
Personnel Costs

CHAPTER 4

Public employee salaries and benefits are a significant portion of state and local expenditures. Personnel costs account for a little less than one-half of the government expenditures in Minnesota. This chapter examines how staffing levels, average salaries, and fringe benefits have changed over the 35-year period from 1957 to 1992. The chapter addresses the following issues:

- **How have public employee staffing levels and average compensation changed over time in Minnesota?**
- **Do trends in Minnesota differ from those in other states?**
- **How do staffing levels, average salaries, and fringe benefit packages for Minnesota's state and local government employees compare with those in other states?**
- **How significantly will future spending trends be affected by the need to fund current unfunded liabilities of public employee pensions in Minnesota?**

This chapter relies primarily on Census Bureau data available every five years from the Census of Governments. Data on employment levels should be carefully interpreted, since states may differ from one another and over time in the degree to which they use private contractors, rather than public employees, to perform certain functions. In addition, the extent to which the public sector is involved in operating utilities and providing solid waste disposal services varies across states.

Salary trends and comparisons also need to be carefully interpreted. For example, trends in average salaries could reflect changes in the mix of employees rather than changes in their average compensation. In general, however, we did not find that changes in, or differences in, the mix of employees significantly affected the trends and comparisons presented in this chapter.

EMPLOYMENT LEVELS

From 1957 to 1992, the number of full-time equivalent employees of state and local governments increased an estimated 132 percent in Minnesota and 169 percent

nationally. In 1992, the number of employees was almost 240,000 in Minnesota and 13,369,000 nationally. As Table 4.1 indicates, about 28 percent of state and local government employees in Minnesota were state employees. School districts had about 38 percent of the employees, while counties had 15 percent. Municipalities and townships accounted for 14 percent of employment, and other public employers had 5 percent.

In 1992, Minnesota had about 240,000 state and local government employees.

Table 4.1: Full-Time Equivalent Employment in State and Local Governments by Jurisdiction, Minnesota and the United States, 1992

| | Minnesota | | United States | |
|--------------------|---------------|-----------|------------------|-----------|
| | FTE Employees | Percent | FTE Employees | Percent |
| School District | 90,601 | 38% | 4,331,714 | 32% |
| County | 36,921 | 15 | 2,032,740 | 15 |
| Municipal/Township | 33,037 | 14 | 2,606,220 | 20 |
| Special District | <u>12,052</u> | <u>5</u> | <u>542,327</u> | <u>4</u> |
| Local Governments | 172,611 | 72% | 9,513,001 | 71% |
| State Government | <u>67,332</u> | <u>28</u> | <u>3,856,222</u> | <u>29</u> |
| Total | 239,943 | 100% | 13,369,223 | 100% |

Source: U.S. Census Bureau.

Nationally, a greater share of employment was at the municipal and township levels, and a smaller share was at the school district level. These differences may be due to different organizational structures. In some larger metropolitan areas in other states, schools are run by city governments rather than school districts.

More than half of the state and local government employees in Minnesota were involved with education. As Table 4.2 shows, about 37 percent of employees were in elementary-secondary education and 15 percent were in higher education. Another area employing a substantial share (17 percent) of employees was social services and income maintenance programs. Areas such as transportation, public safety, environment and housing, and government administration each accounted for between 5 and 7 percent of state and local government employment in Minnesota.

Nationally, a larger share of employment was involved with public safety, while a smaller share was in higher education. About 11 percent of state and local government employment nationwide was in public safety (police, corrections, and fire protection) compared with 7 percent in Minnesota. The share of employment in higher education was 12 percent in the United States and 15 percent in Minnesota.

Table 4.2: Full-Time Equivalent Employment in State and Local Governments by Function, Minnesota and the United States, 1992

| | Minnesota | | United States | |
|------------------------------------|---------------|---------|---------------|---------|
| | FTE Employees | Percent | FTE Employees | Percent |
| Higher Education | 35,809 | 15% | 1,546,970 | 12% |
| Elementary-Secondary Education | 87,982 | 37 | 5,000,164 | 37 |
| Other Education/Libraries | 3,816 | 2 | 193,333 | 1 |
| Social Services/Income Maintenance | 40,403 | 17 | 2,011,879 | 15 |
| Transportation | 12,994 | 5 | 591,760 | 4 |
| Public Safety | 17,109 | 7 | 1,507,370 | 11 |
| Environment/Housing | 13,437 | 6 | 748,226 | 6 |
| Government Administration/Judicial | 15,634 | 7 | 857,233 | 6 |
| Utilities | 5,094 | 2 | 443,431 | 3 |
| Other | 7,665 | 3 | 468,857 | 4 |
| Total | 239,943 | 100% | 13,369,223 | 100% |

Source: U.S. Census Bureau.

Trends

Growth in public employment is best measured relative to changes in population. As a state's population grows, there is generally an increase in the demand for public services such as education, transportation, and police protection. The number of public employees thus typically grows along with population.

State and local government employment per capita has not grown much since 1972.

From 1957 to 1992, the number of state and local government employees per capita increased 70 percent in Minnesota. However, as Table 4.3 indicates:

- **Most of the growth in public employment occurred between 1957 and 1972.**

During that period, the number of employees per capita increased 53 percent in Minnesota. In contrast, employment per capita increased only 11 percent from 1972 to 1992. Employment growth was a little stronger in other states. Nation-

Table 4.3: Estimated Percentage Change in Employment per Capita, Minnesota and the United States, 1957-92

| | Minnesota | United States |
|---------|-----------|---------------|
| 1957-72 | 53% | 56% |
| 1972-92 | 11 | 16 |
| 1957-92 | 70% | 81% |

Source: U.S. Census Bureau.

ally, the number of state and local government employees per capita increased 56 percent from 1957 to 1972 and 16 percent from 1972 to 1992.¹

In Minnesota, employment in higher education grew the fastest throughout this 35-year period (See Table 4.4). The number of higher education employees per capita more than tripled from 1957 to 1992. Several other government functions also experienced strong employment growth. Employment per capita in social services, environment/housing, and government administration each doubled.² As Figure 4.1 indicates, the number of employees per capita in elementary-secondary education increased significantly from 1957 to 1972, but declined during the next 15 years before increasing almost back to 1972 levels. The only major area which experienced a decline in employment per capita over the entire 35-year period was transportation.

The strongest growth in public employment has been in higher education.

Table 4.4: Percentage Change in Employment per Capita, Minnesota, 1957-92

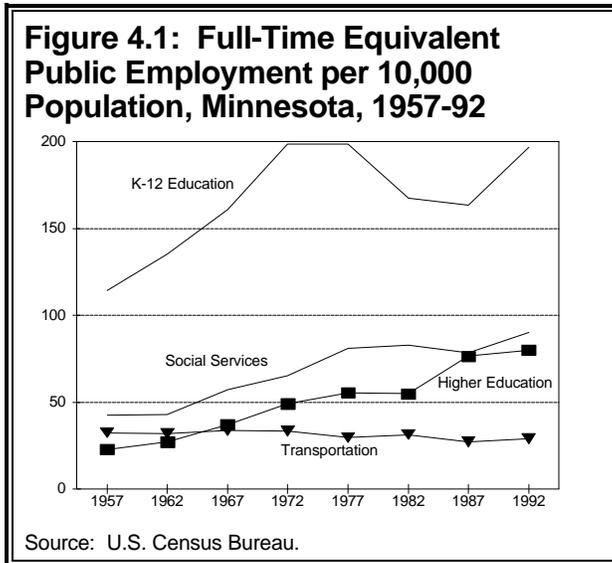
| | <u>1957-72</u> | <u>1972-92</u> | <u>1957-92</u> |
|------------------------------------|----------------|----------------|----------------|
| Higher Education | 115% | 63% | 249% |
| Elementary-Secondary Education | 74 | (-1) | 72 |
| Other Education/Libraries | 35 | 41 | 91 |
| Social Services/Income Maintenance | 53 | 39 | 112 |
| Transportation | 3 | (-13) | (-11) |
| Public Safety | 53 | 27 | 95 |
| Environment/Housing | 38 | 51 | 109 |
| Government Administration/Judicial | 41 | 49 | 111 |
| Utilities | 46 | 17 | 71 |
| Other | 41 | (-20) | 12 |

Source: U.S. Census Bureau.

Two-thirds of the employment growth between 1957 and 1972 was in education. According to Table 4.5, employment growth in elementary-secondary education accounted for 50 percent of overall growth in employment per capita, while 16 percent of the growth was in higher education. From 1972 to 1992, elementary-secondary education was not a factor in overall employment growth. Higher

¹ Figures on employment and salary trends were adjusted to reflect a change in the definition of a full-time equivalent employee which the Census Bureau made in 1986. As a result, our figures are slightly different than published Census numbers. Published Census figures do not correct earlier figures for the change in how part-time employees were counted in full-time equivalents. We adjusted for the change in definition by assuming that, for 1957 to 1982, the ratio of full-time equivalents from part-time workers to the total number of part-time workers was equal to the average for 1987 and 1992. Our overall trend results are similar to those using unadjusted Census data. National comparisons of employment levels and average salaries are somewhat affected, however, because Minnesota has typically had a greater share of part-time workers than other states.

² These rates of increase are based on unadjusted Census Bureau data on the number of full-time equivalent employees. Lack of adequate data by government function prevented us from adjusting for the change in definitions used by the Census Bureau. The adjusted rates of increase would probably be a little lower than those appearing in Table 4.4. The rates shown in Table 4.4 are, however, probably a good indication of the relative growth across various government functions.



education was responsible for 39 percent of the overall growth, and social services accounted for 32 percent of the growth.

Student enrollment trends played a role in the employment changes in education. However, employment did not simply rise or fall in response to enrollment trends. For example, in elementary-secondary education, enrollment in Minnesota declined 15 percent from

1972 to 1992, while the number of staff increased 14 percent according to Census Bureau figures.³ Although employment per capita declined 1 percent, enrollment per capita declined 27 percent over the 20-year period.

National Comparisons

Figure 4.2 shows how Minnesota has compared with the national average for state and local government employees per capita over the 35-year period. Over the last decade, Minnesota has been at or near the national average. In 1992, the number of public employees per capita in Minnesota was 2 percent above the national average.

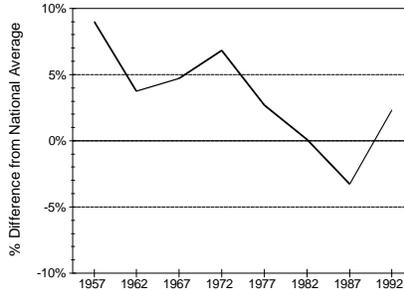
Table 4.5: Share of Employment Growth from Various Sources, Minnesota, 1957-92

| | 1957-72 | 1972-92 | 1957-92 |
|------------------------------------|---------|---------|---------|
| Higher Education | 16% | 39% | 23% |
| Elementary-Secondary Education | 50 | (-3) | 33 |
| Other Education/Libraries | 1 | 3 | 2 |
| Social Services/Income Maintenance | 13 | 32 | 19 |
| Transportation | 1 | (-6) | (-1) |
| Public Safety | 6 | 10 | 8 |
| Environment/Housing | 3 | 13 | 6 |
| Government Administration/Judicial | 4 | 15 | 7 |
| Utilities | 2 | 2 | 2 |
| Other | 4 | (-5) | 1 |
| | 100% | 100% | 100% |

Source: U.S. Census Bureau.

³ Data from the National Center for Education Statistics suggest a somewhat lower rate of employment growth (7 percent instead of 14 percent) in Minnesota's elementary-secondary schools from 1972 to 1992.

Figure 4.2: Percentage Difference in Employees per Capita, Minnesota vs. the National Average, 1957-92



Source: U.S. Census Bureau.

In 1992, Minnesota had slightly more public employees than the national average.

Table 4.6 indicates how Minnesota compared with the national averages for a variety of government functions in 1992. State and local government employment per capita in Minnesota was substantially above national averages for public welfare (43 percent), natural resources (33 percent), higher education (32 percent), and highways (31 percent). Minnesota's employment was 35 percent below average for public safety functions including police, corrections, and fire protection and 19 percent below average for judicial system related activities. Minnesota was also 35 percent below average for public utilities and 56 percent below average for solid waste management. The comparisons for public utilities and solid waste management are difficult to interpret, however, since states may differ significantly in the degree to which private enterprises, rather than public entities, perform some of these functions.

It is also important to understand differences among states in how employment is divided between state government and various local governments. Outside of education, Minnesota has more of its public employees in local governments and fewer in state government. In fact, in 1992, Minnesota had 24 percent fewer state employees per capita outside of education than the national average. This figure is misleading, however, for two reasons. First, Minnesota's system of state and local governments is simply more decentralized than most other states. Minnesota has a greater share of its employees in social services, transportation, and public safety in local governments than other states. Some of these local government employees perform functions which are performed by state government employees in other states. Minnesota state government is not necessarily leaner than other states. Second, when education is included, the number of state employees per capita in Minnesota was very close to the national average. Table 4.7 shows that state government employment in Minnesota was 1 percent below the national average in 1992, and local government employment was 3 percent above average. This occurred because higher education employment is more concentrated at the state level in Minnesota than in other states.

Table 4.6: Percentage Difference in Employees per Capita, Minnesota vs. the National Average, 1992

| | Percentage Difference from National Average | |
|------------------------------------|---|-------------|
| Higher Education | 32% | |
| Elementary-Secondary Education | 0 | |
| Other Education | (-5) | |
| Libraries | <u>31</u> | |
| Education Services | | 8% |
| Public Welfare | 43 | |
| Hospitals | 17 | |
| Health | (-17) | |
| Social Insurance Administration | <u>(-35)</u> | |
| Social Services/Income Maintenance | | 14 |
| Highways | 31 | |
| Air/Water Transportation | <u>(-45)</u> | |
| Transportation | | 25 |
| Police | (-25) | |
| Fire Protection | (-51) | |
| Corrections | <u>(-41)</u> | |
| Public Safety | | (-35) |
| Natural Resources | 33 | |
| Parks and Recreation | 9 | |
| Housing/Community Development | 4 | |
| Sewerage | (-4) | |
| Solid Waste Management | <u>(-56)</u> | |
| Environment/Housing | | 2 |
| Financial and Other Administration | 16 | |
| Judicial/Legal | <u>(-19)</u> | |
| Government Administration | | 4 |
| Water Supply | (-36) | |
| Electric and Gas | (-37) | |
| Transit | <u>(-33)</u> | |
| Utilities | | (-35) |
| State Liquor Stores | | (-100) |
| All Other | | <u>(-5)</u> |
| Total | | 2% |

Source: U.S. Census Bureau.

Minnesota has higher than average public employment levels for higher education, public welfare, highways, and natural resources.

Table 4.7: Employees per 10,000 Population by Level of Government and Function, Minnesota and the United States, 1992

| | State Government | | | Local Governments | | | Combined State and Local | | |
|------------------------------------|------------------|---------------|-----------------------|-------------------|---------------|-----------------------|--------------------------|---------------|-----------------------|
| | Minnesota | United States | Percentage Difference | Minnesota | United States | Percentage Difference | Minnesota | United States | Percentage Difference |
| Higher Education | 74.1 | 50.4 | 47% | 5.8 | 10.2 | (-43)% | 79.9 | 60.6 | 32% |
| Elementary-Secondary Education | 0.0 | 1.1 | (-100) | 196.4 | 194.9 | 1 | 196.4 | 196.0 | 0 |
| Other Education | 3.6 | 3.8 | (-5) | 0.0 | 0.0 | NA | 3.6 | 3.8 | (-5) |
| Libraries | 0.0 | 0.0 | NA | 4.9 | 3.7 | 31 | 4.9 | 3.7 | 31 |
| Education Services | 77.6 | 55.4 | 40% | 207.1 | 208.9 | (-1)% | 284.8 | 264.2 | 8% |
| Social Service/Income Maintenance | 27.6 | 39.7 | (-30) | 62.6 | 39.2 | 60 | 90.2 | 78.9 | 14 |
| Transportation | 11.4 | 10.3 | 10 | 17.6 | 12.8 | 37 | 29.0 | 23.2 | 25 |
| Public Safety | 7.3 | 16.9 | (-57) | 30.8 | 42.2 | (-27) | 38.2 | 59.1 | (-35) |
| Environment/Housing | 9.0 | 7.3 | 24 | 21.0 | 22.1 | (-5) | 30.0 | 29.3 | 2 |
| Government Administration/Judicial | 9.9 | 11.9 | (-17) | 25.0 | 21.7 | 15 | 34.9 | 33.6 | 4 |
| Utilities | 0.0 | 1.1 | (-100) | 11.4 | 16.3 | (-30) | 11.4 | 17.4 | (-35) |
| Other | 7.3 | 8.6 | (-16) | 9.9 | 9.8 | 1 | 17.1 | 18.4 | (-7) |
| All Non-Education | 72.6 | 95.8 | (-24)% | 178.2 | 164.1 | 9% | 250.8 | 259.9 | (-4)% |
| TOTAL | 150.3 | 151.2 | (-1)% | 385.3 | 372.9 | 3% | 535.6 | 524.1 | 2% |

Source: U.S. Census Bureau.

AVERAGE SALARIES AND PAYROLLS

Salary Trends

Average salaries for state and local government employees in Minnesota increased more than eight-fold from about \$3,800 in 1957 to more than \$31,000 in 1992.⁴ The average national increase was a little less, as average salaries increased from about \$3,900 to almost \$30,000.

Much of the increase in salaries, particularly since 1972, was due to inflation. Table 4.8 shows that, after adjusting for inflation, average salaries increased 70 percent in Minnesota and 60 percent nationally from 1957 to 1972. However:

- Average inflation-adjusted salaries increased only slightly from 1972 to 1992.

During the last 20 years, average salaries for state and local government employees increased 4 percent in Minnesota and 3 percent across the country after inflation. The slowdown in the increase in public employee salaries is consistent with wage trends in the private sector of the U.S. economy.

Like the private sector, little real growth in wages has occurred in the public sector since the early 1970s.

⁴ Salary trends and comparisons made in this chapter also reflect the adjustment we made to correct for the Census Bureau's change in the definition of a full-time equivalent employee. In general, published Census data tend to overstate the employment growth and understate the payroll growth which has occurred in state and local governments. No adjustment is necessary when overall payroll trends are examined.

Table 4.8: Changes in Average Inflation-Adjusted Salaries for State and Local Government Employees, Minnesota and the United States, 1957-92

| | <u>Minnesota</u> | <u>United States</u> |
|---------|------------------|----------------------|
| 1957-72 | 70% | 60% |
| 1972-92 | <u>4</u> | <u>3</u> |
| 1957-92 | 77% | 64% |

Source: U.S. Census Bureau.

Growth in state and local government payroll costs has slowed down considerably since 1972.

Payroll Trends

Changes in public payrolls depend on both employment trends and average salary trends.⁵ Table 4.9 shows how state and local government payrolls per capita have changed since 1957 after adjusting for inflation. Reflecting both employment and salary trends, payrolls per capita increased significantly from 1957 to 1972 and modestly from 1972 to 1992.

Minnesota public payrolls per capita increased 160 percent in constant dollars from 1957 to 1972, compared with a national average of 149 percent. From 1972 to 1992, inflation-adjusted payrolls per capita increased only 16 percent in Minnesota, slightly less than the national average of 19 percent. Minnesota's 16 percent increase includes an 11 percent increase in employees per capita and a 4 percent increase in average inflation-adjusted salaries.

National Comparisons

As Figure 4.3 shows, average state and local government salaries in Minnesota have generally been above the national average in recent years. Since 1972,

Table 4.9: Changes in Inflation-Adjusted Payrolls per Capita for State and Local Government Employees, Minnesota and the United States, 1957-92

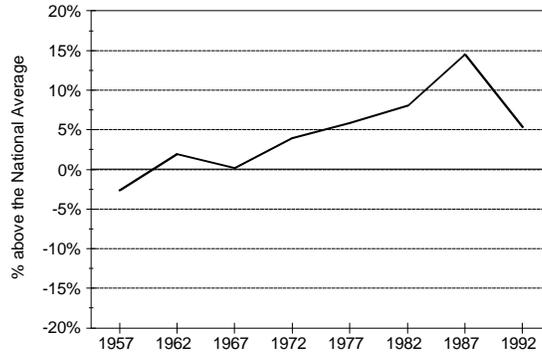
| | <u>Minnesota</u> | <u>United States</u> |
|---------|------------------|----------------------|
| 1957-72 | 160% | 149% |
| 1972-92 | <u>16</u> | <u>19</u> |
| 1957-92 | 201% | 196% |

Source: U.S. Census Bureau.

⁵ Payrolls include only salaries and wages, not fringe benefits.

In 1992, average salaries for Minnesota's public employees were 5 percent above the national average.

Figure 4.3: Percentage Difference in Average Public Employee Salaries, Minnesota vs. the National Average, 1957-92



Source: U.S. Census Bureau.

average salaries have been between 4 and 15 percent above average. In 1992, average salaries were 5 percent above the national average.⁶

Minnesota's overall public payrolls per capita have been above the national average throughout most of the 35-year period since 1957. Payrolls per capita have generally been between 5 and 10 percent above the national average. For 1992, payrolls per capita were about 8 percent

above the national average. This 1992 figure reflects an employment level which was 2 percent above average and average salaries which were 5 percent above average.

Table 4.10 shows how average salaries and payrolls per capita in Minnesota compared with national averages in 1992 for a variety of government functions. In

Table 4.10: Percentage Difference in Average Salaries and Payrolls per Capita, Minnesota and the National Average, 1992

| | Percentage Difference from the National Average | |
|------------------------------------|---|---------------------|
| | Average Salaries | Payrolls per Capita |
| Higher Education | 4% | 37% |
| Elementary-Secondary Education | 6 | 6 |
| Social Services/Income Maintenance | 3 | 18 |
| Transportation | 16 | 45 |
| Public Safety | 5 | (-32) |
| Environment/Housing | 11 | 14 |
| Government Administration/Judicial | 10 | 15 |
| Utilities | (-6) | (-38) |
| Other | 4 | 3 |
| Total | 5% | 8% |

Source: U.S. Census Bureau.

⁶ It is difficult to determine if the higher than average public employee salaries in Minnesota reflect higher than average private sector salaries. In general, available data do not suggest that the higher than average public employee salaries can be explained by higher than average private sector salaries or a higher than average cost of living in Minnesota. However, the lack of adequate comparison data on the private sector prevents us from reaching a definitive conclusion.

general, average salaries in Minnesota were above the national average for all functions listed in the table except public utilities. Average salaries were 10 percent or more above average in transportation, environment/housing, and government administration.

Payrolls per capita were above average for all functions except public utilities and public safety, which both had below average employment levels. Payrolls per capita in Minnesota were 45 percent above average in transportation, 37 percent above average in higher education, and 18 percent above average for social services and income maintenance programs. Payrolls per capita were 38 percent below average for public utilities and 32 percent below average for public safety functions.

FRINGE BENEFITS

The most recent data available on employee fringe benefits paid by state and local governments in Minnesota is for 1987.⁷ Minnesota's state and local governments spent about \$1.18 billion on fringe benefits, or about 20.1 percent of employee payroll. The average cost per employee was about \$5,749.

There are three major types of fringe benefits: social security, employee retirement, and health and disability insurance. Together, these three benefit categories accounted for 97 percent of Minnesota's fringe benefit expenditures in 1987. As Table 4.11 and Figure 4.4 show, employee retirement expenditures were 37 percent of overall fringe benefit expenditures, with social security and health and disability insurance each accounting for 30 percent.⁸

Table 4.11: Cost of Employee Benefits per Employee, Minnesota, 1987

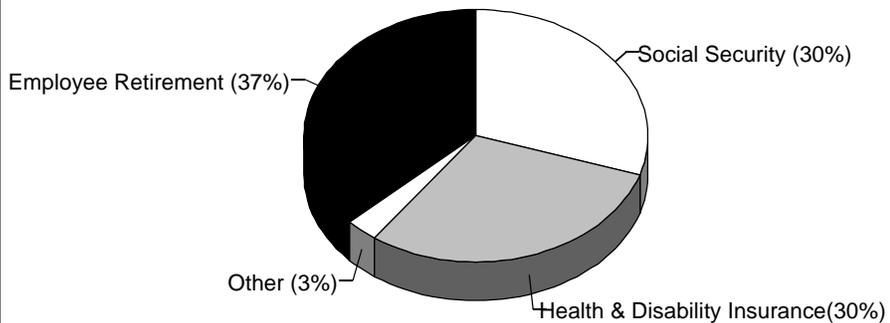
| | <u>Amount</u> | <u>Percent</u> |
|---------------------------------|---------------|----------------|
| Social Security | \$1,703 | 29.6% |
| Employee Retirement | 2,120 | 36.9 |
| Health and Disability Insurance | 1,744 | 30.3 |
| Life Insurance | 76 | 1.3 |
| Unemployment Insurance | 44 | 0.8 |
| Bonuses and Cash Awards | 41 | 0.7 |
| Severance Pay | 18 | 0.3 |
| Other Benefits | <u>4</u> | <u>0.1</u> |
| Total | \$5,749 | 100.0% |

Source: U. S. Census Bureau.

⁷ Comprehensive data on the fringe benefit expenditures made by state and local governments are only available from the Census Bureau for selected years (1967, 1982, and 1987).

⁸ The costs of vacations, holidays, and sick leave are not included in fringe benefits, since the Census Bureau includes these items in payroll costs.

Figure 4.4: Cost of Employee Benefits, Minnesota, 1987



Source: U.S. Census Bureau.

Fringe benefits have grown much faster than inflation.

Trends

We used Census Bureau data to examine the trend in fringe benefit expenditures between 1967 and 1987. Comparable data were available for both years for the four largest types of fringe benefits. Census data show that:

- **Between 1967 and 1987, fringe benefits paid by state and local governments in Minnesota increased much faster than inflation and average salaries.**

The cost of these fringe benefits in Minnesota increased from \$518 per employee in 1967 to \$5,642 in 1987. After adjusting for inflation, fringe benefits increased by 182 percent, or 5.3 percent per year.⁹ Fringe benefit costs also increased significantly faster than average salaries, going from 9 percent of payrolls in 1967 to 20 percent of payrolls in 1987.

Table 4.12 shows the change in cost between 1967 and 1987 for different types of fringe benefits. The table indicates that:

- **Most of the growth in fringe benefit costs is due to the rising costs of health and disability insurance and Social Security.**

The fastest growing benefit was health and disability insurance, which increased by 11.3 percent per year in Minnesota, after adjusting for inflation. Social Security costs increased by 7.1 percent annually. Together, these two benefits explained 77 percent of the growth in average fringe benefit cost. Retirement costs

⁹ Data from the Bureau of Labor Statistics' Employment Cost Index suggest that the national growth rate for fringe benefits paid by state and local governments tapered off after 1987. These data indicate an annual rate of increase of only 0.3 percent between 1987 and 1995 after adjusting for inflation, compared with a 4.7 percent annual rate of increase between 1967 and 1987 using Census data. We are somewhat skeptical of the more recent trends indicated by the Employment Cost Index. In Minnesota, health insurance and social security contributions made by school districts continued to increase after 1987. Total fringe benefit expenditures made by Minnesota school districts increased from 21.3 percent of payroll in 1987 to 24.9 percent in 1994.

Table 4.12: Trend in Average Cost of Employee Benefits, Minnesota, 1967-87 (in Constant 1992 Dollars)

| | <u>Cost per Employee</u> | | <u>Percent Change</u> | <u>Annual Growth Rate</u> | <u>Percent of Growth</u> |
|---------------------------------|--------------------------|-------------|-----------------------|---------------------------|--------------------------|
| | <u>1967</u> | <u>1987</u> | | | |
| Social Security | \$518 | \$2,053 | 297% | 7.1% | 35% |
| Employee Retirement | 1,616 | 2,557 | 58 | 2.3 | 21 |
| Health and Disability Insurance | 248 | 2,103 | 748 | 11.3 | 42 |
| Life Insurance | <u>29</u> | <u>92</u> | <u>215</u> | <u>5.9</u> | <u>1</u> |
| Total | \$2,411 | \$6,804 | 182% | 5.3% | 100% |

Source: U. S. Census Bureau.

grew by 2.3 percent per year, considerably less than the other two major benefit categories. As a result:

Health insurance and Social Security costs have grown the most.

- **Employee retirement costs explained only 21 percent of the growth in fringe benefit costs between 1967 and 1987.**

As Table 4.13 shows, the share of fringe benefit costs going for employee retirement declined from 67 percent in 1967 to 38 percent in 1987. Furthermore, Census data indicate that Minnesota's retirement costs per public employee declined by about 13 percent between 1987 and 1992. The recent trend in retirement contributions in Minnesota and throughout the nation is, in part, the result of increased retirement fund earnings.

Table 4.13: Change in Share of Fringe Benefit Cost by Type of Benefit, Minnesota, 1967-87

| | <u>Percent Share</u> | |
|---------------------------------|----------------------|-------------|
| | <u>1967</u> | <u>1987</u> |
| Social Security | 21% | 30% |
| Employee Retirement | 67 | 38 |
| Health and Disability Insurance | 10 | 31 |
| Life Insurance | <u>1</u> | <u>1</u> |
| Total | 100% | 100% |

Source: U. S. Census Bureau.

National Comparisons

In 1987, fringe benefits provided by Minnesota's state and local governments cost 3 percent more per employee than the national average. As Table 4.14 shows, Minnesota's costs were higher because its Social Security costs were higher. Social Security covers almost all of Minnesota's state and local government employees, but several states continue not to participate in Social Security. While

Minnesota's fringe benefit costs per employee were 3 percent above the national average.

Table 4.14: Annual Employee Benefit Cost per Employee, Minnesota and the National Average, 1987

| | <u>Minnesota</u> | <u>United States</u> | <u>Percent Difference</u> |
|---------------------------------|------------------|----------------------|---------------------------|
| Social Security | \$1,703 | \$1,120 | 52% |
| Employee Retirement | 2,120 | 2,557 | -17 |
| Health and Disability Insurance | 1,744 | 1,734 | 1 |
| Life Insurance | 76 | 61 | 25 |
| Other Benefits | <u>107</u> | <u>103</u> | <u>4</u> |
| Total | \$5,749 | \$5,575 | 3% |

Note: The annual average cost is the October 1987 cost times 12 divided by the number of full-time-equivalent employees in October 1987.

Source: U. S. Census Bureau.

governments typically make higher retirement contributions when employees are not covered by Social Security, the additional retirement contribution is usually less than the cost of Social Security. Minnesota's health and disability insurance costs differed from the national average by less than 1 percent.

Future Employee Retirement Costs

We showed that employee retirement costs have increased moderately faster than inflation and do not explain much of the growth in fringe benefits. However, since many retirement funds have large unfunded liabilities, some policy makers are concerned about how much retirement benefits will cost state and local governments in the future. To address this issue, we examined the actuarial valuation reports for 14 retirement funds for Minnesota public employees, including the three major funds (the Minnesota State Employees Retirement Fund, the Teachers Retirement Fund, and the Public Employees Retirement Fund). These valuation reports estimate the funds' unfunded liability as of July 1, 1995, and determine whether the current employee and employer contribution rates are sufficient to eliminate the unfunded liability by the year 2020.

There are different methods for measuring unfunded liability and the adequacy of pension funding. This section is based on the method required by statute for actuarial valuations.¹⁰ Other methods may yield different results.¹¹

¹⁰ *Minn. Stat.* §356.20 and §356.215.

¹¹ The method we used values assets at cost and includes realized capital gains and losses, plus one-third of unrealized capital gains and losses. The rationale for this method is to stabilize estimates of contribution requirements. Otherwise, fluctuations in the stock and bond markets could cause large changes in the contribution requirements. When stock and bond markets have been rising, this method tends to value assets below market value. When markets have been declining, it tends to value assets above market value. Since markets have been rising, recent actuarial valuations of assets are below market value. For example, on July 1, 1995, the assets of the Public Employees Retirement Fund had an actuarial value of \$5.14 billion, about 2.4 percent less than the market value of \$5.27 billion.

As Table 4.15 shows, most of the retirement funds, including the three major funds, have significant unfunded liability. The overall unfunded liability was about \$4.0 billion, about 16 percent of the funds' total accrued liability. But, in most cases, including all three of the major funds, actuarial valuations indicate that the combined employee/employer contribution rate is within 1 percent of the rate required to eliminate the unfunded liability by 2020.

Six of the funds do not have sufficient current contribution rates to eliminate their unfunded liabilities by 2020. Actuaries estimate that additional annual contributions of about \$38 million would be required to eliminate the unfunded liabilities. For the other eight funds, contributions exceed the amounts required to eliminate unfunded liabilities by an estimated \$21 million per year.

For all three major retirement funds, the actual contribution is within 1 percent of payroll of the amount required to eliminate the unfunded liability by 2020. The contribution rates were 0.36 percent and 0.22 percent above the required rate for the Teachers Retirement Fund and the State Employees Retirement Fund, respectively. The contribution rate was 0.70 percent below the required rate for the Public Employees Retirement Fund. Nevertheless, the contribution deficiency for the Public Employees Retirement Fund is large, because it is the second largest fund in the state. Its estimated annual deficiency is \$20.2 million per year, the largest deficiency of the funds we examined.

Funds with large deficiencies in their combined employee and employer contribution rates include the teacher retirement funds for Minneapolis, St. Paul, and Duluth, the Legislators Retirement Fund, and the Elected State Officers Retirement Fund. The total unfunded liability of these five funds is about \$678 million, of which 91 percent is due to the teacher retirement funds in Minneapolis and St. Paul. To eliminate the unfunded liability by 2020, according to actuarial valuations, the Minneapolis Teachers Retirement Fund needs to increase its employee/employer contribution rate from 19.00 to 25.18 percent of payroll. This would increase its contribution by \$10.8 million annually. The St. Paul Teachers Retirement Fund needs to raise its contribution rate from 15.87 to 17.96 percent of payroll, an increase of \$3.1 million per year. The retirement funds for legislators and elected state officers are much smaller than the other retirement funds and account for less than 1 percent of the total unfunded liability. The reason that they have large deficiencies in their current contribution rates is that these two funds are designed to run differently than other employee retirement funds. Unlike other funds, government contributions to these funds do not occur until an individual's retirement. To eliminate the unfunded liability by 2020, the total employee/employer contributions would need to be increased by 32.5 percent for the Legislators Retirement Fund and 34.6 percent for the Elected State Officers Retirement Fund.¹² This would require additional annual contributions of \$2.34 million for the Legislators Retirement Fund and \$0.16 million for the Elective State Officers Retirement Fund.

¹² Assets reported for the Legislators Retirement Fund and the Elected State Officers Retirement Fund include employee contributions made to the state's general fund that are not held in segregated reserves. If these contributions were not counted as assets, the deficiency would be 36.74 percent and 38.92 percent of payroll, respectively.

Table 4.15: Actuarial Valuations of Minnesota Public Employee Retirement Funds as of July 1, 1995 (Dollar Figures in Thousands)

| <u>Retirement Fund</u> | <u>Teachers</u> | <u>Public Employees</u> | <u>State Employees</u> | <u>Minneapolis Employees</u> | <u>Public Employees Police and Fire</u> | <u>Minneapolis Teachers</u> | <u>Police and Fire Consolidation</u> |
|--|-----------------|-------------------------|------------------------|------------------------------|---|-----------------------------|--------------------------------------|
| Accrued Liability | \$9,717,623 | \$6,622,069 | \$3,795,926 | \$1,230,966 | \$1,196,795 | \$983,249 | \$744,514 |
| Assets | 8,348,124 | 5,138,461 | 3,462,098 | 964,886 | 1,385,901 | 554,960 | 675,332 |
| Unfunded Accrued Liability | 1,369,499 | 1,483,608 | 333,828 | 266,080 | (189,106) | 428,289 | 69,182 |
| Funding Ratio | 85.9% | 77.6% | 91.2% | 78.4% | 115.8% | 56.4% | 90.7% |
| Contributions Required to Fully Fund Accrued Liabilities by 2020 (as Percent of Payroll) | 14.30% | 9.61% | 8.05% | 44.48% | 16.49% | 25.18% | N/A |
| Actual Contributions (Percent of Payroll) | | | | | | | |
| Employee Contributions | 6.51 | 4.31 | 4.07 | 9.75 | 7.60 | 6.16 | |
| Employer Contributions | 8.15 | 4.60 | 4.20 | 22.20 | 11.40 | 9.80 | |
| Additional Contribution ¹ | -- | -- | -- | 12.53 | -- | 3.04 | -- |
| Total Contributions | 14.66% | 8.91% | 8.27% | 44.48% | 19.00% | 19.00% | |
| Contribution Surplus (Deficiency) | | | | | | | |
| Percent of Payroll | 0.36% | (0.70)% | 0.22% | 0.00% | 2.51% | (6.18)% | 0.00% |
| Annual Amount | \$8,251 | \$(20,201) | \$3,598 | \$0 | \$7,878 | \$(10,775) | \$0 |

The impact of these fourteen funds on future state and local spending is somewhat difficult to forecast for several reasons. First, actuarial valuations vary from year to year. While the numbers presented in Table 4.15 represent the most current actuarial valuations of these funds, these actuarial estimates will likely change in the future as actuaries revise their assumptions or use more current information on factors such as investment performance. Second, it is unclear how the Legislature will choose to address the problems of funds with persistent deficiencies or adjust the contribution rates of funds with persistent surpluses. Adjustments can either be made to the contributions made by state and local governments to pension funds or to the contributions made by employees. Only the former affects state and local spending. Finally, estimated impacts on state and local expenditures are also affected by the timing of any adjustments to the funds. For example, if a persistent deficiency in a fund is not addressed at this time, it would have a potentially greater percentage impact on state and local spending when addressed in the future.

Despite these problems, we can provide a rough estimate of the potential impact of retirement fund deficiencies on future state and local government spending. In making this estimate, we assume that all deficiencies and surpluses in the annual contribution rates are eliminated by changing the level of contributions made by state or local governments. In addition, we assume that all deficiencies and surpluses are addressed promptly. Table 4.15 shows that, under those conditions:

Table 4.15: Actuarial Valuations of Minnesota Public Employee Retirement Funds as of July 1, 1995 (Dollar Figures in Thousands), continued

| <u>Retirement Fund</u> | <u>St. Paul Teachers</u> | <u>State Patrol</u> | <u>Duluth Teachers</u> | <u>Correctional Employees</u> | <u>Judges</u> | <u>Legislators</u> | <u>Elective State Officers</u> | <u>TOTAL</u> |
|--|--------------------------|---------------------|------------------------|-------------------------------|---------------|--------------------|--------------------------------|--------------|
| Accrued Liability | \$633,070 | \$283,078 | \$173,965 | \$153,491 | \$102,238 | \$50,255 | \$2,948 | \$25,690,187 |
| Assets | 445,733 | 284,918 | 142,852 | 165,427 | 56,813 | 21,213 | 378 | 21,647,096 |
| Unfunded Accrued Liability | 187,337 | (1,840) | 31,113 | (11,936) | 45,425 | 29,042 | 2,570 | 4,043,091 |
| Funding Ratio | 70.4% | 100.6% | 82.1% | 107.8% | 55.6% | 42.2% | 12.8% | 84.3% |
| Contributions Required to Fully Fund Accrued Liabilities by 2020 (as Percent of Payroll) | 17.96% | 21.34% | 13.23% | 11.11% | 27.32% | 41.54% | 43.58% | |
| Actual Contributions (Percent of Payroll) | | | | | | | | |
| Employee contributions | 5.90 | 8.92 | 5.50 | 4.90 | 6.36 | 9.00 | 9.00 | |
| Employer contributions | 9.54 | 14.88 | 5.79 | 6.27 | 22.00 | 0.00 | 0.00 | |
| Additional contribution ¹ | 0.43 | -- | | | | | | |
| Total Contributions | 15.87% | 23.80% | 11.29% | 11.17% | 28.36% | 9.00% | 9.00% | |
| Contribution Surplus (Deficiency) | | | | | | | | |
| Percent of Payroll | (2.09)% | 2.46% | (1.94)% | 0.06% | 1.04% | (32.54)% | (34.58)% | |
| Annual Amount | \$(3,100) | \$984 | \$(942) | \$44 | \$244 | \$(2,340) | \$(156) | \$(16,515) |

Source: Actuarial valuation reports prepared by the actuary for the Legislative Commission on Pensions and Retirement.

¹Additional contributions for the Minneapolis Employees Retirement Fund are paid for by the state. For Minneapolis Teachers Retirement Fund, contributions equal to 2.87 percent of payroll are shared by the state (50%), the city (25%), and the school district (25%). In addition, fund members pay an administrative assessment of .17 percent of payroll. For the St. Paul Teachers Retirement Fund, the state pays 0.34 percent of payroll and fund members pay an administrative assessment of 0.09 percent of payroll.

- **Full funding of these 14 retirement funds by the year 2020 would require additional annual funding of about \$17 million in 1995 dollars.**

Current pension fund deficiencies will likely have only a minor impact on future government spending.

While this is a significant amount of additional government spending, it is not likely to be a major factor in future spending trends. In 1995, this overall deficiency represented 0.12 percent of the state and local government taxes collected in Minnesota.¹³

SUMMARY

Significant growth in staffing levels and average salaries in both Minnesota and other states occurred between 1957 and 1972. In Minnesota, the number of state and local government employees per capita increased 53 percent, and average inflation-adjusted salaries grew 70 percent. Nationally, employment growth was

¹³ Assuming no change in actuarial valuations, the annual net deficiency in years between 1995 and 2020 would remain a constant percentage of payroll and would consequently grow at the rate of payroll growth.

slightly greater (56 percent), while salary increases were lower (60 percent). Two-thirds of the employment growth in Minnesota was in elementary-secondary education and higher education, both of which were experiencing significant enrollment increases.

Much less growth in both staffing levels and salaries occurred between 1972 and 1992. The number of employees per capita in Minnesota increased only 11 percent, compared with 16 percent nationally. Average salaries rose 4 percent in Minnesota and 3 percent nationally. In Minnesota, 39 percent of the employment growth was in higher education, and 32 percent was in social services and income maintenance programs.

Fringe benefit costs per employee in Minnesota increased by 182 percent between 1967 and 1987, after adjusting for inflation. Most of this growth was due to rapidly increasing health and disability insurance costs and Social Security costs. Employer contributions to public employee pension funds also increased, but at a slower rate.

In 1992, Minnesota had 2 percent more state and local government employees than the national average. Average salaries were about 5 percent higher than average, but total compensation per employee may be a little closer to the national average. The last available data on fringe benefits indicated that fringe benefits were a smaller percentage of salary costs in Minnesota than nationally. In 1987, fringe benefits in Minnesota were 20.1 percent of payroll costs compared with 22.3 percent for all state and local government employees in the United States. Lower employer retirement contributions and health and disability expenditures were responsible for the lower ratio of fringe benefits to payroll costs.

Actuarial valuations indicate that contributions to public employee pension funds in Minnesota will have to increase in order to eliminate the unfunded liabilities of the funds by 2020. We estimate that additional annual contributions of \$17 million per year would be required for the 14 retirement funds covering most of Minnesota's public employees. This is a significant amount of money, but it represents only about 0.12 percent of the state and local government taxes collected in Minnesota during 1995. As a result, it is not likely to be one of the major factors driving future spending in Minnesota.