Voluntary time-income trade-off option for Montana public employees.

Bruce Desonia

The University of Montana

Follow this and additional works at: http://scholarworks.umt.edu/etd

Recommended Citation
A VOLUNTARY TIME-INCOME TRADE-OFF OPTION
FOR MONTANA PUBLIC EMPLOYEES

by
Bruce Desonia
B.A., Concordia College, Moorhead, MN., 1971
Presented in Partial Fulfillment of the Requirements for the Degree of
Master of Public Administration
UNIVERSITY OF MONTANA
1993

Approved by,

Chairman, Board of Examiners

Dean, Graduate School

Date
May 11, 1993
## TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>LIST OF ILLUSTRATIONS</th>
<th>...............</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIST OF TABLES</td>
<td>................</td>
<td>111</td>
</tr>
</tbody>
</table>

### Chapter | Page
--- | ---
I. INTRODUCTION | 1
   A. Problem Statement | 1
   B. Inadequate Compensation for Montana State Employees | 3
   C. High Turnover Rates and Disruptions from Cutback Management | 11
   D. Political Restraints to a Balanced Budget | 16
II. THE TIME EXCHANGE STUDY | 21
   A. Proposal | 21
   B. Methodology | 24
III. LITERATURE REVIEW | 29
   A. Conceptual Issues | 29
      1. Work time as an employment policy issue
      2. Work time as a family policy issue
      3. Work time and organizational theory
   B. Practical Issues | 43
      1. Economic implications and management concerns
      2. Cultural/organizational implications
      3. Overview of work time experimentation
   C. 1990 Committee on State Employee Compensation | 57
IV. RESULTS AND DISCUSSION | 64
V. CONCLUSION AND RECOMMENDATIONS | 76

### Appendix

A. Letter of Agreement With State Agencies | 81
B. Cover Letter For Survey | 82
C. Survey Instrument | 83

### BIBLIOGRAPHY | 84
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Comparison of Annual Benefit and Salary Contributions by Selected State Positions, 1990</td>
<td>4</td>
</tr>
<tr>
<td>2.</td>
<td>Degree of Satisfaction With Montana Employee Benefits (%)</td>
<td>8</td>
</tr>
<tr>
<td>4.</td>
<td>Stated Worker Preferences Toward Exchanging All or Portions of a 10 Percent Raise for Alternative Forms of Free Time</td>
<td>35</td>
</tr>
<tr>
<td>5.</td>
<td>Number of Surveys Distributed, Number Returned and Percent Returned, by Department</td>
<td>64</td>
</tr>
<tr>
<td>6.</td>
<td>Number of Employees Choosing Pay, Number Choosing Time, Percent Choosing Time and Number Undecided, by Department</td>
<td>65</td>
</tr>
<tr>
<td>7.</td>
<td>Choice of Pay vs. Time Off by Age Group</td>
<td>65</td>
</tr>
<tr>
<td>8.</td>
<td>Choice of Pay vs. Time Off by Years of Service in State Government</td>
<td>67</td>
</tr>
<tr>
<td>9.</td>
<td>Choice of Pay vs. Time Off by Annual Salary</td>
<td>68</td>
</tr>
<tr>
<td>10.</td>
<td>Choice of Pay vs. Time Off by Percentage of Salary That Is General Fund Dollars</td>
<td>71</td>
</tr>
</tbody>
</table>
# LIST OF ILLUSTRATIONS

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Comparison of Changes in Consumer Price Index With MT. State Employee Pay</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Increases, 1976-93</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Percent Choosing Time Option by Sex and Department</td>
<td>69</td>
</tr>
<tr>
<td>3.</td>
<td>Perceived Funding Source by Individual Employees by Department</td>
<td>69</td>
</tr>
<tr>
<td>4.</td>
<td>Comparison of Survey Population with Montana State Work Force by Age Group.</td>
<td>73</td>
</tr>
<tr>
<td>5.</td>
<td>Comparison of Survey Population with Montana State Work Force by Salary Range</td>
<td>73</td>
</tr>
</tbody>
</table>
CHAPTER I

INTRODUCTION

Different cultures look upon time differently. The Western perception is a linear one, with a past, present and future. Thus in this culture, life is segmented into early childhood, education, work, and leisure (retirement). With the exception of leisure, Americans tend to anticipate the next segment. Time is a commodity and thus the metaphor of money is often used in describing it--time can be saved, spent, or wasted. In this way, time has an emphasis on the future.

Job design typically begins with the assumption that the employee will work forty hours per week, the tasks required of the position can be divided into five eight-hour segments, and employees can and will adjust their personal lives to fit that schedule. Since the preference of the employee and the requirements of the job may be considered together, alternative approaches to work scheduling may be examined. If given a choice, many employees would opt for a reduced work schedule, one allowing more leisure time.
A. Problem Statement

Replacing rigid and inflexible work schedules in the public sector with more flexible ones involving employee choice makes sense politically, organizationally, economically, and socially. Although it may require extra managerial efforts to implement, allowing exchange of pay for voluntary reduced work time provides higher worker morale, decreased turnover, and better job performance which compensate for those efforts.

This paper will document the inadequate compensation provided to Montana state employees using salary surveys of other states and a comparison with the cost of living as a standard. It will then discuss the state government's high turnover rate and poor morale affected by years of an administrative policy of vacancy savings mandates and elimination of whole positions through attrition.

The Montana Legislature responds to the above dilemma that there is not enough money left in the budget to provide adequate cost of living increases. They provided a 1.5% salary increase for the last six months of the 1995 biennium and eliminated approximately 750 positions in SFY94. What alternatives are there to this dilemma? Allowing employees the opportunity to trade current salary (or a future cost of living increase) for a corresponding
amount of annual leave offers a win-win situation. It
provides flexibility to the Legislature to reduce personal
services costs in difficult economic times and allows for
increasing public employment during times of a surplus
budget. It gives public employees the individual choice
to increase their leisure time to meet their perceived
personal needs at the same time enhancing their
opportunity to receive fair cost of living increases.

This study will examine the feasibility for a time-
pay trade-off choice for state employees. The following
three sections will elaborate on the problems just
identified.

B. Inadequate Compensation for Montana State Employees

The Montana Department of Administration released
a State of Montana Salary Survey in December 1990. The
survey is conducted every two years to compare state
employee’s pay with that provided by other Montana
employers and surrounding state governments. The 1990
survey showed that Montana’s ability to compete in the job
market continues to decline.

Montana government’s overall competitive position can
be described by a ratio comparing Montana state average
salaries to the average salaries for other employers for
similar jobs. The survey revealed that Montana government
### TABLE 1

COMPARISON OF ANNUAL BENEFIT AND SALARY CONTRIBUTIONS

BY SELECTED STATE POSITIONS, 1990

<table>
<thead>
<tr>
<th>State</th>
<th>Health/Life/Dental</th>
<th>Retirement Plan</th>
<th>Annual/Sick/Holiday</th>
<th>FICA</th>
<th>Total Benefit Package</th>
<th>Average Salary</th>
<th>Ave. Salary &amp; Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MT</td>
<td>$1,560 7.7%</td>
<td>$1,301 6.4%</td>
<td>$3,002 14.8%</td>
<td>$1,551 6.7%</td>
<td>$7,414 36.6%</td>
<td>$20,281</td>
<td>$27,695</td>
</tr>
<tr>
<td>ND</td>
<td>2,395 12%</td>
<td>1,820 9.1%</td>
<td>2,840 14.2%</td>
<td>1,527 7.7%</td>
<td>8,582 43.0%</td>
<td>19,956</td>
<td>28,538</td>
</tr>
<tr>
<td>CO</td>
<td>972 3.4%</td>
<td>3,446 12%</td>
<td>3,658 12.9%</td>
<td>0 0.0%</td>
<td>8,076 28.6%</td>
<td>28,248</td>
<td>36,324</td>
</tr>
<tr>
<td>AZ</td>
<td>2,790 12%</td>
<td>450 2%</td>
<td>3,128 13.9%</td>
<td>1,721 7.7%</td>
<td>8,089 36.0%</td>
<td>22,500</td>
<td>30,589</td>
</tr>
<tr>
<td>WY</td>
<td>1,338 6.0%</td>
<td>1,672 7.5%</td>
<td>3,121 14.0%</td>
<td>1,706 7.7%</td>
<td>7,837 35.1%</td>
<td>22,296</td>
<td>30,133</td>
</tr>
<tr>
<td>NV</td>
<td>2,050 8.2%</td>
<td>4,181 17%</td>
<td>3,330 13.3%</td>
<td>0 0.0%</td>
<td>9,561 38.2%</td>
<td>25,036</td>
<td>34,597</td>
</tr>
<tr>
<td>SD</td>
<td>1,033 5.5%</td>
<td>946 5.0%</td>
<td>2,763 14.6%</td>
<td>1,448 7.7%</td>
<td>6,190 32.7%</td>
<td>18,928</td>
<td>25,118</td>
</tr>
<tr>
<td>MN</td>
<td>2,966 10%</td>
<td>1,427 5.1%</td>
<td>4,421 15.8%</td>
<td>2,140 7.7%</td>
<td>10,954 39.2%</td>
<td>27,979</td>
<td>38,933</td>
</tr>
<tr>
<td>OR</td>
<td>3,148 13%</td>
<td>1,453 6.0%</td>
<td>3,390 14.0%</td>
<td>1,853 7.7%</td>
<td>9,844 40.7%</td>
<td>24,216</td>
<td>34,060</td>
</tr>
<tr>
<td>UT</td>
<td>2,891 12%</td>
<td>2,813 12%</td>
<td>3,664 15.4%</td>
<td>1,820 7.7%</td>
<td>11,188 47.0%</td>
<td>23,795</td>
<td>34,983</td>
</tr>
<tr>
<td>WA</td>
<td>3,093 11%</td>
<td>1,613 6.1%</td>
<td>3,463 13.1%</td>
<td>2,022 7.7%</td>
<td>10,191 38.6%</td>
<td>26,436</td>
<td>36,627</td>
</tr>
<tr>
<td>ID</td>
<td>1,778 7.3%</td>
<td>2,165 8.9%</td>
<td>3,386 13.9%</td>
<td>1,863 7.7%</td>
<td>9,192 37.7%</td>
<td>24,357</td>
<td>33,549</td>
</tr>
<tr>
<td>NM</td>
<td>2,216 11%</td>
<td>2,891 14%</td>
<td>3,052 14.6%</td>
<td>1,599 7.7%</td>
<td>9,758 46.7%</td>
<td>20,904</td>
<td>30,966</td>
</tr>
</tbody>
</table>

**Average**

<table>
<thead>
<tr>
<th>**</th>
<th><strong>Health/Life/Dental</strong></th>
<th><strong>Retirement Plan</strong></th>
<th><strong>Annual/Sick/Holiday</strong></th>
<th><strong>FICA</strong></th>
<th><strong>Total Benefit Package</strong></th>
<th><strong>Average Salary</strong></th>
<th><strong>Ave. Salary &amp; Benefits</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2,172 9.3%</td>
<td><strong>$1,810 8.0%</strong></td>
<td><strong>$3,324 14.2%</strong></td>
<td></td>
<td><strong>$23,456</strong></td>
<td><strong>$30,966</strong></td>
<td></td>
</tr>
</tbody>
</table>

*Temporarily reduced due to over funding. Normal percent is 7%.

**Excludes CO & NV whose contributions are unusually high because they don't contribute to Social Security.

"pays on the average, 90.7 percent of what other Montana employers pay for similar jobs." Montana paid 79.4 percent of the average salaries paid by the other 12 states surveyed, as shown by the salary and benefits comparison in Table 1 above. The 1990 Committee on State Employee Compensation considered in-state employers and the states of Idaho, Wyoming, North Dakota, South Dakota and Washington as competing most directly with Montana for employees and a ratio of 87.3 percent was calculated for Montana state salaries compared to this group.

The survey also provided a comparison of compensation by grade, step, and occupation. Salaries for positions below grade 12 (clerical and semi-skilled) were more competitive with current rates for all market areas than positions above grade 12 (professional and/or administrative). This is partially due to salary compression, or flat dollar additions to the salary matrix at lower grades, rather than straight percentage additions. Forty-four percent of state employees are paid at step two or three of the salary matrix. The annual benefit contribution ($7,414) is the second lowest of the twelve states surveyed. 1

The State Employee Compensation Report for the Montana Legislature in January, 1989, showed that "Montana state employees earn 17 percent less than their
counterparts in nine neighboring states." 2 Those states were Idaho, Utah, Nevada, New Mexico, Arizona, Colorado, Wyoming, North Dakota, and Minnesota. In 1986, Montana state employees earned 12 percent less than their counterparts in neighboring states. Montana public employees have clearly been losing ground for several years. The report went on to suggest that highly trained professionals in Montana state government are beginning to leave Montana state government and move to other states or the private sector, because of low pay. The concern has been expressed in the past by the Department of Administration that government efficiency is reduced as new employees need to be hired and trained.

The fact that Montana state employees are losing ground can also be documented by examining the cost of living increases, step increases, and insurance benefits provided by the Montana Legislature as compared to the Consumer Price Index during the same years (see Figure 1 below). 3 The cost of living increase for a Montana state employee is calculated for a Grade 12, Step 7, to provide consistency throughout the analysis. Those at a lower grade have had larger increases in some of those years. 4 The Problem Identification Survey conducted for the 1990 Montana Committee on Employee Compensation in December 1989 revealed employees were most dissatisfied with direct
FIG. 1. Cumulative Changes in the CPI-U & Montana State Employee Pay Increases

Years (1976-1993)

c
Cons.Price Index-U + Mont. Employee Pay
compensation, including salary, cost-of-living increases and increases for experience. It was perceived by employees in the survey that salaries for new or inexperienced employees were more competitive with the market, but "employees with 3 to 9 years of state service, employees in grades 14 to 15, and employees in protective service and professional fields are those most dissatisfied" with basic compensation. Table 2 below shows employee responses to the following question: "How satisfied are you with what the State of Montana currently provides?" (very = 5 and not at all = 1). By contrast,

<table>
<thead>
<tr>
<th></th>
<th>Very % (5)</th>
<th>Somewhat (4)</th>
<th>Not too (2)</th>
<th>Not at all (1)</th>
<th>Don't know</th>
<th>Mean (1-5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salary</td>
<td>4.4</td>
<td>33.2</td>
<td>36.3</td>
<td>25.6</td>
<td>0.5</td>
<td>2.54</td>
</tr>
<tr>
<td>Annual sal. incre. (COL)</td>
<td>2.8</td>
<td>6.4</td>
<td>19.5</td>
<td>70.6</td>
<td>0.7</td>
<td>1.5</td>
</tr>
<tr>
<td>Annual sal. incre. for experience</td>
<td>3.4</td>
<td>9.2</td>
<td>19.4</td>
<td>66.8</td>
<td>1.2</td>
<td>1.61</td>
</tr>
<tr>
<td>Pd. holiday</td>
<td>71.9</td>
<td>25.1</td>
<td>1.3</td>
<td>1.1</td>
<td>0.5</td>
<td>4.66</td>
</tr>
<tr>
<td>Annu. leave</td>
<td>66.5</td>
<td>30.5</td>
<td>1.8</td>
<td>0.7</td>
<td>0.4</td>
<td>4.60</td>
</tr>
<tr>
<td>Sick leave</td>
<td>66.3</td>
<td>30.4</td>
<td>2.0</td>
<td>1.0</td>
<td>0.4</td>
<td>4.60</td>
</tr>
</tbody>
</table>
the respondents seemed most satisfied with paid holidays and annual leave. 5

There is no evidence that the situation is going to improve given the recent track record of the executive branch. Governor Schwinden's budget for the 1991 biennium proposed a 1.5 percent cost of living increase in each of the fiscal years 1990-91, plus an increase in the state insurance contribution of $120 in FY90 and $180 in FY91. His proposal provided no money for the increase. The dollars were to come from vacancy savings and reduced operating budgets. Governor Stephens proposed a 2.5 percent increase for the same biennium, with the funds to support it.

The Office of the Legislative Fiscal Analyst (LFA) in 1989 suggested that cost of living increases of 4.5 percent annually would "more closely match the forecasted increases in the consumer price index," during the 1991 biennium. The LFA estimated that the 4.5 percent increase would cost $52.5 million during the biennium, compared with the cost of $21.4 million as proposed by Governor Stephens. 6 The Racicot Administration in 1993 proposed no cost of living increase for state employees for the 1995 Biennium, with the exception of a $20/month increased state contribution towards the health insurance premium.
The Legislature provided a 1.5% increase beginning in the last six months of the 1995 biennium.

The rate of pay increases is not the only factor that comes into play. Another means of increasing employee compensation was through thirteen lateral step increases provided in the former Montana pay plan. Although these steps had been referred to as "merit increases", the design has generally provided for automatic increases based on length of service rather than merit based upon performance. Economic realities caused the Legislature to freeze step increases between State Fiscal Year 1986-91. Beginning with State Fiscal Year 1992, these step increases were abolished altogether by the Montana Legislature. This has caused individual equity issues to develop.

More than 50 percent of state employees were at step 3 or below in the statewide pay plan during 1990. The current midpoint of the pay ranges (at step 6.5) was 13 percent below the average of the salaries paid by other Montana employers and the state governments in North Dakota, South Dakota, Wyoming, Idaho and Washington. That midpoint was also 18.8 percent behind other states in a 12 state survey. 

The 1992 Montana Salary Survey by the State Personnel Division, compared state employee salaries with similar
jobs in Montana's private market and to state salaries in the five states listed above. It showed that state employee salaries increased from 87.3 percent to 91.1 percent of the market salary from 1990 to 1992 respectively.

C. High Turnover Rates and Disruptions from Cutback Management

The Montana Department of Administration conducted a survey of state employee turnover between July, 1989 and June, 1990. They found on the average that 14 percent of the state's employees leave state service each year, which was the fifth highest average turnover rate among twelve regional states surveyed. The average for the other states and the local private sector was 12 percent, with a low of 5 percent in Oregon to a high in Nevada of 17 percent. Montana was surpassed by the turnover rates in Nevada, Wyoming and both North and South Dakota.

The turnover rate was unusually high among some of the technical and professional positions (grades 9-15) compared to national trends. The highest turnover rates are in grades 14 and 15 (10 percent to 11 percent) and grades 19 (12 percent) and 20 (14 percent). These grades represent 19 percent of the state's work force. These positions cost the state approximately $5,000 to $10,000
per position to replace, including the cost of recruitment, training and lost productivity.

As a percentage of total employees, between-agency transfers average 4.3 percent. The highest between-agency transfers occur at grades 6, 7 and 9. Including the turnover rates for employees leaving state service, within-agency transfers, and between-agency transfers, the state is experiencing an average turnover rate among full-time employees of 39 percent. 9

In addition to high turnover rates Montana state agencies continue to experience disruptions resulting from cutback management. Montana's Governor Stephens ran on a campaign platform in 1988 of reducing the size of state government by not replacing retiring employees or vacant positions. Governor Stephens issued executive order 01-89 on January 6, 1989, freezing all hiring for new or vacant positions, pending review and approval of each position by the Governor's office. This policy may have attempted to reduce the size of the state work force, but not without organizational dislocations in the process. Managers must realign the existing work force to carry on the necessary functions of state government. Position descriptions and duties need to be rewritten to address the responsibilities left behind by the retired or terminated employees not replaced. This creates stress for the public
administrator and a "distressed supervisor can do more damage than a distressed subordinate" in the work environment. ⁷

If work force reductions cannot be met by attrition alone and layoffs become necessary, there is the disruptive reduction in force (RIF) procedure and a bumping process which must be followed involving social dislocation, increased unemployment compensation chargebacks, increased training costs and a likely loss of productivity. Also, unemployment and Social Security funds are drained. Payments on mortgages and cars are not met and family ties are strained. ⁸ Other costs associated with layoffs include administration of the reduction in force, costs of employees who quit voluntarily due to job insecurity, cost of the preferred hiring system for laid off employees, costs of increased alcohol abuse for those reentering state service, damages to the image of the employer, resistance to change on the part of those employees remaining, and increased grievance and law suit costs. ⁹

Because state and local governments spend over 70% of their operating budgets on employee pay and benefits, a major part of cutback management is to reduce these costs. Some of the issues and problems encountered in this process are:
1) **inadequate human resource planning**—changes in workforce size (up or down) as a result of the political negotiating process rather than human resource planning;

2) **deterioration of employee morale**—a survey of the Merit Systems Protections Board in 1981 revealed that the threat or fact of a RIF in the federal government workforce negatively affected the morale of 65% of the employees and the insecurity caused voluntary quits of the hardest employees to replace;

3) **selection of criteria for targeting cuts**—rational management suggests that to maximize efficiency administration should target cuts, but organizational politics usually dictates equal across the board cuts which may endanger the organization's future effectiveness and survival. All units do not equally contribute to the functioning of the organization. Hiring freezes on the other hand take authority away from management and may affect organization in a haphazard way by undermining long range planning;

4) **role of seniority in determining the order of layoffs**—organizations often use seniority to decide RIFs because of the strength of the unions and employees feel that is the fairest way. Managers may also prefer it because it removes the painful and costly process of
deciding who must go. Unfortunately it does not ensure efficient or equitable decisions as seniority is not usually equally distributed among units. Managers also lose control over targeting cuts to ensure adequate organizational functions. The federal government suggested, following the 1981 RIF, that job performance should receive greater weight in future RIFs. The unions are opposed to this because they feel it is too subjective and there is the possibility of retaliation by management;

5) **effect of retrenchment on equal opportunity**—with seniority determining RIFs, women and minorities are often the first to go (in the 1981 federal RIF 42% of the actions involved women who comprised 37% of the federal work force and 37% of the actions involved minorities who comprised 23%). The Civil Rights Act of 1964 provides for bonafide seniority systems as long as they do not discriminate due to race, color, religion, sex or national origin. Another issue which is hard to quantify is the human costs associated with RIFs such as the affected physical health of employees and their families as well as the declining productivity. 13

Meanwhile, those workers who are terminated must find work elsewhere, competing in the marketplace and increasing the unemployment rate in Montana. Research
suggests that the costs of unemployment are physical as well as economic and psychological. Kahn reports the threat of unemployment fosters psychological changes long before actual job loss occurs and that most physical indicators return to normal slowly, long after new job stability is attained. The unemployment created by the automobile plant closings in Detroit in 1980 yielded some alarming statistics. Kahn reports that Michigan social indicators reflected an increase in child abuse cases by 37 percent, substance abuse increased 10 percent, and suicide jumped 27 percent during this period. 14

Pelletier reports that during periods of economic slumps, there is an increase in murder, suicide, mental illness, heart disease, alcoholism, divorce, domestic violence, family fights, and child abuse. Brenner has predicted that a one percent rise in unemployment in this country is associated with an additional 36,887 deaths (20,440 from cardiovascular diseases, 495 from cirrhosis of the liver, 920 suicides, 648 homicides), 4,227 first admissions to state mental hospitals and 3,340 admissions to state prisons. 15

D. Political Restraints to Balance the Budget

One of the reasons the Montana Legislature has not provided equitable cost of living increases to state
employees in recent years is that the Montana economy has been frequently stagnant during the past decade and the Legislature has been forced to make tough decisions in order to maintain a budget surplus. The actual general fund surplus has ranged from 3.2 to 9.9 million dollars per year between 1983-1988, with expenditures of $357-402 million during that same period. 16

Another problem for the Montana Legislature is that it must forecast Montana's revenues and define budget expenditures two and one-half years in advance of the end of the current biennium. This is difficult to do and unfortunately the decision on the pay increases for state employees is often made in the final days of the session, every two years. The available revenues to provide for the state employees' pay plan are often limited at that point, providing little flexibility for negotiation.

In 1991, Governor Stephens vetoed a pay plan adopted by the Legislature in the final days of the session. Of the estimated 5,560 unionized state workers of the 10,000 executive branch employees, 4,000 went on strike on April 25, 1991. The Legislature postponed it's last day, to allow negotiations between the Governor's office, the unions and the Legislature, before approving a pay plan which Governor Stephens signed on April 27, 1991. 17
During a special session of the Montana Legislature in July 1992, which was called to address a revenue shortfall, agencies were required to submit a list of jobs they "would eliminate to meet a 5 percent cut in their personnel budgets." It exempted the judiciary, university system and agencies with less than 20 employees. Some agency heads and union leaders were critical of the exercise, stating it would "destroy morale and slash productivity." Governor Stephens' budget chief said that they would recommend a different approach for meeting cost reductions, by proposing elimination of entire programs. Representative Cobb, sponsor of the law, said it would "provide some people advance warning that their jobs are not considered top priority by their agency." He stated this would "give them six months warning instead of two weeks under a layoff notice after the 1993 Legislature ends."  

The 1993 Montana Legislature started its session with a projected $215 million deficit by the middle of 1995, assuming no increases in state spending except for inflation and increases in entitlement programs. The complex budget process seems to require the whole session until it is adopted. The projected deficit is the result of spending more than the revenues it takes in during eight of the last twelve years.  As mentioned, the
Legislature provided a 1.5% increase for the last six months of the 1995 biennium.

ENDNOTES:


5. Montana Legislative Council and Department of Administration, State of Montana Employee Compensation: Results of Survey of Employees, Managers, and Union Representatives, April 1990, 17.


CHAPTER II

THE TIME EXCHANGE STUDY

Having discussed some of the compensation issues in Montana, this chapter will focus on how alternative strategies may be incorporated into the Montana state pay plan. Specifically, it will investigate what percentage of state employees would trade a future cost of living salary increase for an equivalent amount of time off in the form of additional annual leave.

A. Proposal

Three specific problems concerning Montana’s executive agency employment may be identified:

1) how can government provide equitable cost of living increases for state employees in order to retain an experienced work force, even though Montana’s economy may be stagnant and revenues unpredictable;

2) what alternatives are available to the dislocation and disruption caused by reductions in the state work force through vacancy savings, hiring freezes and layoffs; and

3) the Committee on State Employee Compensation identified the dissatisfaction of state employees with continued salary freezes, while the cost of living increases.
The Montana Legislature and Governor will continue to make political decisions about expenditures and revenues and try to balance the budget. Implementing alternative work schedules, such as voluntary reduced work time schedules for exchanges in pay may be one approach to addressing these problems.

The issue of exchange of pay for voluntary reduced work time (or short-time compensation) has not been explored by Montana's executive branch, based on an inquiry with legislative leaders and the former Chief of the Labor Relations Bureau in the Department of Administration. One option would be to allow employees to voluntarily exchange pay for additional vacation leave. An incremental approach would be to offer a time trade-off option to salaried executive branch employees in the form of an increased annual leave rate in lieu of a future cost of living increase.

If a sufficient number of employees accepted the time trade-off, there could be a significant cost savings created from which the executive agencies could hire additional employees, contract out for additional assistance or take no action, as their budgets or workloads required. The costs associated with lay-offs and the dislocations and dysfunctions associated with not filling positions may therefore be mitigated. There could
be increased job satisfaction for the state employee, who may perceive more control over his/her work life through the voluntary option of increased leisure time.

There are approximately 14,500 full-time equivalent (FTE) positions in state government. Excluding university employees and elected officials (approximately 25%), the cost of a 2.5% cost of living increase is currently estimated to be about $8,944,000. With 20-35% of employees choosing to trade the cost of living increase for annual leave, a potential cost savings would be realized of approximately $1,789,000-$3,130,000 for one year, assuming those choosing the time option were equally distributed throughout the pay matrix. This figure includes the additional fringe costs of FICA, retirement, worker’s compensation and unemployment insurance.

[Interview with Steve Johnson, Administration’s Labor Relations Bureau Chief, 29 March 1993] Not all of the savings would be state general fund dollars, which may or may not affect legislative decision-making, but employees funded more by state general fund dollars may be more likely to choose the time off option than those not funded by general fund dollars.

The hypothesis advanced in this study is that 20-35% of Montana state government employees based in Lewis and Clark County, from a sample of five of the departments
with the largest number of Helena-based employees, would choose to trade an incremental cost of living increase for additional days of annual leave. This is assuming they would be provided that option individually by the Montana Legislature. This would provide not only increased flexibility to the worker about some aspects of their work life, but also increased flexibility to the Montana Legislature and the executive branch in providing equitable cost of living increases within budgetary constraints. It also mitigates the problems created currently by the policy of cutback management and layoffs. A review of conceptual and practical issues in the literature as well as the findings of the 1990 Committee on State Employee Compensation is discussed in Chapter III.

B. Research Methodology

Research in the form of interviews with officials in state government were conducted to assess the feasibility and impact of this concept in Montana. These interviews are reported elsewhere in this paper and occurred with personnel in the Public Employment Retirement System, Personnel Division, and Labor Relations Bureau of the Department of Administration; Legislative Fiscal Analyst's Office; Office of Budget and Program Planning; and
personnel officers in five state agencies. Elected officials, legislative, judicial and university system staff were excluded since they utilize a different compensation system, although the proposal would appear to be suitable for some of those employees.

State employees in Helena within the Departments of Administration, Labor and Industry, Revenue, Social and Rehabilitative Services and Transportation were chosen for the survey because of the size of those Departments within Lewis and Clark County. To reduce the costs of the survey, only those 1,996 employees based in Lewis and Clark County were chosen for the survey. A random sample of all executive Helena-based agencies was considered, but was abandoned due to the increased cost of the survey and the need for followup letters to the sample chosen, which would have reduced the confidential nature of the survey. The Administrator of the Personnel Division within the Department of Administration suggested the survey be sent out under a cover letter by the personnel officers within those selected agencies.

The five personnel officers were contacted in person and permission to distribute the survey obtained (see Appendix A). A cover letter to accompany the survey and signed by the personnel officer was agreed upon (see Appendix B) and a method for distribution of the survey
was decided. The confidential nature of the survey was emphasized in the survey instructions and in the letter from the personnel officer. The survey was designed to be anonymous, both to maximize its acceptability by the employee and to increase the return rates. Therefore, there was no opportunity to send a follow-up questionnaire to those not responding to the initial one.

The Department of Administration was chosen as a pilot to be surveyed first, to see if any questions or problems would arise in the survey instrument or process, and to define the expected return rate and return time for the survey. The survey was distributed in the Department of Administration with the payroll on February 3, 1993. The surveys were to be folded, stapled or taped, and returned to the personnel director's office in the Mitchell Building, as addressed on the back of the survey instrument. The author's phone number was listed on the survey and only one call was received of the 350 surveys distributed within the Department of Administration.

The personnel director within the Department of Social and Rehabilitative Services preferred to have the surveys delivered to the five Helena work locations on February 8, 1993, and returned to contact persons at each of those locations. The remaining three Departments' surveys were distributed with payroll on February 17,
1993. The Departments of Labor & Industry and Transportation were returned to the central mailroom and those in the Department of Revenue were returned to the main receptionist in the Director's office. Surveys received through February 26, 1993, were analyzed in this study. Thirteen surveys received after that date were not included in the analysis.

The only variable question in the survey was:

Assume the cost of living increased by 3% in SFY93. If the Montana Legislature provided you individually an option in SFY94 of receiving either a 2.5% cost of living increase or 2.5% of your salary in the form of additional paid annual leave (ie. 2.5% of 1784 available hours is equivalent to 44.6 additional hours of annual leave), which would you choose?

"Available hours" were defined on the survey as regular hours (2080) less annual, sick, and holiday leave. The survey also asked for the employee's age group, sex, full or part-time status, membership in a bargaining unit, years of state government service, salary range and percent of salary known to be general fund (See Appendix C). Source of funding was asked to be able to estimate the fiscal impact to the state general fund and to identify any association between this choice and the time/pay trade-off choice. The characteristics of those completing the survey were asked to also be able to compare characteristics of those choosing the time trade-
off with those choosing pay and to compare those completing the survey with the total state work force.

The results of this survey are found in Chapter IV. The next chapter will review conceptual and practical issues surrounding the work time issue, concluding with findings of the 1990 Montana Legislative Committee on State Employee Compensation.
CHAPTER III

LITERATURE REVIEW

A review of the literature was made to identify previous applications of this concept and to look at how the concept is impacted by organizational issues, economic and employment policy issues, individual and family patterns and personnel management theory. Of special relevance is the recent work of the 1990 Montana Committee on State Employee Compensation.

A. Conceptual Issues

1. Work time as an employment policy issue

The dislocations caused by hiring freezes and layoffs were discussed earlier, along with the competition it creates in the job market and upward pressure on unemployment. Montana state government employment figures for the years 1980-1992, excluding workstudy students and elected officials, are shown in Table 3 below along with the number in the civilian labor force and number of unemployed workers. ¹

According to Robert Kahn, an organizational theorist,

Providing work is paramount for individual and social wellbeing; for this reason, jobs should be created as necessary. The adequacy of jobs is almost as important as their availability; the quality of the
work experience should therefore become a matter of national policy.  

Table 3

<table>
<thead>
<tr>
<th>Year</th>
<th>MT. Gov’t</th>
<th>Civ. Employment</th>
<th>Unemployment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1981</td>
<td>15,309</td>
<td>358,000</td>
<td>27,000</td>
</tr>
<tr>
<td>1982</td>
<td>15,088</td>
<td>360,000</td>
<td>34,000</td>
</tr>
<tr>
<td>1983</td>
<td>15,333</td>
<td>360,000</td>
<td>35,000</td>
</tr>
<tr>
<td>1984</td>
<td>15,610</td>
<td>374,000</td>
<td>30,000</td>
</tr>
<tr>
<td>1985</td>
<td>15,890</td>
<td>374,000</td>
<td>31,000</td>
</tr>
<tr>
<td>1986</td>
<td>15,589</td>
<td>374,000</td>
<td>33,000</td>
</tr>
<tr>
<td>1987</td>
<td>15,307</td>
<td>374,000</td>
<td>30,000</td>
</tr>
<tr>
<td>1988</td>
<td>15,779</td>
<td>375,000</td>
<td>27,000</td>
</tr>
<tr>
<td>1989</td>
<td>16,258*</td>
<td>381,000</td>
<td>24,000</td>
</tr>
<tr>
<td>1990</td>
<td>16,581</td>
<td>379,000</td>
<td>23,000</td>
</tr>
<tr>
<td>1991</td>
<td>17,048</td>
<td>375,000</td>
<td>28,000</td>
</tr>
<tr>
<td>1992</td>
<td>17,528</td>
<td>383,800</td>
<td>27,600</td>
</tr>
</tbody>
</table>

*Number includes transfer of 350 Votech employees

In studies conducted by his Institute for Social Research, almost three-fourths of employed men and the majority of women responded that they would continue to work, even if they would have enough money to live well the remainder of their lives.

During the 1988 Montana gubernatorial race Governor Stephens cited low employee morale in the state work force. Nollen has suggested that job satisfaction in the American work force in general has declined, and life satisfaction along with it. In a national survey, one-
third of the workers reported problems with inconvenient or excessive hours. Nollen has suggested that alternative work schedules have demonstrated an ability for improving business needs by meshing harmoniously with human needs. Alternate work schedules provide for elements of choice and trust. They may also stimulate productivity, reduce energy consumption, permit family life to be improved, and encourage equity in employment. ³

During the first half of this century, the average workweek has declined from 60 to 41 hours. Since World War II, the average work week has remained relatively stable, with any reduced hours arising from paid vacations and holidays. The median weekly hours decreased only 0.2 percent, from 40.5 to 40.4 hours between 1973 and 1985. ⁴

The AFL-CIO at its 1975 convention voted to support "a decrease in hours worked, whether on a daily, weekly, or annual basis, with no reduction of wages or benefits." Their goal at that time was a 35 hour week as soon as possible. ⁵ The Work in America Institute recommended that if it were to become necessary to implement a four-day week, Congress should legislate a 36-hour workweek of four nine-hour days, reducing the traditional 40-hour workweek by one hour a week each year over a period of four years. They suggested that workers may accept a loss
of holidays if the workweek were shortened, since many holidays are celebrated on Monday or Friday anyway. 6

Samuel Gompers, President of the American Federation of Labor wrote in 1887 that "as long as there is one man who seeks employment and cannot find it, the hours of work are too long." 7 Gomper's reference to worksharing, or voluntary reduction in pay and time to increase the available work and reduce unemployment, was a justification for labor's movement at that time for a shortening of the workweek. The Hoover Administration supported the shortening of the workweek during the Depression of the 1930s as a way of reducing the high unemployment rate. President Roosevelt signed the Fair Labor Standards Act of 1938 which defined the standard workweek as forty hours with a time-and-a-half pay premium for hours beyond that standard. 8 It is accepted public policy from the 1946 federal full employment legislation that government has a responsibility to reduce unemployment. As a major employer, government has been called upon to take the lead in providing new job opportunities through demonstration projects.

Best looked at seventeen public policies for redistribution of employment opportunities and grouped them into four categories. The first category of six options provided income subsidies to workers to induce
work time reductions, such as sabbaticals, short-time compensation, and educational leaves. Best sees these options as costly and inefficient as a means of transforming work time to employment. The second category seeks to limit work time over weeks or longer through legal restrictions or disincentives such as restriction of overtime, forced retirement and reduction of the standard workweek. Some of these options are costly and inflationary, while others are restrictive of individual freedoms and politically infeasible. The third group fostered long term forfeiture of pay raises for more time away from work, including subsidization of fringe benefits and tax incentives for work time reductions. Best reports this group as less costly and noninflationary, but some of the ideas need more testing. The fourth category included government efforts to encourage institutional options for voluntary work time reductions to open jobs for the unemployed such as neutralization of payroll taxes. This category is politically more feasible, but some of the costs and administrative complications need further study, relative to other means of combatting unemployment. 9

Worksharing has been used primarily in private industry as a means of avoiding layoffs in the face of economic downturns. It has been a tool for industry to respond to economic trends. 10 Some analysts suggest that
unions are demanding reduced work time not to create new jobs but to provide job security and employment for current workers, especially during times of recession.\textsuperscript{11}

The literature suggests that how the time off is scheduled influences the employee's trade-off preferences. In a survey of 233 workers from 9 different organizations the question of a trade-off for a 2 percent pay raise was posed. If 10 minutes off each workday were offered, only 2.1 percent chose it. If 50 minutes were given off each Friday, 11.6 percent chose that trade-off. But if 5 additional vacation days were offered each year, 58.3 percent would choose it.\textsuperscript{12} In another nationally representative survey of American workers in 1978, workers were asked if they would trade some portion of a 10 percent pay raise for different forms of time. The results are shown in Table 4 below.\textsuperscript{13}

Another issue affecting the employee's decision may be how they view the state's economic situation at the time the choice is offered. If the state's revenue projections were down at the time the employee selected their choice, more employees may choose the time-off option as a result.

Canada has experimented with a shortened workweek in recent decades. Their experience was positive between 1977-1979, when workers took a 20 percent reduction in pay
and received an extra day off per week, yet had only a 5 percent reduction in after tax income. Management cited the previously higher costs normally incurred when production picked up and they had to find replacements for those formerly laid off. Those costs included advertising, interviewing and training. A 1978 Gallup poll taken in Canada in 1978 showed a 2 to 1 approval when respondents were asked

Would you approve or disapprove if business and government introduced a shorter work week to spread the work around and help to reduce unemployment? 14

**TABLE 4.**

Stated Worker Preferences Toward Exchanging All or Portions of a 10 Percent Pay Raise for Alternative Forms of Free Time (percentage)

<table>
<thead>
<tr>
<th>Value of trade-off</th>
<th>Reduced Workday vs.Raise</th>
<th>Reduced Workweek vs.Raise</th>
<th>Added Vacation vs.Raise</th>
<th>Sabbatical vs.Raise</th>
<th>Early Retire. v.Raise</th>
</tr>
</thead>
<tbody>
<tr>
<td>No part of raise</td>
<td>73.2</td>
<td>56.5</td>
<td>34.4</td>
<td>34.7</td>
<td>48.6</td>
</tr>
<tr>
<td>40% of raise</td>
<td>6.7</td>
<td>15.4</td>
<td>31.8</td>
<td>34.2</td>
<td>19.3</td>
</tr>
<tr>
<td>70% of raise</td>
<td>4.9</td>
<td>5.3</td>
<td>4.5</td>
<td>8.1</td>
<td>8.3</td>
</tr>
<tr>
<td>100% of raise</td>
<td>14.1</td>
<td>22.8</td>
<td>29.4</td>
<td>23.0</td>
<td>23.7</td>
</tr>
<tr>
<td>Total # Respondents</td>
<td>950</td>
<td>952</td>
<td>954</td>
<td>949</td>
<td>952</td>
</tr>
</tbody>
</table>
Some would argue that part-time jobs are currently available in the labor market, which would serve the same purpose as increasing the availability of voluntary reduced work time. But there is a bias and dichotomy in the part-time employment issue. For instance full-time workers have been perceived as the breadwinners, while part-time employees are assumed to be dependent upon the breadwinner. Full-time workers are assumed to be permanent, while part-time workers are often considered temporary. Men are usually considered to be full-time workers, while part-time workers are assumed to be women, students, the elderly or disabled. Full-time positions occur throughout the organization, while part-time positions are often found in the lowest, menial positions. Full-time positions usually have opportunity for upward mobility, while part-time ones rarely do. Part-time workers often do not receive the same fringe benefits as full-time workers, and are often the first to be laid off in a retrenchment. In 1977, 81 percent of the part-time workers in the United States were women or teenagers. It is easy to see how the opportunity for voluntary reduced work time in managerial or professional positions is especially scarce. 15
2. Work time as a family policy issue

Although demographic, social and economic conditions in this country have changed dramatically since 1940, the eight-hour day remains the standard for the majority of American workers. This rigid standard for use of time conflicts with some of the changing needs of the labor force. In a University of Michigan 1977 Quality of Employment Survey, of those responding that their job and family life interfered with each other, work time was the largest single source of interference. Those same American workers were asked

Would you like to spend less time working so that you could spend more time with your spouse and children, even if it meant having less money, or would you like to spend more time working in order to have more money, even if it meant spending less time with your spouse and children? 16

Forty percent of both men and women said they would prefer less time working and more time with the family.

A Health, Education, and Welfare task force in 1971 on Work In America concluded that "satisfying work is a basic human need which gives identity, self-respect, and order to the life of the individual." 17 Since then there have been changes in the American work force, including a rise of dual wage-earner families who have fewer children. This increasing income from dual wage-earners occurs at the same time financial needs may be decreasing.18 Meier
has found that an increasing number of workers view increasing leisure time as a more important value than their work. As two-earner families become the predominant form of family life in the United States, the desire from many families is to increase the flexibility of their work, especially in families with young children. A study of families indicated that the highest stress was reported in mothers working full-time, less when not working at all, but least for those working part-time. Meier cites the need for part-time work at higher paid jobs, for single parent families (which were at 13 percent a decade ago).  

Women of all ages, but especially married women are entering the labor market at rates never before experienced. The labor force participation of women rose from 32.7 percent in 1948 to 50.1 percent in 1978. Young people are marrying at a later age and postponing the age at which they bear their first child. As there is no longer one predominant family form, so there is no longer one predominant model of a job holder. Harriman argues that although the rigid segregation of sex roles within the family has decreased, organizations support a masculine model of work that assumes the segregation. The masculine model of work then creates stress and adversely affects families which differ from the traditional
breadwinner model of employment. Yankelovich also reports on the changing values of the "New Breed" of American workers. He reports that family life, work and leisure have always competed for people's time and allegiance, but leisure has grown more important. When compared as a source of satisfaction, only one in five said work was more important to them than leisure. Sixty percent indicated that work was not their major source of satisfaction. 

A policy recommendation adopted by the 1980 White House Conference on Families stated that employers "should adopt work schedules that enable employees to accommodate workplace demands to family-life demands." The Work in America Institute issued a policy recommendation in 1981 that stated

...in dealing with the problem of conflict and tensions between work life and home life, employers should try to follow a course of action that is facilitating rather than restrictive. Their policies should be designed to increase worker's options and self-management."

Staines and Peck found in their studies on work time and families that certain kinds of job schedules had a negative influence on workers' family lives. Those schedules included nonstandard patterns of days each week, nonstandard patterns of hours each day and working a large number of hours each week. These schedules had the most
negative effects on workers who had the least control over their schedules. They also found that with dual-earner couples, a person's family life can be affected by his or her spouse's work schedule, as well as by his or her own schedule.\textsuperscript{25}

3. Work time and organizational theory

The practices by the Montana Governor's office over the past twelve years to freeze hiring and reduce expenditures through vacancy savings (delays in hiring vacant positions) will likely be continued. This prospect is demoralizing to remaining employees who must attempt to also perform some of the duties left behind by the vacant or frozen positions. The dislocations and dysfunctions created by not filling positions vacated by retiring employees have been discussed previously.

One organizational strategy proposed by Frederick Herzberg is that of job enrichment. Herzberg studied work satisfaction and work motivation. His motivation-hygiene theory suggested that job dissatisfaction and job satisfaction are produced by different work factors. People are satisfied in their work by the content of their jobs, such as achievement, recognition, increased responsibility, opportunities for growth and advancement. He called these aspects motivators. What makes people
unhappy in their work is how well or poorly they are treated, such as company policy, interpersonal relationships, supervision, salary, status, security and working conditions. These factors he called hygiene factors and in their negative context produce job dissatisfaction. It would appear the employee's lack of control over layoffs, hiring freezes, and work time would lead to job dissatisfaction, but increased control would not necessarily lead to job satisfaction.

Hopkins looked at job satisfaction among state government employees in Tennessee, Nebraska, Oregon, Wisconsin, and New York. She found that certain variables in what she called the job environment were more important than job characteristics in their positive impact on job satisfaction. She found the most important characteristics of the job environment are favorable perceptions of one's supervisor and the fairness of promotions. It would appear that the opportunity to select additional leave is also a potential motivational strategy.

If employees desire more leisure time, why not take voluntary leave without pay, work part-time, or increase annual leave for everyone? The Montana Legislature in 1983 passed a statute that denied the accrual of annual leave or sick leave credit while in a leave without pay
status. In addition, leave without pay exceeding a set amount of time constitutes a break in service affecting the longevity additive for Montana state employees regarding increased leave and pay. This process also does not allow the administration, the legislature or the manager to project the amount of cost savings anticipated from this type of leave. Increasing annual leave or holidays for everyone in lieu of dollars does not provide the flexibility or choice to the employee as to which they may prefer. Moving to part-time reduces the employee’s job security and blocks opportunities for advancement, especially for professional or managerial positions.

Organizations have implemented flexible compensation programs to meet the changing needs of their work force over time. As a result of events in a person’s life such as marriage, children, death of a spouse, etc., the needs of employees change. Flexible compensation systems are also viewed as providing greater equality in compensation between single and married employees. Flexible compensation is the creation of a portion of compensation that the employee can elect to have in cash or benefits or distribute among different types of benefits. One of these types of benefits is in the form of vacation time. Northern States Power Company of Minneapolis in 1981 offered flexible credits derived from reduced vacation
time and employees could either "buy back" the vacation time or use the credits to buy hard dollar benefits. Loews Corporation and Girard Bank of Philadelphia in 1982 offered employees choices of welfare benefits, vacation time, and deferred compensation. One of the objectives of many of these programs is to offer the employees a more tax effective reallocation of compensation. Flexible compensation systems have received favorable responses by employees. Employees like choice and appreciate the opportunity to select choices to meet their own needs.  

Management's responsibility is to "define work objectives and organize resources to get the work done." Two of the resources they have to work with are people and time and organizing these resources means setting work schedules. One company, Corning Glass Works, experimented with flexitime as a means of improving productivity and to improve the use of time as a resource available to management. 

B. Practical Issues

1. Economic implications and management concerns

One way of looking at voluntary reduced work time is by means of a cost/benefit analysis which management would consider. Costs associated with voluntary reduced work time will be discussed in this section, followed by a
review of some of the benefits which may offset those costs.

Mandatory payroll taxes include Social Security, unemployment insurance, and worker's compensation. Social Security taxes are based on the employee's income with both the rate and the ceiling set by Congress. If the employee reduces his/her salary below the ceiling, the employer's liability for Social Security benefits will decrease. Additional liability will occur only when the reduction requires the hiring of additional employees and the pay for the positions exceeds the ceiling.

Unemployment insurance taxes work similarly to Social Security except that the ceilings are set by the state. Additional taxes may be incurred for additional employees, but the increased financial impact may be less than would occur if a lay-off forced employees to collect unemployment benefits.

Worker's compensation insurance is the third mandated expense. The rates vary widely between states, depending upon employer's claim experience and legal requirements. Generally the additional cost of workers' compensation is not significant. 39

The Public Employment Retirement Division, Montana public employees' pension fund, reports there would be no increased cost to the retirement program, since the final
The pension is based on an average of the employee's last three years salary. This would be a disadvantage to the employee, because they would receive no monetary benefit from this increased annual leave choice, unless it were decided it should be converted to salary upon retirement.

Additional employees mean added administrative costs for records, payroll, supervision, and additional space, training, equipment and supplies may be necessary.

Flexible fringe-benefit programs or "cafeteria plans" have received increasing attention by compensation managers, in part because fringe benefits are increasingly a significant cost to management. In some instances, fringe benefits may be excessive, not needed or unused. The Revenue Act of 1978 has made it possible to remove certain employee benefits from taxable income and has provided opportunities for organizations to experiment with flexible compensation. The programs are complex and require additional expense to administer. One method of introducing increased voluntary reduced work time without increasing fringe benefit costs would be to allow employees to exchange fringe benefits not needed for additional vacation time.

Although management may consider a voluntary reduced work time program as a means of increasing employment opportunities, it is more likely to consider it to
increase productivity (or achieve a salary savings), avoid a lay-off, or to respond to employee demand for better balance of job, family, and leisure. The cost of lost productivity can be recovered in several of the following ways, only the last two of which require hiring additional employees:

1) restructure or redesign the job to improve productivity;
2) reduce the workload of the position;
3) rotate other employees on training and development assignments;
4) implement job-sharing arrangement through transfer or new hire;
5) assign student interns to fill the void.

In return for potential costs, employers can realize benefits in the form of increased productivity, greater job satisfaction, added flexibility and easier recruitment according to Harriman. In the Catalyst Project in Boston involving social workers, half-time workers showed higher productivity using face-to-face contacts as a measure. Half-time social workers reported 89 percent of contacts, compared with the expected 50 percent of those seen by full-timers. A number of explanations may explain this phenomenon according to Harriman. Since there is more non-job time, more personal business and phone calls can
be conducted on one's own time, whereas a full-time employee must conduct a certain amount of personal business during working hours. Routine doctor and dentist appointments can be scheduled on non-job time. Depending on how time is taken off, there may be less fatigue and stress for the employee working less than full time. Many jobs involve cycles and fluctuations in work flow. Productivity can be increased by matching the job time around high demand times and the non-job time around slack periods, which will require increased planning by management.

Harriman reports in her study and others she reviewed that employees seeking voluntary reduced work time reported improved job satisfaction and they perceived management as innovative and progressive. Employees reported an increased sense of personal autonomy and more satisfying family life. Even employees not participating reported approval and looked forward to the time they might participate in the program.

The increased flexibility can benefit management as well as the employee. When the work flow is cyclical, having a pool with flexible schedules makes it easier to modify the work force as necessary. For nonexempt (FLSA) employees, this results in reduced overtime pay. Additional employees are available for employees on leave.
Voluntary reduced work time may be a recruiting benefit for hard to fill, highly skilled occupations. In implementing such strategies, organizations need to develop policies and procedures to accomplish the desired results, including policies to determine:

1) employee's rights, responsibilities and protection;
2) supervisor's rights, responsibilities and protections when they grant a reduced work time request;
3) which employees are eligible to participate;
4) criteria to be used in considering a request;
5) conditions when a request may be denied or revoked;
6) circumstances when an employee may withdraw or modify his or her schedule. 31

Reduced work time provides more opportunity for employees to pursue additional education and training on their own time. This additional training and education can be a benefit to the organization. In an experiment with flexitime at Corning Glass Works, 11 percent reported in a survey that education was easier to take after flexitime and in fact 29 percent of all employees reported taking organized educational courses in a 10 month period. 32 Since annual leave is not a taxable benefit, the employee would experience no increased tax burden with an increased annual leave option.
2. Cultural/organizational implications

The electronic revolution has changed the world. The semiconductor and products it has made possible has freed workers from many time and place restrictions. With the microprocessor, workers can often work when and where they want to. Productivity is no longer only a function of the ability of the machine to produce, but increasingly a function of the ability of the worker to utilize the resources available.

Organizational theorists have examined a variety of job redesign and quality of life interventions according to Harriman. They are concerned about job satisfaction and productivity and propose organizational development programs and wage incentive programs. They support compressed work weeks and flexitime approaches, but seldom consider reduced work time options. 33

Harriman conducted a study in California of professional and managerial employees who had voluntarily reduced their working hours and salaries. She interviewed employees in California state government and in the private sector, along with their supervisors, co-workers, and subordinates. Employees included in the study had to be on a salary or hourly wage (not freelance or consulting) and their reduction in hours and pay had to represent a significant departure from current practice in
their occupations. The employees sorted into three subgroups. One group, called adaptors, had chosen to reduce their work time temporarily, usually because of conflicts such as the birth of a child or attending school. They responded to the pressures of multiple roles by adaptation or compromise. They had a high level of energy and enthusiasm. The second subgroup, which Harriman referred to as innovators, were defining a new set of role expectations. They chose their new work schedules as a means of reordering their lives. They saw their change as a permanent one for their careers.

The third subgroup, referred to as the rebels, were like the innovators, but had resisted strong pressures to conform. Each had struggled to choose an ideal balance of work and personal roles. They were concerned more with the present than the future. There was a difference in how co-workers perceived these groups. The adaptors were seen as having a socially acceptable reason for choosing the trade-off. The innovators and rebels were seen as making a greater departure from the societal norms, sometimes rejecting them altogether. It was often much harder for co-workers to understand the latter's choices. They all were experimental subjects, "searching for, proposing, and testing solutions to the many problems that face contemporary organizations in responding to the needs
and expectations of workers in a time of rapid and dramatic social change."  34

Changes in work time will have a significant effect on American consumption and investment patterns. There will be increased spending on recreational activities, sports, travel and other leisure time activities. The country's recreational resources will be under increased strain.  35 Education will have to be viewed as a continuing process rather than an activity only for the young.  36

3. Overview of work time experimentation

Workers are interested in the qualitative as well as the quantitative aspects of their working life. 37 One aspect of the quality of the workplace has involved experimentation with alternative work schedules, including telecommuting, 38 flexitime, compressed work week, job sharing, job splitting, permanent part-time, work sharing (involuntary), and voluntary reduced work time. 39

Flexitime is available now to many state executive branch employees as stated in the Montana Operations Manual, Policy #3-0220, issued on April 16, 1982. Data on the number of state employees utilizing this option was not available from the Montana Department of Administration. This alternative does not provide any
direct cost reduction to state government, even though there may be indirect benefits including improved morale, decreased traffic congestion and increased time for employees to be with their families.

Western Europe has experimented with work sharing to a much greater degree than the United States. In the recession in the mid-1970s, unemployment remained lower there than in the United States. Part of that reason is thought to be greater use of worksharing in Europe. Worksharing programs were utilized in West Germany, Italy, Norway, Luxemborg, the United Kingdom and the Netherlands during that recession. In West Germany, the number of short-time workers increased from 225,000 to 925,000 in 1975. Many Europeans viewed worksharing as a way of "reducing short-run economic instability and unemployment." 40

Of the short time benefit programs practiced in Europe, the German Program most closely resembles those discussed in the United States. The West German plan, called Kurzarbeiter Geld, emerged in the 1920s. It is administered by an independent tripartite organization composed of labor, business and government. Worker eligibility is determined by eligibility for unemployment insurance. The programs are financed by a three percent payroll tax divided equally between employers and
employees. An organization must demonstrate that a reduction in hours of labor is unavoidable and that work time reductions with short-time benefits will prevent the dismissal of employees. Employers must document that work time reductions of 10 percent or more of payroll has been made for one-third or more of the employees for a period of at least four consecutive weeks. The employer pays benefits directly to the employees and is then reimbursed by the government. An employee whose hours are reduced by one-fourth can receive one-fourth of regular unemployment insurance benefits. The maximum duration of benefits is six months. In general, most beneficiaries had their work time shortened by about 40 percent and duration has been under three months. The number of registered short-time workers increased from 10,000 in 1968 to 250,000 in 1978. Ninety-five percent of workers receiving short-time payments in West Germany are from manufacturing, mining and construction. Although the legislation includes both public and private sectors, no public employees had received benefits as of 1980.

California enacted legislation authorizing worksharing in 1978, to allow for employees who have had their hours reduced by at least 10 percent to be eligible for a corresponding portion of their unemployment benefits, to offset their lost wages. Between July 1978
and September 1979, 312 employers had approved a short week unemployment compensation plan, covering 7,603 employees in California. The rationale was that it provided a more equitable distribution of the burden of certain types of unemployment. The potential secondary benefits included "maintenance of family stability, stabilization of consumer confidence, reduced use of other government programs, and increased leisure time." Best and Mattesich suggest that unemployment insurance or short term compensation supported worksharing offers "win-win" opportunities to most participants (management and employees), it has been proven to be cost-effective through empirical assessment, and the program is flexible and voluntary. 41

At least twelve states have operated short-term compensation programs. All twelve had to address existing unemployment insurance law which restricted worker eligibility for short term compensation. Most states required claimants receiving unemployment insurance benefits to be actively seeking work. Since a focus of worksharing is to maintain the employer-employee relationship, this requirement had to be waived. Since some employers may experience seasonal unemployment, variable insurance tax rates need to apply, whether unemployment is short term or not. 42
The California Legislature mandated a Part-time Employment Program in 1976 and funded it in 1978. It was conducted in the State Department of Motor Vehicles. It did not mandate that employees work half-time or job share. Employees could reduce their time in increments of 1/8 or 1/5 and supervisors could utilize unspent personnel dollars to hire additional employees. Of the 331 employees initially participating in the program, only 5 percent chose to work less than half-time and 40 percent chose half-time. Schedules ranged from 1/5 to 4/5 time. The Department had a high proportion of clerical workers and 69 percent of the work force was female. Ninety-seven percent of the participants in the study were female.

Worksharing experiments have been tried in local governments. Santa Clara County, California initiated a plan in 1977, due to budget cuts which would have required lay-offs. The county proposed a 6.5 percent across-the-board reductions but the unions opposed the plan. A voluntary plan resulted, allowing employees to choose 5, 10 or 20 percent reductions. Of 10,000 employees, 1,500 or 15 percent participated in the program and Santa Clara County was one of the few in California which did not have to lay off social workers that year. Although budget constraints eased the following year, county employees requested that the program continue. Reductions in hours
and pay of 2.5, 5, 10, or 20 percent are allowed today. The limitation of the California law is that it allows for a reduction in workweeks or workdays, but not in work years, in the form of annual leave. Employees have flexibility in how time off is taken and negotiate a contract every 6 months. San Mateo County implemented a similar reduced work hours program in 1978 and employees received full benefits and seniority.

The Federal Employees Part-time Career Employment Act of 1978 was enacted and justified as

...part-time work may be appropriate for older workers as a transition into retirement, handicapped individuals, or others who require a reduced work week, parents who seek ... opportunities to balance family responsibilities with the need for additional income, and students. 43

The law defined part-time work as 16 to 32 hours per week. It required the agencies to develop plans on how they would implement the law in grades GS-1 to GS-15.

Kentucky state employees have had a standard 37.5 hour workweek since the 1960s. Hours are from 8:00 am-4:30 pm, with an hour for lunch. Most Illinois state employees have had a 37.5 hour week since 1972. In 1982, Idaho Governor John Evans ordered a 20 percent reduction in the workweek and pay of more than 3,000 state employees, to help balance the budget for the state. The cut lasted seven weeks and applied only to workers paid from the
state's general fund. Over 10,000 of the state's employees were not affected. 44

Worksharing was tried temporarily by the Missoula office of the Montana Job Service (Department of Labor and Industry) when the union members voted voluntarily to cut back their hours and pay to avoid layoffs, due to a reduction in federal funds in the spring of 1982. A similar agreement was negotiated in January 1989 by environmental health workers in the Missoula City-County Health Department, as a means of gaining a cost of living increase, by working fewer hours. 45

C. 1990 Committee on State Employee Compensation

Since Montana adopted a uniform pay plan in 1973, three special studies have dealt with state employee pay. The Select Committee on State Employee Pay in 1976 and the Personnel and Labor Relations Study Commission in 1982 both dealt primarily with collective bargaining in Montana and its effect on pay.

The Montana Legislature in Montana Session Laws 1989, Chapter 660, Section 14, created the Committee on State Employee Compensation to examine policies governing state employee compensation; study compensation policies of other comparable governmental and private sector entities; and develop recommendations to maximize employee
productivity and promote quality governmental services, among other issues.

The Committee 1) studied the development of Montana's current pay plan, 2) contracted for an attitude survey to identify problem areas, 3) contracted with a Dallas-based compensation consulting firm to audit the state's compensation system and recommend solutions to identified problems, 4) examined the state's employee turnover rate and 5) examined the Department of Administration's 1990 salary and benefits survey of Montana employers and 12 other state governments. The Committee focused its efforts on the state's pay philosophy, the salary structure and employee pay increases.

The University of Montana's Bureau of Business and Economic Research, in coordination with the Department of Administration, conducted a survey for the Committee in December of 1989 to measure the attitudes and perceptions of state employees, managers, and union representatives toward the state compensation system. Questionnaires were sent to 1,140 employees with a 70 percent response rate, 252 managers with an 81 percent response rate and 36 union representatives with a 50 percent response rate. Different questionnaires were given to the three groups, although they were similar in overall theme.
In general, employees reported dissatisfaction with the state’s direct compensation, but had a more positive attitude about the state’s benefits. Employees in the higher grades, those working as administrators and managers, and those working in protective service and professional jobs were the most dissatisfied with pay. All three groups felt that pay rates for experienced employees were not as competitive with the market as the rates for new and/or inexperienced employees. 47

In December 1989, the Committee requested agency directors to provide information on problems and solutions on state employee compensation. The Department heads in Commerce and Health and Environmental Sciences both suggested that the state should allow incentives such as additional paid time off. The Director of the Department of Natural Resources and Conservation suggested that Montana consider more flexible benefits packages and allow employees to "buy time" toward retirement with unused annual and sick leave. Most agency heads suggested there needed to be pay for performance or merit pay. The Commissioner of Higher Education also indicated there should be a flexible benefits plan and that the state should consider greater workweek/day/holiday flexibility. 48
Work time experimentation has been reviewed as it relates to employment policy, organizational theory, family policy issues and economic and management implications. Voluntary reduced work time opportunities have relevance in all of these areas. The next chapter looks at how a sample of Montana state employees view this option as part of their compensation system.

ENDNOTES:


11. Levitan and Belous, 42-3.

12. Nollen, 45.


21. Harriman, 30-47.


23. Nollen, 159.


30. Harriman, 149-150.

31. Ibid, 152-156.

32. Nollen, 177-191.


34. Ibid, 74-139.

35. Levitan and Belous, 82-3.

36. Harriman, 10.

37. Levitan and Belous, 30-36.


40. Harriman, 10.

41. Levitan and Belous, 63-4.


43. Harriman, 146-162.


45. Jim Carlson, Interview by author, Missoula City-County Health Department, Missoula, Montana, 8 March 1989.


CHAPTER IV

RESULTS AND DISCUSSION

The number of surveys distributed by Department, the number returned and the percent returned are shown in Table 5 below. The high rate of return (77.8 percent) of the surveys suggests that the issue was one of high interest to the employees.

### TABLE 5

NUMBER OF SURVEYS DISTRIBUTED, NUMBER RETURNED AND PERCENT RETURNED, BY DEPARTMENT

<table>
<thead>
<tr>
<th>Department</th>
<th>Number Surveyed</th>
<th>Number Returned</th>
<th>Percent Returned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration</td>
<td>350</td>
<td>270</td>
<td>77.1</td>
</tr>
<tr>
<td>Labor &amp; Indust.</td>
<td>360</td>
<td>287</td>
<td>79.7</td>
</tr>
<tr>
<td>Revenue</td>
<td>321</td>
<td>255</td>
<td>79.4</td>
</tr>
<tr>
<td>Social &amp; Rehab.</td>
<td>316</td>
<td>246</td>
<td>77.8</td>
</tr>
<tr>
<td>Transportation</td>
<td>649</td>
<td>496</td>
<td>76.4</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>1996</strong></td>
<td><strong>1554</strong></td>
<td><strong>77.8</strong></td>
</tr>
</tbody>
</table>

The number choosing pay, the number choosing time off, the percent choosing time off and the number undecided by Department are shown in Table 6. The number choosing the time off option varied among the five departments, ranging from 30.9% for Social and Rehabilitative Services to 39.6% in the Department of Revenue.

64
TABLE 6
NUMBER OF EMPLOYEES CHOOSING PAY, NUMBER CHOOSING TIME, PERCENT CHOOSING TIME AND NUMBER UNDECIDED, BY DEPARTMENT

<table>
<thead>
<tr>
<th>Department</th>
<th>Number Pay</th>
<th>Number Time</th>
<th>Percent Time</th>
<th>Number Undecided</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration</td>
<td>165</td>
<td>91</td>
<td>33.7</td>
<td>14</td>
</tr>
<tr>
<td>Labor &amp; Indust.</td>
<td>178</td>
<td>90</td>
<td>31.4</td>
<td>19</td>
</tr>
<tr>
<td>Revenue</td>
<td>142</td>
<td>101</td>
<td>39.6</td>
<td>12</td>
</tr>
<tr>
<td>Social &amp; Rehab.</td>
<td>156</td>
<td>76</td>
<td>30.9</td>
<td>14</td>
</tr>
<tr>
<td>Transportation</td>
<td>284</td>
<td>188</td>
<td>37.9</td>
<td>24</td>
</tr>
<tr>
<td>TOTAL</td>
<td>925</td>
<td>546</td>
<td>35.1</td>
<td>83</td>
</tr>
</tbody>
</table>

Those in the age group 30-39 had the highest preference for additional time off, followed by those in the age group 40-49, as shown in Table 7 below. One could speculate the reason for the higher preference for time-off in the 30-39 age group may be due to these years being child raising years for many couples, who would rather be

TABLE 7
CHOICE OF PAY VS. TIME OFF BY AGE GROUP

<table>
<thead>
<tr>
<th>Age Group</th>
<th>No. Pay</th>
<th>No. Time</th>
<th>% Time</th>
<th>Undecided</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 30</td>
<td>115</td>
<td>59</td>
<td>30.7</td>
<td>18</td>
<td>192</td>
</tr>
<tr>
<td>30-39</td>
<td>271</td>
<td>203</td>
<td>40.4</td>
<td>28</td>
<td>502</td>
</tr>
<tr>
<td>40-49</td>
<td>347</td>
<td>200</td>
<td>35.1</td>
<td>23</td>
<td>570</td>
</tr>
<tr>
<td>50-59</td>
<td>156</td>
<td>69</td>
<td>29.2</td>
<td>11</td>
<td>236</td>
</tr>
<tr>
<td>60+</td>
<td>35</td>
<td>14</td>
<td>26.9</td>
<td>0</td>
<td>52</td>
</tr>
<tr>
<td>TOTAL</td>
<td>924</td>
<td>545</td>
<td>35.1</td>
<td>83</td>
<td>1552</td>
</tr>
</tbody>
</table>
home with family. For those over age 50, the children are likely to be out of the home and workers have more time for themselves.

Surprisingly, of the 54 employees working part-time, 15 (27.7 percent) chose time off over pay, with 3 employees undecided. Of the 1482 full-time employees 519 (35 percent) chose time off, with 80 employees undecided. This was not statistically significant (chi-square = 1.22, p = 0.268).

Of the 661 employees belonging to a collective bargaining unit 254 (38.4 percent) chose time off over pay, with 39 undecided. Of the 808 employees not represented by a collective bargaining unit only 261 (32.3 percent) chose time off over pay, with 39 also undecided. This was significant (chi-square = 6.89, p < 0.009). No explanation is offered for this difference. Eighty-five employees did not complete this question.

There was an inverse relationship between years of service and persons choosing additional time off as shown in Table 8 below. One would speculate that employees with increasing years of service, who already receive longevity pay and have cumulative years of cost of living or merit pay increases, may find the time more attractive than employees with less years of service and pay. Years of service was positively associated with increasing salary
TABLE 8
CHOICE OF PAY VS. TIME OFF BY YEARS
OF SERVICE IN STATE GOVERNMENT

<table>
<thead>
<tr>
<th>Years of Service</th>
<th>No. Pay</th>
<th>No. Time</th>
<th>% Time</th>
<th>Undecided</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-3</td>
<td>202</td>
<td>158</td>
<td>40.2</td>
<td>33</td>
<td>393</td>
</tr>
<tr>
<td>4-9</td>
<td>216</td>
<td>158</td>
<td>40.1</td>
<td>20</td>
<td>394</td>
</tr>
<tr>
<td>10-14</td>
<td>157</td>
<td>111</td>
<td>39.1</td>
<td>16</td>
<td>284</td>
</tr>
<tr>
<td>15-19</td>
<td>183</td>
<td>71</td>
<td>26.9</td>
<td>10</td>
<td>264</td>
</tr>
<tr>
<td>20-24</td>
<td>95</td>
<td>29</td>
<td>23.0</td>
<td>2</td>
<td>126</td>
</tr>
<tr>
<td>25+</td>
<td>72</td>
<td>19</td>
<td>20.4</td>
<td>2</td>
<td>93</td>
</tr>
<tr>
<td>TOTAL</td>
<td>925</td>
<td>546</td>
<td>35.1</td>
<td>83</td>
<td>1554</td>
</tr>
</tbody>
</table>

range and many employees indicated they couldn’t use the time they receive currently. Time off was less attractive with increasing years of service. With 10-15 years of service, an additional 3 days of annual leave are earned each year, increasing total days of annual leave to 18. With 15 to 20 years of service this increases 3 more days and with over 20 years of service the number of vacation leave days credited annually increases to 21.

When analyzed by gross annual salary range, workers in the range of $15,000-29,999 were more likely to choose time off over salary than those below or above that range (see Table 9 below). Several comments were made during interviews and on survey forms that employees were not able to use the annual leave or compensatory time they
Table 9

<table>
<thead>
<tr>
<th>Salary</th>
<th>No. Pay</th>
<th>No. Time</th>
<th>% Time</th>
<th>Undecided</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; $14,999</td>
<td>80</td>
<td>37</td>
<td>27.8</td>
<td>16</td>
<td>133</td>
</tr>
<tr>
<td>$15,000-19,999</td>
<td>168</td>
<td>111</td>
<td>36.7</td>
<td>14</td>
<td>302</td>
</tr>
<tr>
<td>$20,000-24,999</td>
<td>213</td>
<td>165</td>
<td>42.1</td>
<td>14</td>
<td>392</td>
</tr>
<tr>
<td>$25,000-29,999</td>
<td>184</td>
<td>129</td>
<td>39.0</td>
<td>18</td>
<td>331</td>
</tr>
<tr>
<td>$30,000-34,999</td>
<td>139</td>
<td>66</td>
<td>31.2</td>
<td>6</td>
<td>211</td>
</tr>
<tr>
<td>$35,000-39,999</td>
<td>75</td>
<td>25</td>
<td>23.8</td>
<td>5</td>
<td>105</td>
</tr>
<tr>
<td>$40,000+</td>
<td>64</td>
<td>13</td>
<td>16.6</td>
<td>1</td>
<td>78</td>
</tr>
<tr>
<td>TOTAL</td>
<td>923</td>
<td>546</td>
<td>35.2</td>
<td>83</td>
<td>1553</td>
</tr>
</tbody>
</table>

already have accumulated, and this often was reported by employees in upper salary range positions.

There was not a significant difference (chi-square = 0.26) in choice of pay vs. time off related to sex for all departments combined. Of the 778 men surveyed, 270 (34.7 percent) chose time off over pay, with 24 undecided. Of the 770 women surveyed, 275 (35.7 percent) chose time off, with 58 undecided. There were differences by sex however by individual department in percent of those choosing the time-off option as shown in Figure 2 below. The difference was significant in the Department of Administration where 53/128 (41.4 percent)
FIG 2. Percent Choosing Time Option
by SEX and DEPARTMENT

FIG 3. Perceived Funding Source by
INDIVIDUAL EMPLOYEES by DEPARTMENT

[Bar charts with data showing the percentage of employees choosing time option by department and perceived funding source by department, with different bars for male and female categories.]
of men chose time compared with 38/141 (26.9 percent) of women doing so (chi-square = 5.01, p < .03).

For the question of what percent of the employee's individual state salary was general fund dollars, over a third of the employees didn't know the answer. Given the projected deficit in state general fund revenue at the time of the survey, the hypothesis was that employees funded with general fund would be more likely to choose time off over pay, to help the state in balancing the budget (and possibly conserving their own job). As shown in Table 10 below, 30.4 percent of the 578 employees reporting no general fund support chose the extra time. Of the 189 employees reporting all general fund support, 40.2 percent chose time off over pay. This was significant (chi-square = 6.14, p < 0.014). If this relationship is valid, a question raised was why the Department of Transportation, which is funded with very little general fund, had the second highest percent (37.9) of employees choosing the time off option.

An analysis of the perceived source of funding by employees and by department was done as shown in Figure 3 above. Over 39 percent (194) of the Department of Transportation employees didn't know the source of funding for their jobs and only 36 percent perceived none of their salary to be from general fund. The Revenue Department
Table 10

CHOICE OF PAY VS. TIME OFF BY PERCENTAGE OF SALARY THAT IS GENERAL FUND DOLLARS

<table>
<thead>
<tr>
<th>Percentage General fund</th>
<th>No. Pay</th>
<th>No. Time</th>
<th>% Time</th>
<th>Undecided</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>369</td>
<td>176</td>
<td>30.4</td>
<td>33</td>
<td>578</td>
</tr>
<tr>
<td>1-50%</td>
<td>135</td>
<td>79</td>
<td>35.9</td>
<td>6</td>
<td>220</td>
</tr>
<tr>
<td>51-99%</td>
<td>24</td>
<td>17</td>
<td>41.4</td>
<td>0</td>
<td>41</td>
</tr>
<tr>
<td>100%</td>
<td>103</td>
<td>76</td>
<td>40.2</td>
<td>10</td>
<td>189</td>
</tr>
<tr>
<td>Didn't know</td>
<td>294</td>
<td>198</td>
<td>37.6</td>
<td>34</td>
<td>526</td>
</tr>
<tr>
<td>TOTAL</td>
<td>925</td>
<td>546</td>
<td>35.1</td>
<td>83</td>
<td>1554</td>
</tr>
</tbody>
</table>

had the highest percentage of employees choosing the time off option (39.6 percent) and 46 percent didn't know their source of funding, while only 39 percent correctly perceived it to be all from general fund. Of the departments surveyed, the percentage of total personnel services which are general fund supported according to their personnel officers were Administration - 22 percent, Labor and Industry - less than 10 percent, Revenue - over 95 percent, Social and Rehabilitative Services - 58 percent, and Transportation - 0.5 percent.

This survey is only valid for the sample of Lewis & Clark County based state employees from the five departments surveyed. A recent profile of the State
of Montana employee, prepared by the Personnel Division of the Department of Administration, does allow for a comparison of the population surveyed in this study to the total state work force. The Personnel Division's profile determined the average State of Montana employee could be either a man or woman around 40 years of age. The typical employee earns a salary of around $24,168, has been with the state about eight years and has been in his or her current position less than four years. The employee has an average vacation leave balance of 141 hours and an average sick leave balance of 309 hours. If an employee is exempt from overtime for Federal Labor Standards Act (FLSA) purposes, they probably have a balance of compensatory time of about 70 hours. 1

The population surveyed in this study (1554) represents approximately 13.7 percent of the state employees (11,367-excluding the University system, Vocational-technical schools, and state elected officials including state legislators). The average length of service in Montana state government is 7.96 years. For the Department of Administration it is 7.7 years, Labor & Industry = 8.52 years, Revenue = 7.45 years, Social & Rehabilitative Services = 7.9 years and Transportation = 10.48 years. Figure 4 below compares the survey population to total work force by age group, which has a
FIG. 4. Comparison of Survey Population
With MT. STATE WORKFORCE by AGE GROUP

FIG. 5. Comparison of Survey Population
With MT STATE WORKFORCE by SALARY RANGE
very similar pattern. Figure 5 above compares the full-time survey population to total work force by salary range. Those working part-time in the survey population were excluded for this specific analysis, to be comparable to the state profile. There were a higher percentage in the total state work force in the salary range above $31,000, which is probably due to more management and administrative positions in Helena. Fifty-three percent of the state work force is male and 50.1 percent of the surveyed population was male.

Although the question was not asked in the survey, the total state work force carries an average cumulative annual leave per employee of 141 hours. The average Department of Revenue employee carries 127 hours, Administration averages 132 hours, Social and Rehabilitative Services averages 138 hours, Labor and Industry averages 144 hours, and Transportation averages 182 hours. Department of Transportation employees carry the highest average cumulative leave per employee of the five departments and interestingly also have the second highest percentage of employees choosing additional annual leave over pay.

One area where comparisons cannot be made is the size of the Department. The survey sample included the largest Helena-based agency populations. There is little reason
to suspect the organizational culture is different and therefore employees in smaller agencies would be more or less likely to choose the time off option. However, cost savings realized in smaller agencies could probably not be used to increase employees in those agencies.

ENDNOTES:

CHAPTER V

CONCLUSION AND RECOMMENDATIONS

Compensation for Montana public employees has been reviewed in comparison to other states in the region, to the market-based pay for similar work in Montana and to the cost of living increases over the past two decades. The compensation has not remained competitive with those indicators. Recommendations of the 1990 Committee on State Employee Compensation offered some new directions for the Legislature, some of which have been implemented. One strategy which the Committee did not pursue was the concept that some employees may view time as a valuable trade-off for monetary rewards.

This study reports that a significant number of employees (35.1 percent) would choose additional annual leave over an equivalent value in monetary compensation, if offered based on a future cost of living increase. The reason Montana employees would choose time off over pay was not asked, although some suggestions were provided based on the characteristics of those choosing that option, compared with those who did not. The results document that compensation other than dollars can be a meaningful reward for a significant number of public employees. Implemented incrementally in the form of a
cost of living trade-off, it is a feasible means of addressing some of the needs for some of the state work force, such as time with their family, recreational activities, plant a garden, roof a house, etc.

If the time off vs. pay option were made available to Montana state employees, the Legislature could provide the option for any years the Legislature chooses, although it is anticipated that the option may only be made available during difficult economic times, such as the 1995 Biennium. The employee's choice could be a permanent decision for future years of continued employment or could be reversible, with or without management approval. If the employee's choice is reversible, it raises some equity issues about whether employees would revert back to former pay choices in their last years in order to increase their potential retirement income. This issue was not discussed in the survey and a few employees inquired whether it would be a permanent decision. Employees choosing the time off option would retain the same fringe benefits they currently have. The additional annual leave granted would be with supervisors' approval, which is the current state policy with annual leave. Management would therefore have some control over scheduling of employee's work time off.

Based on the number of employees choosing the annual leave option over the 2.5 percent pay increase by various
salary ranges, a cost savings of $333,312 would be realized in the sample population in salaries alone. If the survey sample is representative of the state workforce (excluding the University and elected officials) the cost savings would be approximately $2,438,000 for salaries alone. This is based on a workforce of 11,367 as listed in the current Department of Administration employee profile. Based on the average salary for a state worker ($24,168) plus a 23% fringe benefit rate, an estimated 82 employees could be hired from the cost savings realized. Instead, the current Legislature will be laying off several hundred state workers in the new fiscal year.

The consultant hired by the 1990 Committee on State Employee Compensation concurred with a previous pay study in Montana in 1982 that a non-base-building, pay-for-performance bonus system should be implemented for state employees. The current study suggests another consideration, which would be to allow supervisors to grant additional time off as a bonus or merit measure. Some workers clearly choose Montana as a place to live for the lifestyle and environment that Montana offers, and they may accept a lower wage and additional leisure time for the benefits of the quality of life they perceive here.
As Osborne and Gaebler have pointed out, our institution of government must adapt to the changing needs and increasing complexity of our society. Part of that response means studying the changing patterns and needs of our public work force and rethinking whether the rigid system of full-time employment can be more flexible to the divergent needs and values of public employees, in a way that still meets the needs of the public they serve.

If we begin to free our thinking from the rigidity of the 40-hour week, if we begin to think in terms of scheduling jobs around the tasks themselves rather than on some arbitrary time schedule, if we begin to remove artificial constraints of time and place, then it may be possible for organizations to achieve their purposes of efficiency; for employees to achieve their need for actualization in other areas; and for the society as a whole to benefit.

This paper will be provided to the Montana Legislature through the Legislative Council and to the Department of Administration. The paper, with an executive summary and minus the literature review, will be provided to the to the Governor's office, to the Montana Public Employees Association and to the personnel officers in the remaining four Departments participating in the survey.
ENDNOTES:


February 3, 1993
303 Broadway
Helena, MT. 59601

Rick Harden
Personnel Officer
Dept. of SRS

I am a graduate student in public administration at the University of Montana. I am preparing a professional paper on an incremental time/pay tradeoff option for public [Montana state] employees. I am requesting distribution of the attached one page survey with payroll on February 17, 1993 or by other means to your employees based in Lewis and Clark County. I would be responsible for

-the cost of preparing/printing the survey;
-being available to respond to questions from employees by telephone;
-picking up the completed surveys from your mailroom;
-tabulation and analysis of the surveys;
-sharing the results of the survey in SRS with your Department.

I plan to use the survey results with that of four other state departments in my professional MPA paper, describing potential impacts such an option would have on public employment, fiscal implications, etc. I will also provide you with a copy of my completed professional paper, expected in the spring of 1993. As indicated in the survey, no individual results will be released, although I plan to share aggregate results with the Legislature.

The survey is currently being distributed to Department of Administration employees through their Feb. 3 payroll.

Sincerely,

Bruce Desonia
Dear Department of Labor and Industry,

On the reverse side is a brief survey being conducted of a sample of departments by a University of Montana graduate student. This is only a survey, although the graduate student plans to transmit a summary of this information to the Montana Legislature. Administrative costs in conducting this survey are born by the graduate student. Only he will view the individual responses. If you have questions you may contact Bruce Desonia at 442-2509. Thank you for your participation. Please return as labeled below.

Pamela Wintrode, Chief
Personnel and Training Bureau

Deadhead to:
MAILROOM
Mail Site B
Labor & Industry
APPENDIX C

STATE OF MONTANA EMPLOYEE SURVEY
Time for Pay Trade-off Option

YOUR NAME IS NOT REQUESTED AND YOUR RESPONSES ARE CONFIDENTIAL. ALL RESPONSES WILL BE SUMMARIZED TOGETHER FOR ANALYSIS. NO INDIVIDUAL RESPONSES WILL BE IDENTIFIED OR RELEASED. PLEASE CIRCLE THE LETTER CORRESPONDING TO YOUR RESPONSE FOR THE FOLLOWING EIGHT QUESTIONS.

1. Assume the cost of living increased by 3% in SFY93. If the Montana Legislature provided you individually an option in SFY94 of receiving either a 2.5% cost of living increase or 2.5% of your salary in the form of additional paid annual leave (i.e., 2.5% of 1784 available hours* is equivalent to 44.6 additional hours of annual leave), which would you choose?
   a. the 2.5% cost of living salary increase
   b. the 44.6 additional hours of annual leave
   c. undecided

2. What is your age?
   a. under 30
   b. 30-39
   c. 40-49
   d. 50-59
   e. 60+

3. What is your sex?
   a. Male
   b. Female

4. Are you working?
   a. Full-time
   b. Part-time

5. Are you a member of a collective bargaining unit? a. Yes b. No

6. How many years of service do you have in MT. state government?
   a. 0-3
   b. 4-9
   c. 10-14
   d. 15-19
   e. 20-24
   f. 25 or more

7. What is your current gross annual state salary?
   a. less than $14,999
   b. $15,000-19,999
   c. $20,000-24,999
   d. $25,000-29,999
   e. $30,000-34,999
   f. $35,000-39,999
   g. $40,000 or over

8. What percent of your state salary is general fund dollars?
   a. none
   b. 1-50%
   c. 51-99%
   d. 100%
   e. don't know

PLEASE TAKE A MINUTE RIGHT NOW TO COMPLETE THIS QUESTIONNAIRE, FOLD ON DOTTED LINE, STAPLE OR TAPE CLOSED AND RETURN IT WITHIN THE NEXT FIVE DAYS DEADHEAD TO YOUR DEPARTMENT'S MAILROOM. IF YOU HAVE ANY COMMENTS OR SUGGESTIONS, PLEASE LIST THEM BELOW OR ON THE BACK OF THIS SURVEY. THANK YOU FOR YOUR COOPERATION!

* Regular hours minus annual, sick and holiday leave.


Montana, Committee on State Employee Compensation, Minutes, 8 February 1990.


Montana Legislative Council, Committee on State Employee Compensation. "Summary Analysis Problem Identification Survey Results." April 1990.

Montana Department of Administration, Personnel Division. "Summary of State Turnover: July 1, 1989 through June 30, 1990, August 1990."

Montana Legislative Council and Department of Administration. State of Montana Employee Compensation: Results of Survey of Employees, Managers, and Union Representatives. April 1990.


Pizman,, Lawrence and James Cicarelli. "Unions
Politicians, and the Public Interest: Retrenchment in
the Public Sector." Journal of Labor Research 5
(Fall 1984): 413-418.

Reid, Frank. "UI-Assisted Worksharing As An Alternative to
Layoffs: the Canadian Experience." Industrial and

Reisch, Michael and Chris Taylor. "Ethical Guidelines for
Cutback Management: A Preliminary Approach."
Administration in Social Work 7 (Fall/Winter 1983):
59-72.

Seltz, Christine and Dale Gifford. Flexible
Compensation A Forward Look. New York: American


Staines, Graham and Joseph Pleck. The Impact of Work
Schedules on the Family Ann Arbor: Institute for
Social Research/University of Michigan, 1983.

Stiles, Ward. Interview by author. Montana Department of
Labor and Industry, Research and Analysis Bureau.
Helena, Montana, 8 March 1989.

Swart, J. Carroll. A Flexible Approach to Working Hours


Waters Consulting Group, The State of Montana:
Compensations Issues and Recommendations. Dallas,

Welter, Therese R. "The Goal is Working Smarter, Not

"Workweek Reduced for State Employees." Monthly Labor
Review 105 (July 1982) 56.

Administration Review 48 (January-February 1988):
551-556.