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New Trends in the Distribution and Characteristics of the Federal Workforce in the Washington DC Metropolitan Area

1998-2011

By

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Executive Summary

The federal workforce in the Washington DC Metropolitan Area is decreasing after 12 years of gains. According to the Bureau of Labor Statistics, from 1998 to 2010 the number of federal workers increased by 19 percent reaching its peak in July 2010. Between July 2010 and December 2011, the number of federal workers had decreased by 1.2 percent. These changes in the federal workforce are reflected in their demographic profile and distribution across income and pay grades.

The key findings of this research are:

- The distribution of federal employment changed nationally and in the Washington DC Metropolitan Area between 1998 and 2011 – lower GS grade-level employment decreased and the number of managerial and executive positions increased.
- The federal workforce is aging – in the Washington DC Metropolitan Area the modal age grouping has shifted from 45-49 to 50-54 years old between 1998 and 2011.
- The mix of males and females in the federal workforce has changed – the proportion of females in the higher grade-level positions surpassed the proportion of males.
- The years of service have changed – the number of workers with less than 5 years of experience increased by 125.2 percent and the number of workers with 35 years of service or more increased by 112.3 percent between 1998 and 2011.
- The total salaries paid to the federal workforce have increased by 34.1 percent between 1998 and 2011.

This research has shown that outsourcing of the lower- and medium-level federal jobs is accompanied by the concentration of the remaining employees in the higher-level positions. The federal workforce is becoming older and characterized by over three decades of federal experience. The large increase in the number of workers with less than five years of service is accompanied by a minimal increase in the number of young workers and an increase in the number of older workers which suggests that a large portion of the new hires are workers 55 years old or more. If these trends continue, the General Schedule and Equivalent Grade System will include fewer federal workers in favor of the private sector

and the "shadow" federal workforce, such as federal contractors or grantees. The older federal workforce will be gradually retiring in the coming years. One possible implication of these changes is that the government will have to hire replacement workers from outside of the current federal worker base to fill vacated managerial and executive positions. Alternatively, the federal workforce will shrink resulting in a smaller federal payroll. The changes in the distribution, demographics and characteristics of the federal employment in the Washington DC Metropolitan Area are notable. The new trends call for ongoing research and discussion about the future of the federal government as a generator of jobs and its evolving role in the regional economy.

Introduction

This analysis examines the change in the distribution and characteristics of a subset of the federal workforce as divided among the General Schedule and Equivalent Grade (GS) and Senior Executive Service (SES includes permanent career workers) over the 1998-2011 period using data provided by the Office of Personnel Management (OPM)[1]. This research includes 1,498,615 federal workers nationally and 247,334 federal workers in the Washington DC Metropolitan Area, and includes information on the changes in the distribution of the workforce across pay grades, age, gender, length of service, and salary. Finally, the analysis identifies possible reasons for these trends and their implications.

Change in the Distribution of the Federal Workforce by Grade Level

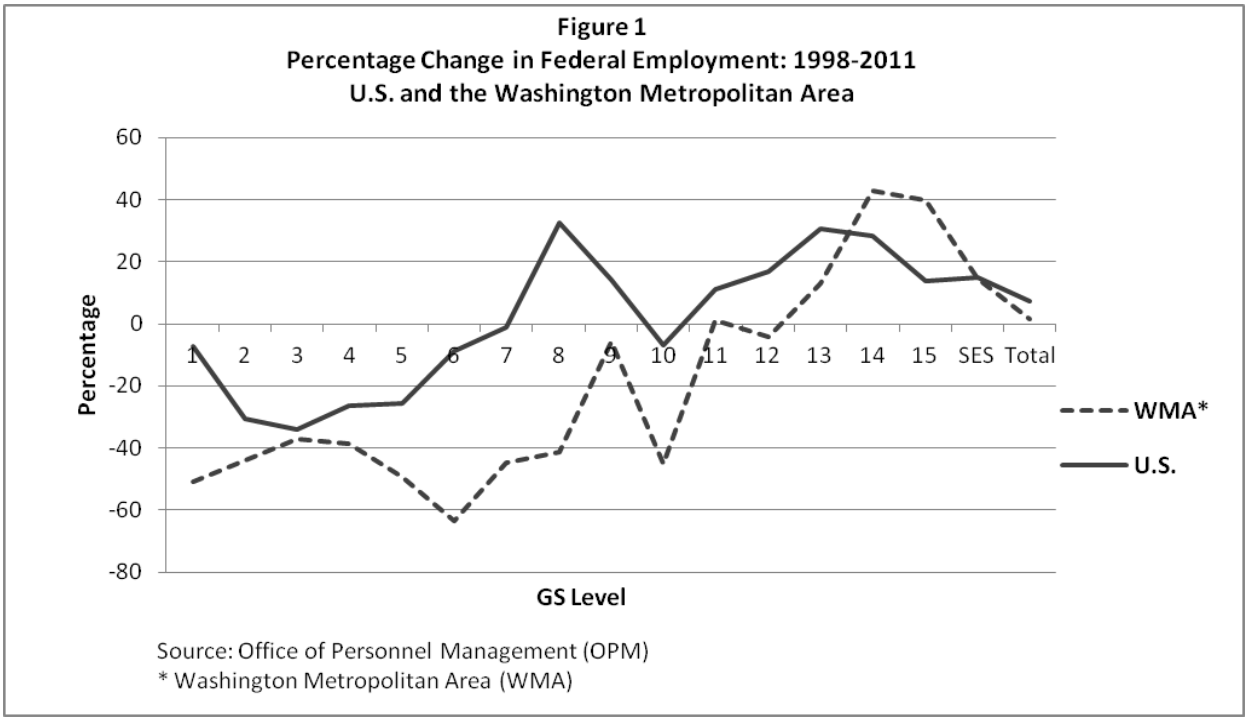
Since 1998, the national and the Washington DC Metropolitan Area federal employment experienced its greatest growth in managerial and executive positions. The magnitude of the changes has been greater in the Washington DC Metropolitan Area where the decrease in lower GS grade-levels and the increase in the upper GS and SES grade-levels were stronger than in the U.S. as a whole (Figure 1). The losses of lower and medium grade-level workers and the growth of the highest grade-level workers in the Washington DC Metropolitan Area reflects the concentration of a better-educated, more-experienced, and better-paid workforce (Figure 2).

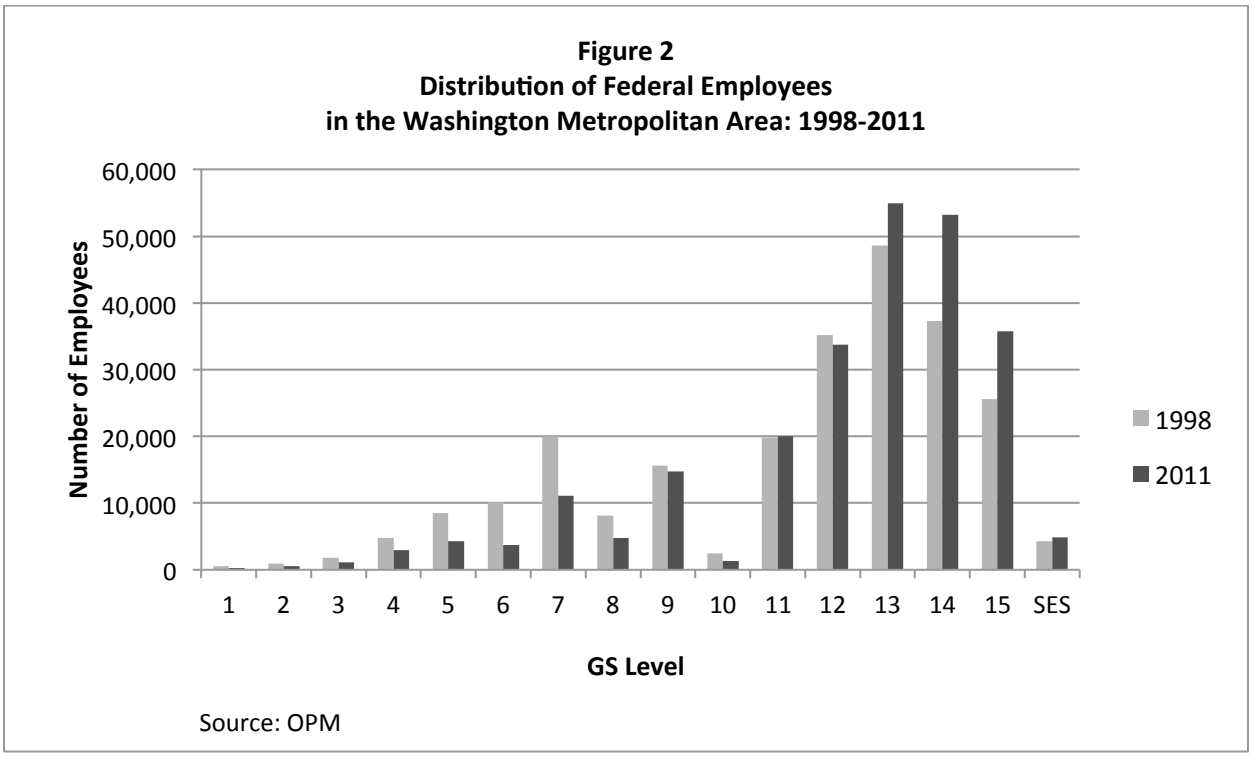
Change in the Distribution of the Federal Workforce by Age

The distribution of the federal workforce is aging (Appendix, Figure 1). The trend shows a downward tendency in the number of employees between 34 and 54 years old, suggesting that workers are leaving federal employment at mid-career. The most notable change is among the 55-64 year olds (up 66.2%) and those 65 years old and older (up 129.2%). These two groups made up one-quarter of the total

[1] OPM does not provide detailed enough description and data on the workers paid by other than GS and SES systems, so this analysis excludes these workers. It is a considerable limitation as these workers, including contractors, grantees, members of armed forces, reservists, federal employees in the judicial branch, and most employees in the legislative branch, make a large portion of the total federal employment.

federal workforce as of 2011 and will begin to retire in increasing numbers in the near future (Figure 3, Figure 4).





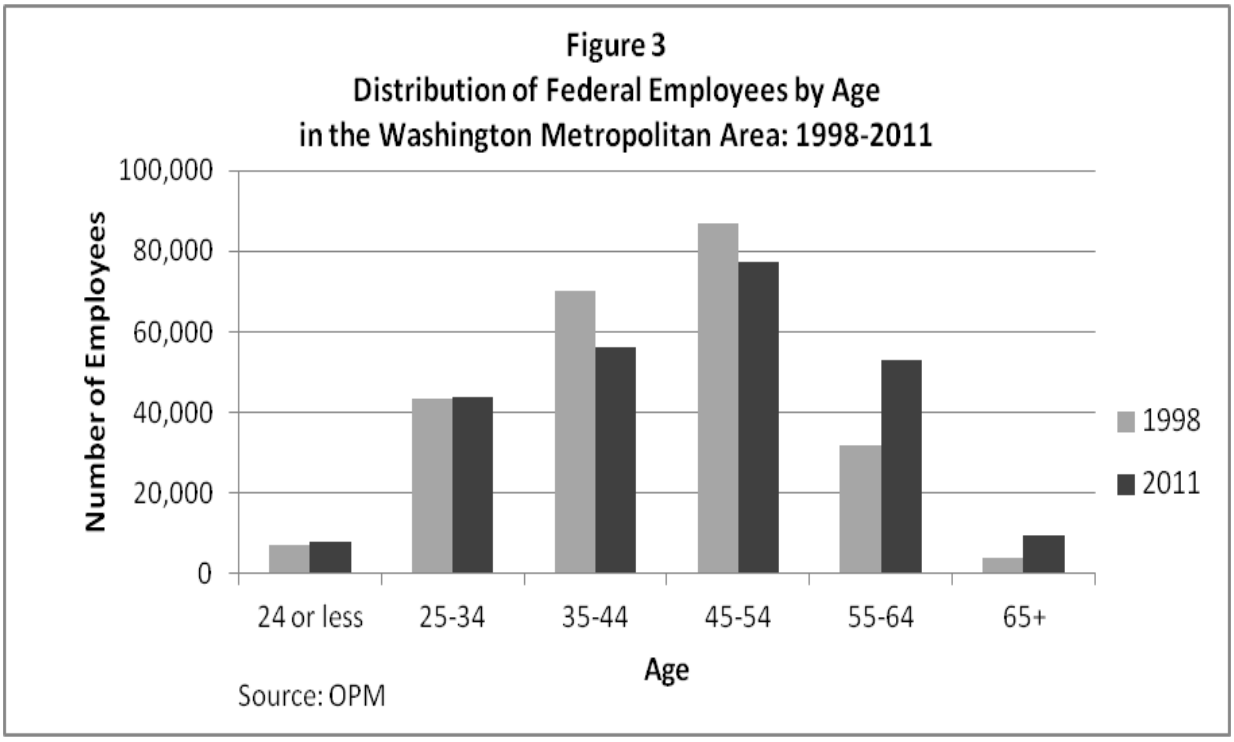


Figure 3
Distribution of Federal Employees by Age
in the Washington Metropolitan Area: 1998-2011
Number of Employees
100,000
80,000
60,000
40,000
20,000
0
24 or less
25-34
35-44
45-54
55-64
65+
Age
1998
2011
Source: OPM

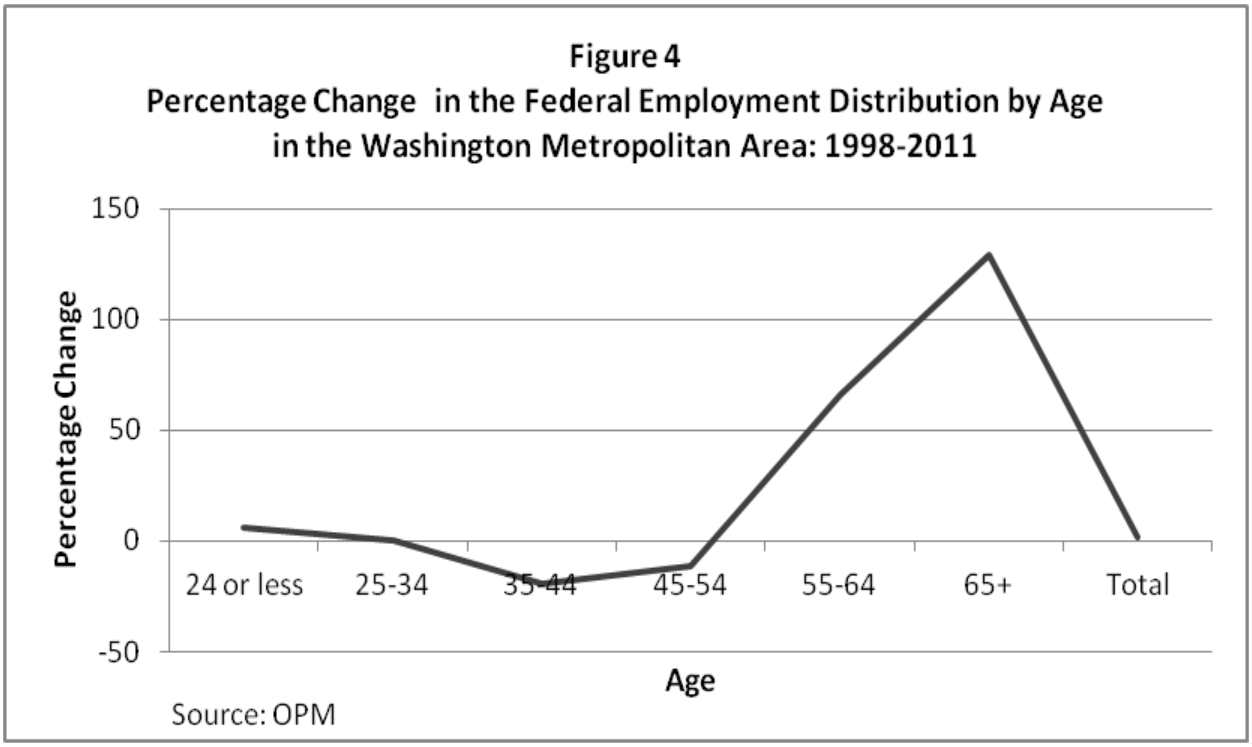


Figure 4
Percentage Change in the Federal Employment Distribution by Age
in the Washington Metropolitan Area: 1998-2011
Percentage Change
150
100
50
0
-50
24 or less
25-34
35-44
45-54
55-64
65+
Total
Age
Source: OPM

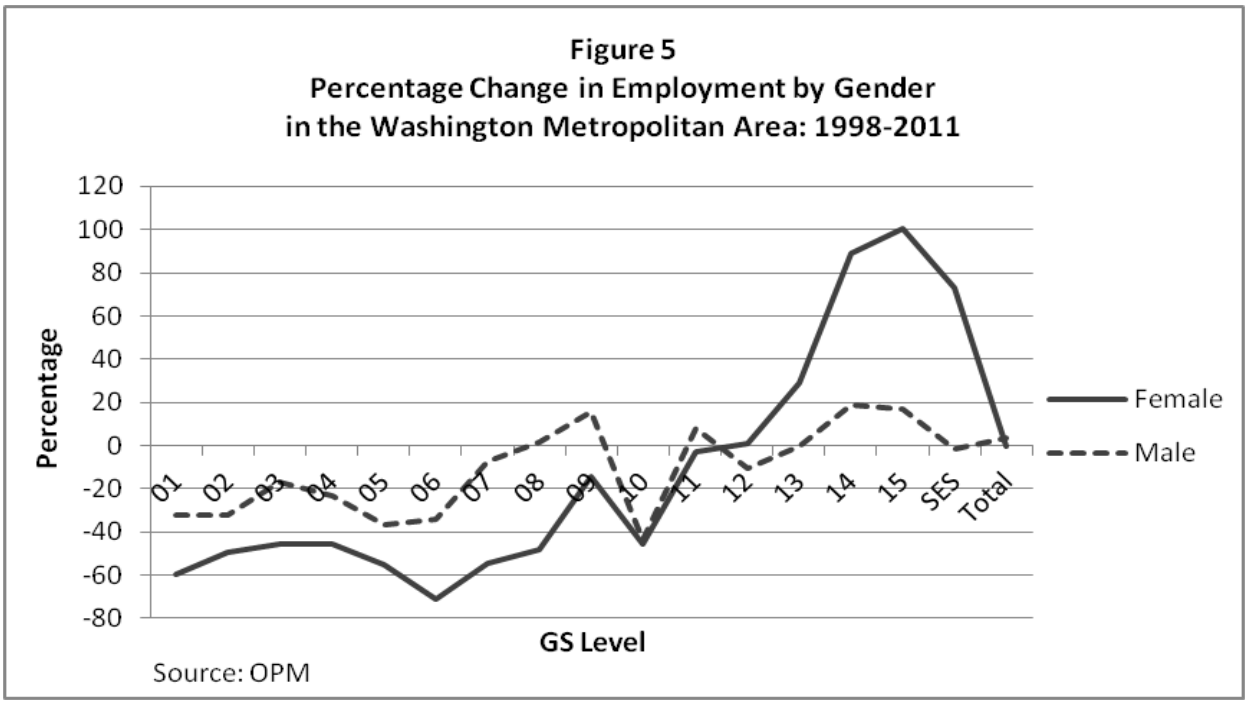
Change in the Distribution of the Federal Workforce by Gender

There was a substantial shift in the distribution of male and female federal employment between 1998 and 2011. The trend shows that the total number of males increased while the total number of females decreased. The decline in the participation of females in the lower GS grade-levels was much greater than for males. At the same time, the change in the participation of females in managerial and executive positions grew more than males, increasing by 33.7 percent and 6.7 percent, respectively (Table 1). The greatest difference in the distribution of male and female workers is evident in the GS-15 where the growth of female participation was higher than male by 84.0 percentage points (Figure 5).

Table 1
Distribution of Federal the Workforce by Gender in the Washington Metropolitan Area, 1998 and 2011

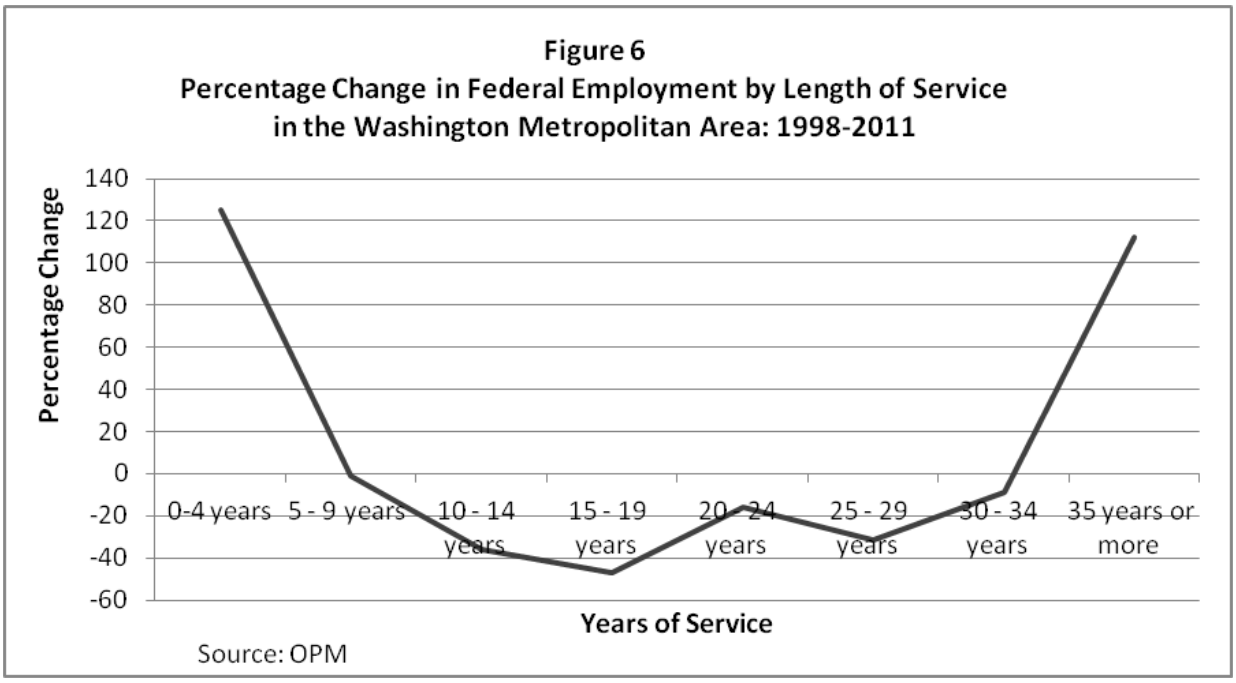
		Number			Percent of Total		
		1998	2011	% Change	1998	2011	% Point Change
Male		113,727	117,937	3.7	46.6	47.7	+1.1
Female		130,097	129,397	-0.54	53.4	52.3	-1.1
Total		243,824	247,334	1.44	100	100	
Male	GS 1-10	17,867	15,653	-12.4	7.3	6.3	-1
Female	GS 1-10	55,075	29,083	-47.2	22.6	11.8	-10.8
Male	GS 11-SES	95,859	102,284	+6.7	39.3	41.4	+2.1
Female	GS 11-SES	75,023	100,314	+33.7	30.8	40.6	+9.8

Source: OPM



Change in the Distribution of the Federal Workforce by Length of Service

The distribution of federal workers by length of service changed between 1998 and 2011 (Figure 6). There has been a downward trend in the number of workers with 5 through 34 years of service. Simultaneously, there has been an increase in the number of workers with less than 5 years of federal experience (up 125.2%) and with 35 or more years of service (up 112.3%)[2]. The large increase in the number of workers with less than 5 years of service is accompanied by a small increase in the number of young workers and by a large increase in the number of workers 55 years old or more. This trend shows that new workers tend to be older and preparing for retirement as a part of the federal workforce. Also the increase in the number of federal workers with 35 years of service or more is related to the overall aging of the federal workforce. These workers are about the meet or have already met the government requirements of age and tenure to retire, opening their positions to younger workforce at lower pay-grades.

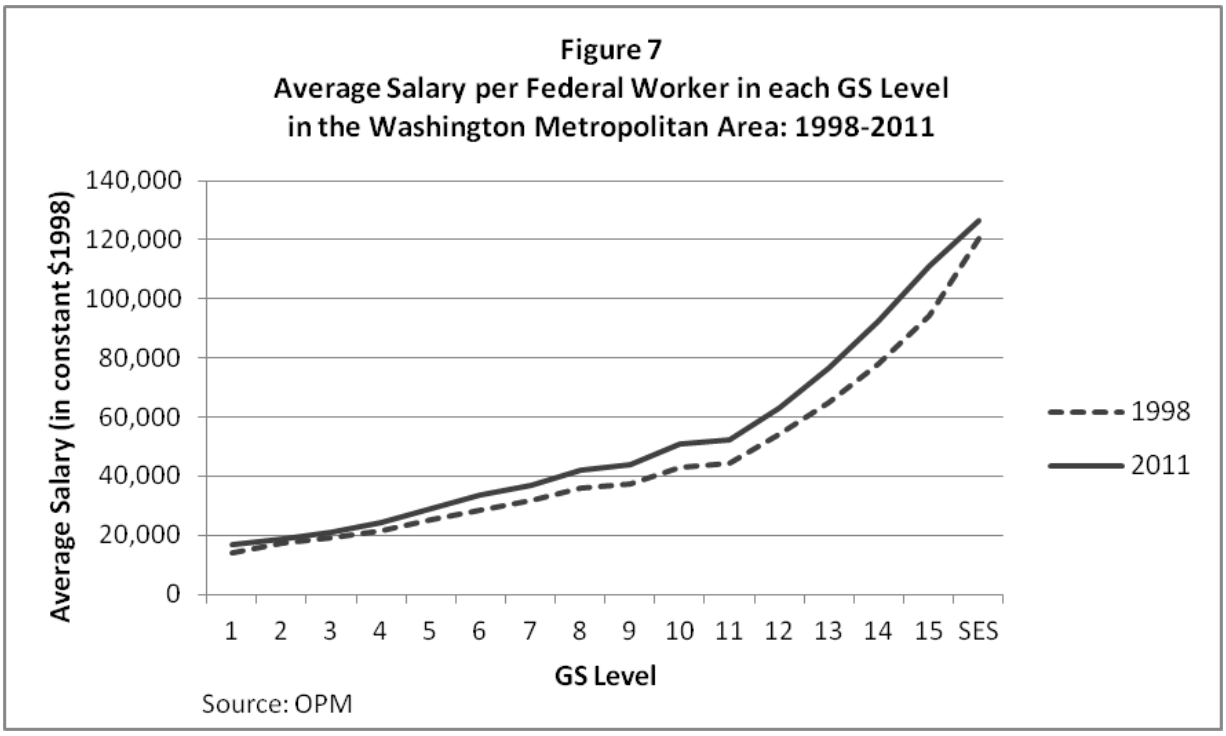


[2] The results may not be fully accurate due to undercounting of the federal employees when broken down by the length of service, as provided by OPM. When compared to the totals reported elsewhere in this analysis, the 1998 total number of workers is missing 26 employees, and the 2011 total number of workers is undercounted by 8,732 employees.

Change in the Distribution of the Federal Workforce by Salary

The average salary earned by federal workers has grown across all the pay grade levels, increasing the most in the managerial and executive positions (Figure 7). On average, in 2011 males made 24.9 percent more and females made 42.6 percent more than in 1998. The greater growth in average salary is related to the faster growth of female participation in the better-paid managerial and executive positions (Appendix, Table 5).

Total salaries paid to federal workers in each GS level have decreased for the lower-grade positions and SES while increasing in the mid-management and management positions. This change corresponds with the decrease in the number of lower GS grade-level workers and the increase in the number of managerial positions over this period. Accounting for the change in the total number of employees and the change in average pay, the total salaries paid to all the federal employees increased by 34.1 percent between 1998 and 2011.



Conclusion and Implications

The distribution and characteristics of the federal workforce in the Washington DC Metropolitan Area have changed between 1998 and 2011.

The key findings from the research are:

- The distribution of federal employment nationally and in the Washington DC Metropolitan Area changed over the 1998-2011 period reflecting a decrease in the size of lower GS-level employment and an increase in managerial and executive positions. The magnitude of the changes was greater in the Washington area than nationally.
- The proportion of females in the federal workforce decreased overall but the participation of females in managerial and executive positions grew at a faster rate than for male workers.
- The proportion of workers 55 years old and older increased while the number of workers 35-54 years old decreased.
- The number of workers with less than 5 years of federal experience increased by 125.2 percent and the number of workers with 35 years of service or more increased by 112.3 percent between 1998 and 2011.
- The compensation of the total federal workers increased as a result of the increased number of employees in managerial and executive positions and the decline in the number of employees in lower-level and lower-paid GS levels.

These changes have resulted from the outsourcing of the lower- and medium-level federal jobs and the aging of the federal workforce as reflected in the rapid expansion of federal contracting over the 1998-2011 period. The concentration of older and experienced workers in high pay-grade levels in the Washington D.C. Metropolitan Area is seen in the growth of the federal payroll increasing from $20.7 billion in 1998 to $42.3 billion in 2010, or by 104.3 percent. As these older workers retire in increasing numbers, their positions are likely to be filled by workers at lower pay grades or steps resulting in a smaller federal payroll. The federal payroll will also decrease in response to budget pressures to reduce federal spending.

Overall, the trends in the distribution, demographics and characteristics of the federal employment in the Washington DC Metropolitan Area are clear. These trends require continuing research and discussion concerning the future of the federal government as a source of employment in the region.

Summary Table

	1998	% of total	2011	% of total	% Change
US federal employment*	1,394,496	-	1,498,615	-	7.5%
WMSA federal employment*	243,824	-	247,334	-	1.4%
Male	113,727	46.6	117,937	47.7	3.7%
Female	130,097	53.4	129,397	52.3	-0.54%
< 24 year olds	7,325	3	7,783	3.1	6.3%
25-34 year olds	43,549	17.9	43,713	17.7	0.4%
35-44 year olds	70,003	28.7	56,360	22.8	-19.5%
45-54 year olds	87,043	35.7	77,215	31.2	-11.3%
55-64 year olds	31,810	13	52,881	21.4	66.2%
65+ years olds	4,094	1.7	9,382	3.8	129.2%
Average salary, male	$64,566	-	$80,643	-	25%
Average salary, female	$50,264	-	$71,710	-	43%
Total salaries**	$14,065,913,947	-	$18,864,358,840	-	34.1

Source: OPM

* Numbers for federal employment include workers in GS and SES pay grades. The numbers exclude contractors, grantees, members of armed forces, reservists, federal employees in the judicial branch, and most employees in the legislative branch, make a large portion of the total federal employment.

** In constant $1998.

Appendix

Table 1
Distribution of Federal Workforce in the Washington Metropolitan Area by Pay Grade Level

GS	1998	2011	% Change
1	545	267	-51.0
2	943	528	-44.0
3	1,819	1,141	-37.3
4	4,748	2,910	-38.7
5	8,468	4,279	-49.5
6	10,166	3,714	-63.5
7	20,058	11,068	-44.8
8	8,112	4,762	-41.3
9	15,628	14,717	-5.8
10	2,455	1,350	-45.0
11	19,850	20,054	1.0
12	35,227	33,750	-4.2
13	48,652	54,912	12.9
14	37,270	53,202	42.7
15	25,601	35,771	39.7
SES	4,282	4,909	14.6
Total	243,824	247,334	1.4

Source: OPM

Table 2

Age Distribution of Federal Workforce in the Washington DC Metropolitan Area

Age	1998	2011	Change	% Change
24 or less	7,325	7,783	458	6.3
25-34	43,549	43,713	164	0.4
35-44	70,003	56,360	-13,643	-19.5
45-54	87,043	77,215	-9,828	-11.3
55-64	31,810	52,881	21,071	66.2
65 or more	4,094	9,382	5,288	129.2
Total	243,824	247,334	3,510	1.4

Source: OPM

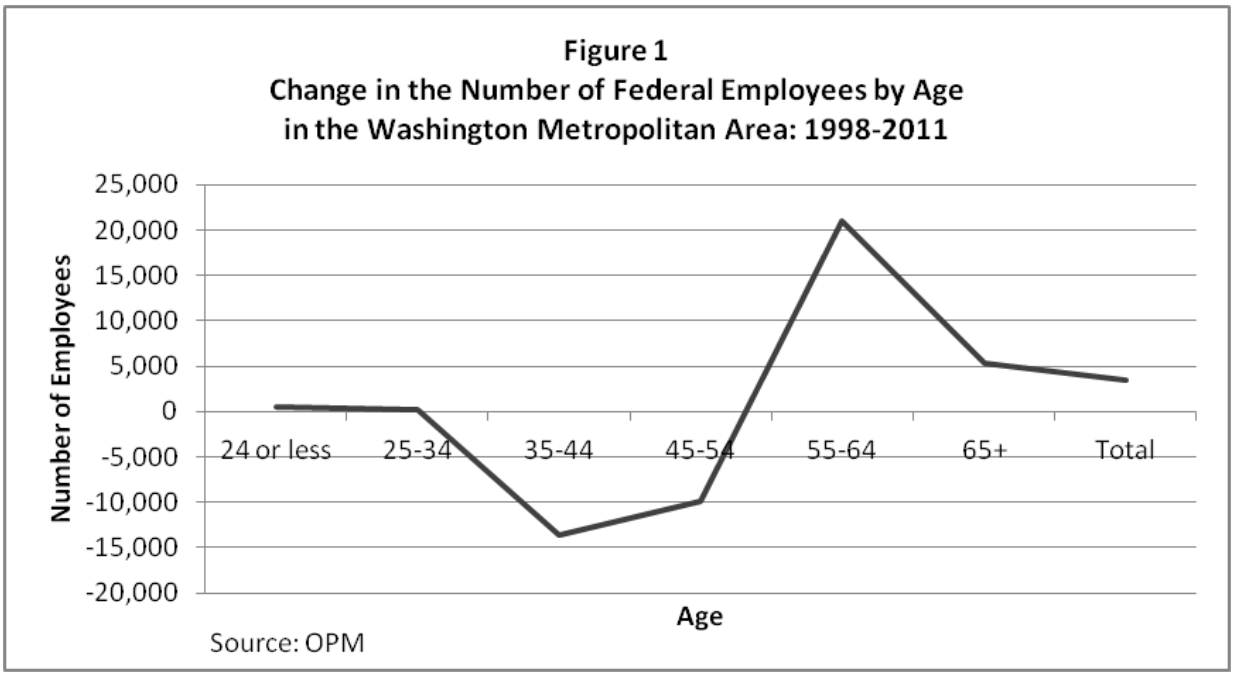


Table 3
Federal Employment Distribution by Length of Service in WMA*, 1998

GS	5 - 9 years	10 - 14 years	15 - 19 years	20 - 24 years	25 - 29 years	30 - 34 years	35 years or more	Total Employees
1	3	1	2	0	0	0	0	6
2	36	7	9	6	9	3	1	71
3	179	95	33	30	21	9	1	368
4	769	499	267	195	113	69	11	1,923
5	2,269	1,642	906	640	433	164	37	6,091
6	2,722	2,508	1,406	1,099	751	344	85	8,915
7	4,469	4,585	2,872	2,306	1,674	690	185	16,781
8	1,332	1,817	1,498	1,334	1,078	547	147	7,753
9	2,683	2,789	2,180	1,978	1,567	923	257	12,377
10	305	361	328	347	341	198	69	1,949
11	3,580	3,469	2,773	2,584	2,071	1,281	358	16,116
12	6,267	6,905	5,592	5,267	4,180	2,647	810	31,668
13	8,367	9,403	7,876	8,143	6,479	3,904	1,192	45,364
14	5,084	6,188	5,984	7,019	6,270	3,484	1,275	35,304
15	2,616	2,992	3,803	5,257	5,279	3,073	1,239	24,259
SES	171	290	481	976	1,205	718	287	4,128
Total	40,852	43,551	36,010	37,181	31,471	18,054	5,954	213,073

Source: OPM
Note: Employment totals reported in this table differ from the federal employment totals reported elsewhere in this analysis due to inconsistency in data as provided by OPM
*Washington Metropolitan Area (WMA)

Table 4
Federal Employment Distribution by Length of Service in WMA*, 2011

GS	5 - 9 years	10 - 14 years	15 - 19 years	20 - 24 years	25 - 29 years	30 - 34 years	35 years or more	Total Employees
1	0	2	0	0	1	0	0	3
2	10	3	8	4	1	1	0	27
3	51	31	18	24	9	10	7	150
4	211	119	59	69	52	41	28	579
5	586	297	181	437	171	138	103	1,913
6	624	365	228	345	228	171	168	2,129
7	1,437	883	579	1,116	637	510	445	5,607
8	751	584	346	726	500	381	377	3,665
9	1,848	1,041	706	1,300	864	664	595	7,018
10	85	109	90	205	137	144	144	914
11	2,716	1,574	1,018	1,826	1,178	957	872	10,141
12	5,904	3,367	2,061	3,667	2,622	1,969	1,607	21,197
13	11,224	6,977	4,274	6,877	4,725	3,522	2,682	40,281
14	9,663	7,516	5,222	7,895	5,314	3,941	2,868	42,419

15	4,985	4,577	3,856	5,841	4,193	3,190	2,157	28,799
SES	436	449	500	921	874	798	589	4,567
Total	40,531	27,894	19,146	31,253	21,506	16,437	12,642	169,409

Source: OPM
Note: Employment totals reported in this table differ from the federal employment totals reported elsewhere in this analysis due to inconsistency in data as provided by OPM
*Washington Metropolitan Area (WMA)

Table 5
Federal Employment Distribution by Length of Service as Percentage of Total in each GS Level in WMA*, 1998

GS	Less than 4 years	5 - 9 years	10 - 14 years	15 - 19 years	20 - 24 years	25 - 29 years	30 - 34 years	35 years or more	Total Employees
1	98.9	0.6	0.2	0.4	0.0	0.0	0.0	0.0	100%
2	92.4	3.8	0.7	1.0	0.6	1.0	0.3	0.1	100%
3	79.7	9.9	5.2	1.8	1.7	1.2	0.5	0.1	100%
4	59.5	16.2	10.5	5.6	4.1	2.4	1.5	0.2	100%
5	28.1	26.8	19.4	10.7	7.6	5.1	1.9	0.4	100%
6	12.3	26.8	24.7	13.8	10.8	7.4	3.4	0.8	100%
7	16.3	22.3	22.9	14.3	11.5	8.3	3.4	0.9	100%
8	4.4	16.4	22.4	18.5	16.4	13.3	6.7	1.8	100%
9	20.8	17.2	17.8	14.0	12.7	10.0	5.9	1.6	100%
10	20.6	12.4	14.7	13.4	14.1	13.9	8.1	2.8	100%
11	18.8	18.0	17.5	14.0	13.0	10.4	6.5	1.8	100%
12	10.1	17.8	19.6	15.9	15.0	11.9	7.5	2.3	100%
13	6.8	17.2	19.3	16.2	16.7	13.3	8.0	2.5	100%
14	5.3	13.6	16.6	16.1	18.8	16.8	9.3	3.4	100%
15	5.2	10.2	11.7	14.9	20.5	20.6	12.0	4.8	100%
SES	3.6	4.0	6.8	11.2	22.8	28.1	16.8	6.7	100%
Total	12.6	16.8	17.9	14.8	15.3	12.9	7.4	2.4	100%

Source: OPM
Note: Employment totals reported in this table differ from the federal employment totals reported elsewhere in this analysis due to inconsistency in data as provided by OPM
*Washington Metropolitan Area (WMA)

Table 6
Federal Employment Distribution by Length of Service as Percentage of Total in each GS Level in WMA*, 2011

GS	Less than 4 years	5 - 9 years	10 - 14 years	15 - 19 years	20 - 24 years	25 - 29 years	30 - 34 years	35 years or more	Total Employees
1	98.9	0.0	0.8	0.0	0.0	0.4	0.0	0.0	100%
2	94.8	1.9	0.6	1.5	0.8	0.2	0.2	0.0	100%
3	86.7	4.5	2.8	1.6	2.1	0.8	0.9	0.6	100%
4	79.5	7.5	4.2	2.1	2.4	1.8	1.4	1.0	100%

5	55.4	13.7	6.9	4.2	10.2	4.0	3.2	2.4	100%
6	41.3	17.2	10.1	6.3	9.5	6.3	4.7	4.6	100%
7	47.6	13.4	8.3	5.4	10.4	6.0	4.8	4.2	100%
8	21.0	16.2	12.6	7.5	15.6	10.8	8.2	8.1	100%
9	50.5	13.0	7.3	5.0	9.2	6.1	4.7	4.2	100%
10	13.0	8.1	10.4	8.6	19.5	13.0	13.7	13.7	100%
11	47.9	13.9	8.1	5.2	9.4	6.0	4.9	4.5	100%
12	35.7	17.9	10.2	6.3	11.1	8.0	6.0	4.9	100%
13	24.7	21.0	13.0	8.0	12.9	8.8	6.6	5.0	100%
14	17.1	18.9	14.7	10.2	15.4	10.4	7.7	5.6	100%
15	13.7	14.9	13.7	11.6	17.5	12.6	9.6	6.5	100%
SES	7.0	8.9	9.1	10.2	18.8	17.8	16.3	12.0	100%
Total	29.0	17.0	11.7	8.0	13.1	9.0	6.9	5.3	100%

Source: OPM

Note: Employment totals reported in this table differ from the federal employment totals reported elsewhere in this analysis due inconsistency in data as provided by OPM

*Washington Metropolitan Area (WMA)

Table 7
Average Salary by Gender ($1998) in the Washington Metropolitan Area

	1998	2011 (in $1998)	% Change
Male	64,566	80,643	24.9%
Female	50,264	71,710	42.6%

Source: OPM

Table 8
Average Salary by GS Level in the Washington Metropolitan Area

GS	1998	2011 salary expressed in $1998	2011	1998 salary expressed in $2011
1	$14,085	$16,646	$22,195	$18,592
2	17,086	18,882	25,176	22,553
3	19,136	21,080	28,106	25,260
4	21,709	24,153	32,205	28,656
5	25,174	28,983	38,644	33,229
6	28,542	33,420	44,560	37,675
7	31,670	36,888	49,184	41,804
8	35,857	42,124	56,165	47,331
9	37,501	43,943	58,591	49,502
10	42,951	50,841	67,788	56,695
11	44,537	52,104	69,472	58,789
12	53,936	63,125	84,166	71,196
13	64,988	76,581	102,108	85,784
14	78,139	92,624	123,499	103,144
15	94,134	111,102	148,136	124,257
SES	$120,333	$126,359	$168,479	$158,840

Source: OPM

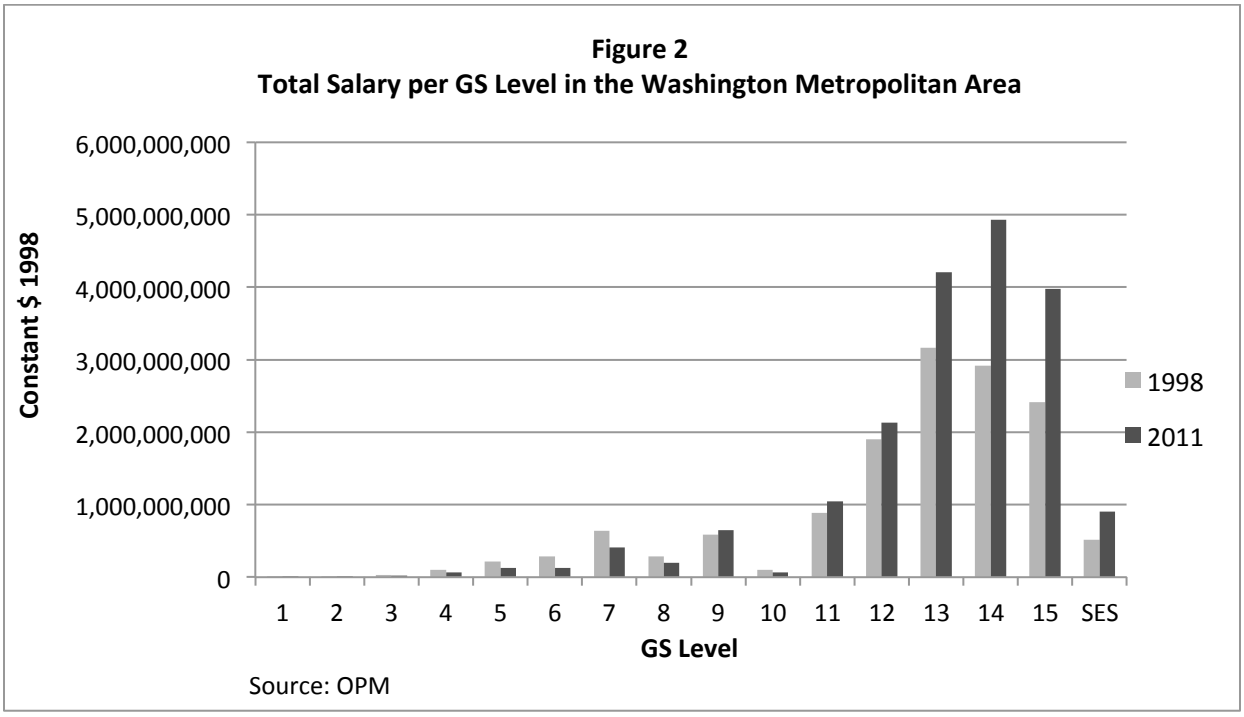


Figure 2
Total Salary per GS Level in the Washington Metropolitan Area
Constant $ 1998
6,000,000,000
5,000,000,000
4,000,000,000
3,000,000,000
2,000,000,000
1,000,000,000
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
SES
GS Level
1998
2011
Source: OPM