

3. Salary paid will be proportional to contracted work effort, but benefits will be continued as if the participant were a full-time employee.

4. Benefits

a. Contributions to the Optional Retirement Plan will be continued on an annual basis in the amount equal to the maximum permitted by the Internal Revenue Service for the faculty member's compensation during each year of the phased retirement.

b. Medical benefits will continue in full during the period of participation.

c. Coverage provided by group Life and Total Disability Insurance Plans will continue with disability coverage based on the full-time equivalent of the proportional salary.

5. Merit adjustments to salary may be granted during the period of participation.

6. During the period of participation, administrative support, such as office space, secretarial support and travel funds, will be available to the faculty member.

D. Contract Conditions: VRS Participation

This set of conditions applies to faculty members who are enrolled in the Virginia Retirement System.

1. Participation may not be for a period exceeding two years, or may not continue beyond June 30 of the year in which age 70 is reached. Full retirement from the University must take place at the conclusion of the period of participation. Faculty members must withdraw from active membership in VRS upon retirement.

2. Phased retirement requires the faculty member to work not less than 50% of the full-time equivalent effort for a period not to exceed two years.

3. Salary paid will be proportional to contracted work effort, but benefits will be continued as if the participant were a full-time employee.

4. Benefits

a. The VRS member will be placed on educational leave. If the individual receives at least one-half pay, VRS contributions will be made on full pay and the member will earn service credit. If the individual receives less than one-half pay, no VRS contributions will be made, and the member will not earn service credit.

b. Medical benefits will continue in full during the period of participation.

c. Coverage provided by the Group Life Insurance will continue.

5. Merit salary adjustments may be granted during the period of participation.

6. During the period of participation, administrative support, such as office space, secretarial support and travel funds, will be available to the faculty member.

## II. PRIORITY SYSTEM FOR CHOOSING PARTICIPANTS

In the event that funding constraints limit the number of applicants who can participate in the Phased Incentive Retirement Program for Faculty, a priority system has been established to choose among applicants.

## Appendix C

### List of Interviewees

<u>Name</u>	<u>Organization</u>	<u>Position</u>
1. Blake, Peter	State Council	Financial Coordinator
2. Roberts, Roscoe C.	Attorney General	Assistant Attorney General
3. Chronister, Jay L.	University of Virginia	Chair, Department of Education and Leadership Studies
4. Reed, Katherine M.	University of Virginia	Associate Provost
5. Jackameit, William	James Madison University	Director of Resource Planning and Policy Studies
6. Perry, John M.	Virginia Polytechnic Institute and State University	Acting Provost (Now retired)
7. Hyer, Patricia B.	Virginia Polytechnic Institute and State University	Assistant Provost for Administration

### Other Contributors

1. Gay, June M.	Virginia Retirement System	Field Services Coordinator
2. Sheldon, Philip B.	Virginia Polytechnic Institute and State University	Planning Coordinator



## Appendix D

### Members of Retirement Incentive Study Group

W. Stepka, (Chairman), Retired Faculty Member, Virginia Commonwealth University

K. Burke, Administration, Northern Virginia Community College

L. Fletcher, Business Faculty Member, Old Dominion University

R. Hunt, Vice President for Business and Finance, University of Virginia

E. Miller, Business Faculty Member, Virginia Commonwealth University

I. Robitshek, Administrator, William and Mary

P. Sheldon, Administrator, Virginia Polytechnic Institute and State University

M. Weiss, Business Faculty Member, James Madison University

### Later Added

W. Bigger, State Council of Higher Education

C. d'Evegne, State Department of Personnel and Training

M. Mullen, State Council of Higher Education

## Appendix E

### Brief Histories of Model Universities

Brief histories of the three model institutions are provided to give insight into background, mission, faculty composition, and culture of these institutions as they developed and implemented early retirement programs.

#### James Madison University

James Madison University has grown into a comprehensive coeducational institution with an approximate enrollment of 11,000. The student body is composed of approximately 55% women and 45% men with major growth taking place during the 1970s. The institution received its current designation of James Madison University in 1977. The university was established by the General Assembly in 1908 as the State Normal and Industrial School for Women at Harrisburg. The first student body was admitted in 1909 with 209 students enrolled and a faculty of 15. In addition to the student enrollment of 11,000, the university now has 480 faculty with teaching and research responsibilities in the College of Letters and Science, the College of Business, the College of Education and Psychology, the College of Fine Arts and Communication, the College of Health and Human Service and the Graduate School (James Madison University, 1992-93. "Undergraduate Catalog". Vol. 16, No. 1, June 1992).

#### University of Virginia

The University of Virginia was founded by Thomas Jefferson in 1819 and began classes in 1825 with 68 students and a faculty of 8. The University's faculty now number almost 2,000 with more than 300 endowed professorships. Among Commonwealth of Virginia faculty, University of Virginia faculty have enjoyed unique retirement opportunities (University of Virginia. "Undergraduate Record 1991-92". The defined-contribution TIAA-CREF retirement plan was made available to those faculty in 1928; other instate public institutions began offering the TIAA-CREF retirement program in 1986 after authorization was granted by then-Governor Charles Robb. Currently, consistent with statutory guidelines, those University of Virginia faculty hired prior to January 1, 1991 have 11.5% of their salaries contributed to their defined contribution retirement plans with 1.1% of this contribution coming from non-state sources. Faculty

hired on or after January 1, 1991 receive 10.4% of salary - the contribution currently authorized by state code (Section C, Code of Virginia 51.1-126). University of Virginia faculty have participated in several types of pension plans over the last forty years; therefore, any early retirement incentive plans must recognize the differences in those plans if all faculty are to be encouraged to consider early retirement.

#### Virginia Polytechnic Institute and State University

Established in October 1882 as one of two land-grant colleges in the Commonwealth of Virginia, Virginia Polytechnic Institute and State University has grown from a President, four faculty, and twenty-nine students to a comprehensive university with more than 2,000 faculty, 3600 classified employees and 22,000 students. The traditional land-grant mission of teaching, research, and public service continues. The university history contains repetitive pleas from early college presidents regarding the need for an appropriate retirement system for older and disabled faculty. Mention is made in the 1940s of faculty age 70 to 80 years old and beyond remaining on payroll with the President having the unenviable task of determining when an individual faculty member should take a reduced work load and a reduced salary (Kinneer, 1972).

**DOUGLAS D. MARTIN**

Home Address

Rt. 2, Box 348  
Newport, VA 24128  
(703) 626-3572

Business Address

Personnel Services  
Suite 142, Southgate Ctr.  
VPI & SU  
Blacksburg, VA 24061  
(703) 231-4233

**EDUCATION**

- 1993 Ed.D. in Educational Administration, Virginia Polytechnic Institute & State University
- 1978 Master of Arts in Educational Administration, Virginia Polytechnic Institute & State University
- 1964 Bachelor of Science in Business Administration, Virginia Polytechnic Institute & State University

**WORK EXPERIENCE**

- 1978-Present **Benefits Manager and Benefits Program Manager**  
- Virginia Polytechnic Institute & State University - Responsible for the design, development, implementation and administration of a comprehensive university benefits program for 6,200 faculty and staff, 3,600 part-time employees, and an overall benefits budget in excess of \$80,000,000. Duties include responsible for retirement programs, health care programs, life insurance and disability plans, workers compensation, flexible benefits plans, and a personal investments program. Current additional duties include Director of New Dimensions, a campus organization for retirees, campus liaison for the university wellness program, and a task force member of the Center for Creative Retirement.
- 1969-1978 **Agency Records Administrator** - Responsible for the development and implementation of a comprehensive records management program to assure compliance with existing federal and state statutes. Established a microfilm system. Served as a historical researcher for the University history, "The First One Hundred Years."

1968-1969           **Political Aide** - Member of Staff of State Candidate for Attorney General. Prepared and disseminated radio press releases, scheduled appearances, and traveled with candidate.

**MILITARY EXPERIENCE**

1964-1968           U.S. Air Force - Member of the Air Force Personnel Staff. Viet Nam era Veteran. Served in European theatre for 37 months. Security clearance - top secret.

Graduated Air Force Personnel Technical School, Amarillo, Texas

**COMMITTEE WORK - UNIVERSITY**

University Council  
EEO/AA Sub Committee on Minorities  
Search Committee for Vice President for Administration  
University Self Study  
University Benefits Committee  
Advisory Board, Virginia Center for Creative Retirement  
Faculty Long-term Disability Committee  
Faculty Sick Leave Committee  
U.S. Savings Bond Coordinator  
Montgomery County Senior Federation

**COMMITTEE WORK - STATE**

Health Insurance Benefits Advisory Committee  
Legislative Sub-Committee for Sick Leave  
State Commission for Faculty Optional Retirement Plans

**RECENT SPEAKING ENGAGEMENTS**

State Black Faculty and Administrators Conference  
Craig County Father-Son Banquet  
State Convention of Home Economics Teachers  
Ruritan Family Night  
Blacksburg Rotary  
Virginia-North Carolina Regional UMCA Convention  
Newport Woman's Club

**CHURCH ACTIVITIES**

Member, Newport-Mount Olivet United Methodist Church,  
Pastor-Parish Committee, Lay Leader

**HONORS/AFFILIATIONS**

Phi Kappa Phi  
Alpha Kappa Psi Professional Business  
Public Administration Club  
Management Systems Laboratory Responsiveness Award  
Air Force Commendation Medal  
Ruritan Service Award  
Little League Baseball Award  
Dean's List  
Valedictorian - High School  
DeKalb Agriculture Accomplishment Award  
Member, U.S. Air Force Baseball Team - Germany

**COMMUNITY ACTIVITIES**

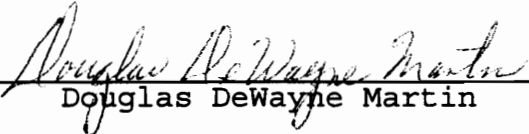
Newport Ruritan Club  
    Program Chairman  
    Board of Directors  
    Secretary  
    21 years perfect attendance  
Giles County School Board Sub-Committee  
Giles County Schools Interview Committee  
Little League Baseball Coach  
Village of Newport Team Leader

**COMPUTER LITERACY**

Mainframe  
    Statistical Package for Social Sciences (SPSS)  
    GML  
Microcomputer  
    QUATTRO  
    Harvard Graphics  
    Retirement Planning Programs (2)

**LEISURE ACTIVITIES**

Roses  
Jogging  
Local History  
Photography  
Reading

  
\_\_\_\_\_  
Douglas DeWayne Martin