Minnesota Public Sector Compensation
Part 1

Costs, Trends, and Comparisons to the Private Sector

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About the Minnesota Taxpayers Association

The Minnesota Taxpayers Association was founded in 1926 for the purpose of disseminating factual information that will educate and inform all Minnesotans about Minnesota tax and spending policies. For over eighty years, the Association has advocated for the adoption of sound fiscal policies through its research efforts, publications, and meetings.

The Association is a non-profit, non-partisan group supported by membership dues. For information about membership, call (651) 224-7477, or visit our web site at www.mntax.org.

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Executive Summary

Discussions over the cost of government swiftly move to the cost of labor, as government at all levels is a labor intensive enterprise. NAIOP Minnesota and the Minnesota Chamber of Commerce commissioned the Minnesota Taxpayers Association to conduct an examination of state and local government employee compensation levels and design.

The purpose of this investigation is to examine state and local public employee compensation in light of private sector trends and assess the impact on government budgets. We conducted an examination of total employee compensation (defined as wages, health benefits and pensions) among state and local government employees to answer the following questions:

- How does Minnesota's state and local government workforce compare to the rest of the nation in terms of size and compensation?
- How do government employee salary, health, and pension packages compare with the comparable jobs in the private (i.e. non-government) sector? What is the magnitude of any public sector compensation cost premiums in these areas?
- What are the cost trends in employee compensation and how do these trends compare to revenue and tax base trends and projections?
- What types of compensation-related spending are driven by contract provisions, state laws, and mandates which have weak or inconsistent relationships with public sector outcomes? What are the opportunity cost implications of these provisions?

This report is the first of a two part series and addresses the first three research questions. A forthcoming report will examine the opportunity cost implications of government compensation system design.

Private sector and state employees were matched by comparing state and local job title descriptions with federal occupational code descriptions. Positions unique to the public sector with no private sector analogues were excluded from the analysis as were other public employee positions that could not be matched accurately with sufficient confidence. The study includes over 9,400 state positions representing 41 occupations and over 12,500 local government positions representing 27 occupations.

Compensation benchmarking on wages, health benefits, and pensions in this report is determined solely on an employer cost basis. Additional descriptive and comparative information on the design and generosity of fringe benefits is also provided but is excluded in our total compensation cost comparison because of the challenges of quantifying differences of health care and retirement plan features.

Our source for state employee compensation data is Minnesota Management and Budget's (MMB) *Executive Branch Total Compensation Report* for 2010 which includes wage and benefit information for all executive branch employees except for employees in the Minnesota State Colleges and Universities and other employees protected by data privacy restrictions, such as Department of Public Safety special agents. Our source for local government employee wage and health care data is the Minnesota Local Government Salary and Benefits Survey.

Wage data for various occupations was obtained using the Occupational Employment Statistics survey administered by the Minnesota Department of Employment and Economic Development (DEED) in conjunction with the federal Bureau of Labor Statistics. Our source

for health benefit data is the Medical Expenditure Panel Survey administered by the federal Department of Health and Human Services' Agency for Health Care Research and Quality. Our source for private sector retirement cost data is the Employer Costs for Employee Compensation (ECEC) report administered by the federal Bureau of Labor Statistics as part of its National Compensation Survey program.

Findings on Public Employee Compensation Rankings and Trends

State Government Employees

- Minnesota ranked 31st nationally in the number of state full-time-equivalent employees per 10,000 residents in 2009.
- Minnesota pays state employees above-average when compared to other states. On a nominal basis, state employees were paid $59,415 on average, 7th highest in the nation. On a cost-of-living-adjusted basis, state employees were paid $57,797 on average, 5th highest in the nation.
- The State of Minnesota's workforce grew 5.0% between 2001 and 2009 but declined by 0.7% during that same period when measured relative to population growth (after adjusting for the state takeover of the court system).
- Average per-employee wages grew 3.67% per year from 2001 to 2009. Adjusting for inflation (CPI basis) the average state employee wage grew 1.26% annually during that same period.
- The cost of providing fringe benefits for state employees grew by 4.90% per year on a per employee basis from 2001 to 2009.
- From 2001 to 2009, total state government employee compensation (wages, employer pension contributions, and health care) grew at an average annual rate 35% faster than state own source revenues (4.6% vs. 3.4%). If recent compensation trends continue, revenues will have to grow about 18% faster than long term forecasts predict, otherwise compensation costs run the risk of crowding out other areas of government spending or forcing a downsizing of the workforce relative to population.

Local Government Employees

- Minnesota also ranked 31st nationally in the number of local government full-time equivalent employees per 10,000 in 2009.
- Local governments in Minnesota pay employees average to above-average when compared to other states. On a nominal basis, local government employees were paid $49,268 on average, 16th highest in the nation. On a cost-of-living-adjusted basis, local government employees were paid $47,926 on average, 9th highest in the nation.
- Minnesota's local government workforce declined 1.3% between 2001 and 2009 and declined by 6.7% during that same period when measured relative to population (after adjusting for the partial state takeover of the court system).
- Average per-employee wages grew 3.25% per year from 2001 to 2009; when adjusting for inflation (CPI basis) the average state employee wage grew 0.85% annually during that same period.
- The cost of providing fringe benefits to local government employees grew by 4.85% per year on a per employee basis from 2001 to 2009.
- From 2001 to 2009, total local government employee compensation (wages, employer pension contributions, and health care) grew by 3.7% per year. This number would likely have been higher had local government employment not declined over this period. If recent compensation trends continue, local government revenues would need to grow by

at least a similar amount in future years, otherwise compensation costs run the risk of crowding out other areas of government spending or forcing a downsizing of the workforce relative to population.

Findings on State Employee Compensation Benchmarking

- State employee wages are typically above market rates for positions requiring less education while below market rates for positions with higher educational requirements. This "double imbalance" is common to public sector labor cost structures around the country.
- Wages for state employees are higher than private sector counterparts in 24 of the 41 occupations studied in this report (72% of the study population).
- State health insurance costs are higher for all occupations studied in this report; the public sector premium ranges from 37.5% to 41.5% above private sector counterpart costs.
- The state has higher pension-related costs for 30 of the 41 occupations studied (86% of the study population) than does the private sector for similar positions.
- From a total compensation cost perspective (employer cost for wages, health care and pensions):
    - 71.7% of the employees included in the study have total compensation costs that are at least 5.0% greater than private sector counterparts.
    - 10.0% of the employees included in the study have total compensation costs that are at least 5.0% lower than private sector.
    - 18.3% of the employees included in the study have total compensation costs that are largely reflective of private sector compensation (within 5.0% plus or minus of private sector counterparts).
- A 30-year state employee retiring at age 60 in 2009 with an average salary for that tenure and age could expect to receive almost $725,000 over his or her remaining life expectancy (22.4 years) from the MSRS General Plan in addition to what he or she could expect to receive from Social Security or other personal savings. That same employee would need over $400,000 in a 401(k) account yielding 5% return per year to provide a similar benefit. The 2008 median 401k account balance for a similar salaried, long-tenured participant in a defined contribution plan is $74,000.

Findings on Local Employee Compensation Benchmarking

- Local government employee wages are typically above market rates for positions requiring less education while below market rates for positions with higher educational requirements -- again reflecting the "double imbalance" common to public sector labor markets.
- Wages for local government employees are higher than private sector counterparts in 14 of the 27 occupations studied in this report (64% of the study population).
- Local governments have higher employee health insurance costs than the private sector; with 47.8% higher premium costs for employee only health care coverage and 7.9% higher costs for family health care coverage.
- Local governments have higher pension-related costs for 26 of the 27 occupations studied (97% of the study population) than does the private sector for similar positions.
- From a total compensation cost perspective (employer cost of wages, health care and pensions) in which family health care coverage is elected:
    - 62.6% of the employees included in the study have total compensation costs that are at least 5.0% greater than private sector counterparts.

  - 23.6% of the employees included in the study have total compensation costs that are at least 5.0% lower than private sector counterparts.
  - 13.7% of the employees included in the study have total compensation costs that are largely reflective of private sector compensation (within 5.0% plus or minus of private sector counterparts).
- A 30-year local government employee retiring at age 60 in 2009 with an average salary for that tenure and age could expect to receive more than $600,000 over his or her remaining life expectancy (22.4 years) from the PERA Coordinated Plan in addition to what he or she could expect to receive from Social Security or other personal savings. That same employee would need over $365,000 in a 401(k) account yielding 5% return per year to provide a similar benefit. The 2008 median 401k account balance for a similar salaried, long-tenured participant in a defined contribution plan is $74,000.

Introduction

Discussions over the cost of government swiftly move to the cost of labor, as government at all levels is a labor intensive enterprise. In 2010 the Minnesota Chamber of Commerce and NAIOP Minnesota commissioned the Minnesota Taxpayers Association to conduct an examination of state and local government employee compensation levels and design.

The purpose of this investigation is to examine state and local employee compensation and evaluate the impact on state service delivery and budget sustainability. We conducted an examination of total employee compensation among state and local government employees to answer the following questions:

- How does Minnesota's state and local government workforce compare to the rest of the nation in terms of size and compensation?
- How do government employee salary, health, and retirement packages compare with comparable jobs in the private sector? What is the magnitude of any public sector compensation premiums in these areas?
- What are the cost trends in employee compensation and how do these trends compare to revenue and tax base trends and projections?
- What types of compensation-related spending driven by contract provisions, state laws, and mandates have weak or inconsistent relationships with public sector outcomes? What are the opportunity cost implications of these provisions?

This report is the first of a two-part series and addresses the first three research questions. A forthcoming report will examine the opportunity cost implications of government compensation system design.

This report is organized as follows:

Section II presents Minnesota state government employment and compensation levels in a national context and highlights some recent trends.

Section III compares state employee compensation with the Minnesota private sector with regard to wage, health care and pension costs.

Section IV presents Minnesota local government employment and compensation levels in a national context and highlights some recent trends.

Section V compares local government compensation with the Minnesota private sector with regard to wage, health care and pension costs.

Appendix A provides detail on the methodology used for the state employee compensation comparison

Appendix B provides detail on the methodology used for the local government employee compensation comparison

Appendix C is a literature review highlighting key findings of state and national public sector compensation-related investigations.

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II. Overview and General Trends in State Employee Compensation

Summary of Findings

- Minnesota ranked 31st nationally in the number of state full-time equivalent employees per 10,000 residents in 2009
- Minnesota pays its state employees above-average when compared to other states:
  - On a nominal basis, state employees were paid $59,415 on average, 7th highest in the nation
  - On a cost-of-living-adjusted basis, state employees were paid $59,797 on average, 5th highest in the nation
- The State of Minnesota's workforce grew 5.0% in real terms between 2001 and 2009 but declined by 0.7% during that same period when measured relative to population growth (after adjusting for the state takeover of the court system)
- In total dollars, per-employee wage growth was 3.67% per year from 2001 to 2009; when adjusting for inflation (CPI basis) the average state employee wage grew 1.26% annually during that same period
- The cost of providing fringe benefits for state employees grew by 4.90% per year on a per employee basis from 2001 to 2009
- From 2001 to 2009, total state government employee compensation (wages, employer pension contributions, and health care) grew at an average annual rate 35% faster than state own source revenues (4.6% vs. 3.4%). If recent compensation trends continue, revenues will have to grow about 18% faster than long term forecasts predict, otherwise compensation costs run the risk of crowding out other areas of government spending or forcing a downsizing of the workforce relative to population

Minnesota State Government Employment and Payroll, 2009

According to the U.S. Census Bureau's *Survey of State and Local Government Employment and Payroll*, Minnesota employed 80,536 full-time equivalent (FTE) employees[1] in 2009 at the state level.[2] When measured per 10,000 of population (a per capita measure to allow for comparisons between states of varying sizes), Minnesota had 152.9 employees per 10,000 population (31st nationally). There is some correlation between state population and employees per capita: the five states with the most state employees per capita (Hawaii, Alaska, Delaware, North Dakota and Wyoming) have some of the smallest state populations in the country; the five states with the least state employees per capita (Nevada, California, Illinois, Arizona, Florida) have some of the largest state populations in the country. Although Minnesota's 152.9 FTEs per 10,000 population is relatively modest when compared with all 50 states, it is closer to average when compared to other states of similar sizes, as Table 1 demonstrates.

[1] FTEs are derived by converting part-time positions to a "full-time equivalent". For example, a 20 hour-per-week position converts to 0.5 FTE. 40 hour-per-week positions convert to 1.0 FTE.

[2] This figure includes statewide institutions such as the University of Minnesota and the Minnesota State Colleges and Universities.

Table 1: 2009 Population and State Government Employees (FTE) per 10,000 Residents in 2009: Selected States with Similar Populations

State	2009 Population (000s)	State FTE per 10,000 Population, 2009	
		Number	Rank
Louisiana	4,492	204.4	11
Alabama	4,709	190.0	14
South Carolina	4,561	169.4	24
Maryland	5,699	157.1	30
Minnesota	**5,266**	**152.9**	**31**
Missouri	5,988	150.5	32
Colorado	5,025	144.8	36
Indiana	6,423	144.0	37
Tennessee	6,296	134.0	39
Wisconsin	5,655	124.6	43
U.S. Total	**306,407**	**143.6**	
Note: Population data and state employment data from U.S. Census Bureau; calculations by MTA.			

Although Minnesota has an average to below-average number of state employees relative to its population, the state pays these workers relatively well. According to Census Bureau data, Minnesota pays state workers $59,415 on average (some 9.3% above the national average state wage per employee of $52,895), ranking it 7th highest in the nation. Not surprisingly, four of the five states with the highest state and local wages per employee (Connecticut, New Jersey, California and New York; with Iowa being a puzzling exception) all have high costs of living.

However, state-to-state comparison of wages should also account for differences in the cost of living. Equivalent salaries will have much more purchasing power in Omaha than in New York City. Adjusting for cost of living differences creates different results, with the five highest average wages now offered by Iowa, Ohio, Michigan, Illinois, and Minnesota. Adjusting for cost of living differences makes a difference in Minnesota's rank, which rises from 7th to 5th even as the adjusted average wage falls to $57,797 (a result of the relatively high cost of living in many states paying higher salaries than Minnesota). After adjusting for cost of living differentials, the average Minnesota state employee's wage is 14.8% higher than the national average of $50,340. Table 2 provides data on state wages per employee for 2009, both on a nominal basis and after adjusting for cost of living differences between states[3].

[3] Cost of living data from the Missouri Economic Research and Information Center; Missouri Department of Economic Development.

Table 2: Average State Employee Wage, Nominal and Cost of Living-Adjusted, 2009

State	Average State Employee Wage: Actual	Rank	COL* Adjusted	Rank	State	Average State Employee Wage: Actual	Rank	COL* Adjusted	Rank
Alabama	$47,379	32	$51,165	16	Nebraska	42,861	46	47,152	33
Alaska	59,328	8	46,937	35	Nevada	56,688	11	53,937	9
Arizona	48,525	28	46,391	36	New Hampshire	50,707	21	43,192	47
Arkansas	42,904	45	47,251	32	New Jersey	66,235	2	52,360	12
California	65,666	3	48,605	29	New Mexico	45,184	40	45,184	40
Colorado	56,825	10	55,277	7	New York	62,530	4	49,944	25
Connecticut	67,085	1	53,539	10	North Carolina	47,102	33	48,861	28
Delaware	50,049	23	49,358	27	North Dakota	46,007	36	48,377	30
Florida	46,064	35	45,563	38	Ohio	54,137	17	58,337	2
Georgia	45,626	39	50,193	22	Oklahoma	44,007	43	49,952	24
Hawaii	50,654	22	30,718	50	Oregon	53,696	18	46,250	37
Idaho	47,724	30	51,762	14	Pennsylvania	51,548	20	50,340	21
Illinois	55,784	13	57,988	4	Rhode Island	59,991	6	50,413	19
Indiana	46,342	34	50,154	23	South Carolina	41,931	47	43,006	48
Iowa	60,769	5	64,994	1	South Dakota	43,300	44	47,426	31
Kansas	47,567	31	51,872	13	Tennessee	44,270	42	49,798	26
Kentucky	45,898	37	50,772	17	Texas	49,003	26	54,147	8
Louisiana	48,438	29	50,509	18	Utah	49,374	25	51,271	15
Maine	48,714	27	42,397	49	Vermont	52,748	19	43,994	41
Maryland	55,142	14	43,833	42	Virginia	50,022	24	50,375	20
Massachusetts	58,057	9	47,086	34	Washington	54,768	16	52,409	11
Michigan	55,994	12	58,327	3	West Virginia	40,643	48	43,238	46
Minnesota	**59,415**	**7**	**57,797**	**5**	Wisconsin	54,896	15	57,362	6
Mississippi	40,068	49	43,317	44	Wyoming	45,656	38	45,474	39
Missouri	39,424	50	43,276	45	**U.S. Total**	**52,895**		**50,340**	
Montana	44,929	41	43,790	43					

*Cost of Living

Trends in Minnesota State Government Employment

To assess trends in government employment and compensation we have chosen to use 2001 as the starting point of our analysis. The end of the dot-com boom and subsequent the 9/11 recession is generally regarded as the beginning of a new economic reality for both the U.S. economy and government budgets. From 1981 to 2001, per capita personal income in Minnesota grew by 5.58% per year, 1.65 times growth in inflation[4] (3.39%); from 2001 to 2009 per capita income grew by only 2.88% per year, 1.19 times growth in inflation.

According to Census Bureau data, Minnesota's state employee workforce grew from 75,588 FTEs in 2001 to 80,536 FTEs in 2009; a 6.5% increase. However, some of this growth is attributable to the partial state takeover of court administration; after factoring in that change we estimate the state workforce grew only 5.0% during this period, from 76,725 FTEs to 80,536.[5] After this adjustment is made, the number of state employees per 10,000 residents actually declined during this period, from 154.0 in 2001 (33rd nationally) to 152.9 in 2009 (31st nationally). On the whole, state government workforces nationwide have fallen 2.2%

[4] As measured by the Consumer Price Index (CPI) for all urban consumers, U.S. city average for all items on a non-seasonally adjusted basis.

[5] State court system data indicates that 1,137 FTEs were transferred from counties to state government during FY 2003 through 2005 as part of the partial takeover.

relative to population change; Minnesota's growth rate of (minus) -0.7% since 2001 ranks 22nd nationally. The state employee base has therefore been relatively stable compared to other states over this period.

Table 3: State Employees (FTE) per 10,000 Residents, 2001 and 2009: Selected States

Rank	State	State Employees per 10,000 Population		Percent Change
		2001	2009	
1	Arkansas	190.5	212.3	11.4%
2	Wyoming	226.4	250.4	10.6%
3	West Virginia	196.5	217.1	10.5%
4	New Jersey	161.2	177.0	9.8%
5	North Dakota	249.9	273.1	9.3%
6	Oregon	156.1	164.9	5.6%
7	Vermont	223.3	234.8	5.2%
8	Oklahoma	186.8	195.8	4.8%
9	Pennsylvania	125.2	130.0	3.8%
10	California	108.0	111.2	3.0%
12	Illinois	103.8	105.8	1.9%
14	Michigan	141.3	143.4	1.4%
22	**Minnesota**	**154.0**	**152.9**	**(0.7%)**
24	South Dakota	174.9	173.0	(1.1%)
35	Wisconsin	128.4	124.6	(2.9%)
40	Iowa	186.8	173.8	(6.9%)
46	Georgia	143.9	124.7	(13.4%)
47	Idaho	175.8	149.9	(14.7%)
48	Arizona	122.9	104.6	(14.9%)
49	South Carolina	200.0	169.4	(15.3%)
50	Utah	227.3	185.3	(18.5%)
	U.S. Total	**146.8**	**143.6**	**(2.2%)**

Trends in Minnesota State Government Payrolls

Census Bureau data indicates that the average wage paid to state employees nationwide grew by 3.35% per year between 2001 and 2009 (30.1% for the period overall). Minnesota's per-employee wage growth was ahead of the national average, at 3.67% per year (ranking it 21st in terms of the growth rate) or 33.4% overall. Table 4 presents the findings for selected states. Minnesota's state government employees' purchasing power did not suffer on average during this period; in constant 2009 dollars the average wage grew by 1.26% per year (10.5% overall): from $53,762 in 2001 to $59,415 in 2009.[6]

[6] Inflation adjustments use the Consumer Price Index (CPI) for all urban consumers, U.S. city average, not seasonally adjusted for March 2001 and March 2009 (the survey dates for the Census data).

Table 4: Average State Employee Wage (Nominal Only), 2001 and 2009: Selected States

	Wages per Employee		Change, 2001-2009	
State	**2001**	**2009**	**Annual Change**	**Rank**
Louisiana	33,474	48,438	4.73%	1
Hawaii	35,061	50,654	4.71%	2
Iowa	42,282	60,769	4.64%	3
Utah	34,461	49,374	4.60%	4
Connecticut	47,599	67,085	4.38%	5
North Dakota	32,822	46,007	4.31%	6
Nevada	40,631	56,688	4.25%	7
Oregon	38,508	53,696	4.24%	8
Idaho	34,281	47,724	4.22%	9
Wyoming	33,061	45,656	4.12%	10
Illinois	40,644	55,784	4.04%	13
South Dakota	32,427	43,300	3.68%	19
Minnesota	**44,534**	**59,415**	**3.67%**	**21**
Michigan	44,437	55,994	2.93%	40
Mississippi	32,185	40,068	2.78%	46
Wisconsin	44,525	54,896	2.65%	47
Pennsylvania	41,968	51,548	2.60%	48
Missouri	32,378	39,424	2.49%	49
California	54,329	65,666	2.40%	50
U.S. Total	**40,647**	**52,895**	**3.35%**	

Trends in Minnesota State Government Fringe Benefits

Comprehensive time-series data on the cost of fringe benefits is much more difficult to find than salary and wage data. The best source is the federal Bureau of Economic Analysis, which provides data on compensation by industry for the country as a whole and for the individual states. The BEA data suggests that, on a per-employee basis, the cost of fringe benefits for Minnesota state government employees grew by 4.90% per year between 2001 and 2009 (46.6% overall), from $9,118 to $13,371.

Trends in Minnesota State Government Total Compensation

BEA also provides the best time-series data on total compensation costs on an industry-level basis. Using the same data set, we find that compensation of state employees (the sum of total wage and salary disbursements, employer contributions to employee pension and insurance funds, and employer contributions for government social insurance) increased by 43.1% from 2001 to 2009; which translates into a 4.6% annual rate of growth. As Table 5 indicates, growth in total compensation outpaced growth in state tax revenues (2.7% per year) and state own source revenues (3.4% per year) over this same period.

Table 5: Change in Total State Employee Compensation, Tax Revenues, and Own Source Revenues, 2001 and 2009

Item	CY2001	CY2009	Total Pct Change	Annual Pct Change
Total Compensation, State Employees	3,917,409	5,607,406	43.1%	4.6%
State Tax Revenues	12,997,086	16,146,932	24.2%	2.7%
State Own Source Revenues	15,317,361	20,068,899	31.0%	3.4%
Note: Dollar figures are in thousands. Note: Per source, state tax revenues and state own-source revenues are calendar year 2001/fiscal year 2002 and calendar year 2009/fiscal year 2010 Note: CY 2009 data for state tax revenues and state own source revenues are forecast data. Data from Bureau of Economic Analysis' *Regional Economic Information System*, September 2010; and from Minnesota Management and Budget's May 2010 End of Legislative Session Price of Government; calculations by MTA.				

Looking ahead, it is clear that it will be difficult to sustain this level of overall compensation growth. The Minnesota Budget Trends Study Commission's report projects that total state revenues will grow by 3.9% per year between 2008 and 2033.[7] Revenue growth would need to come in about 18% higher than predicted through 2033 in order to sustain the compensation growth the state has experienced between 2001 and 2009 without crowding out other spending areas or forcing a downsizing of the workforce relative to population.

[7] http://www.mmb.state.mn.us/doc/budget/trends/report-09.pdf

III. State Employee vs. Private Sector Employee Compensation Comparison

Summary of Findings

- State employee wages are typically highest above market rates for positions requiring less education while lowest below market rates for positions with higher educational requirements; this "double imbalance" is common to public sector labor cost structures around the country
- Wages for state employees in 24 of the 41 occupations studied in this report (72% of the survey population) are higher than private sector counterparts
- The state has higher employee health insurance costs for all occupations studied in this report; the public sector premium ranges from 37.5% to 41.5% above private sector counterpart costs
- The state has higher pension-related costs for 30 of the 41 occupations studied (86% of the study population) than does the private sector for similar positions
- 72% of the study population have an employer cost for wages, health care, and pensions that is at least 5% higher than private sector comparables
- A 30-year state employee retiring in 2009 with an average salary for his or her age cohort could expect to receive almost $725,000 over his or her remaining life expectancy (22.4 years) from the MSRS General Plan in addition to what he or she could expect to receive from Social Security or other personal savings. That same employee would need over $400,000 in a 401(k) account yielding 5% return per year to provide a similar benefit; a private sector employee with a similar salary could expect to have, on average, $74,000 in a 401(k) account

Methodology

Private sector[8] and state employees were matched by comparing state job title descriptions with federal occupational code descriptions. Clearly, our analysis excludes a sizable number of state employees. Readers interested in a comprehensive explanation of the methodology used to make these comparisons should read the extended methodology section included in Appendix A of this report.

Our source for state employee compensation data is Minnesota Management and Budget's (MMB) *Executive Branch Total Compensation Report* for 2010[9], which includes all executive branch employees except for employees in the Minnesota State Colleges and Universities and other employees protected by data privacy restrictions, such as Department of Public Safety special agents.

We used multiple sources for private sector compensation data. Wage data for various occupations was obtained using the Occupational Employment Statistics survey administered by the Minnesota Department of Employment and Economic Development (DEED) in conjunction with the federal Bureau of Labor Statistics.[10] Our source for health benefit data is the Medical

[8] For purposes of this report, the term "private sector" should be construed to mean all non-government positions.

[9] http://www.mmb.state.mn.us/comp-tc

[10] http://www.positivelyminnesota.com/Data_Publications/Data/All_Data_Tools/Occupational_Employment_Wages_(OES)_3.aspx

Expenditure Panel Survey administered by the federal Department of Health and Human Services' Agency for Health Care Research and Quality. Our source for private sector retirement cost data is the Employer Costs for Employee Compensation (ECEC) report administered by the federal Bureau of Labor Statistics as part of its National Compensation Survey program.[11]

Scope of Analysis

The dataset provided by MMB contained 33,125 positions, representing 30,989 FTEs. Since the OES dataset contains both full-and part-time positions, we elected to include only full- and part-time public sector positions to eliminate any bias that might occur by having one dataset which contains seasonal ("intermittent") positions. We removed intermittent positions (1,019 positions representing 139 FTEs) from the study database.

Of the remaining state employment population a significant number of positions are unique to the public sector; positions where there are no meaningful private-sector analogues. Examples include correctional officers, administrative law judges, hydrologists and food inspectors. We removed these positions from the analysis. We removed other positions that could be not matched with confidence to the private sector as follows:

- We eliminated supervisory and management positions[12], because of the difficulties involved with accurately grouping these positions together in the public sector and matching them to private sector positions with similar management and budget responsibilities. .
- We eliminated positions from the analysis if we could not reasonably ensure that the private sector match group would perform similar tasks. For example, the state employs health care call center representatives; however, it was not possible to match this job classification with a single SOC occupation code, nor was it feasible to group this with other job classifications to match with an SOC occupation code or codes.
- We eliminated positions for which MMB did not maintain written job class specifications.[13]
- We eliminated positions if there were 10 or fewer FTEs, because of the undue influence experience may have in a compensation comparison for a small population. For example, if the state only employs one person for a particular position, but that individual happens to have thirty years of experience, a compensation analysis might result in the appearance of a substantial public sector wage premium where none really exists.

Removal of these positions from the analysis left 9,437 public sector positions, representing 41 occupations and 9,041 FTEs. These positions were then matched to their private sector analogues as described in Appendix A.

[11] http://www.bls.gov/eci/

[12] Defined as positions that are represented by the Middle Management Association, those positions covered under the state's Managerial Plan, state agency commissioners and the state's constitutional officers.

[13] Notably, this includes many positions in the Office of the Attorney General.

Sidebar: How does this study differ from other public compensation studies?

Q: How does this study differ from other public compensation studies, some of which have received significant recent attention and have arrived at different conclusions?

A: There are four primary differences:

1. Our study is Minnesota based while other studies have focused on the federal workforce or are a national analysis of state and local government employees.
2. Our study compares like positions rather than sector averages.
3. Our study uses different data sets (discussed in detail below)
4. Our study uses straight matching and comparison of like positions rather than attempting to control for worker characteristics through regression analysis.

Q: Why does your study not use regression analysis to control for education, demographic and other characteristics that can affect compensation levels?

A: Studies employing regression-based methods approach public/private sector comparisons from the "top down," aggregating by sector and then controlling for workforce characteristics. This means that such analyses will include positions which are purely public sector (and also those that are purely private sector). Studies that use regression modeling do so because detail position-specific and employee-specific data is not available.

Since we have access to position-specific and employee-specific data, we are able to utilize a different approach. Our analysis is constructed from the bottom up, matching data for directly comparable positions (with equivalent educational and skill requirements) in government and the private sector. This method better ensures an "apples to apples" comparison and eliminates the need for a regression-based approach.

Comparison of Compensation Costs

Wages

Of the 41 occupations examined, 24 of them (reflecting 71.7% of the total workforce studied) had higher public sector wages. Table 6 presents the details. The jobs with the greatest public sector wage premium tend to be jobs with lower educational requirements: maintenance and repair workers, groundskeepers, and cooks; while the positions with the greatest private sector advantages tend to have much higher educational requirements: accountants and auditors, management analysts, and lawyers. Notably, this finding is highly consistent with a number of other local and national studies that have been conducted on public sector compensation. Overcompensation of certain positions in relation to market rates and undercompensation of other positions in relation to market rates has been described as the "double imbalance" of public sector labor markets.[14]

[14] "Comparing Public and Private Sector Earnings: An Academic's Toolkit" presentation by Keith Bender at the Federal Reserve Bank of Chicago Public and Private Sector Compensation Conference, February 26, 2009

Table 6: Minnesota State Employee Wages Compared to Private Sector Counterparts, by Occupation, 2010

Occupation	Number of Employees*	Annual Salary**		State Salary Cost Relative to Private Sector
		State Rates	Private Sector Rates	
Maintenance and Repair Workers	420.5	$35,498	$25,503	39.2%
Groundskeeper	40.3	37,868	27,895	35.8%
Engineering Technician	351.2	65,638	48,746	34.7%
Cook	27.0	36,335	27,350	32.9%
Rehabilitation Counselor	207.3	53,705	43,443	23.6%
Licensed Alcohol/Drug Counselor	30.0	46,873	37,944	23.5%
Social Worker	152.7	55,000	45,318	21.4%
Medical Records Technician	19.4	45,461	37,873	20.0%
Painter	28.5	47,776	40,949	16.7%
Health Educator	16.3	51,050	43,917	16.2%
Account Clerk	162.4	40,261	34,927	15.3%
Security Guard	82.2	32,037	28,199	13.6%
Customer Services Specialist	411.0	37,337	33,057	12.9%
Pharmacy Technician	13.4	35,123	31,181	12.6%
Office and Administrative Specialist	2,100.8	37,584	33,500	12.2%
Licensed Practical Nurse	445.0	43,676	39,130	11.6%
Dietitian/Nutritionist	31.8	59,507	53,343	11.6%
Psychologist	65.9	70,581	64,932	8.7%
Architect	12.0	79,316	73,958	7.2%
Heavy Equipment Mechanic	157.0	48,541	45,311	7.1%
Architectural Drafting Tech	29.0	52,861	49,635	6.5%
Recreational Therapist	65.0	45,940	43,320	6.0%
Carpenter	39.0	48,462	45,884	5.6%
Information Technology Specialist	1,571.1	75,439	73,611	2.5%
Engineer	524.3	74,956	75,932	(1.3%)
Occupational Therapist	20.9	62,682	63,661	(1.5%)
Registered Nurse	581.5	72,368	73,724	(1.8%)
Legal Secretary	64.0	45,427	48,263	(5.9%)
Information Officer	132.2	51,614	55,204	(6.5%)
Pharmacist	23.2	106,475	114,770	(7.2%)
Medical Laboratory Technician	16.5	39,028	42,154	(7.4%)
Electrician	63.8	53,467	57,850	(7.6%)
Buyer/Purchasing Agent	70.0	$54,989	$60,174	(8.6%)
Employee Development Specialist	39.8	53,141	58,857	(9.7%)
Personnel Officer	123.2	54,623	60,780	(10.1%)
Delivery Van Driver	37.7	34,677	40,372	(14.1%)
Stationary Engineer	21.0	47,145	55,451	(15.0%)
Plumber	31.0	50,867	60,299	(15.6%)
Accountant/Auditor	384.7	51,397	62,243	(17.4%)
Management Analyst	354.6	56,496	92,927	(39.2%)
Lawyers	74.3	67,480	137,564	(50.9%)

* Measured in full-time equivalent employees.
** On an annualized, full-time basis.

Health Care Costs

Description of State Health Care Plan

The State of Minnesota provides insurance benefits to employees through the State Employee Group Insurance Program, administered by MMB. One benefit the state offers is health insurance: the Minnesota Advantage Health Plan is available to benefits-eligible employees. The Minnesota Advantage Health Plan is itself administered by three insurance carriers: Blue Cross Blue Shield, HealthPartners, and PreferredOne. Health plan options are negotiated between the state and its labor unions every two years. Two health care plan types are offered to employees: employee-only coverage and family coverage. The state contributes to the cost of the premium at one of three levels, depending on the number of hours per week an employee works and, in some cases, the union to which an employee belongs, since the unions do not negotiate uniform contracts with the state. The state pays 100% of the employee-only health care premium for employees who work 30 hours or more per week and 85% of the dependent-only portion of the premium for such employees who elect family coverage. Employees who work between 20 and 30 hours per week are eligible for health care benefits but must pay a higher proportion of the premiums; whether the state contributes 75% or 50% of the full-time rate appears to be negotiated on a union-by-union basis. Table 7 provides an overview of the total premium costs and the cost sharing for calendar year 2010.

Table 7: State of Minnesota Employee Health Plan Costs and Coverage, 2010

Rate Plan and Plan Type		Total Premium	Employee		Employer	
			Premium Share	Premium Cost	Premium Share	Premium Cost
Full-Time Rate Plan*	**Employee-Only**	$5,367	0%	$0	100%	$5,367
	Family	15,784	10%	1,562	90%	14,222
75% Part-Time Rate Plan	**Employee-Only**	5,367	25%	1,342	75%	4,026
	Family	15,784	32%	5,118	68%	10,666
50% Part-Time Rate Plan	**Employee-Only**	5,367	50%	2,684	50%	2,684
	Family	15,784	55%	8,673	45%	7,111

Note: 236.3 FTEs do not appear to participate in the health care plan offered by the state.
* Employees at 30 or more hours per week.

Estimation of State Health Care Costs

The information on insurance costs made available through MMB's *Total Compensation Report* cannot be used by itself to determine public sector health care costs. The report presents state spending on all insurance costs (e.g. health, dental, life, disability) in the aggregate, and it is not feasible to disaggregate the data. However, analysis of the rates for the various insurance options indicates that health care costs constitute the lion's share of overall insurance spending. We reviewed each employee's total insurance costs as provided in the *Total Compensation Report* and have used that to estimate health care plan participation as follows:

- Employees with insurance costs between $0 and $2,684 are assumed to not participate in the state's health care plan
- Employees with insurance costs between $2,684 and $4,025 are assumed to participate in the state's health care plan on an employee-only basis with a 50% state contribution
- Employees with insurance costs between $4,026 and $5,366 are assumed to participate in the state's health care plan on an employee-only basis with a 75% state contribution
- Employees with insurance costs between $5,367 and $7,110 are assumed to participate in the state's health care plan on an employee-only basis with a 100% state contribution
- Employees with insurance costs between $7,111 and $10,665 are assumed to participate in the state's health care plan with family coverage with a 50% state contribution
- Employees with insurance costs between $10,666 and $14,221 are assumed to participate in the state's health care plan with family coverage with a 75% state contribution

- Employees with insurance costs above $14,221 are assumed to participate in the state's health care plan with family coverage with a 100% state contribution

Table 8 presents our findings, based on these assumptions.[15] As the table indicates, the vast majority of state employees analyzed in this study, an on FTE basis, receive the full employer contribution toward health care premiums.

Table 8: Estimated Takeup of Health Care Coverage by State of Minnesota Employees in Analysis, 2010

Employer Contribution	Plan Type	FTE	Pct Total
Full	Employee-Only	3,742.4	41.4%
Full	Family	4,967.1	54.9%
75%	Employee-Only	50.4	0.6%
75%	Family	34.8	0.4%
50%	Employee-Only	4.9	<0.1%
50%	Family	5.1	<0.1%
	No Coverage	236.3	2.6%

Health Care Benchmarking with the Private Sector

As noted in the methodology section, we used MEPS data to estimate the private sector health care costs for establishments where 75% or more of the employees work on a full-time basis. No distinctions are made between different employer contribution levels.[16] As Table 9 demonstrates, we estimate a single (employee-only) premium averages $4,885 in Minnesota, with the employer picking up 78% of the cost; a family premium averages $13,913 with the employer picking up 72% of the cost.

Table 9: Estimated Minnesota Private Sector Employee Health Plan Total Premium and Cost Sharing, 2010

Plan Type	Total Premium	Employee		Employer	
		Premium Share	Premium Cost	Premium Share	Premium Cost
Single	$4,885	22%	$1,070	78%	$3,816
Family	$13,913	28%	3,816	72%	$10,039

- Substituting private sector employer premium costs for the state rates allows for an estimation of what the state would spend for health care if average private sector rates applied. We estimate that the cost differential for the individual occupations ranged from 37.3% to 41.5% above private sector costs

[15] Note that some state employees hold multiple jobs in state government; for instance state employees who hold 50% Office and Administrative Assistant positions in two different state agencies. The *Total Compensation Report* shows the complete cost of insurance benefits each time the employee is listed; however, the employee only received the benefit once. We found instances of this in the employee group we analyzed for this study. In these instances, private-sector and public-sector health care costs were allocated between the two positions based on employment share; for example, health care costs for an employee such as the one described earlier in the footnote would have been allocated one-half to each position.

[16] 2009 is the latest year for which MEPS data is available. We estimate 2010 employer health care premium costs by applying growth rates of 4.1% for single coverage plans and 3.3% for family coverage plans; the growth rates were calculated using 2004-2009 MEPS data.

Pension Costs

Our analysis indicates that the State of Minnesota pays higher pension costs for 30 of the 41 surveyed occupations, comprising almost 86% of the workforce population studied on an FTE basis. As Table 10 on the next page indicates, the disparities largely mirror the wage premium/discount disparities; not a surprising finding given that pension contributions are generally determined as a share of total salary.

As an employer, the state makes contributions to employee pension funds that are determined as a percent of each employee's salary. At the occupational level, the state's pension contributions as a percent of salary do vary. Much of the occupational variation in contribution rates can be attributed to participation in different pension plans. Most of the employees studied in this report participate in the Minnesota State Retirement System's (MSRS) General Plan. However, some employees in the Corrections and Human Services Departments who spend at least 75% of their employment directly responsible for inmate care participate instead in MSRS' Correctional Plan. Occupational groups with higher pension contribution rates have higher proportions of employees in the MSRS Correctional Plan. The Correctional Plan provides more lucrative benefits than the General Plan and at a higher employer cost. Employees in both the General Plan and the Correctional Plan participate in Social Security.

Some of the variation in contribution rates is related to occupational differences in the cost of the state's defined contribution pension plan.[17] The state generally matches the first $100 of contributions to the plan to incentivize plan usage, although the MMB dataset indicates that many employees have a $175 or $300 first-dollar match available – this is driven by differences in union contracts with the state. Clearly differences in 403(b) plan participation between occupations will produce variation in costs. The match is also more valuable for employees with lower salaries; a $100 match is 0.15% of a $65,000 salary but is 0.33% of a $30,000 salary.

The minimum contribution was 4.44% of salary for Health Educators and the maximum contribution was 8.21% of salary for Psychologists. The state contributed less than 5% of salary to MSRS for 16 of the occupations, contributed between 5% and 6% for another 16 of the occupations, contributed between 6% and 7% for seven of the occupations, and contributed over 7% of salary for two occupations (Psychologist and Recreational Therapist). Three occupations[18] have contribution rates that are below the estimated private sector pension contribution rate of 4.752% of payroll.

[17] MSRS administers the Minnesota Deferred Compensation Plan, which has been created under the auspices of section 403(b) of the Internal Revenue Code. It is similar in nature to a 401(k) private sector defined contribution plan.

[18] Security Guard, Management Analyst, and Health Educator.

Table 10: Minnesota State Employee Pension Cost Compared to Private Sector Counterparts by Occupation, 2010

Occupation	Number of Employees*	Annual Pension Cost**		State Pension Cost Relative to Private Sector
		State Cost	Using Private Sector Wages and Rate	
Psychologist	65.9	$5,793	$3,086	87.7%
Recreational Therapist	65.0	3,623	2,059	76.0%
Social Worker	152.7	3,538	2,154	64.3%
Maintenance and Repair Workers	420.5	1,877	1,212	54.9%
Licensed Practical Nurse	445.0	2,870	1,859	54.3%
Groundskeeper	40.3	2,039	1,326	53.8%
Painter	28.5	2,935	1,946	50.8%
Cook	27.0	1,911	1,300	47.0%
Licensed Alcohol/Drug Counselor	30.0	2,516	1,803	39.5%
Engineering Technician	351.2	3,229	2,316	39.4%
Carpenter	39.0	2,984	2,180	36.9%
Registered Nurse	581.5	4,689	3,503	33.8%
Rehabilitation Counselor	207.3	2,701	2,064	30.8%
Medical Records Technician	19.4	2,273	1,800	26.3%
Electrician	63.8	3,381	2,749	23.0%
Pharmacy Technician	13.4	1,808	1,482	22.0%
Plumber	31.0	3,492	2,865	21.9%
Account Clerk	162.4	2,006	1,660	20.9%
Customer Services Specialist	411.0	1,895	1,571	20.6%
Occupational Therapist	20.9	3,555	3,025	17.5%
Office & Administrative Specialist	2,100.8	1,848	1,592	16.1%
Dietitian/Nutritionist	31.8	2,919	2,535	15.2%
Heavy Equipment Mechanic	157.0	2,442	2,153	13.4%
Security Guard	82.2	1,508	1,340	12.5%
Architectural Drafting Tech	29.0	2,614	2,359	10.8%
Architect	12.0	3,818	3,514	8.6%
Health Educator	16.3	2,267	2,087	8.6%
Engineer	524.3	3,794	3,608	5.1%
Information Technology Specialist	1,571.1	3,640	3,498	4.1%
Legal Secretary	64.0	2,315	2,293	0.9%
Medical Laboratory Technician	16.5	1,971	2,003	(1.6%)
Personnel Officer	123.2	2,808	2,888	(2.8%)
Stationary Engineer	21.0	2,476	2,635	(6.0%)
Buyer/Purchasing Agent	70.0	2,685	2,859	(6.1%)
Employee Development Specialist	39.8	2,615	2,797	(6.5%)
Information Officer	132.2	2,441	2,623	(6.9%)
Pharmacist	23.2	5,038	5,454	(7.6%)
Delivery Van Driver	37.7	1,685	1,918	(12.2%)
Accountant/Auditor	384.7	2,513	2,958	(15.0%)
Management Analyst	354.6	2,653	4,416	(39.9%)
Lawyers	74.3	3,435	6,537	(47.5%)

* Measured in full-time equivalent employees.
** On an annualized, full-time basis.

Total Compensation Cost Comparison

Our findings indicate that state employee health care and pensions are costlier to the state than are health care and pensions offered by private sector employers. When combined with the state employee/private-sector employee wage differentials, this yields much higher public sector total compensation[19] costs in most instances. The data in Table 11 indicate that overall:

- 6,479 FTEs (71.7% of the study total) have total compensation costs that are at least 5.0% greater than private sector counterparts
- 903 FTEs (10.0% of the study total) have total compensation costs that are at least 5.0% lower than private sector counterparts
- 1,659 FTEs (18.4% of the study total) have total compensation costs that are within 5.0% plus or minus of private sector counterparts.
- The differential ranged from a total compensation premium of 40.1% for maintenance and repair workers to a total compensation discount of 46.7% for lawyers.

[19] "Total compensation" is defined here as the employer cost for wages, health care, and pensions.

Table 11: Minnesota State Employee Wage, Health Care, and Pension Cost Compared to Private Sector Counterparts, by Occupation, 2010

Occupation	Number of Employees*	Compensation**		State Wage, Health Care, and Pension Cost Relative to Private Sector
		Actual	At Private Sector Wages and Rates	
Maintenance and Repair Workers	420.5	$47,079	$33,604	40.1%
Groundskeeper	40.3	50,167	36,474	37.5%
Engineering Technician	351.2	80,133	59,053	35.7%
Cook	27.0	50,157	37,325	34.4%
Licensed Alcohol/Drug Counselor	30.0	58,593	46,260	26.7%
Rehabilitation Counselor	207.3	66,555	52,716	26.3%
Social Worker	152.7	68,695	54,653	25.7%
Medical Records Technician	19.4	58,744	47,456	23.8%
Painter	28.5	60,908	50,138	21.5%
Account Clerk	162.4	51,742	43,320	19.4%
Pharmacy Technician	13.4	48,309	40,702	18.7%
Health Educator	16.3	61,186	51,572	18.6%
Security Guard	82.2	42,493	35,868	18.5%
Licensed Practical Nurse	445.0	58,978	49,877	18.2%
Customer Services Specialist	411.0	48,726	41,394	17.7%
Office and Administrative Specialist	2,100.8	49,107	41,972	17.0%
Psychologist	65.9	86,863	75,433	15.2%
Dietitian/Nutritionist	31.8	73,189	63,644	15.0%
Recreational Therapist	65.0	59,733	52,647	13.5%
Heavy Equipment Mechanic	157.0	62,520	55,616	12.4%
Carpenter	39.0	63,170	56,348	12.1%
Architectural Drafting Tech	29.0	65,422	59,028	10.8%
Architect	12.0	94,404	85,437	10.5%
Information Technology Specialist	1,571.1	89,635	84,580	6.0%
Registered Nurse	581.5	89,079	85,808	3.8%
Occupational Therapist	20.9	78,068	75,284	3.7%
Engineer	524.3	89,862	87,398	2.8%
Legal Secretary	64.0	57,759	57,798	(0.1%)
Electrician	63.8	68,402	68,763	(0.5%)
Medical Laboratory Technician	16.5	49,749	50,352	(1.2%)
Information Officer	132.2	63,562	64,604	(1.6%)
Buyer/Purchasing Agent	70.0	67,469	69,961	(3.6%)
Pharmacist	23.2	123,264	128,567	(4.1%)
Employee Development Specialist	39.8	65,610	68,623	(4.4%)
Personnel Officer	123.2	67,234	70,621	(4.8%)
Delivery Van Driver	37.7	46,141	49,230	(6.3%)
Plumber	31.0	65,439	70,995	(7.8%)
Stationary Engineer	21.0	60,470	65,754	(8.0%)
Accountant/Auditor	384.7	63,621	72,082	(11.7%)
Management Analyst	354.6	68,815	104,220	(34.0%)
Lawyers	74.3	80,484	150,902	(46.7%)

* Measured in full-time equivalent employees.
** Annualized on full-time basis.

Qualitative Issues in State Employee Health and Pension Benefits

Employer cost comparisons are essential to public and private sector compensation comparisons, but any analysis of compensation is incomplete without a consideration of the design and generosity of the fringe benefit plans offered to employees. Health care benefit plans can take on many forms. Plans differ based on a variety of design elements such as drug coverage, preventive and wellness care, retiree access, and existence of supplemental benefits like long-term care insurance and medical care reimbursement or savings accounts. Cost sharing provisions such as co-pays, deductibles, and employer matches add to plan diversity. Pension plans also differ considerably between the private and public sector; the biggest difference being that defined benefit pension plans are standard among Minnesota's public employees while defined contribution plans are quickly becoming predominant in the private sector.

Public Sector Health Care Plan Benefit Features

As mentioned earlier in the report, the state offers the Minnesota Advantage Health Plan to benefits-eligible employees. The Minnesota Advantage Health Plan is itself administered by three insurance carriers: Blue Cross Blue Shield, HealthPartners, and PreferredOne. The Minnesota Health Advantage Plan assigns health care providers to one of four cost levels, depending on the care system in which the provider participates and that care system's total cost of delivering health care – the incentive is to direct employees to use the most cost-effective health care available. Table 12 provides information copays, deductibles, and other employee costs for each cost level.

Table 12: Key Features of the State of Minnesota's Employee Health Plan in Effect for 2010

Dollars represent employee co-pay or deductible costs; Percents represent share of total cost borne by employee								
Feature	**Cost Level 1**		**Cost Level 2**		**Cost Level 3**		**Cost Level 4**	
	Single	**Family**	**Single**	**Family**	**Single**	**Family**	**Single**	**Family**
Annual First Dollar Deductible	$50	$100	$140	$280	$350	$700	$600	$1,200
Office Visit & In Network Urgent Care**	$17/$22	$17/$22	$22/$27	$22/$27	$27/$32	$27/$32	$37/$42	$37/$42
Convenience Clinics	$10	$10	$10	$10	$10	$10	$10	$10
In Network Emergency Care	$75	$75	$75	$75	$75	$75	25%	25%
Prescription Drugs*	$10/16/36	$10/16/36	$10/16/36	$10/16/36	$10/16/36	$10/16/36	$10/16/36	$10/16/36
Inpatient Hospital	$85	$85	$180	$180	$450	$450	25%	25%
Outpatient Surgery	$55	$55	$110	$110	$220	$220	25%	25%
Hospice and Skilled Nursing Facility	0%	0%	0%	0%	0%	0%	0%	0%
Prosthetics and Durable Medical Equipment	20%	20%	20%	20%	20%	20%	25%	25%
Lab, Pathology, and X-ray	5%	5%	5%	5%	10%	10%	25%	25%
MRI/ CT Scans	5%	5%	5%	5%	10%	10%	25%	25%
Other Expenses	5%	5%	5%	5%	10%	10%	25%	25%
Out of Pocket Maximum - Prescription Drugs	**$800**	**$1,600**	**$800**	**$1,600**	**$800**	**$1,600**	**$800**	**$1,600**
Out of Pocket Maximum – Total EXCEPT Prescription Drugs	**$1,100**	**$2,200**	**$1,100**	**$2,200**	**$1,100**	**$2,200**	**$1,100**	**$2,200**

* Costs for generic/brandname/formulary

** The amount of the office visit and in network urgent care copay varies based on whether the employee has completed the Health Assessment in each Open Enrollment period. Those employees who have completed the Health Assessment and agreed to a follow-up call from a health coach are entitled to the lower copay amount.

Source: Minnesota Management and Budget

Public Sector Defined Benefit Plan Features and Equivalent Principal Analysis

As discussed earlier in this report, the state offers various pension plans to its employees through the Minnesota State Retirement System (MSRS). The two plans offered to employees in this study are MSRS' General Plan and Correctional Plan. Both essentially operate the same way: an initial retirement benefit is calculated by multiplying the number of years of credited service the employee has times a "multiplier" (1.7% for MSRS-General and 2.4% for MSRS-Correctional) times the average of the employee's highest five annual salaries. The earliest age at which an employee may retire with an unreduced benefit ("normal retirement age") is 55 for members of the Correctional Plan and somewhere between 65 and 66 for members of the General Plan.[20] Employees choosing to retire and collect benefits before reaching the normal retirement age have their benefit reduced using actuarial formulas. The earliest age at which any pension can be drawn from these plans is 50 for MSRS-Correctional and 55 for MSRS-General.

Public employees originally hired prior to July 1, 1989 are eligible for the "Rule of 90" provision, which provides an unreduced benefit to employees who have not reached the normal retirement age so long as the sum of their age and years of service is at least 90. However, employees retiring under the Rule of 90 must calculate their pension in a slightly different fashion: the multiplier for their first ten years of service is limited to 1.2% instead of 1.7%.

Comparing defined benefit and defined contribution plans is challenging because the value of a defined contribution pension to an employee is not necessarily related to the cost of the provision; rather, it is related to the total benefit the employee should expect to receive over his or her lifetime. Given this premise, we have generated expected pension payouts for various state employees using the following assumptions or premises:

- The typical state employee retiring in 2010 was originally hired before July 1, 1989; and so is eligible to retire under the Rule of 90 provision
- We assume retirement on December 31, 2009 at age 60, with 30 years of service credit
- We assume example employees will have been at the maximum salary step in the same job title for at least five years prior to their retirement (necessary to estimate high-five salary)
- According to the U.S. National Center for Health Statistics, as of 2006 Americans 60 years of age could expect to live 22.4 years (269 months) longer on average; we assume example employees will have an average lifespan and collect pension benefits for 269 months
- We assume, based on changes made to the MSRS plans by the 2010 Legislature, that example employees will receive a 2.0% cost of living adjustment annually until their death
- We assume the example employee chooses the Single-Life Benefit Option (i.e. that he or she does not choose to provide monthly benefits to a surviving spouse, which lowers the overall monthly benefit)

Given these assumptions, we created an equivalent annuity analysis which estimates the amount of principal needed in a traditional defined contribution plan to generate the annuity stream expected by state employees. For example, we calculate the initial pension benefit for an Office and Administrative Specialist Principal as follows:

- High-five salary for period ending December 31, 2009[21]: $44,422
- 30 years of service
- Multiplier: 1.2% for first ten years and 1.7% for subsequent 20 years = 46%
- Unreduced benefit = $44,222 (times) 46% = **$20,434**

[20] MSRS-General uses the same year of birth-dependent normal retirement age as does Social Security.

[21] High-five salary calculated using the AFSCME Unit 4 and Unit 6 contracts with the State for July 1, 2003-June 30, 2005; July 1, 2005-June 30, 2007; July 1, 2007-June 30, 2009; and July 1, 2009-June 30, 2011.

Assuming that our example employee is eligible for a 2.0% cost-of-living adjustment annually after the first year of the benefit[22], the expected pension payout over a 22.4 year period is as follows:

Table 13: Expected MSRS Pension Payments over 269 Month Period for Employee Retiring Under Rule of 90 with 30 Years Service Credit and High Five Salary of $44,422

Year of Retirement	Annual Pension	Cumulative Pension
1	$20,434	$20,434
2	20,843	41,277
3	21,260	62,537
4	21,685	84,222
5	22,119	106,341
6	22,561	128,902
7	23,012	151,914
8	23,473	175,387
9	23,942	199,329
10	24,421	223,750
11	24,909	248,659
12	25,407	274,067
13	25,916	299,982
14	26,434	326,416
15	26,963	353,379
16	27,502	380,881
17	28,052	408,933
18	28,613	437,546
19	29,185	466,731
20	29,769	496,500
21	30,364	526,864
22	30,972	557,836
23 (part)	13,163	570,999
Total Payments over 269 months		**$570,999**

Our calculations indicate that this example employee would expect to receive a total of $570,999 over his or her lifetime, given these conditions. Note that the employee could expect to receive more in retirement than just the pension; the employee would be eligible for Social Security and may have other retirement investment vehicles outside of his or her public pension. Additionally, the calculations represent payments to only one retiree – households with two public employee retirees could expect to receive a much higher total pension income stream.

The amount of principal that would be needed in a 401(k) retirement account to provide the same benefits (initial payment of $20,434 with 2.0% increase in payment annually) over the same period of time (22.4 years; 269 months) as the defined benefit plan can be calculated using the following assumptions:

- The account would have net investment returns of 5.0% per year
- Costs of maintaining the account would be assessed against investment returns (i.e. –the 5.0% investment return assumed above is net of investment account costs)

[22] The MSRS-General Pension Plan's COLA will revert to 2.5% when the plan's funding ratio (ratio of assets to current liabilities) reaches 90% when assets are valued on a market value basis. If this trigger is hit in the next twenty years, the example employee would receive higher COLAs toward the end of his or her lifetime and therefore this analysis would understate the total expected value of the pension.

- Proceeds from the account would be withdrawn on the first day of each month; those funds would be unavailable for investment thereafter

As Table 14 demonstrates, an individual would need a nest egg of $334,261 in a 401(k) retirement account with these features upon retirement in order to generate the $570,999 that the example employee's defined benefit plan could be reasonably expected to generate over the course of the example employee's retirement.

Table 14: Calculation of Initial Investment Needed to Generate $570,999 Over 269 Months

Year of Retirement	Beginning Sum	Total Payouts	Investment Income	Ending Sum
1	$334,261	$20,434	$16,164	$329,990
2	329,990	20,843	15,939	325,086
3	325,086	21,260	15,683	319,509
4	319,509	21,685	15,393	313,217
5	313,217	22,119	15,066	306,164
6	306,164	22,561	14,702	298,305
7	298,305	23,012	14,297	289,589
8	289,589	23,473	13,848	279,965
9	279,965	23,942	13,355	269,378
10	269,378	24,421	12,812	257,769
11	257,769	24,909	12,219	245,079
12	245,079	25,407	11,571	231,242
13	231,242	25,916	10,865	216,192
14	216,192	26,434	10,099	199,857
15	199,857	26,963	9,268	182,163
16	182,163	27,502	8,369	163,030
17	163,030	28,052	7,397	142,375
18	142,375	28,613	6,350	120,112
19	120,112	29,185	5,221	96,147
20	96,147	29,769	4,007	70,386
21	70,386	30,364	2,703	42,724
22	42,724	30,972	1,304	13,057
23 part)	$13,057	$13,163	$106	$0
Total Payments over 269 Months		**$570,999**		

We have performed this analysis for four example employees: an Office and Administrative Specialist Principal as detailed above; and, an Information Technology Specialist 5, a General Maintenance Worker, and an "average" MSRS retiree with 30 years of service credit. The assumptions for the Information Technology Specialist 5 and the General Maintenance Worker are the same as for the Office and Administrative Specialist Principal. We used data from the 2009 MSRS *Comprehensive Annual Financial Report's* actuarial section to estimate a high-five salary for a 60-year-old employee in the MSRS-General Plan with 30 years of service credit. Table 15 presents our findings: the expected payout ranges from nearly $445,000 for the General Maintenance Worker to nearly $1.2 million for the Information Technology Specialist 5. Equivalent 401(k) principal ranges from about $260,000 for the General Maintenance Worker to almost $700,000 for the Information Technology Specialist 5.

Table 15: 401(k) Account Principal Needed to Yield Amount Equal to 269 Months of Defined Benefit Payouts, Selected State Employees

	High Five Salary	Beginning Pension	Expected Payout	Equivalent 401(k) Principal
Average MSRS Retiree (30 years)*	$56,368	$25,929	$724,546	$424,147
Office & Admin Specialist Principal	$44,422	$20,434	$570,999	$334,261
Information Technology Specialist 5	$92,741	$42,661	$1,192,075	$697,836
General Maintenance Worker	$34,605	$15,918	$444,801	$260,385

To facilitate comparisons with the private sector, we have included data from the Employee Benefit Research Institute regarding the median 401(k) account balances among long-tenured participants who are between 60 and 70 years of age – the most recent information is for calendar year 2008. The average thirty-year MSRS retiree has an equivalent 401(k) principal of $424,000 dollars compared to a median 401(k) account balance of about $74,000 for a similar salaried, long-tenured participant in a defined contribution plan. Of course, both private sector employees and public sector employees may hold retirement funds in other vehicles, such as individual retirement accounts, passbook savings, or brokerage accounts. However, such vehicles are not employer-sponsored and are therefore beyond the scope of this report.

Table 16: Median 401(k) Account Balance For Long-Tenured Participants, 60 Years Old, Calendar Year 2008

Salary Range	Account Balance for 2008
$20,000 to $40,000	$50,707
$40,000 to $60,000	$73,834
$60,000 to $80,000	$119,904
$80,000 to $100,000	$174,981
Over $100,000	$258,941
Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project	

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IV. Overview and General Trends in Local Government Employee Compensation

Summary of Findings

- Minnesota ranked 31st nationally in the number of local government full-time equivalent employees per 10,000 in 2009
- Local governments in Minnesota pay employees average to above-average when compared to other states:
  - On a nominal bases, local government employees were paid $49,268 on average, 16th highest in the nation
  - On a cost-of-living-adjusted basis, local government employees were paid $47,926 on average, 9th highest in the nation
- Minnesota's local government workforce declined 1.3% in actual headcount between 2001 and 2009 and declined by 6.7% during that same period when measured relative to population (after adjusting for the partial state takeover of the court system)
- In total dollars, per-employee wage growth was 3.25% per year from 2001 to 2009; when adjusting for inflation (CPI basis) the average state employee wage grew 0.85% annually during that same period
- The cost of providing fringe benefits to local government employees grew by 4.85% per year on a per employee basis from 2001 to 2009
- From 2001 to 2009, total local government employee compensation (wages, employer pension contributions, and health care) grew by 3.7% per year. This number would likely have been higher had local government employment not declined over this period. If recent compensation trends continue, local government revenues would need to grow by at least a similar amount in future years, otherwise compensation costs run the risk of crowding out other areas of government spending or forcing a downsizing of the workforce relative to population.

Minnesota Local Government Employment and Payroll, 2009

According to the U.S. Census Bureau's *Survey of State and Local Government Employment and Payroll*, Minnesota's local governments[23] employed 201,224 full-time equivalent (FTE) employees in 2009. When measured per 10,000 of population, Minnesota had 382.1 employees per 10,000 population (31st nationally) and is 4.1% below the national average of 398.3 employees per 10,000 population. Unlike state employment, there is no real correlation between state population and employees per capita. Minnesota's 382.1 FTEs per 10,000 population is relatively modest when compared with all 50 states and the District of Columbia, and is less than all other states of comparable size except Maryland (Table 17).

[23] The data presented here is for all local governments: counties, cities, townships, special districts, and school districts. Data for individual types of local governments are only available every five years.

Table 17: 2009 Population and Local Government Employees (FTE) per 10,000 Residents in 2009: Selected States

State	2009 Population (000s)	Local FTE per 10,000 Population, 2009	
		Number	Rank
Alabama	4,709	417.5	10
Louisiana	4,492	412.0	13
Colorado	5,025	404.2	16
Indiana	6,423	393.9	20
Wisconsin	5,655	393.0	22
Missouri	5,988	391.9	24
South Carolina	4,561	388.5	26
Tennessee	6,296	382.9	30
Minnesota	**5,266**	**382.1**	**31**
Maryland	5,699	371.3	34
U.S. Total	**306,407**	**398.3**	
Note: Population data and state employment data from U.S. Census Bureau; calculations by MTA.			

According to Census Bureau data, Minnesota local government pays employees $49,268 on average (just 0.1% above the national average of $49,212), ranking it 16th highest in the nation. Not surprisingly, four of the five states with the highest state and local wages per employee (California, D.C., Maryland, and New Jersey; with Washington being the exception) all have relatively high costs of living.

Adjusting for cost of living differences makes a difference in Minnesota's rank, which rises from 16th to 9th even as the adjusted average wage falls to $49,926 (a result of the relatively high cost of living in many states paying higher salaries than Minnesota). After adjusting for cost of living differentials, the average Minnesota local government employee's wage is 3.5% higher than the national average of $46,304. Table 18 provides data on state wages per employee for 2009, both on a nominal basis and after adjusting for cost of living differences between states[24].

[24] Cost of living data from the Missouri Economic Research and Information Center; Missouri Department of Economic Development.

Table 18: Average Local Government Employee Wage, Nominal and Cost of Living-Adjusted, 2009

Average Local Government Employee Wage					Average Local Government Employee Wage				
State	Actual	Rank	COL* Adjusted	Rank	State	Actual	Rank	COL* Adjusted	Rank
Alabama	$38,011	45	$41,049	39	Montana	40,048	37	39,033	45
Alaska	59,115	6	46,768	15	Nebraska	43,924	26	48,321	8
Arizona	47,858	19	45,753	20	Nevada	56,935	9	54,172	2
Arkansas	36,940	48	40,683	41	New Hampshire	43,162	27	36,765	48
California	65,587	1	48,547	7	New Jersey	60,564	3	47,876	10
Colorado	47,637	20	46,339	17	New Mexico	39,313	41	39,313	44
Connecticut	55,844	11	44,569	28	New York	58,573	7	46,784	14
Delaware	49,651	15	48,966	6	North Carolina	42,116	30	43,689	31
Dist. of Col.	59,132	5	42,237	34	North Dakota	39,690	38	41,734	37
Florida	48,069	18	47,546	12	Ohio	45,600	24	49,138	5
Georgia	40,994	35	45,098	25	Oklahoma	36,942	47	41,932	35
Hawaii	57,963	8	35,150	49	Oregon	48,263	17	41,570	38
Idaho	38,491	44	41,747	36	Pennsylvania	47,310	21	46,201	18
Illinois	52,107	13	54,165	3	Rhode Island	54,119	12	45,478	22
Indiana	41,190	34	44,578	27	South Carolina	41,394	33	42,455	32
Iowa	42,681	29	45,648	21	South Dakota	34,819	51	38,137	47
Kansas	38,803	43	42,315	33	Tennessee	39,499	40	44,430	29
Kentucky	35,660	49	39,446	42	Texas	41,680	32	46,056	19
Louisiana	39,125	42	40,797	40	Utah	42,681	28	44,321	30
Maine	39,547	39	34,419	51	Vermont	41,982	31	35,014	50
Maryland	59,266	4	47,111	13	Virginia	45,039	25	45,357	24
Massachusetts	56,020	10	45,434	23	Washington	60,757	2	58,141	1
Michigan	50,749	14	52,864	4	West Virginia	37,039	46	39,403	43
Minnesota	**49,268**	**16**	**47,926**	**9**	Wisconsin	45,735	23	47,790	11
Mississippi	35,433	50	38,306	46	Wyoming	46,823	22	46,637	16
Missouri	40,756	36	44,738	26	**U.S. Total**	**49,212**		**46,304**	

*Cost of Living

Trends in Minnesota Local Government Employment

Since 2001 the local government workforce in Minnesota has shrunk by almost any measure. Census Bureau data indicates that, Minnesota's local government workforce declined from 205,077 FTEs in 2001 to 201,224 FTEs in 2009. However, some of this decline is attributable to the partial state takeover of court administration; after factoring in that change we estimate the local government workforce declined only 1.3% during this period, from 203,940 FTEs to 201,224.[25] After making this adjustment, the number of state employees per 10,000 residents to the number of local government employees also decreased, from 409.3 in 2001 (13th nationally) to 382.1 in 2009 (31st nationally) – a 6.7% decline. On the whole, local government workforces nationwide have increased 1.3% on a per capita basis, from 393.1 employees per 10,000 residents in 2001 to 398.3 in 2009. Minnesota's decline of 6.7% in this statistic ranks 46th nationally and indicates that economic conditions have had a serious impact on the local government employee base. As Table 19 demonstrates, Minnesota's (lack of) employee growth on a per 10,000 population basis is ahead of only Michigan, Maine, Delaware, Idaho, and Rhode Island.

[25] State court system data indicates that 1,137 FTEs were transferred from counties to state government during FY 2003 through 2005 as part of the partial takeover.

Table 19: Local Government Employees (FTE) per 10,000 Residents, 2001 and 2009: Selected States

Rank	State	Local Government Employees per 10,000 Population		Pct Change
		2001	2009	
1	Kansas	469.1	557.2	18.8%
2	Wyoming	594.2	689.5	17.5%
3	South Dakota	362.1	416.7	15.1%
4	Washington	327.1	356.5	9.0%
5	Pennsylvania	315.0	342.7	8.8%
6	Colorado	376.3	404.2	7.4%
7	North Carolina	407.2	436.0	7.1%
8	Nevada	305.2	324.8	6.4%
9	Maryland	349.2	371.3	6.3%
10	Virginia	381.0	404.8	6.2%
12	North Dakota	350.6	370.9	5.8%
18	Iowa	414.3	423.0	2.1%
28	Illinois	388.7	392.0	0.9%
40	Wisconsin	404.6	393.0	(2.9%)
46	**Minnesota**	**409.3**	**382.1**	**(6.7%)**
47	Michigan	358.0	332.0	(7.3%)
48	Maine	413.5	383.0	(7.4%)
49	Delaware	269.8	249.0	(7.7%)
50	Idaho	400.2	359.9	(10.1%)
51	Rhode Island	348.5	310.3	(11.0%)
	U.S. Total	**393.1**	**398.3**	**1.3%**

Trends in Minnesota Local Government Payrolls

Census Bureau data indicates that the average wage paid to local government employees nationwide grew by 3.42% per year between 2001 and 2009 (30.8% over the entire period). Minnesota's per-employee wage growth was behind the national average, at 3.25% per year (ranking it 30th in terms of the growth rate) or 29.1% for the entire period. Table 20 presents the findings for selected states. Minnesota's local government employees' purchasing power did not suffer on average during this period; in constant 2009 dollars the average wage grew by 7.0% over the entire period: from $46,060 in 2001 to $49,268 in 2009.[26]

[26] Inflation adjustments use the Consumer Price Index (CPI) for all urban consumers, U.S. city average, not seasonally adjusted data for March 2001 and March 2009 (the survey dates for the Census data).

Table 20: Average Local Government Employee Wage (Nominal Only), 2001 and 2009: Selected States

	Wages per Employee		Change, 2001-2009	
State	**2001**	**2009**	**Annual Change**	**Rank**
Wyoming	$30,618	$46,823	5.45%	1
Hawaii	39,687	57,963	4.85%	2
Arkansas	26,102	36,940	4.44%	3
Louisiana	27,664	39,125	4.43%	4
Mississippi	25,099	35,433	4.40%	5
Florida	34,107	48,069	4.38%	6
Maryland	42,091	59,266	4.37%	7
Washington	43,869	60,757	4.15%	8
South Carolina	30,112	41,394	4.06%	9
Massachusetts	40,838	56,020	4.03%	10
Iowa	31,230	42,681	3.98%	13
Illinois	39,530	52,107	3.51%	20
Minnesota	**38,154**	**49,268**	**3.25%**	**30**
Michigan	39,841	50,749	3.07%	36
South Dakota	28,043	34,819	2.74%	46
Oregon	38,974	48,263	2.71%	47
Wisconsin	37,122	45,735	2.64%	48
North Dakota	32,498	39,690	2.53%	49
Pennsylvania	38,799	47,310	2.51%	50
West Virginia	30,445	37,039	2.48%	51
U.S. Total	**$37,617**	**$49,212**	**3.42%**	

Trends in Minnesota Local Government Fringe Benefits

Comprehensive time-series data on the cost of fringe benefits is much more difficult to find than salary and wage data. The best source is the federal Bureau of Economic Analysis, which provides data on compensation by industry for the country as a whole and for the individual states. The BEA data suggests that, on a per-employee basis, the cost of fringe benefits for Minnesota local government employees grew by 4.85% per year between 2001 and 2009 (46.1% overall); from $8,834 to $12,901.

Trends in Minnesota State Government Total Compensation

BEA also provides the best time-series data on total compensation costs on an industry-level basis. Using the same data set, we find that compensation of state employees (the sum of total wage and salary disbursements, employer contributions to employee pension and insurance funds, and employer contributions for government social insurance) increased by 34.0% from 2001 to 2009; which translates into a 3.7% annual rate of growth (Table 21). Note that this growth rate would likely have been higher if local government employment had not declined over the same period. If recent compensation trends continue, local government revenues would need to grow by at least a similar amount in future years, otherwise compensation costs run the risk of crowding out other areas of government spending or forcing a downsizing of the workforce relative to population.

Table 21: Change in Total Local Government Employee Compensation 2001 and 2009

Item	CY2001	CY2009	Total Pct Change	Annual Pct Change
Total Compensation, Local Government Employees	10,905,890	14,603,183	34.0%	3.7%
Note: Dollar figures are in thousands. **Note:** Data from Bureau of Economic Analysis' *Regional Economic Information System*, September 2010; calculations by MTA.				

V. Local Government vs. Private Sector Employee Compensation Comparison

Summary of Findings

- Local government employee wages are typically highest above market rates for positions requiring less education while lowest below market rates for positions with higher educational requirements; this "double imbalance" is common to public sector labor cost structures around the country
- Wages for local government employees in 14 of the 27 occupations studied in this report (64% of the survey population) are higher than private sector counterparts
- Local governments have higher employee health insurance costs than the private sector; with 47.8% higher premium costs for employee-only health care coverage and 7.9% higher premium costs for family health care coverage
- Local governments have higher pension-related costs for 26 of the 27 occupations studied (97% of the study population) than does the private sector for similar positions
- In cases where family health coverage is elected:
  - 62.6% of the study population have an employer cost for wages, health care, and pensions that is at least 5% higher than private sector comparables
  - 23.6% of the study population have an employer cost for wages, health care, and pensions that is at least 5% lower than private sector comparables
  - 13.7% of the study population have an employer cost for wages, health care, and pensions that is within 5% (plus or minus) of private sector comparables
- A 30-year local government employee retiring in 2009 with an average salary for his or her age cohort could expect to receive more than $600,000 over his or her remaining life expectancy (22.4 years) from the PERA Coordinated Plan in addition to what he or she could expect to receive from Social Security or other personal savings. That same employee would need over $365,000 in a 401(k) account yielding 5% return per year to provide a similar benefit; a private sector employee with a similar salary could expect to have, on average, $74,000 in a 401(k) account.

Methodology

The methodology for our comparison of local government employee and private sector[27] employee compensation costs is substantially similar to the methodology used to compare compensation costs for state employees and private sector employees. A comprehensive description and explanation of that methodology can be found in Appendix A of this report. Methodological differences are as follows.

Our source for local government employee wage and health care data is the *Minnesota Local Government Salary and Benefits Survey* ("Salary Survey").[28] The data is primarily for 2008, although since local governments are able to update data continuously, some data could be for 2009. The "Salary Survey" does not make this distinction clear when reporting data. Note that the Salary Survey data is not public data; MTA purchased access to the survey data. No individual-level pension records are available; we assume that all employees in the study participate in the Public Employees Retirement Association of Minnesota Coordinated Plan, to which employers contributed 6.5% of payroll during calendar year 2008.

Data for private sector wages, health care, and pensions come from the same sources as for our state employee-private sector employee comparison.

The Salary Survey data is limited in two ways

- First, Salary Survey data is self-reported and has not been audited. It therefore may contain reporting errors despite our data cleaning efforts.
- Second, local government participation in the Salary Survey is voluntary, so some amount of self-selection bias affects the data.

We extracted local government wage data using the survey reporting tool. Data was reported on a position basis in the aggregate, although the tool did report the number of participating organizations reporting wages for each position and the total number of employees in each position. Our efforts to extract specific wage data for each participating organization were not fruitful. However, with 31,725 positions in the Salary Survey database (of which we use about 40% - see Appendix B for more information) we believe the database covers a substantial portion of Minnesota's local governments. We also believe that this is the best available occupation-specific local government wage data available for Minnesota.

We were able to extract health plan data on a jurisdiction-specific purpose. Our health insurance premium cost analysis draws on the database we created for a previous study[29] which used data on 182 Minnesota cities with population of over 2,500 which comprised 73% of Minnesota's total urban population for 2008. We assume that health benefit plan costs for other types of local governments are not significantly different from those costs for city governments.

[27] For purposes of this report, the term "private sector" should be construed to mean all non-governmental positions.

[28] Coordinated and sponsored by the League of Minnesota Cities, the Association of Minnesota Counties, and the Association of Metropolitan Municipalities. The purpose of the survey is to facilitate the exchange of information among elected officials and to assist administrative staff in the management of compensation and benefit plans.

[29] *Health Care Spending By Minnesota's Cities: Costs, Efficiencies and the Role of Local Government Aid*; published in June 2009 by the Minnesota Center for Public Finance Research, the 501(c)3 research and education organization supporting MTA's educational mission.

One final note: SOC wage data is not available at the industry level for Minnesota for 2008. Therefore, the analysis of wage differentials compares 2008 local government wages against 2009 private sector wages. Although there is a slight differential in the time frame, it likely serves to understate any local government wage differential versus private sector comparables.

Comparison of Compensation Costs

Wage Comparison

Minnesota local governments responding to the salary survey offer a wage premium in 14 of the 27 occupations analyzed in this study; a group which contains nearly 64% of the total workforce studied. Put another way, nearly two-thirds of employees with private sector comparables are paid at higher rates than those comparables (Table 22).

As with our state analysis, we again find evidence of the "double imbalance" in public sector compensation in which local government employee wages are highest in relation to private-sector counterparts' positions with lower educational requirements while the reverse is true for positions with higher educational requirements.

Table 22: Minnesota Local Government Employee Wages Compared to Private Sector Counterparts, by Occupation, 2008

Occupation	Number of Employees*	Annual Salary**		Local Govt Salary Cost Relative to Private Sector Rates
		Local Govt Rates	Private Sector Rates	
Laborer	322	40,019	26,902	48.8%
Office Support/Clerks* **	2,800	36,635	28,825	27.1%
Custodian	423	31,803	25,082	26.8%
Telephone Operator and/or Receptionist	108	33,987	27,721	22.6%
Utility Billing Clerk	125	41,205	35,357	16.5%
Clinical Psychologist	26	74,812	64,793	15.5%
Cook	17	30,826	26,889	14.6%
Child Protection Worker/Social Worker	2,050	53,258	46,790	13.8%
Auto Service Worker/Skilled Mechanic	418	46,445	41,190	12.8%
Maintenance Worker	848	43,285	38,465	12.5%
Payroll Clerk	169	43,597	39,107	11.5%
Communications Specialist	35	57,970	54,520	6.3%
Engineering Technician	545	51,103	48,392	5.6%
Administrative Assistant	149	44,512	43,583	2.1%
General Office Supervisor/ Office Administrator	233	47,960	48,176	(0.4%)
Paralegal	43	47,382	48,167	(1.6%)
Human Resources Representative	119	58,234	59,545	(2.2%)
Information Technology	663	69,401	72,652	(4.5%)
Engineer	156	70,629	75,020	(5.9%)
Property Appraiser	348	50,038	53,467	(6.4%)
Driver	19	30,742	32,856	(6.4%)
Legal Secretary	228	40,082	47,537	(15.7%)
Heavy Equipment Operator	764	40,789	50,639	(19.5%)
Nurse	593	55,113	72,086	(24.3%)
Accountant	793	43,283	60,970	(29.0%)
Engineering Manager** **	168	82,848	119,137	(30.5%)
Attorney	399	78,575	134,448	(41.6%)

* Measured as headcount.
** On an annualized, full-time basis.
*** Includes all Office Support, Real Estate Clerks, and Tax Clerks
**** Includes city engineers, assistant city engineers, county engineers and assistant county engineers

Comparison of Health Care Costs

Note: As mentioned earlier, our health insurance premium cost analysis draws on the database we created for a previous study which used data on 182 Minnesota cities with population of over 2,500 which comprised 73% of Minnesota's total urban population for 2008. We assume that health benefit plan costs for other types of local governments are not significantly different from those costs for city governments.

Description of City Health Care Plans

Table 23 provides an overview of city healthcare premium costs and cost sharing for calendar year 2008. As the table indicates, cities generally cover the entire premium costs for employee-only health care and cover about 76% of the total premium costs for family health care.

Table 23: Average Employee Health Plan Costs for Minnesota Cities, 2008

Plan Type	Total Premium	Employee		Employer	
		Premium Share	Premium Cost	Premium Share	Premium Cost
Employee-Only	$5,328	<1%	$12	99%	$5,316
Family	$14,664	24%	$3,468	76%	$11,196

Estimation of City Health Care Costs

Unlike information available through the state, the data from the Salary Survey does not provide information on city employee takeup of health care by plan type. Since there is no good method available for estimating the number of city employees who waive health care, the number who utilize employee-only coverage, and the number who utilize family coverage, we will present findings for both employee-only coverage and for family coverage as a minimum and maximum of the range.

Health Care Benchmarking with the Private Sector

As noted in the methodology section, we used MEPS data to determine the private sector health care costs for establishments where 75% or more of the employees work on a full-time basis. No distinctions are made between different employer contribution levels. As Table 24 demonstrates, a single (employee-only) premium averaged $4,390 in Minnesota, with the employer picking up 82% of the cost; a family premium averaged $13,575 with the employer picking up 79% of the cost.

Table 24: Minnesota Private Sector Employee Health Plan Costs and Coverage, 2008

Plan Type	Total Premium	Employee		Employer	
		Premium Share	Premium Cost	Premium Share	Premium Cost
Single	$4,390	18%	$793	82%	$3,597
Family	$13,575	24%	3,196	76%	$10,379

Substituting private sector employer premium costs for the city rates allows for an estimation of the employer cost differential. The public sector premium for single coverage is relatively high: city costs are 47.8% higher than private sector costs. However, the public sector premium for family coverage is much lower; cities pay only 7.9% higher family coverage costs than does the private sector.

Table 25: Employer Health Care Premium Costs for Cities and Private Sector In Minnesota, 2008

Plan Type	Employer Cost		Public Sector Premium	
	City	Private Sector	Amount	Percent
Single	$5,316	$3,597	$1,719	47.8%
Family	$11,196	$10,379	$817	7.9%

Pension Costs

The analysis assumes that employees are eligible for pension benefits and participate in the Public Employee Retirement Association of Minnesota's (PERA) Coordinated Plan[30], which provides a defined benefit to retirees.[31] Local governments paid amounts equal to 6.50% of participating employees' salaries into the PERA Coordinated Plan in 2008. Based on data from the BLS' *Employer Costs for Employee Compensation*, we estimate a private sector pension contribution rate equal to 4.463% of payroll for 2008.[32]

Our analysis indicates that Minnesota local government in the salary survey pay higher pension costs for 26 of the 27 surveyed occupations, comprising about 96.8% of the workforce on a headcount basis. As Table 26 on the next page indicates, the disparities mirror the wage premium/discount disparities; not a surprising finding given that pension contributions are generally determined as a share of total salary. Pension cost premiums range from a high of 116.7% for laborers to 1.3% for engineering managers. Attorneys are the only occupational group with a pension cost discount.

[30] Members of "coordinated" public pension plans also participate in the federal Social Security program.
[31] We do not believe that any of the job titles studied in the report would qualify for PERA's Police and Fire Plan (which is restricted to local police and firefighters); PERA's Local Government Correctional Service Retirement Fund (which is restricted to correctional officers serving in county and regional adult and juvenile corrections facilities and is further restricted to those officers responsible for the security, custody and control of the facilities and their inmates; or PERA's Public Employees Defined Contribution Plan, is restricted to personnel employed by public ambulance services, physicians, city managers, and locally-elected public officials except for county sheriffs.
[32] Includes contribution costs for defined benefit and defined contribution plans.

Table 26: Minnesota Local Government Employee Pension Cost Compared to Private Sector Counterparts by Occupation, 2008

Occupation	Number of Employees*	Annual Pension Cost**		Local Govt Pension Cost Relative to Private Sector
		Local Govt Wages and Rates	Using Private Sector Wages and Rates	
Laborer	322	$2,601	$1,201	116.7%
Office Support/Clerks* **	2,800	2,381	1,286	85.1%
Custodian	423	2,067	1,119	84.7%
Telephone Operator and/or Receptionist	108	2,209	1,237	78.6%
Utility Billing Clerk	125	2,678	1,578	69.7%
Clinical Psychologist	26	4,863	2,892	68.2%
Cook	17	2,004	1,200	67.0%
Child Protection Worker/Social Worker	2,050	3,462	2,088	65.8%
Auto Service Worker/Skilled Mechanic	418	3,019	1,838	64.2%
Maintenance Worker	848	2,814	1,717	63.9%
Payroll Clerk	169	2,834	1,745	62.4%
Communications Specialist	35	3,768	2,433	54.9%
Engineering Technician	545	3,322	2,160	53.8%
Administrative Assistant	149	2,893	1,945	48.7%
General Office Supervisor/ Office Administrator	233	3,117	2,150	45.0%
Paralegal	43	3,080	2,150	43.3%
Human Resources Representative	119	3,785	2,658	42.4%
Information Technology	663	4,511	3,242	39.1%
Engineer	156	4,591	3,348	37.1%
Property Appraiser	348	3,252	2,386	36.3%
Driver	19	1,998	1,466	36.3%
Legal Secretary	228	2,605	2,122	22.8%
Heavy Equipment Operator	764	2,651	2,260	17.3%
Nurse	593	3,582	3,249	10.2%
Accountant	793	2,813	2,721	3.4%
Engineering Manager** **	168	5,385	5,317	1.3%
Attorney	399	5,107	6,000	(14.9%)

* Measured as headcount.
** On an annualized, full-time basis.
*** Includes all Office Support, Real Estate Clerks, and Tax Clerks
**** Includes city engineers, assistant city engineers, county engineers and assistant county engineers

Total Compensation Comparison

As with Minnesota state employees, our findings indicate that local government employee health care and pensions are costlier to local governments than are health care and pension offered by private sector employees. When combined with the local government employee/private-sector employee wage differentials, this yields much higher public sector total compensation[33] costs in many instances. The data in Table 27 on the next page indicate that overall for positions where employee-only health insurance is provided:

- 14 local government occupations with 8,035 employees (64.0% of the study total) have total employer compensation costs that are at least 5.0% greater than private sector counterparts
- 6 local government occupations with 2,945 employees (23.4% of the study total) have total employer compensation costs that are 5.0% or more below private sector counterparts

[33] "Total compensation" is defined here as the employer cost for wages, health care, and pensions.

- 7 local government occupations with 1,581 employees (12.6% of the study total) have total employer compensation costs that are within 5.0% (plus or minus) of private sector counterparts
- The differential ranged from a local government compensation cost premium of 51.2% for laborers to a local government compensation cost discount of 38.2% for lawyers.

Table 27: Minnesota Local Government Employee Compensation Costs Compared to Private Sector Counterparts by Occupation – Employees with Single Health Care Coverage, 2008

Occupation	Number of Employees*	Compensation**		Local Govt Wage, Health Care, and Pension Cost Relative to Private Sector
		Local Govt Actual	At Private Sector Wages And Rates	
Laborer	322	47,936	31,699	51.2%
Office Support/Clerks* **	2,800	44,333	33,708	31.5%
Custodian	423	39,186	29,799	31.5%
Telephone Operator and/or Receptionist	108	41,512	32,555	27.5%
Billing Clerk (Utilities)	125	49,199	40,532	21.4%
Cook	17	38,145	31,686	20.4%
Clinical Psychologist	26	84,991	71,282	19.2%
Child Protection Worker/Social Worker	2,050	62,035	52,475	18.2%
Auto Service Worker/Skilled Mechanic	418	54,780	46,625	17.5%
Maintenance Worker	848	51,414	43,779	17.4%
Payroll Clerk	169	51,747	44,449	16.4%
Communications Specialist	35	67,054	60,551	10.7%
Engineering Technician	545	59,741	54,149	10.3%
Administrative Assistant	149	52,721	49,125	7.3%
General Office Supervisor/Office Administrator	233	56,393	53,923	4.6%
Paralegal	43	55,778	53,914	3.5%
HR Representative	119	67,335	65,800	2.3%
Driver	19	38,057	37,919	0.4%
Information Technology	663	79,228	79,491	(0.3%)
Property Appraiser	348	58,607	59,450	(1.4%)
Engineer	156	80,536	81,965	(1.7%)
Legal Secretary	228	48,003	53,256	(9.9%)
Heavy Equipment Operator	764	48,756	56,496	(13.7%)
Public Health Nurse (RN)	593	64,011	79,652	(19.6%)
Accountant	793	51,412	67,288	(23.6%)
Engineering Manager **	168	93,549	128,051	(26.9%)
Attorney	399	88,999	144,046	(38.2%)

* Measured as headcount.
** On an annualized, full-time basis.
*** Includes all Office Support, Real Estate Clerks, and Tax Clerks
**** Includes city engineers, assistant city engineers, county engineers and assistant county engineers

The data in Table 28 on the next page indicate that overall for positions where family health insurance is provided:

- 13 local government occupations with 7,886 employees (62.8% of the study total) have total employer compensation costs that are at least 5.0% greater than private sector counterparts
- 6 local government occupations with 2,945 employees (23.4% of the study total) have total employer compensation costs that are 5.0% or more below private sector counterparts

- 8 local government occupations with 1,730 employees (13.8% of the study total) have total employer compensation costs that are within 5.0% (plus or minus) of private sector counterparts
- The differential ranged from a local government compensation cost premium of 39.9% for laborers to a local government compensation cost discount of 37.1% for lawyers.

Table 28: Minnesota Local Government Employee Compensation Costs Compared to Private Sector Counterparts by Occupation – Employees with Family Health Care Coverage, 2008

Occupation	Number of Employees*	Compensation**		Local Govt Wage, Health Care, and Pension Cost Relative to Private Sector
		Local Govt Actual	At Private Sector Wages And Rates	
Laborer	322	53,816	38,481	39.9%
Office Support/Clerks	2,800	50,213	40,490	24.0%
Custodian	423	45,066	36,581	23.2%
Telephone Operator and/or Receptionist	108	47,392	39,337	20.5%
Billing Clerk (Utilities)	125	55,079	47,314	16.4%
Clinical Psychologist	26	90,871	78,064	16.4%
Child Protection Worker/Social Worker	2,050	67,915	59,257	14.6%
Cook	17	44,025	38,468	14.4%
Auto Service Worker/Skilled Mechanic	418	60,660	53,407	13.6%
Maintenance Worker	848	57,294	50,561	13.3%
Payroll Clerk	169	57,627	51,231	12.5%
Communications Specialist	35	72,934	67,333	8.3%
Engineering Technician	545	65,621	60,931	7.7%
Administrative Assistant	149	58,601	55,907	4.8%
General Office Supervisor/Office Administrator	233	62,273	60,705	2.6%
Paralegal	43	61,658	60,696	1.6%
HR Representative	119	73,215	72,582	0.9%
Information Technology	663	85,108	86,273	(1.4%)
Driver	19	43,937	44,701	(1.7%)
Engineer	156	86,416	88,747	(2.6%)
Property Appraiser	348	64,487	66,232	(2.6%)
Legal Secretary	228	53,883	60,038	(10.3%)
Heavy Equipment Operator	764	54,636	63,278	(13.7%)
Public Health Nurse (RN)	593	69,891	86,434	(19.1%)
Accountant	793	57,292	74,070	(22.7%)
Engineering Manager****	168	99,429	134,833	(26.3%)
Attorney	399	94,879	150,828	(37.1%)

* Measured as headcount.
** On an annualized, full-time basis.
*** Includes all Office Support, Real Estate Clerks, and Tax Clerks
**** Includes city engineers, assistant city engineers, county engineers and assistant county engineers

Qualitative Issues in Local Government Employee Health and Pension Benefits

Employer cost comparisons are essential to public and private sector compensation comparisons, but any analysis of compensation is incomplete without a consideration of the design and generosity of the fringe benefit plans offered to employees. Health care benefit plans can take on many forms. Plans differ based on a variety of design elements such as drug coverage, preventive and wellness care, retiree access, and existence of supplemental benefits like long-term care insurance and medical care reimbursement or savings accounts. Cost sharing provisions such as co-pays, deductibles, and employer matches add to plan diversity. Pension plans also differ considerably between the private and public sector; the biggest difference being that defined benefit pension plans are standard among Minnesota's public employees while defined contribution plans are quickly becoming predominant in the private sector.

Public Sector Health Care Plan Benefit Features

Again drawing on the database created for our earlier study about Local Government Aid and city health care costs, we report that the cities in that database (those 182 cities with population of at least 2,500 which provided complete survey data without apparent response errors) reported health plan features as follows:

- 93 offer more than one health plan to employees
- 95 offer prescription drug plan coverage
- 56 offers HSA or HRA high deductible health plans as an option
- 25 offer a consumer-driven health plan option
- 78 allow employees to defer medical benefits
- 42 offer wellness programs
- 20 offer long-term care
- 82 offer long-term disability coverage
- 46 offer short-term disability coverage

Only 85 cities report office visit copay amounts; Table 29 provides details.

Table 29: Reported City Health Care Plan Copay Amounts, 2008

Copay Reported	Number of Cities
$0	24
$10	3
$15	11
$20	15
$25	14
$30	15
>$30	2
Source: Salary Survey	

Public Sector Defined Benefit Plan Features and Equivalent Principal Analysis

As discussed earlier in this report, local governments in Minnesota offer various pension plans to their employees, mainly through the Public Employees Retirement Association of Minnesota (PERA)[34]. The benefit plan offered to the employees in this study is the PERA-Coordinated Plan, which operates as follows: the initial benefit paid at retirement is calculated by multiplying the number of years of credited service the employee has times a "multiplier" (generally 1.7%) times the average of the employee's highest five annual salaries. The earliest age at which an employee may retire with an unreduced benefit ("normal retirement age") is somewhere between 65 and 66 for employees.[35] Employees who choose to retire and collect benefits before reaching the normal retirement age have their benefit reduced using actuarial formulas. The earliest age at which a PERA-Coordinated member may draw a pension is 55.

Public employees who were originally hired prior to July 1, 1989 are eligible for a provision called the "Rule of 90"; which allows employees to collect an unreduced benefit even if they have not reached the normal retirement age so long as the sum of their age and years of service is equal to or greater than 90. However, employees retiring under the Rule of 90 provisions must calculate their pension in a slightly different fashion: the multiplier for their first ten years of service is limited to 1.2% instead of 1.7%.

Unlike state employees, local government employees who participate in PERA's defined benefit pension plans do not have access to a supplemental 403(b) deferred compensation plan sponsored on a statewide basis.

The value of a defined contribution pension to an employee is not necessarily related to the cost of the provision; rather, it is related to the total benefit the employee should expect to receive over his or her lifetime. Given this premise, we have generated an expected pension payout for a hypothetical PERA-Coordinated employee using the following assumptions or premises:

- The typical PERA-Coordinated employee retiring in 2010 was originally hired before July 1, 1989; and so is eligible to retire under the Rule of 90 provision
- We assume retirement on December 31, 2009 at age 60, with 30 years of service credit
- According to the U.S. National Center for Health Statistics, as of 2006 Americans 60 years of age could expect to live 22.4 years (269 months) longer on average; we assume that the hypothetical employee in our example will have an average lifespan and collect pension benefits for 269 months
- We assume, based on changes made to the PERA plans by the 2010 Legislature, that the example employee will receive a 1.0% cost of living adjustment annually until his or her death
- We assume the example employee chooses the Single-Life Benefit Option (i.e. that he or she does not choose to provide monthly benefits to a surviving spouse, which lowers the overall monthly benefit)

[34] It is not universally the case that local government employees are members of one of the PERA plans. For instance, many firefighter plans are administered at the local level, along with plans for police officers in Fairmont and Minneapolis. Long-term employees in the City of Minneapolis are members of the Minneapolis Employees Retirement Fund, which was closed to new members in 1980. For purposes of this report, we assume that example employees do not participate in any locally-administered pension plans.

[35] The PERA-Coordinated plan uses the same year of birth-dependent normal retirement age as does the Social Security.

- PERA's *Comprehensive Annual Financial Report* for 2009 indicates that the average high-five salary for a member of PERA's Coordinated Plan who retired in 2009 with 30 or more years of service was $4,458 per month ($53,496 per year)

Given these assumptions, we calculate the initial pension benefit for an average PERA-Coordinated member retiring in 2009 with 30 years of service as follows:

- High-five salary for period ending December 31, 2009: $53,496
- 30 years of service
- Multiplier: 1.2% for first ten years and 1.7% for subsequent 20 years = 46%
- Unreduced benefit = $44,222 (times) 46% = **$24,608**

Assuming that our example employee is eligible for a 1.0% cost-of-living adjustment annually after the first year of the benefit[36], his or her expected pension payout over a 22.4 year (269 month) period is as follows:

Table 30: Expected PERA Pension Payments over 269 Month Period for Employee Retiring Under Rule of 90 with 30 Years Service Credit and High Five Salary of $53,496

Year of Retirement	Annual Pension	Cumulative Pension
1	$24,608	$24,608
2	24,854	49,462
3	25,103	74,565
4	25,354	99,919
5	25,607	125,526
6	25,863	151,389
7	26,122	177,511
8	26,383	203,894
9	26,647	230,541
10	26,914	257,455
11	27,183	284,638
12	27,455	312,093
13	27,729	339,822
14	28,006	367,828
15	28,286	396,114
16	28,569	424,683
17	28,855	453,538
18	29,144	482,682
19	29,435	512,117
20	29,729	541,846
21	30,027	571,873
22	30,327	602,200
23 (part)	12,763	614,963
Total Payments over 269 Months		**614,963**

Our calculations indicate that this example employee would expect to receive a total of $614,963 over his or her lifetime, given these conditions. Note that the employee could expect to receive more in retirement than just the pension; the employee would be eligible for

[36] The PERA-Coordinated Plan's COLA will revert to 2.5% when the plan's funding ratio (ratio of assets to current liabilities) reaches 90% when assets are valued on a market value basis. If this trigger is hit in the next twenty years, the example employee would receive higher COLAs toward the end of his or her lifetime and therefore this analysis would understate the total expected value of the pension.

Social Security and may have other retirement investment vehicles outside of his or her public pension. Additionally, the calculations represent payments to only one retiree – households with two public employee retirees could expect to receive a much higher total pension income stream.

The amount of principal that would be needed in a 401(k) retirement account to provide the same benefits (initial payment of $24,608 with 1.0% increase in payment annually) over the same period of time (269 months) as the defined benefit plan is calculated using the following assumptions:

- The account would have net investment returns of 5.0% per year
- Costs of maintaining the account would be assessed against investment returns (i.e. – the 5.0% investment return assumed above is net of investment account costs)
- Proceeds from the account would be withdrawn on the first day of each month; those funds would be unavailable for investment thereafter

As Table 31 demonstrates, an individual would need a nest egg of $367,259 in a 401(k) retirement account with these features upon retirement in order to generate the $614,963 that the example employee's defined benefit plan could be reasonably expected to generate over the course of the example employee's retirement.

Table 31: Calculation of Initial Investment Needed to Generate $614,963 Over 269 Months

Year of Retirement	Beginning Sum	Total Payouts	Investment Income	Ending Sum
1	$367,259	$24,608	$17,701	$360,353
2	360,353	24,854	17,350	352,848
3	352,848	25,103	16,968	344,713
4	344,713	25,354	16,554	335,913
5	335,913	25,607	16,107	326,413
6	326,413	25,863	15,625	316,175
7	316,175	26,122	15,107	305,159
8	305,159	26,383	14,549	293,325
9	293,325	26,647	13,950	280,628
10	280,628	26,914	13,308	267,022
11	267,022	27,183	12,620	252,460
12	252,460	27,455	11,885	236,890
13	236,890	27,729	11,099	220,260
14	220,260	28,006	10,260	202,514
15	202,514	28,286	9,365	183,593
16	183,593	28,569	8,412	163,435
17	163,435	28,855	7,396	141,976
18	141,976	29,144	6,315	119,148
19	119,148	29,435	5,166	94,879
20	94,879	29,729	3,945	69,095
21	69,095	30,027	2,648	41,716
22	41,716	30,327	1,271	12,659
23 (part)	$12,659	$12,763	$103	$0
Total Payments over 269 Months		**$614,963**		

Note that while we performed similar analyses for various example employees in the portion of this report dealing with state employees, we will not do so here. The exercise was relatively easy to perform for state employees since they operate on statewide pay scales.

However, since local government pay scales vary across the different units of government, it is rather difficult to determine an average high five salary for particular job classes on a statewide basis.

To again facilitate comparisons with the private sector, we have included data from the Employee Benefit Research Institute regarding the median 401(k) account balances among long-tenured participants who are between 60 and 70 years of age. The average 30 year PERA retiree has an equivalent 401(k) principal balance of $367,259 compared to median 401(k) account balance of about $74,000 for similar salaried, long-tenured participant in a defined contribution plan. Of course, both private sector employees and public sector employees may hold retirement funds in other vehicles, such as individual retirement accounts, passbook savings, or brokerage accounts. However, such vehicles are not employer-sponsored and are therefore beyond the scope of this report.

Table 32: Median 401(k) Account Balance For Long-Tenured Participants, 60 Years Old

Salary Range	Account Balance for 2008
$20,000 to $40,000	$50,707
$40,000 to $60,000	$73,834
$60,000 to $80,000	$119,904
$80,000 to $100,000	$174,981
Over $100,000	$258,941
Source: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project	

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Appendix A: Methodology for State Employee Compensation Comparison

Source for State Employee Compensation Data

Our source for state employee compensation data is Minnesota Management and Budget's (MMB) *Executive Branch Total Compensation Report* for 2010. (The report is public information and can be accessed at http://www.mmb.state.mn.us/comp-tc as of September 2010.) The report projects the cost to the state on an employee-by-employee basis for the following: wages, health care, retirement[37], FICA (Social Security and Medicare), deferred compensation[38], and health care savings plan. MMB staff provided MTA with an Excel spreadsheet with the records. Importantly, individual employees are not named; compensation data is linked only to each employee's identification number, the agency he or she works for, and the amount of time each employee works (represented as a percentage of full-time – forty hours per week).

The report is created by taking a snapshot of the workforce on a specific date and using that snapshot to project total compensation expenditures for the year. The methodology used to generate the report assumes that the workforce will remain static over the course of the calendar year, and therefore does not reflect seasonal changes to the workforce. The methodology also assumes that compensation expenditures will remain static. This provision is problematic for calendar year 2010, since the state's contributions to the various retirement plans were generally increased on July 1, 2010; the report therefore understates total pension costs to the state.

The report includes all employees in the executive branch except for employees in the Minnesota State Colleges and Universities and other employees protected by data privacy restrictions, such as Department of Public Safety special agents.

Sources for Private Sector Compensation Data

Unfortunately, a similar master list of compensation costs is not available for the private sector[39] as a whole. Private sector compensation data was gathered from three sources:

Our source for private sector wage data is the Occupational Employment Statistics (OES) survey administered by the Minnesota Department of Employment and Economic Development (DEED) in conjunction with the federal Bureau of Labor Statistics. The OES survey provides data on wages for full-time or part-time paid workers in over 800 occupations. The survey excludes self-employed persons. For survey purposes, "wages" are defined to include: base pay, incentive pay (including commissions and production bonuses), cost-of-living allowances, guaranteed pay, hazardous-duty pay, on-call pay, and tips. The OES survey methodology can be accessed in greater detail on the DEED website, at http://www.positivelyminnesota.com/Data_Publications/Data/All_Data_Tools/Occupational_Employment_Wages_(OES)_3.aspx.

[37] The employer's contributions to the various Minnesota State Retirement System (MSRS) plans.
[38] The state, through MSRS, operates a 403(b) defined contribution-style plan in which employees may choose to participate. The state matches contributions on a very limited basis; these matching contributions are reflected in this report as a compensation cost.
[39] For purposes of this report, the term "private sector" should be construed to mean all non-government positions.

Our source for private sector health benefit data is the Medical Expenditure Panel Survey administered by the federal Department of Health and Human Services' Agency for Health Care Research and Quality. This annual survey collects and validates health care expenditure/cost data and provides trend information on health care and insurance utilization. The survey utilizes appropriate statistical sampling methods. We extracted Minnesota-specific data on health insurance plans for private sector employers from the Insurance Component of the survey, which is also known as the Health Insurance Cost Study. We used data for firms where 75% or more employees work full-time.

Our source for private sector retirement cost data is the Employer Costs for Employee Compensation (ECEC) report administered by the federal Bureau of Labor Statistics as part of its National Compensation Survey program. The survey does not make Minnesota-specific data available; figures used in the study are for the West North Central United States (as defined by the U.S. Census)[40]. Minnesota represents a significant share of this region; according to the federal Bureau of Economic Analysis, Minnesota's share of the region's 2008 gross domestic product was 28.9%. Information on the ECEC report and the broader National Compensation Survey program can be accessed through http://www.bls.gov/eci/.

Scope of Analysis

The dataset provided by MMB contained 33,125 positions, representing 30,989 FTEs. Since the OES dataset contains both full-time and part-time positions, we elected to include only full-time and part-time public sector positions to eliminate any bias that might occur by having one dataset which contains seasonal ("intermittent") positions. We removed intermittent positions (1,019 positions representing 139 FTEs) from the study database.

Of the remaining state employment population a significant number of positions are unique to the public sector; positions where there are no meaningful private-sector analogues. Examples include correctional officers, administrative law judges, hydrologists and food inspectors. We removed these positions from the analysis. We removed other positions that could be not matched with confidence to the private sector as follows:

- We eliminated supervisory and management positions[41], because of the difficulties involved with accurately grouping these positions together in the public sector and matching them to private sector positions with similar management and budget responsibilities.
- We eliminated positions from the analysis if we could not reasonably ensure that the private sector match group would perform similar tasks. For example, the state employs health care call center representatives; however, it was not possible to match this job classification with a single SOC occupation code, nor was it feasible to group this with other job classifications to match with an SOC occupation code or codes.
- We eliminated positions for which MMB did not maintain written job class specifications.[42]
- We eliminated positions if there were 10 or fewer FTEs, because of the undue influence experience may have in a compensation comparison for a small population. For example, if the state only employs one person for a particular position, but that individual happens

[40] Includes: Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota.
[41] Defined as positions that are represented by the Middle Management Association, those positions covered under the state's Managerial Plan, state agency commissioners and the state's constitutional officers.
[42] Notably, this includes many positions in the Office of the Attorney General.

to have thirty years of experience, a compensation analysis might result in the appearance of a substantial public sector wage premium where none really exists .

A total of 22,669 positions were eliminated under these provisions, representing 21,741 FTEs.[43] Table 33 shows all the job classes with at least 100 positions (headcount) which we excluded from this analysis, along with the reason for the exclusion. These thirty job classes represent almost 45% of the total full-time and part-time positions excluded from the analysis.

Table 33: Large Employee Groups Excluded from Analysis

Job Title	Employee Count	FTE Count	Reason for Exclusion
Human Services Technician	1,604	1,213.08	Poor match with SOC codes
Corrections Officer 2	1,569	1,568.40	No private sector analogue (public safety)
Transportation Generalist	1,079	1,078.50	No MMB job class description
Security Counselor	583	564.30	Poor match with SOC codes
State Patrol Trooper	501	501.00	No private sector analogue (public safety)
Transportation Generalist Senior	463	461.80	No MMB job class description
Transportation Specialist	427	425.38	No MMB job class description
State Program Administrator, Principal	371	366.88	Poor match with SOC codes
Corrections Officer 3	360	360.00	No private sector analogue (public safety)
State Program Administrator Senior	238	235.65	Poor match with SOC codes
Revenue Tax Specialist Intermediate	217	215.85	Poor match with SOC codes
Unemployment Insurance Operations Analyst	189	186.75	Poor match with SOC codes
Planner, Principal - State	182	177.72	Majority of total position workforce in public sector
Revenue Tax Specialist Senior	176	175.75	Poor match with SOC codes
Workforce Development Representative	157	153.80	Majority of total position workforce in public sector
Minnesota Care Enrollment Representative	156	156.00	Poor match with SOC codes
Corrections Agent Career	140	139.80	No private sector analogue (public safety)
Natural Resources Specialist 2 (Conservation Officer)	140	140.00	No private sector analogue (public safety)
Food Service Worker	136	88.73	Poor match with SOC codes
Revenue Tax Specialist	130	129.50	Poor match with SOC codes
Pollution Control Specialist Senior	128	125.34	Poor match with SOC codes
Corrections Lieutenant	126	126.00	No private sector analogue (public safety)
Human Services Support Specialist	124	98.35	Poor match with SOC codes
Revenue Collection Officer 2	122	122.00	Poor match with SOC codes
Education Specialist 2	116	114.00	Poor match with SOC codes
State Program Administrator Coordinator	116	112.40	Poor match with SOC codes
Transportation Associate	115	115.00	No MMB job class description
Income Maintenance Program Advisor	114	113.75	Poor match with SOC codes
State Program Administrator Intermediate	110	109.00	Poor match with SOC codes
State Program Administrator Director	101	101.00	Management position (MMA)
Subtotal	**9,990**	**9,475.73**	

The remaining 9,437 public sector positions, representing 9,041.04 FTEs, were matched to their private sector analogues as follows. Minnesota Management and Budget maintains job class specifications – general position descriptions of the kind of work performed by employees in each job class – for over 1,300 job classifications (available at http://www.mmb.state.mn.us/staff-hr/class-specs). OES survey data is presented using the

[43] Note that we do not provide specific numbers on the number of employees eliminated by each individual provision. In large part this is because many employees could be eliminated under multiple provisions. For example, the state employs 5.0 "Veterinarian Senior": not only are these management/supervisory positions but also the group does not meet the 10 employee threshold.

Standard Occupational Classification system ("SOC codes") developed by the federal government to classify workers into occupational categories.[44] The MMB job class specification data was used to match the MMB job classes to the SOC occupational codes. In many instances, MMB job classes were grouped together to match grouped SOC occupational codes. The master list of our MMB job description-SOC occupational code matches follows shortly.

Data Limitations

DEED's OES data tool provides Minnesota-specific data on employment and mean wages for each occupation with an Standard Occupational Code ("SOC code"). However, to accurately represent private sector-only wages the wages paid to public employees in each occupation must be removed from the overall total. This presents two challenges:

- DEED's OES tool does not specifically differentiate between public sector and private sector employees. Public sector employees appear to be located in two industries: Public Administration and Education and Health Services. While the Public Administration industry appears to contain only government employees; clearly the Education and Health Services industry contains both government and non-government employees. We believe that the overwhelming majority of public sector employees in Minnesota are reported in the Public Administration industry that our inability to identify and remove those government employees in the Education and Health Services industry does not meaningfully flaw the study.
- The industry-specific data presented for each occupation provides employment and median wage, not mean (average) wage. MTA staff contacted DEED to inquire about the availability of mean wage data. DEED staff responded by stating that such data is not readily available, and the request would require a custom run using the department's wage estimation software, which is typically performed at a cost of $65 per hour for analyst time. It is unclear what the total cost of performing such a run for the 41 occupations studied in this report would be. We used this median wage data in our analysis but adjusted it on an occupation-by-occupation basis based on the differential between the median and mean wages for state governments as a whole, as reported by the federal Bureau of Labor Statistics' OES statistics. This assumes that the relationship between median and mean occupational wages for Minnesota state employees is similar to national averages.

Also, in certain cases multiple state job classes have been matched to one or more SOC occupation codes. In large part this has to do with differences in classifying employees: the SOC codes are designed to differentiate strictly on the basis of the task an employee performs; while the state in many cases lumps together employees who do various related tasks and instead differentiates among them based on tenure. For example, there are various SOC occupation codes related to information technology; for example differentiation is made between computer programmers, computer support specialists and network administrators. The state's job classes bring many different information technology functions together under the "Information Technology Specialist" job class, but differentiate instead based on tenure: there are five different Information Technology Specialist classes through which state employees may be promoted based on experience and tenure.

[44] Information on the Standard Occupational Classification system is available from the federal Bureau of Labor Statistics at http://www.bls.gov/soc/.

Appendix A

MMB Job Title-SOC Occupation Code Matches

State Employee Job Title(s)	SOC Analogue(s)
Acquisition Management Specialist Acquisition Management Specialist, Senior Buyer 1 Buyer 2	13-1023 (Purchasing Agents, Except Wholesale, Retail, and Farm)

State Employee Job Title(s)	SOC Analogue(s)
Personnel Officer Personnel Officer Principal Personnel Officer Senior Personnel Representative	13-1071 (Employment, Recruitment & Placement Specialists) 13-1072 (Compensation, Benefits & Job Analysis Specialists) 13-1079 (Human Resources…Other)

State Employee Job Title(s)	SOC Analogue(s)
Employee Development Specialist 1 Employee Development Specialist 2 Employee Development Specialist 3 Employee Development Specialist 4	13-1073 (Training and Development Specialists)

State Employee Job Title(s)	SOC Analogue(s)
Management Analyst 1 Management Analyst 2 Management Analyst 3 Management Analyst 4	13-1111 (Management Analysts)

State Employee Job Title(s)	SOC Analogue(s)
Accounting Officer Accounting Officer Intermediate Accounting Officer Senior Accounting Officer Principal Accounting Technician Auditor Intermediate Auditor Senior Auditor Principal Local Government Auditor Local Government Auditor Intermediate Local Government Auditor Senior Local Government Auditor Principal Local Governmental Audit Staff Specialist Local Governmental Audit Staff Specialist, Senior	13-2011 (Accountants and Auditors)

State Employee Job Title(s)	SOC Analogue(s)
Information Technology Specialist 1 Information Technology Specialist 2 Information Technology Specialist 3 Information Technology Specialist 4 Information Technology Specialist 5 Systems Architect	15-1021 (Computer Programmers) 15-1031 (Software Engineers, App) 15-1041 (Computer Support Spec) 15-1051 (Computer Systems Anlyst) 15-1071 (Network/Comp Syst Adm) 15-1081 (Net Syst/Data Comm Anal) 15-1099 (Comp Spec, All Other)

State Employee Job Title(s)	SOC Analogue(s)
Architect 1 Architect 2	17-1011 (Architects, Except Landscape and Naval)

State Employee Job Title(s)	SOC Analogue(s)
Engineer 1 Graduate Engineer 2 Graduate Engineer Principal Engineer Senior Engineer, Administrative	17-2051 (Civil Engineers)

State Employee Job Title(s)	SOC Analogue(s)
Architectural Drafting Tech 2 Architectural Drafting Tech 3	17-3011 (Architectural and Civil Drafters)

State Employee Job Title(s)	SOC Analogue(s)
Engineering Aide Engineering Aide Intermediate Engineering Aide Senior Engineering Specialist Engineering Specialist Senior	17-3022 (Civil Engineering Technicians)

State Employee Job Title(s)	SOC Analogue(s)
Psychologist 1 Psychologist 2 Psychologist 3	19-3031 (Clinical, Counseling, & School Psychologists) 19-3039 (Psychologists, All Other)

State Employee Job Title(s)	SOC Analogue(s)
Rehabilitation Counselor Career Rehabilitation Counselor Lead Rehabilitation Counselor Senior	21-1011 (Rehabilitation Counselors)

State Employee Job Title(s)	SOC Analogue(s)
Licensed Alcohol/Drug Counselor	21-1015 (Substance Abuse & Behavioral Disorder Counselors)

State Employee Job Title(s)	SOC Analogue(s)
Public Health Social Worker Specialist Social Worker Social Worker Senior Social Worker Specialist Social Work Specialist Senior – Human Services	21-1021 (Child, Family, & Sch SW) 21-1022 (Med/Pub Health SW) 21-1023 (Men Healt/Sub Abuse SW) 21-1029 (Social Workers, All Other)

State Employee Job Title(s)	SOC Analogue(s)
Health Educator 1 Health Educator 2 Health Educator 3	21-1091 (Health Educators)

State Employee Job Title(s)	SOC Analogue(s)
Attorney 1 Attorney 2 Appeals Court Attorney Compensation Attorney	23-1011 (Lawyers)

Compensation Attorney, Principal

State Employee Job Title(s)	SOC Analogue(s)
Information Officer 1 Information Officer 2 Information Officer 3	27-3031 (Pub Relations Specialists) 27-3099 (Media/Communication Workers, All Other)]
Dietitian 1 Nutritionist	29-1031 (Dietitians & Nutritionists)
Pharmacist Pharmacist Senior	29-1051 (Pharmacists)
Nurse Specialist Nursing Education Specialist Public Health Nursing Advisor Registered Nurse Registered Nurse Senior Registered Nurse Principal Registered Nurse Advanced Practice	29-1111 (Registered Nurses)
Occupational Therapist Occupational Therapist Senior	29-1122 (Occupational Therapists)
Recreation Therapist Recreation Therapist, Lead Recreation Therapist, Senior	29-1125 (Recreational Therapists)
Medical Laboratory Technician 1 Medical Laboratory Technician 2	29-2012 (Medical and Clinical Laboratory Technicians)
Pharmacy Technician	29-2052 (Pharmacy Technicians)
Licensed Practical Nurse 1 Licensed Practical Nurse 2	29-2061 (Licensed Practical and Licensed Vocational Nurses)
Medical Records Technician 1 Medical Records Technician 2	29-2071 (Medical Records and Health Information Technicians)
Security Guard Military Security Guard	33-9032 (Security Guards)
Cook	35-2012 (Cooks, Institutional and Cafeteria)

State Employee Job Title(s)	SOC Analogue(s)
General Maintenance Worker General Maintenance Worker, Lead General Repair Worker	37-2011 (Janitors and Cleaners, Except Maids and Housekeeping)

State Employee Job Title(s)	SOC Analogue(s)
Groundskeeper Groundskeeper Intermediate Groundskeeper Senior	37-3011 Landscaping and Groundskeeping Workers)

State Employee Job Title(s)	SOC Analogue(s)
Account Clerk Account Clerk, Senior	43-3031 (Bookkeeping, Accounting, & Auditing Clerks)

State Employee Job Title(s)	SOC Analogue(s)
Customer Services Specialist Customer Services Specialist Intermediate Customer Services Specialist Principal Customer Services Specialist Senior	43-4051 (Customer Service Reps) 43-4171 (Receptionists and Info Clerks)

State Employee Job Title(s)	SOC Analogue(s)
Office Specialist Office & Admin Specialist Office & Admin Specialist Intermediate Office & Admin Specialist Senior Office & Admin Specialist Principal	43-6011 (Exec Sec & Admin Assts) 43-6014 (Sec Ex Leg, Med & Exec) 43-9022 (Word Processors & Typist) 43-9061 (Office Clerks, General)

State Employee Job Title(s)	SOC Analogue(s)
Legal Secretary Legal Secretary Senior	43-6012 (Legal Secretaries)

State Employee Job Title(s)	SOC Analogue(s)
Carpenter Carpenter, Lead	47-2031 (Carpenters)

State Employee Job Title(s)	SOC Analogue(s)
Electrician Electrician, Lead Electrician Master of Record	47-2111 (Electricians)

State Employee Job Title(s)	SOC Analogue(s)
Painter Painter, Lead	47-2141 (Painters, Construction and Maintenance)

State Employee Job Title(s)	SOC Analogue(s)
Plumber Plumber Chief Plumber Fitter Plumber Master in Charge Steamfitter	47-2152 (Plumbers, Pipefitters & Steamfitters)

State Employee Job Title(s)	SOC Analogue(s)
Heavy Equipment Field Mechanic	49-3042 (Mobile Heavy Equipment

Heavy Equipment Mechanic	Mechanics, Except Engines)
Heavy Equipment Service Attendant	49-3031 (Bus and Truck Mechanics Diesel Engine Specialists)

State Employee Job Title(s)	**SOC Analogue(s)**
Stationary Engineer	51-8021 (Stationary Engineers)

State Employee Job Title(s)	**SOC Analogue(s)**
Delivery Van Driver	53-3032 (Truck Drivers, Heavy and Tractor-Trailer)

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Appendix B: Methodology for Local Government Employee Compensation Comparison

Source for Local Government Employee Compensation Data

Our source for local government employee wage and health care data is the *Minnesota Local Government Salary and Benefits Survey* ("Salary Survey"). The data is primarily for 2008, although since local governments are able to update data continuously, some data could be for 2009. The "Salary Survey" does not make this distinction clear when reporting data. Wage data is reported on an hourly basis, health care data on an annual basis.

We extracted local government wage data using the survey reporting tool. Data was reported on a position basis in the aggregate, although the tool did report the number of participating organizations reporting wages for each position and the total number of employees in each position. Our efforts to extract specific wage data for each participating organization were not fruitful. However, with 31,725 positions in the Salary Survey database (of which we use about 40% - see Appendix B for more information) we believe the database covers a substantial portion of Minnesota's local governments. We also believe that this is the best available occupation-specific local government wage data available for Minnesota.

We were able to extract health plan data on a jurisdiction-specific purpose. Our health insurance premium cost analysis draws on the database we created for a previous study[45] which used data on 182 Minnesota cities with population of over 2,500 which comprised 73% of Minnesota's total urban population for 2008. We assume that health benefit plan costs for other types of local governments are not significantly different from those costs for city governments.

No individual-level records are available for local government pension costs; we assume that all employees in the study participated in the Public Employees Retirement Association of Minnesota Coordinated Plan and that employers contributed 6.5% of payroll to the plan for each eligible employee during calendar year 2008.

Sources for Private Sector Compensation Data

Private sector[46] compensation data was gathered from the same three sources as for the state employee-private sector employee comparisons. See Appendix A for more information.

Scope of Analysis

The Salary Survey dataset contained 180 job types representing 31,725 discrete positions. We excluded certain positions from the analysis as follows:

- We eliminated positions without clear private-sector analogues – largely public safety positions such as firefighters and patrol officers. OES data also indicates that street maintenance workers fall into this category – virtually all of the positions in the category are in the public sector pool and there are not enough private sector comparables for a meaningful comparison

[45] *Health Care Spending By Minnesota's Cities: Costs, Efficiencies and the Role of Local Government Aid*; published in June 2009 by the Minnesota Center for Public Finance Research, the 501(c)3 research and education organization supporting MTA's educational mission.

[46] For purposes of this report, the term "private sector" should be construed to mean all non-government positions.

- We generally eliminated employees in supervisory and management job types, because of the difficulties involved with accurately matching those groups to groups in the private sector. There are two exceptions to this: engineering managers[47] and general office supervisors/office administrators.
- We eliminated positions from the analysis if we could not reasonably ensure that the private sector match group would perform similar tasks.
- We eliminated positions if there were 10 or fewer employees, because of the likelihood that analysis performed on an extremely small group may be biased in unknown ways.

A total of 19,164 employees were eliminated under these provisions. Table 34 shows all the job classes with at least 200 employees which we excluded from this analysis, along with the reason for the exclusion. These twenty-one job classes represent 68% of the total employees excluded from the analysis.

Table 34: Large Employee Groups Excluded from Analysis

Job Title	Employee Count	Reason for Exclusion
Patrol Officer	4,218	No private sector analogue (public safety)
Jailer	1,215	No private sector analogue (public safety)
Police Sergeant	933	No private sector analogue (public safety)
Financial Worker	763	Poor match with SOC codes
Streets Maintenance Worker	706	Majority of total position workforce in public sector
Dispatcher (law enforcement)	611	No private sector analogue (public safety)
Firefighter	523	No private sector analogue (public safety)
Probation/Parole Officer	523	No private sector analogue (public safety)
Financial Worker – Senior	421	Poor match with SOC codes
Park Maintenance Worker	353	Poor match with SOC codes
Child Support Officer/Specialist	320	Poor match with SOC codes
Sewer and Water Maintenance Worker	285	Majority of total position workforce in public sector
Maintenance Supervisor	276	Management position
Case Aide	267	Poor match with SOC codes
Lead Worker – Public Works	266	Poor match with SOC codes
Detective	247	No private sector analogue (public safety)
Administrator/Manager/Coordinator	238	Management position
Social Work Supervisor	227	Management position
Service Center/License Bureau Representative	216	Poor match with SOC codes
Library Information Assistant	209	Majority of total position workforce in public sector
Building Inspector	207	Majority of total position workforce in public sector
Subtotal	**13,096**	

The remaining job titles were aggregated where appropriate (for example, Engineering Technician – Advanced, Engineering Technician – Experienced, and Engineering Technician – General were combined into one group) leaving 27 job titles representing 12,561 employees to be matched to their private sector analogues. We used descriptions of the position titles provided with the survey to match the positions in the Salary Survey to the SOC occupational codes.[48] In certain instances, multiple Salary Survey job classes were grouped together to match grouped SOC occupational codes. The master list of our Salary Survey job description-SOC occupational code matches follows.

[47] Defined as city engineers, county engineers, assistant city engineers and assistant county engineers

[48] Information on the Standard Occupational Classification system is available from the federal Bureau of Labor Statistics at http://www.bls.gov/soc/.

Appendix B

Salary Survey Job Title-SOC Occupation Code Matches

Local Employee Job Title(s)	SOC Analogue(s)
Assistant City/County Engineer City/County Engineer	11-9041 (Engineering Managers)

Local Employee Job Title(s)	SOC Analogue(s)
Human Resources Representative Senior Human Resources Representative	13-1071 (Employment, Recruitment & Placement Specialists) 13-1072 (Compensation, Benefits & Job Analysis Specialists) 13-1079 (Human Resources…Other)

Local Employee Job Title(s)	SOC Analogue(s)
Commercial/Industrial Appraiser Residential Appraiser Senior Residential Appraiser	13-2011 (Appraisers and Assessors of Real Estate)

Local Employee Job Title(s)	SOC Analogue(s)
Systems Analyst-Programmer Network Administrator PC/Network Analyst PC/Network Technician	15-1021 (Computer Programmers) 15-1031 (Computer Sftware Engineers) 15-1041 (Computer Support Spec) 15-1051 (Computer Systems Anlyst) 15-1071 (Network/Comp Syst Adm) 15-1081 (Net Syst/Data Comm Anal) 15-1091 (Comp Spec, All Other)

Local Employee Job Title(s)	SOC Analogue(s)
Civil Engineer – General Civil Engineer – Experienced Civil Engineer – Advanced Highway Engineer	17-2051 (Civil Engineers)

Local Employee Job Title(s)	SOC Analogue(s)
Engineering Technician – General Engineering Technician – Experienced Engineering Technician – Advanced	17-3022 (Civil Engineering Technicians)

Local Employee Job Title(s)	SOC Analogue(s)
Clinical Psychologist (M.A.) Clinical Psychologist (Ph.D.)	19-3031 (Clinical, Counseling, & School Psychologists)

Local Employee Job Title(s)	SOC Analogue(s)
Child Protection Worker Senior Child Protection Worker Senior Social Worker Social Worker (Entry Level)	21-1021 (Child, Family, & Sch SW) 21-1022 (Med/Pub Health SW) 21-1023 (Men Healt/Sub Abuse SW) 21-1029 (Social Workers, All Other)

Local Employee Job Title(s)	SOC Analogue(s)
Attorney Attorney – General Attorney – Experienced Attorney – Intermediate	23-1011 (Lawyers)

Local Employee Job Title(s)	**SOC Analogue(s)**
Paralegal	23-2011 (Paralegals & Legal Assistants)

Local Employee Job Title(s)	**SOC Analogue(s)**
Communications Specialist	27-3031 (Pub Relations Specialists) 27-3099 (Media/Communication Workers, All Other)

Local Employee Job Title(s)	**SOC Analogue(s)**
Public Health Nurse Registered Nurse Correctional Health Nurse	29-1111 (Registered Nurses)

Local Employee Job Title(s)	**SOC Analogue(s)**
Cook	35-2012 (Cooks, Institutional and Cafeteria)

Local Employee Job Title(s)	**SOC Analogue(s)**
Custodian	37-2011 (Janitors and Cleaners, Except Maids and Housekeeping)

Local Employee Job Title(s)	**SOC Analogue(s)**
General Office Supervisor Office Administrator/Supervisor	43-1011 (First-Line Supervisors/ Managers of Office and Admin Support Workers)

Local Employee Job Title(s)	**SOC Analogue(s)**
Telephone Operator and/or Receptionist	43-2011 (Switchboard Operators) 43-4171 (Receptionists and Info Clerks)

Local Employee Job Title(s)	**SOC Analogue(s)**
Billing Clerk (Utilities)	43-3021 (Billing and Posting Clerks & Machine Operators)

Local Employee Job Title(s)	**SOC Analogue(s)**
Payroll Clerk	43-3051 (Payroll & Timekeeping Clerks)

Local Employee Job Title(s)	**SOC Analogue(s)**
Administrative Assistant	43-6011 (Exec Sec & Admin Assts)

State Employee Job Title(s)	**SOC Analogue(s)**
Office Support – General	43-4031 (Court, Municpl & Lic. Clerks)
Office Support – Experienced	43-4071 (File Clerks)
Office Support – Advanced	43-4199 (All Other Info & Recd Clerks)
Real Estate Clerk	43-6014 (Sec Ex Leg, Med & Exec)
Real Estate Clerk – Senior	43-9022 (Word Processors & Typist)
Tax Clerk	43-9061 (Office Clerks, General)
Tax Clerk – Senior	

Local Employee Job Title(s)	SOC Analogue(s)
Legal Secretary	43-6012 (Legal Secretaries)

Local Employee Job Title(s)	SOC Analogue(s)
Heavy Equipment Operator	47-2073 (Operating Engineers and Other Construction Equip Operators)

Local Employee Job Title(s)	SOC Analogue(s)
Auto Service Worker Skilled Mechanic	49-3023 (Auto Service Technicians & Mechanics) 49-3031 (Bus and Truck Mechanics & Diesel Engine Specialists) 49-3042 (Mobile Heavy Equipment Mechanics, Except Engines)

State Employee Job Title(s)	SOC Analogue(s)
Maintenance Worker – Single Classification	49-9042 (Maintenance & Repair Workers, General) 49-9099 (Installation, Maintenance & Repair Workers, All Other)

Local Employee Job Title(s)	SOC Analogue(s)
Driver	53-3033 (Truck Drivers, Light or Delivery Services)

Local Employee Job Title(s)	SOC Analogue(s)
Laborer	53-7062 (Laborers and Freights, Stock, and Material Movers, Hand)

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Appendix C: Literature Review

Background: The State Workforce

OLA State Workforce Study 2000

In 2000, the Office of the Legislative Auditor examined compensation in the state's workforce. What they found is that understanding compensation within the state workforce is more complicated than just comparing total average wages and compensation to the private sector. To summarize their findings:

Minnesota's state government workface is paid more than:

- Most other state workforces
- The private sector average in Minnesota

As a whole, the state workforce was paid more than private sector workers on average:

- The OLA noted that this is because the state workforce was composed primarily of professional workers, with fewer sales, craft, and trade workers than the private sector.
    - Professional workers made up 37.5% of the state workforce and only 12.4% of the private sector workforce
    - There is a higher proportion of white collar jobs which contributes to a higher average wage rate than the private sector

State pay and compensation was highly compressed:

- Lower complexity jobs paid significantly more in the state.
    - Guards, Janitors & General Repair Workers made about 30% more than their private sector equivalents
    - Entry Level Buyers and Contracting Specialists made around 20% more than the private sector
    - Clerical workers averaged 10-20% more than their private sector counterparts
- Higher skill jobs paid relatively less than their private sector equivalents

State employee benefits were found to be:

- About 31% of compensation
- Competitive
- Better than other State's state employees
- Better than other public sector employees in Minnesota
- Better than both public and private sector average benefits nationally

Exploring the Public Sector Wage Premium:

Minnesota

1993 Study on Public Sector Compensation by the Minnesota Chamber of Commerce:

In 1993 the Minnesota Chamber of Commerce sponsored a study on the differences in public and private sector salaries in Minnesota. After reviewing 17 state government positions in Minnesota, the study found that more often than not, public sector employees were being compensated more generously than the private sector, in terms of both salary and benefits. The study also found that public sector pay is higher for low skilled and pay equity targeted positions as well as for positions located within the Metro. In terms of benefits, the study found that public sector employees contribute less towards health care premium coverage than their private sector counterparts.

Table 35: Minnesota Chamber of Commerce 1993 Study Findings, Summarized

Position	Average Salary			
	Counties	Cities	Private Sector	State
Accountants	23,420	29,221	30,695	30,981
Accounting Clerks	19,582	21,622	19,209	23,928
Attorney	65,623	64,428	72,207	40,502
Clerk Typist	18,779	19,277	15,359	20,483
Custodians	18,080	20,206	14,796	22,334
Dispatchers	22,125	24,070	23,643	28,259
EDP System Analyst	34,846	38,064	39,176	44,768
Engineer	49,583	50,053	40,149	41,760
Engineering Technician	24,957	25,763	28,641	30,740
Light Equipment Operator	24,334	24,546	18,928	27,302
Maintenance Supervisor	34,236	33,361	29,353	36,832
Secretaries	*	23,294	20,637	22,321
Social Worker	28,947	*	22,043	31,085

* No data

These findings should not have been too surprising, as in 1979 the Department of Finance in Minnesota conducted a similar study and found that the average public sector employee was paid more than the average private sector employee, excluding those in upper management positions.

National Studies

Comparing and contrasting the public and private sector workforce has been attempted nationally since at least 1993. Braden and Hyland compared national data on state and local government employees, looking at the Employer Costs for Employee Compensation (BLS) and found a 50% average compensation premium, although, as the study notes, this figure is very misleading. Occupational mix, education and other public sector characteristics make it difficult to compare the public and private sector, as a whole.

Few states have initiated investigations into the existence of a public sector wage premium. In upstate New York it was established that up through 2009 the public sector wage premium in comparable positions (not as a whole) was around 30%; statewide, the trend also holds, with an average premium of about 10%.

2010 Cato Wage Studies

In January of 2010, the Cato Institute published a Tax and Budget Bulletin on the compensation of state and local employees. Using BLS data on Employer Costs for Employee Compensation published in June of 2009 as well as support data from the BEA, national averages of state and local employee compensation were calculated and compared to the private sector. We summarize their findings as follows.

As a whole, the public sector workforce in state and local governments:

- Earned an average total compensation premium of 45%, or around $12 per hour
    - Wage and Salary compensation averaged 34% higher
    - Total Benefits averaged 70% higher on average
- Health Insurance costs and contributions were 118% higher on average
- Defined benefit pensions were on average 595% higher
- Defined contribution pension plans were on average 41% below the private sector

2010 Out of Balance Study

In April of 2010 the Center for State and Local Government Excellence released a study examining compensation in the public and private sectors from 1983-2008 using Current Population Survey Data, focusing on the Outgoing Rotation Group.

Methodology:

The study uses national usual weekly earnings by sector, excluding private sector individuals that are self employed and all workers working less than 35 hours per week (less than full time). The usual weekly earnings figure is converted to hourly wages by dividing the figure by usual hourly wages and excludes hourly wages less than $1 or greater than $500. State and Local employees were categorized and analyzed separately in this analysis, although that is the extent of classification within the data sets as all positions within the sample are included (including teachers and public safety) because the study takes a people based approach focusing on individual characteristics rather than position or occupation. As a result, a vector regression model is used in order to control for and isolate the effects of "earnings determinants" which include: Sector, Gender, Marital Status, Age, Race, Education, and Union Status.

Findings:

- Although an overall wage premium exists in the public sector when all positions are considered and compared, this premium is significantly decreased when individual characteristics are controlled for because the public sector tends to require better educated workers and overall the public sector workforce is older and thus had more experience.
- When individual characteristics are controlled for, working in the public sector results in an 11% decrease in the public to private sector wage differential. While this doesn't explain the actual dollar effect on wages in the public sector, or quantify the actual average wage premium or discount in dollar terms (or as a percentage for that matter) it does indicate that overall the characteristics of the public sector workforce result in a higher paid public sector workforce on average due to the positions and occupations in the public sector.

2010 CEPR Wage Studies

The Center for Economic Policy Research has released two studies comparing wage compensation in state and local government from a national perspective with a specific concentration in the second study on New England. Data for this study comes from the Current Population Survey and is for 2009. The data appears to include all positions in state and local government but is unclear as to whether all employees are included (i.e. temporary, seasonal, and part-time). The fourth part of each regression series does exclude fire, police and prison guards. The study uses multivariate regression analysis to control for factors that can affect overall pay. This must be done because all positions are included, and thus the study goes beyond those positions which are directly comparable. The controls included in the regression analysis are: age, gender, education, race, and religion.

Findings:

- As a whole, state and local workers in the US earned an average wage premium of 13%, 13.2% for state workers and 12.6% for local government employees.
- State and Local Employees are "substantially" better educated
- State and Local Employees are on average older: 43/44 public sector vs. 40 private sector
- State and Local Employees are more likely to be women (60% vs. 46%)

- Running regressions to control for these factors (among others) CEPR found that state and local workers earn a 3.7% discount on average, but still a 12.9% premium before controls.
- The extent to which a specific position has a wage premium or discount is determined in part by overall pay: as pay increases premiums decrease and eventually become discounts. The lowest percentile earns a 5.9% premium on average, while the highest percentile earns an 11.9% discount

Conclusion

Overall, when the effects of education level and demographics are removed there is an overall wage discount, although there is typically a wage premium in lower paid positions and a discount in the upper levels of wage compensation.

2010 Inflated Federal Pay

In September of 2010, the Heritage Center released a study on compensation in the Federal Government using Current Population Survey monthly data from 2006-2009. The study sample includes full time workers (defined as 35+ hours per week) ranging in age from 25-65. Using regression modeling and the Oaxaca decomposition, the analysis was able to identify the roles and relationships of several control variables and isolate their effect (age, age squared, year, sex, marital status, education, race, citizenship, size of MSA, state, and an interaction term for married men) on the log of hourly pay in the public and private sector. Data in the private sector is collected from the BLS using NAICS codes, specifically NAICS code 92, which is public administration.

Findings:

- The average annual compensation for a job in the public sector, earns an average of 30-40% more than the identical job in a private sector.
- Hourly wages alone are 22% higher on average in comparable jobs even when education and other characteristics are controlled for.
- This premium does not include the intangible benefits of public sector employment: job security and job satisfaction measured by tenure and quit rates.
- This study estimates the 2011 opportunity cost of the compensation premiums paid at around $47 billion dollars in federal jobs.
- One especially helpful methodological note made in this study is that using full workforce averages masks the differences in compensation premiums across occupational types and skill levels.
    - Highly skilled positions sometimes receive market wages
    - Semi-skilled workers typically earn a premium

2010 Economic Policy Institute

In September of 2010, the Economic Policy Institute released a national study of state and local government employee compensation, comparing overall average total compensation to that of compensation in the private sector. The study seeks to answer the question: are state and local employees overpaid at the expense of taxpayers?

Methodology:

The study uses Integrated Public Use Microdata Series (IPUMS) from the March 2009 CPS for wage data and the Employer Cost of Employee Compensation from the BLS for total compensation data. This study compares only state and local full-time employees and excludes the federal government, self employed individuals, part-time employees, agricultural workers, and domestic workers. The actual analysis compares total average compensation for the public vs. private sector individuals, using demographic characteristics

to match similar individuals (not necessarily in the same occupation or position). Control variables include education and organization size. The study looks at individual compensation comparing workers that have similar education, experience, hours of work, and organization size. This approach was utilized in lieu of trying to compare all the positions in all state and local governments and attempts to compare the full cost of maintaining an employee.

Findings:

This study found that as whole, state and local employees with similar demographic characteristics, primarily education, are undercompensated around 3.7% on average, with an average total compensation penalty in state governments around 1.8% and 7.6% in local governments.

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