

## Industry dynamics in the Washington, DC, area: has a second job core emerged?

*From 1990 to 2005, federal jobs in the District declined while private-sector jobs increased rapidly throughout the metropolitan area; professional and business services jobs spearheaded this growth, particularly in Fairfax County, VA*

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Rapid job growth in several high-wage industries in the private sector, especially professional and business services, has made the Washington, DC metropolitan area,<sup>1</sup> and above all Fairfax County, VA, a very attractive location for jobseekers. However, the Washington metropolitan area, and the District of Columbia<sup>2</sup> in particular, have long been defined by the presence of the Federal Government. Despite the fact that Federal Government jobs have decreased and professional and business services jobs have increased over the 15-year span encompassing the first quarter of 1990 to the first quarter of 2005, these two industries have provided a foundation for high-wage jobs throughout the metropolitan area. Moreover, Fairfax County has emerged as the metropolitan area's private-sector job leader,<sup>3</sup> joining the District, with its concentration of public-sector employment, as a second major hub for regional economic activity. (See chart 1.)

The employment and wage data examined in this article come from the Quarterly Census of Employment and Wages (QCEW) program.<sup>4</sup> This article compares shifts in employment from the first quarter of 1990 to the first quarter of 2005, by a variety of industry supersectors in the Washington, DC, area, one of the 12 largest metropolitan areas in the United States. Although this article focuses on employment and wage changes in the professional and business services and government supersectors, it also looks

at industrial activity levels and commuting patterns to present a clearer picture of the industry dynamics driving the Washington economy.

### Public and private-sector mix

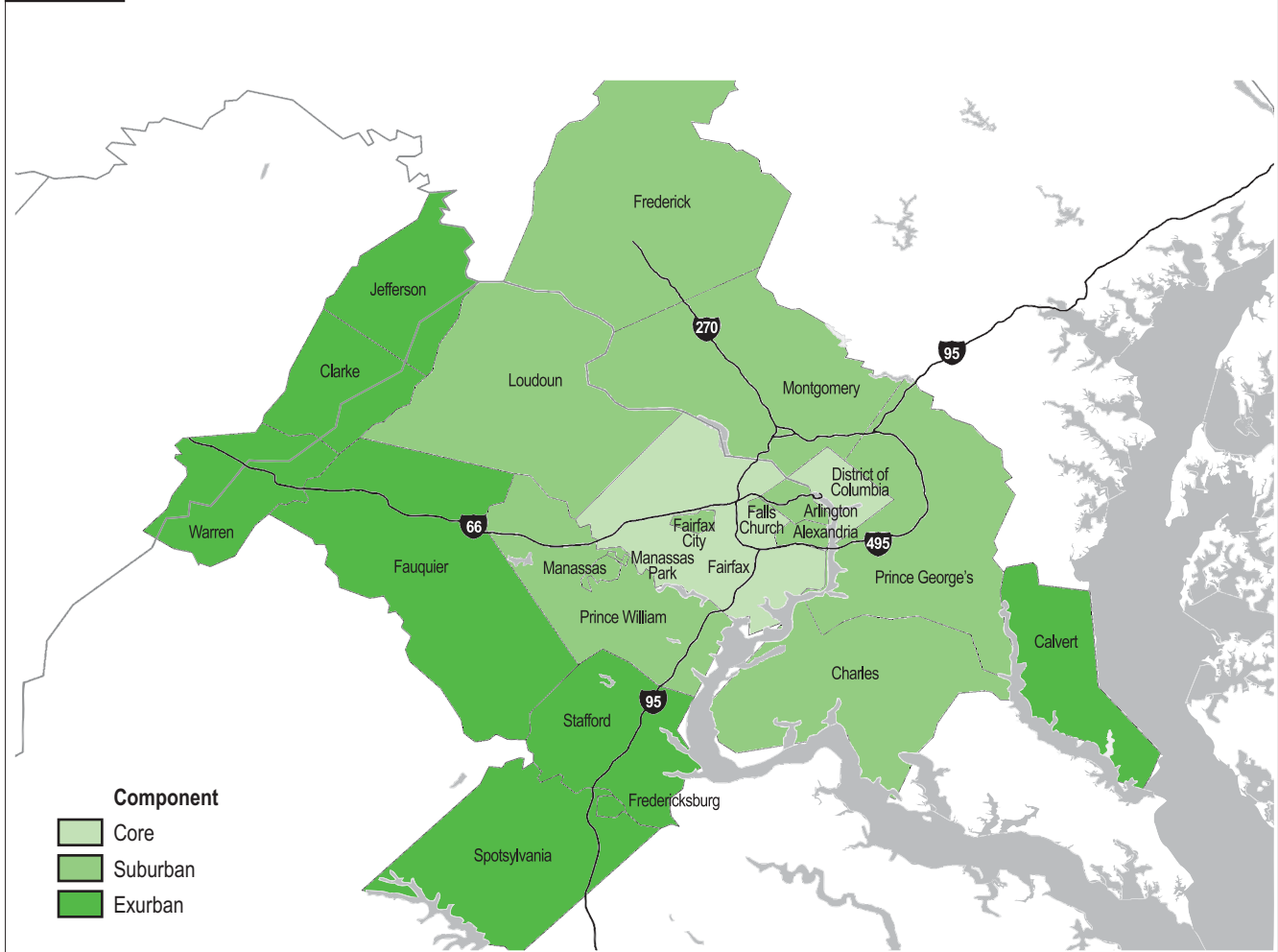
Of the approximately 2.8 million workers in the Washington metropolitan area, 337,221 were employed by the Federal Government in the first quarter of 2005. The majority of these federal jobs, 192,757, were located in the District of Columbia, with smaller concentrations in Montgomery County, MD (40,191); Arlington County, VA (32,985); and Prince George's County, MD (26,187). Though not of the same magnitude, the number of federal workers in Fairfax, 17,372, was still sizable. The other counties in the area each employed fewer than 7,000 workers.

Since 1990, metropolitan area employment has increased by 526,298, but Federal Government jobs have actually declined by 30,848, or 8.4 percent, over this same period. Not surprisingly, the District of Columbia lost the largest number of federal positions, dropping 26,785 jobs. Given the rapid job expansion in the Washington area over the last few years, it is clear that other industry sectors have come to dominate the employment scene, changing the landscape considerably.

Even a cursory look at employment data over the 1990–2005 period showed that professional and business services had become the driving

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**Chart 1. Geographic designations for the 22 counties in the Washington metropolitan area**



force behind the Washington metropolitan area economy—as it is in the Nation as a whole. The influx of professional and business services jobs has had a considerable impact on the composition of the area’s industry mix. In 1990, the Federal Government and professional and business services accounted for similar percentages of the employed in the metropolitan area, at 16.4 and 16.5 percent, respectively. By the first quarter of 2005, the percentage of jobs in the federal sector had shrunk to 12.2 percent of the Washington area’s workforce while professional and business services had grown to 21.6 percent.

The Washington metropolitan area added 228,920 professional and business services jobs from the first quarter of 1990 to the first quarter of 2005, an expansion of 61.6 percent. However, the District of Columbia, the traditional job core of the Washington metropolitan area and home to a significant portion of the federal workforce, was not the main benefactor of this growth. Instead, the growth in professional and

business services jobs was concentrated in the suburbs, with Fairfax County accounting for 45.4 percent of the increase.

Fairfax County’s emergence as a private-sector job core in the Washington metropolitan area was secured by the addition of 103,925 workers in professional and business services over the 15-year period ending in 2005. No other county in the Washington area came close to adding this many jobs. The District of Columbia added 31,011 professional and business services jobs to its workforce during this time span, and Montgomery County, 29,696. Prince George’s County, and Loudoun County, Va., rounded out the top five in professional and business services growth with the addition of 12,674 and 12,342 jobs, respectively. Even taken together, the growth of professional and business services jobs in the District, Montgomery, Prince George’s and Loudoun Counties still fell short of the number added in Fairfax.

**Table 1. Employment by industry supersector in the District of Columbia and Fairfax, first quarter 1990 and first quarter 2005**

Industry	District of Columbia		Fairfax County	
	1990	2005	1990	2005
Total .....	668,532	658,505	372,792	553,107
Percent of total .....	100.0	100.0	100.0	100.0
Private .....	58.8	64.9	84.3	87.1
Natural resources and mining .....	.1	.0	.1	0.0
Construction .....	2.0	1.9	8.5	5.6
Manufacturing .....	1.0	.0	4.0	2.1
Trade, transportation, and utilities .....	6.0	4.1	19.5	14.1
Information .....	3.9	3.4	6.0	5.6
Financial activities .....	5.1	4.1	6.2	6.1
Professional and business services .....	16.0	21.0	22.7	34.1
Educational and health services .....	11.0	12.8	6.5	8.5
Leisure and hospitality .....	7.0	7.8	7.1	7.4
Other Services .....	6.6	8.2	3.8	3.6
Government .....	41.2	35.1	15.7	12.9
Federal .....	32.8	29.3	5.0	3.1
State and local .....	8.4	5.9	10.7	9.8

By the first quarter of 2005, Fairfax County had 34.1 percent of its workforce in professional and business services, up from 22.7 percent in the first quarter of 1990, as shown in table 1. By contrast, 29.3 percent of the District's workforce was employed by the Federal Government in 2005, down from 32.8 percent in 1990. In fact, government jobs were on the decline not just in the District, but throughout the area with five of the nine largest counties<sup>5</sup> experiencing losses, including Fairfax.

In short, the Washington metropolitan area's persona has clearly been redefined during the 15-year period ending in 2005. Although the Federal Government still maintained a commanding presence in the District of Columbia and to a lesser extent in Arlington, Montgomery and Prince George's Counties, it did not account for the new growth the area experienced. The professional and business services industry, by contrast, grew rapidly during this time span, and Fairfax County added these jobs at an astonishing pace for one of the largest counties in the metropolitan area—123 percent—establishing itself as a major job center along side the District of Columbia. In fact, as illustrated in chart 2, since 1990, the District's percentage of the metropolitan area's total employment had declined to less than one-fourth by 2005, while Fairfax County's percentage had grown to one-fifth, reducing the gap between the two considerably.

But the other counties in the Washington metropolitan area also shared in the wealth of new professional and business services jobs. In the exurban or outer ring, counties such as Spotsylvania and Stafford in Virginia recorded growth rates of 300 percent or more in this supersector; that these were lesser populated jurisdictions did contribute to the extremely high percentage increases in employment. Even counties in the inner suburban ring, Loudoun and Prince William Counties, VA for example, experienced job growth in the neighborhood of 250

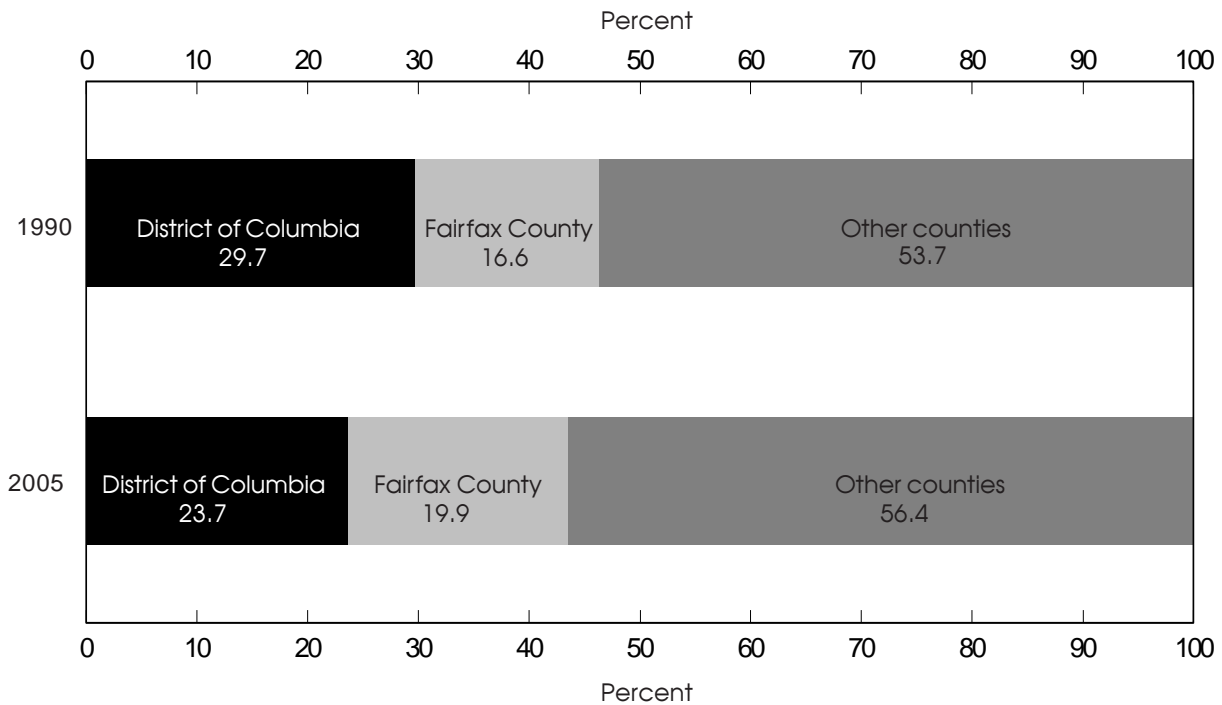
percent during the 15-year time span, and Frederick County, MD's rate of growth was more than 160 percent.

Most assuredly, the federal sector's decline helped fuel the growth of professional and business services in the Washington metropolitan area, as the Federal Government modified its method of operations. With the broad range of activities that the Federal Government must oversee, a number of specialized tasks, often those requiring the latest technologies and production or management techniques, can be better supported with the input from contractors, consultants, and subject-matter experts. Particularly affected were the computer systems design and related services, and management, scientific and technical consulting services industries. These are jobs that fall under the professional and business services sector.

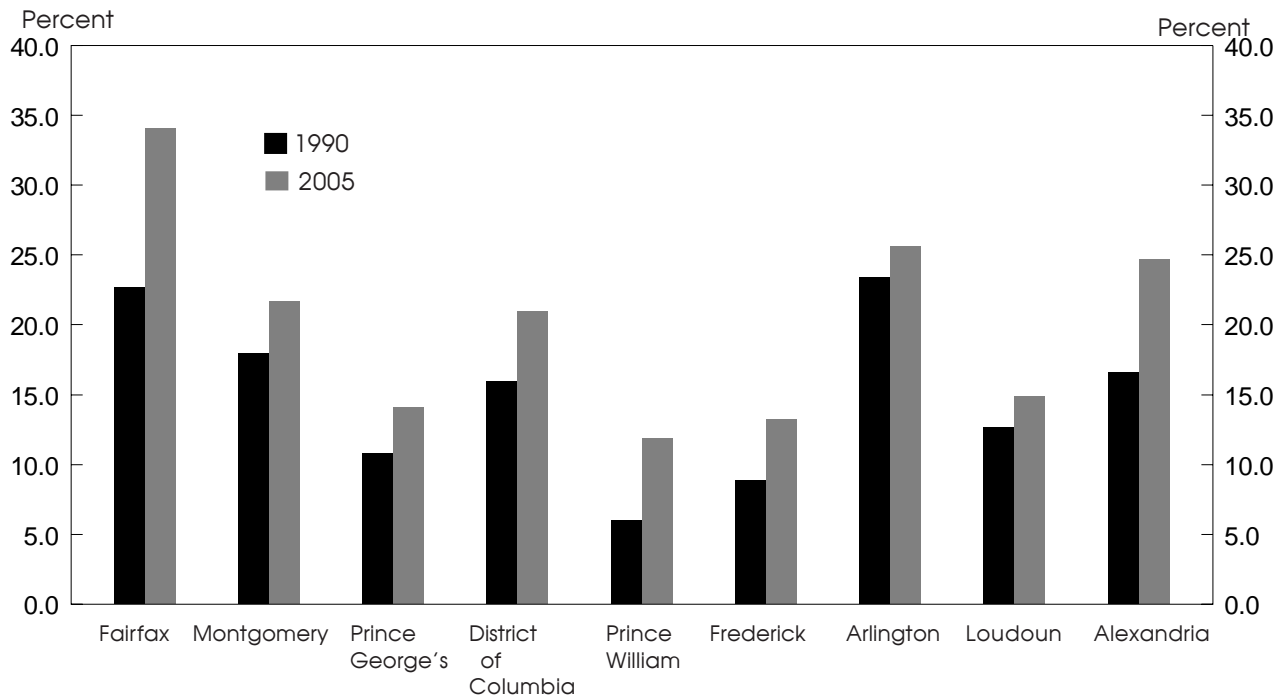
Although the District of Columbia is home base to most federal agencies, other counties also have strong ties to the Federal Government including Arlington County, located across the Potomac River from the District, Montgomery County to its north, and Prince George's County to its east. These three counties are home to the long-established Pentagon military complex, the National Institutes of Health (NIH), and the National Aeronautics and Space Administration (NASA), respectively. However, although federal agencies outside the District have led to a significant amount of business development centered around selected suburban locations in the past, the Federal Government's actual presence in an area need not be necessary to foster new job growth as evidenced by the widespread gains in professional and business services throughout the area.

Over the 15-year span of this study, the share of the workforce accounted for by professional and business services in the Washington metropolitan area rose in its nine largest counties. (See chart 3.) This industry posted the largest job gains of any supersector in seven of these counties while ranking second in the remaining two (Prince William and Loudoun Counties in Virginia).

**Chart 2. Percent distribution of employment in the Washington metropolitan area by county, 1990 and 2005**



**Chart 3. Percentage of professional and business services employment in the nine largest counties in the Washington metropolitan area, first quarter 1990 and first quarter 2005**



Both the Federal Government and professional and business services offer a number of high-paying jobs that make the Washington area an attractive location for jobseekers, especially the well-educated. This was borne out by the fact that average weekly wages in several of the area's large counties were near the top of the national ranking in the first quarter of 2005: Arlington County (\$1,286), the District of Columbia (\$1,277), and Fairfax County (\$1,181). Average weekly wages in these three jurisdictions exceeded the national average of \$775 by more than \$400 in the first quarter of 2005. Additionally, two other large counties in the metropolitan area had wages above the \$1,000 mark—Montgomery and Loudoun.

## High industry concentration

To better appreciate Fairfax County's emergence as a center for professional and business services in the Washington metropolitan area, one can view the data from a national perspective. Using location quotient analysis<sup>6</sup> to compare industrial activity levels among different areas of the country, one can determine the local employment concentration of an industry sector to the average for the Nation as a whole (which, by definition, would have a quotient of 1.0). In the Washington metropolitan area, the professional and business services supersector stood out as having one of the highest location quotients, 1.83, in the

country in 2005. When Washington, one of the 12 largest metropolitan areas in the Nation, was compared with the other 11 areas, all had location quotients exceeding that for the Nation, but none came close to matching Washington's concentration of jobs in this industry. (See table 2.) The next highest in rank were Detroit (1.36), San Francisco (1.29), Atlanta (1.26), and Boston (1.22).

When the field for comparison was expanded to include selected metropolitan areas with rapid job growth that generally attracted more highly educated workers, as has occurred in the Washington area—Raleigh (1.36), San Jose (1.34), San Diego (1.27), Phoenix (1.25), and Austin (1.17)—the location quotients for professional and business services in 2005 still fell well below that for the Washington metropolitan area.

Clearly, the Washington area has become an attractive business location for the generally well-paid professional and business services supersector, some counties more than others. Fairfax led all counties in the metropolitan area with a location quotient of 2.57 in professional and business services. In addition to Fairfax, Arlington County and the District also had location quotients that were more than 2.0. Not coincidentally, these same three jurisdictions were among the 12 best paid counties in the Nation when ranked among all 322 counties with employment of 75,000 or more, with average weekly wages surpassing \$1,100 in the first quarter of 2005.

To further secure the Washington metropolitan area's status as the national growth leader in professional and business services jobs, the net change in employment for this supersector was calculated for the 1990–2005 period. Washington's addition of 228,920 professional and business services jobs during this time span was the highest among the 12 largest metropolitan areas, as well as among 5 other areas with rapid growth in this industry. (See chart 4.)

To put this job growth into perspective, the number of professional and business services jobs added in the Washington metropolitan area over the 15-year time span accounted for 43 percent of its total employment gain of 526,298 and was largely responsible for its fifth-place ranking among the 17 areas being studied, behind only Dallas (723,852), Phoenix (710,615), Atlanta (695,814), and Houston (585,973). Among the remaining 12 areas, one (Los Angeles) lost almost 7,500 jobs, and another (San Jose) had no growth.

## Commuting patterns

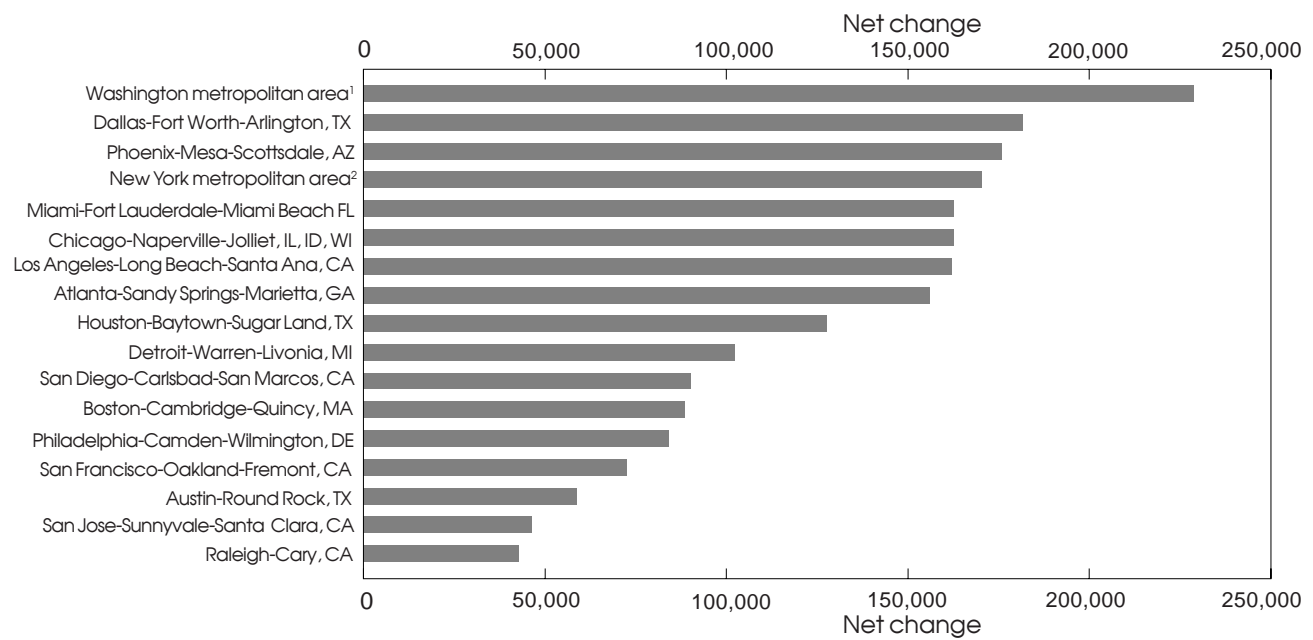
Further support of the creation of a second job core in the Washington metropolitan area can be found using county-to-county worker flow data<sup>7</sup> from the U.S. Census Bureau. Though only available for 2000, the data nonetheless confirm that the three largest counties outside of the District of Columbia (Fairfax, Montgomery, and Prince George's), indeed attracted a large number of workers from other suburban and exurban counties, as well as the District.

**Table 2. Location quotients for professional and business services, 2005**

Metropolitan areas	Location quotient
<b>Twelve largest</b>	
Washington-Arlington-Alexandria, DC,VA-MD-W,VA .....	1.83
Fairfax County, VA .....	2.57
Arlington County, VA .....	2.34
District of Columbia .....	2.13
Alexandria City, VA .....	1.95
Montgomery County, MD .....	1.74
Prince George's County, MD .....	1.25
Loudoun County, VA .....	1.17
Frederick County, MD .....	1.03
Prince William County, VA .....	1.00
Detroit-Warren-Livonia, MI .....	1.36
San Francisco-Oakland-Fremont, CA .....	1.29
Atlanta-Sandy Springs-Marietta, GA .....	1.26
Boston-Cambridge-Quincy, MA-NH .....	1.22
Miami-Fort Lauderdale-Miami Beach, FL .....	1.19
Chicago-Naperville-Joliet, IL-ID-WI .....	1.18
New York-Northern New Jersey-Long Island, NY-NJ-PA .....	1.15
Los Angeles-Long Beach-Santa Ana, CA .....	1.14
Houston-Baytown-Sugar Land, TX .....	1.12
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD .....	1.11
Dallas-Fort Worth-Arlington, TX .....	1.08
<b>Other selected</b>	
Raleigh-Cary, NC .....	1.36
San Jose-Sunnyvale-Santa Clara, CA .....	1.34
San Diego-Carlsbad-San Marco, CA .....	1.27
Phoenix-Mesa-Scottsdale, AZ .....	1.25
Austin-Round Rock, TX .....	1.17

NOTE: U.S. employment concentration of professional and business service = 1.00.

**Chart 4. Net change of professional and business services employment in 17 selected metropolitan areas from first quarter 1990 to first quarter 2005**



<sup>1</sup> The Washington metropolitan area includes: Washington-Arlington-Alexandria, DC-VA-MD-WV.

<sup>2</sup> The New York metropolitan area includes: New York-Northern New Jersey-Long Island-NY-NJ-PA.

About 30 percent of Montgomery’s workforce and 34 percent of Prince George’s County’s come from jurisdictions other than their own. In Fairfax County, the proportion jumps to 43 percent with a daily influx of 207,539 workers from other jurisdictions in 2000. The District of Columbia, which is one of the few metropolitan areas in the country where the workforce is greater than the resident population, imports 69 percent of its workers from the surrounding jurisdictions, the number one contributor being Prince George’s County (126,138).

Even though most persons reside in the county in which they work (persons working in the District being a notable exception), when they do leave their county, where do they go to work? It is clear that those living in the exurban outer counties were not traveling to the District of Columbia to work. (See table 3.) Where the residents of Virginia’s six exurban counties (Clarke, Fauquier, Fredericksburg City, Spotsylvania, Stafford, and Warren) were going was Fairfax County; Calvert County residents were heading to Prince George’s County, whereas those who resided in Jefferson County, West Virginia, were almost equally split between Montgomery County and Fairfax County as to their job location.

Those residing in the outer-most counties of the suburban ring who left their boundaries to work often chose a location other than the District of Columbia. For example, Fairfax

County was the primary destination for residents of Fauquier, Loudoun, Prince William, Manassas City, and Manassas Park City in Virginia; Montgomery County was the first choice for residents of Frederick County, and Prince George’s County was the number one destination for residents of Charles County.

It was apparent that the further one’s residence from the traditional job core of the District of Columbia, the higher the likelihood of having a job located in one of the three largest counties in the Washington metropolitan area. And with the rapid growth of professional and business services jobs in Fairfax County, it was not surprising to find that it imported a larger portion of its workforce than did Montgomery and Prince George’s Counties. Forty-three percent of Fairfax’s workforce resided outside of its boundaries in 2000 compared with 39 percent in 1990. In comparison, the percentage of Montgomery County’s workforce residing outside of its boundaries showed no change over the 10-year period, remaining at 30 percent.

Distance to the workplace is often a primary consideration in choosing a place to reside, and as a significant portion of the new job growth was located in the suburban ring, particularly Fairfax County, the exurbs became more accessible as a place of residence. As noted by Edgar M. Hoover and Raymond Vernon in *Anatomy of a Metropolis*, the distribution of jobs in a

**Table 3. Residence-county-to-workplace-county flows for the four largest counties in the Washington metropolitan area, 2000**

Residence county	Workplace county			
	Fairfax County, VA	Montgomery County, MD	Prince George's County, MD	District of Columbia
District of Columbia .....	12,244	19,509	13,655	190,566
Calvert County, MD .....	866	876	8,243	3,967
Charles County, MD .....	2,475	1,351	13,834	10,785
Frederick County, MD .....	1,786	22,867	1,188	3,025
Montgomery County, MD .....	22,148	267,128	26,825	99,672
Prince George's County, MD .....	18,258	40,240	155,671	126,138
Arlington County, VA .....	20,476	4,618	2,043	42,263
Clarke County, VA .....	789	39	28	156
Fairfax County, VA .....	278,064	16,943	9,594	88,908
Fauquier County, VA .....	5,499	273	135	1,139
Loudoun County, VA .....	35,933	2,770	595	5,843
Prince William County, VA .....	44,322	1,867	1,709	15,368
Spotsylvania County, VA .....	3,160	189	335	2,122
Stafford County, VA .....	7,249	357	415	3,310
Warren County, VA .....	2,246	134	85	376
Alexandria City, VA .....	14,643	2,484	1,813	23,292
Fairfax City, VA .....	4,964	338	145	1,631
Falls Church City, VA .....	1,653	186	69	1,696
Fredericksburg City, VA .....	478	36	40	372
Manassas City, VA .....	5,145	194	135	864
Manassas Park City, VA .....	1,964	94	78	311
Jefferson County, WV .....	1,241	1,348	159	592

metropolitan area influences the distribution of the population far more than the other way around.<sup>8</sup>

### Industry specifics

Of the 22 counties in the Washington area, 9 had employment totals of 75,000 or more. Together, these nine large counties accounted for 91 percent of the area's employment in 2005. Geographically united, the counties were nonetheless independent entities that had created different economic environments to foster job growth. On the one hand, private industry, especially professional and business services, added a large number of jobs across the metropolitan area, but more so in Fairfax County. Federal Government jobs, on the other hand, were on the wane, though State and local government jobs were not, except in the District of Columbia. Overall, private-sector growth easily surpassed the small gains made in the public sector.

*Professional and business services.* The vast majority of employment growth in the Washington, D.C., area over the last 15 years, particularly in the nine largest counties, occurred in private firms, with professional and business services dominating the landscape. Professional and business services was not only the largest supersector, but also the fastest growing in the Washington metropolitan area, expanding by 61.6 percent

from 1990 to 2005. Growth in professional and business services jobs was especially good for the local economy because these jobs tended to be higher paying, often requiring a highly educated labor force.

Employment in professional and business services grew by 228,920 in the Washington metropolitan area during the 15-year period with 218,623 or 96 percent of these jobs located in the nine largest counties. This was not unexpected because the larger counties typically add the most new jobs. Twenty of the 22 jurisdictions that comprise the Washington, D.C., metropolitan area, added professional and business services jobs from the first quarter 1990 to first quarter 2005, the exceptions being Falls Church City, VA, and Warren County, VA. (See table 4.)

Forty-five percent of the gain in professional and business services in the Washington metropolitan area occurred in Fairfax County, which had added 103,925 of these jobs by the first quarter of 2005. Although the District of Columbia shed a large number of Federal Government jobs over the 15-year time span, it recorded the second-highest increase of professional and business services jobs, gaining 31,011, followed closely by Montgomery County, which added 29,696 jobs in this sector over this period. Growth in the remaining six largest counties ranged from 12,674 professional and business services jobs in Prince George's to 4,021 in Arlington County.

Although gains were widespread throughout the professional

**Table 4. Employment in professional and business services by county for the Washington metropolitan area, first quarter 1990 and first quarter 2005**

County	Employment					
	First quarter 1990	First quarter 2005	Net change 1990–2005	Percent change 1990–2005	Ranked by net change	Ranked by percent change
United States .....	10,167,155	16,352,710	6,185,555	60.8	...	...
Washington, DC-VA-MD-WV MSA .....	371,617	600,537	228,920	61.6	...	...
Alexandria City, VA .....	13,350	22,679	9,329	69.9	6	14
Arlington County, VA .....	34,993	39,014	4,021	11.5	9	20
Calvert County, MD .....	733	1,627	894	122.0	15	9
Charles County, MD .....	1,670	2,937	1,267	75.9	13	13
Clarke County, VA .....	235	294	59	25.1	20	18
District of Columbia .....	107,031	138,042	31,011	29.0	2	17
Fairfax City, VA .....	5,239	5,907	668	12.8	17	19
Fairfax County, VA .....	84,526	188,451	103,925	123.0	1	8
Falls Church City, VA .....	4,675	2,270	2,405	-51.4	22	22
Fauquier County, VA .....	1,023	1,831	808	79.0	16	12
Frederick County, MD .....	4,497	11,888	7,391	164.4	8	6
Fredericksburg City, VA .....	1,189	2,342	1,153	97.0	14	11
Jefferson County, WV .....	542	1,145	603	111.3	18	10
Loudoun County, VA .....	4,931	17,273	12,342	250.3	5	4
Manassas City, VA .....	2,120	4,759	2,639	124.5	10	7
Manassas Park City, VA .....	60	408	348	580.0	19	1
Montgomery County, MD .....	68,074	97,770	29,696	43.6	3	15
Prince George's County, MD .....	30,819	43,493	12,674	41.1	4	16
Prince William County, VA .....	3,296	11,530	8,234	249.8	7	5
Spotsylvania County, VA .....	529	2,262	1,733	327.6	12	2
Stafford County, VA .....	726	2,904	2,178	300.0	11	3
Warren County, VA .....	1,359	719	-640	-47.1	21	21

and business services supersector, the majority of the expansion occurred in one of its four sectors—professional, scientific, and technical services sector, particularly the computer systems and related services and management, scientific, and technical consulting services groups. (See table 5.) These industry groups are among the highest paid, drawing on highly educated and experienced workers to fill their ranks.

Specifically, the computer systems design and related services industry primarily provides expertise in the field of information technologies such as writing and testing computer software, designing computer systems, and managing a client's computer operations or data processing facilities. The management consulting services industry is largely involved in providing advice and assistance to businesses and other organizations on management issues, such as strategic planning; budgeting; marketing objectives; human resource policies; and production scheduling.

It is important to note that the job gains in computer systems design and management consulting in Fairfax County accounted for a large portion of the metropolitan area's growth in these industries. Fairfax added 31,771 computer systems design and related service jobs—three times the number added in the District

of Columbia, which is the jurisdiction with the second highest contribution of such jobs in the area. Likewise, Fairfax's addition of 21,134 technical consulting services positions was four times the expansion in the District. It should also be noted that none of the nine largest counties in the Washington area lost jobs in these two industry groups from 1990 to 2005.

Fairfax County also added between 5,000 and 8,500 jobs in five other industry groups: management of companies and enterprises; architectural, engineering, and related services; accounting, tax preparation, bookkeeping, and payroll services; scientific research and development services; and employment services during the 15-year time frame.

Other jurisdictions with notable gains included the District of Columbia (10,645 in computer systems design and related services and 5,261 in management, scientific, and technical consulting services) and Montgomery County (6,510 in computer systems design and related services, 5,663 in scientific research and development services and 5,553 in employment services).

In the remaining six large counties, no industry group added more than 5,000 jobs to its count over the 15-year time span.



**Table 5. Net change from the first quarter 1990 to the first quarter 2005 in professional and business services by selected 4-digit industries for the nine largest counties in the Washington metropolitan area**

NAICS	Industry	Jurisdiction				
		District of Columbia	Maryland			
			Frederick County	Montgomery County	Prince George's County	
<b>Professional, scientific, and technical services</b>						
5411	Legal services .....	2,546	161	1,524	212	
5412	Accounting, tax preparation, bookkeeping, and payroll services .....	-250	236	645	701	
5413	Architectural, engineering, and related services .....	954	1,408	-3,151	303	
5414	Specialized design services .....	-282	53	212	-154	
5415	Computer system design and related services .....	10,645	799	6,510	3,658	
5416	Management, scientific, and technical consulting services .....	5,261	507	2,841	640	
5417	Scientific research and development services .....	1,624	655	5,663	361	
5418	Advertising and related services .....	2,252	65	-361	-671	
5419	Other professional, scientific, and technical services .....	766	500	985	-2,027	
<b>Management of companies and enterprises</b>						
5511	Management of companies and enterprises .....	381	—	2,419	2,677	
<b>Administrative and support services</b>						
5611	Office administrative support .....	969	601	1,092	1,443	
5612	Facilities support services .....	942	—	-6	249	
5613	Employment services .....	3,332	1,278	5,553	305	
5614	Business support services .....	922	188	608	-168	
5615	Travel arrangement and reservation services .....	-382	—	-350	-208	
5616	Investigation and security services .....	4,921	—	2,260	2,814	
5617	Services to buildings and dwellings .....	-1,833	702	4,174	1,634	
5619	Other support services .....	-525	213	-1,088	1,073	
NAICS	Industry	Jurisdiction				
		Virginia				
		Alexandria City	Arlington County	Fairfax County	Loudoun County	Prince William County
<b>Professional, scientific, and technical services</b>						
5411	Legal services .....	468	-484	2,987	284	97
5412	Accounting, tax preparation, bookkeeping, and payroll services .....	391	-369	7,216	-206	209
5413	Architectural, engineering, and related services .....	797	1,147	7,325	1,272	812
5414	Specialized design services .....	24	-67	302	39	53
5415	Computer system design and related services .....	1,507	375	31,771	4,463	1,260
5416	Management, scientific, and technical consulting services .....	1,404	1,150	21,134	1,301	423
5417	Scientific research and development services .....	909	1,665	7,146	—	—
5418	Advertising and related services .....	395	-81	414	532	231
5419	Other professional, scientific, and technical services .....	-566	266	1,205	474	303
<b>Management of companies and enterprises</b>						
5511	Management of companies and enterprises .....	439	1,002	8,482	745	563
<b>Administrative and support services</b>						
5611	Office administrative support .....	-79	-285	459	85	-3
5612	Facilities support services .....	—	1,160	1,521	—	—

**Table 5.** Continued—Net change from the first quarter 1990 to the first quarter 2005 in professional and business services by selected 4-digit industries for the nine largest counties in the Washington metropolitan area

NAICS	Industry	Jurisdiction				
		Virginia				
		Alexandria City	Arlington County	Fairfax County	Loudoun County	Prince William County
5613	Employment services .....	1,022	-596	5,117	569	-
5614	Business support services .....	203	-364	287	130	383
5615	Travel arrangement and reservation services .....	119	-368	-579	87	-
5616	Investigation and security services .....	272	-419	4,645	327	350
5617	Services to buildings and dwellings .....	1,731	533	4,288	1,938	1,630
5619	Other support services .....	-	-16	367	-	-

NOTE: Dash indicates data do not meet BLS or State agency disclosure standards.

Wages in professional and business services averaged \$1,342 a week in the Washington metropolitan area in the first quarter of 2005, an increase of \$723 over the 15-year period beginning in the first quarter of 1990. Of the 22 jurisdictions that comprise the Washington metropolitan area, only four—Fairfax County, Manassas City, the District of Columbia, and Arlington County—had a wage increase higher than the \$723 recorded for the metropolitan area as a whole from the 15-year period. (See table 6.) Loudoun County was also close to the average increase with a wage gain of \$711.

The four jurisdictions with the largest wage increases in professional and business services over the 15-year time span were also the highest paid in the Washington area in the first quarter of 2005, though the ranking did differ. Fairfax County was the highest paying jurisdiction with an average weekly rate of \$1,574. Arlington County recorded the second-highest average weekly wage, \$1,479, followed closely by the District of Columbia, \$1,471. Rounding out the top four was Manassas City with an average weekly wage of \$1,348, only \$6 higher than the \$1,342 reported for the metropolitan area as a whole. Four other jurisdictions also posted wages greater than \$1,000 a week—Alexandria City, Loudoun County, Montgomery County, and Fairfax City—in the Washington area in 2005.

**Government.** The government supersector is made up of publicly owned establishments—Federal, State, and local—that administer, oversee, and manage public programs and have executive, legislative, or judicial authority over other institutions within a given area. These agencies also set policy, create laws, adjudicate civil and criminal legal cases, provide for public safety and for national defense. Establishments such as public schools and public hospitals also are included in government. The information presented here refers to civilian employment only.

Employment in the public sector grew by nearly 25,000 in the Washington metropolitan area from the first quarter 1990 to the first quarter 2005 despite the District of Columbia shedding over 44,000 government jobs. The District was the

only jurisdiction in the Washington metropolitan area to lose both federal (-26,785) and State and local government (-17,347) jobs during this time period. In Arlington County, the addition of more than 2,500 State and local government jobs was not enough to overcome the loss of more than 6,000 federal jobs. As a result, Arlington was the only other jurisdiction in the metropolitan area to lose public sector jobs over the 15 years. (See table 7.)

With 2,715,801 civilian employees in the first quarter of 2005, the Federal Government was the Nation's largest employer. Even though the headquarters of most federal departments and agencies are based in the Washington metropolitan area, it employed only 337,221, or one out of every eight federal workers, in 2005. The Federal Government might be the largest employer nationally, but it was just the second largest industry in the Washington metropolitan area—behind professional and business services—in the first quarter of 2005.

In 1990, employment levels for professional and business services and Federal Government were very similar, the difference being only 3,548 jobs. Fifteen years later, the gap between these two industries had widened to 263,316. While professional and business services added 228,920 jobs to its count, employment on federal payrolls fell by 30,848 in the Washington metropolitan area from 1990 to 2005, with 26,785, or 87 percent, of the loss occurring in the District of Columbia. Nationwide, 448,713 Federal Government jobs were lost over this same 15-year period. (See table 8.)

While the District shed the largest number of federal jobs, the area's four largest counties also contributed to the declining federal workforce. Arlington County, where the Pentagon is headquartered, recorded the second-largest contraction of federal jobs, shedding 6,163 over the 15-year period. Prince George's County dropped 2,049 federal positions, Montgomery, 1,475, and Fairfax 1,340.

These losses may be attributed, in part, to cost-cutting, the growth of private contractors, "out-sourcing," and the devolution of some Federal Government activities.<sup>9</sup>

**Table 6. Average weekly wages in professional and business services by county for the Washington metropolitan area, first quarter 1990 and first quarter 2005**

County	Wages					
	First quarter 1990	First quarter 2005	Net change 1990-2005	Percent change 1990-2005	Ranked by net change	Ranked by percent change
United States .....	\$448	\$937	\$489	109.2	...	...
Washington, DC-VA-MD-WV MSA .....	619	1,342	723	116.8	...	...
Alexandria City, VA .....	636	1,205	569	89.5	6	14
Arlington County, VA .....	710	1,479	769	108.3	4	9
Calvert County, MD .....	393	688	295	75.1	19	19
Charles County, MD .....	494	787	293	59.3	20	21
Clarke County, VA .....	473	832	359	75.9	14	18
District of Columbia .....	659	1,471	812	123.2	3	7
Fairfax City, VA .....	808	1,094	286	35.4	21	22
Fairfax County, VA .....	655	1,574	919	140.3	1	4
Falls Church City, VA .....	530	991	461	87.0	11	16
Fauquier County, VA .....	430	965	535	124.4	9	6
Frederick County, MD .....	460	940	480	104.3	10	10
Fredericksburg City, VA .....	357	673	316	88.5	17	15
Jefferson County, WV .....	351	610	259	73.8	22	20
Loudoun County, VA .....	478	1,189	711	148.7	5	3
Manassas City, VA .....	464	1,348	884	190.5	2	1
Manassas Park City, VA .....	372	723	351	94.4	15	12
Montgomery County, MD .....	581	1,130	549	94.5	7	11
Prince George's County, MD .....	484	936	452	93.4	13	13
Prince William County, VA .....	397	853	456	114.9	12	8
Spotsylvania County, VA .....	381	693	312	81.9	18	17
Stafford County, VA .....	295	844	549	186.1	8	2
Warren County, VA .....	248	591	343	138.3	16	5

**Table 7. Net change in government employment by county for the Washington metropolitan area, first quarter 1990 to first quarter 2005**

County	Net change 1990-2005		
	Total Government	Federal Government	State and Local Government
Alexandria City, VA .....	3,267	1,413	1,854
Arlington County, VA .....	-3,545	-6,163	2,618
Calvert County, MD .....	1,972	55	1,917
Charles County, MD .....	867	-1,154	2,021
Clarke County, VA .....	283	-15	298
District of Columbia .....	-44,132	-26,785	-17,347
Fairfax City, VA .....	662	289	373
Fairfax County, VA .....	12,937	-1,340	14,277
Falls Church City, VA .....	2,627	2,466	161
Fauquier County, VA .....	476	-820	1,296
Frederick County, MD .....	5,271	825	4,446
Fredericksburg City, VA .....	938	69	869
Jefferson County, WV .....	979	161	818
Loudoun County, VA .....	9,913	1,954	7,959
Manassas City, VA .....	1,666	459	1,207
Manassas Park City, VA .....	246	-	-
Montgomery County, MD .....	4,583	-1,475	6,058
Prince George's County, MD .....	10,684	-2,049	12,733
Prince William County, VA .....	8,281	1,087	7,194
Spotsylvania County, VA .....	3,140	15	3,125
Stafford County, VA .....	2,978	90	2,888
Warren County, VA .....	464	28	436

NOTE: Dash indicates data do not meet BLS or State agency disclosure standards.

**Table 8. Employment in the Federal Government by county for the Washington metropolitan area, first quarter 1990 and first quarter 2005**

County	Employment					
	First quarter 1990	First quarter 2005	Net change 1990-2005	Percent change 1990-2005	Ranked by net change	Ranked by percent change
United States .....	3,164,514	2,715,801	-448,713	-14.2	...	...
Washington, D.C.-VA-MD-WV MSA .....	368,069	337,221	-30,848	-8.4	...	...
Alexandria City, VA .....	5,461	6,874	1,413	25.9	3	12
Arlington County, VA .....	39,148	32,985	-6,163	-15.7	20	18
Calvert County, MD .....	63	118	55	87.3	11	5
Charles County, MD .....	3,344	2,190	-1,154	-34.5	16	20
Clarke County, VA .....	51	36	-15	-29.4	14	19
District of Columbia .....	219,542	192,757	-26,785	-12.2	21	17
Fairfax City, VA .....	401	690	289	72.1	7	6
Fairfax County, VA .....	18,712	17,372	-1,340	-7.2	17	15
Falls Church City, VA .....	1,448	3,914	2,466	170.3	1	2
Fauquier County, VA .....	1,229	409	-820	-66.7	15	21
Frederick County, MD .....	2,358	3,183	825	35.0	5	8
Fredericksburg City, VA .....	229	298	69	30.1	10	10
Jefferson County, W.VA .....	569	730	161	28.3	8	11
Loudoun County, VA .....	1,839	3,793	1,954	106.3	2	4
Manassas City, VA .....	99	558	459	463.6	6	1
Manassas Park City, VA .....	( <sup>1</sup> )	2	( <sup>1</sup> )	( <sup>1</sup> )	...	...
Montgomery County, MD .....	41,666	40,191	-1,475	-3.5	18	14
Prince George's County, MD .....	28,236	26,187	-2,049	-7.3	19	16
Prince William County, VA .....	3,429	4,516	1,087	31.7	4	9
Spotsylvania County, VA .....	33	48	15	45.5	13	7
Stafford County, VA .....	69	159	90	130.4	9	3
Warren County, VA .....	144	172	28	19.4	12	13

<sup>1</sup>Data do not meet BLS or State agency disclosure standards.

However, federal employment was up in the four remaining large counties of Loudoun, Alexandria City, Prince William, and Frederick, though none of the increases exceeded 2,000 jobs during the 15-year span.

The percentage of Federal Government employment has declined in eight of the nine largest counties in the metropolitan area from 1990 to 2005; only Alexandria City saw its share of Federal Government workers increase over this period. The two counties employing the largest number of federal workers—the District of Columbia and Arlington—experienced declines of 3.5 and 4.4 percentage points, respectively, during the 15-year time span. (See chart 5.)

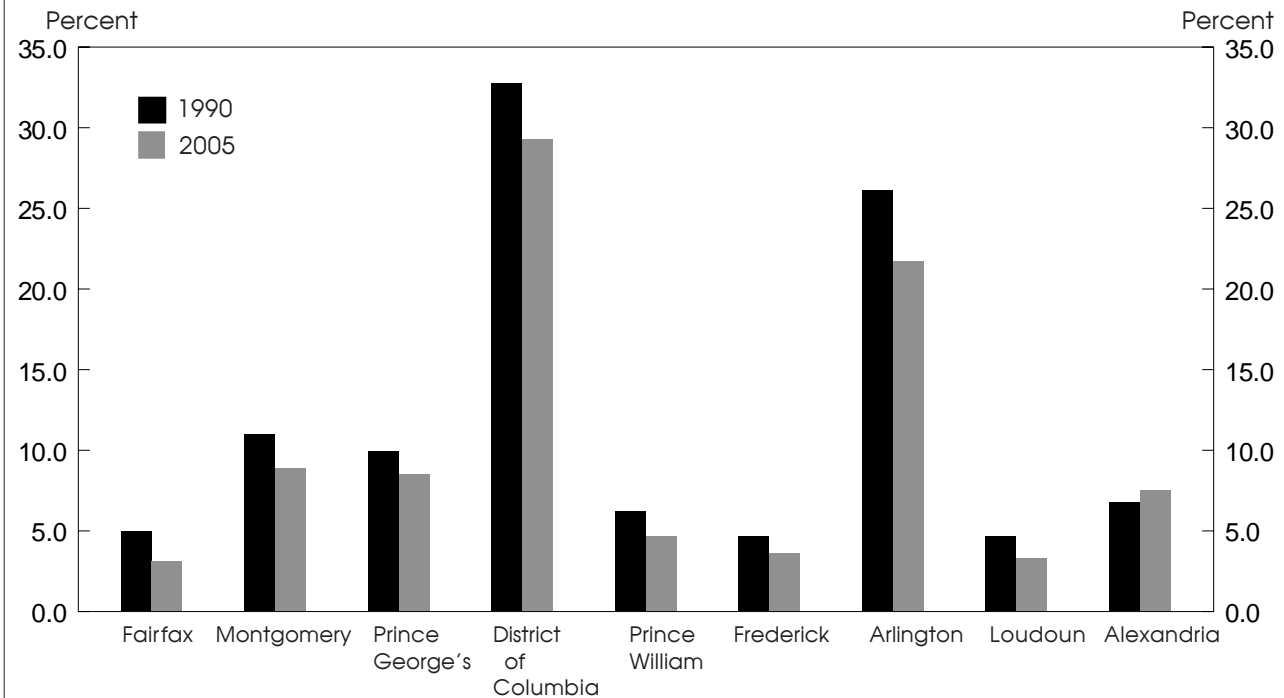
A closer examination of Federal Government employment using inner- and outer-ring analysis, similar to that used by Hoover and Vernon in their study of manufacturing employment in the New York, NY, metropolitan area, revealed an outward migration of the industry over time that was often based on such factors as the availability and cost of office space in high density areas, lower taxes, and improvements in transportation permitting easy access to alternative locations outside of the traditional central business district.<sup>10</sup> (See chart 6.) The resulting trend over this 15-year period has been a decline in federal jobs in the District and an increase in private-sector jobs in the suburban counties. The majority of the outward shift in private-sector jobs occurred in Fairfax

County, leading to its establishment as a second job core within the Washington metropolitan area.

Wages in the Federal Government averaged \$1,550 a week in the Washington metropolitan area in the first quarter of 2005, an increase of \$864 over the 15-year period. Of the 22 counties that make up the Washington metropolitan area, only 5—Fauquier, Falls Church City, Montgomery, Prince George's, and Arlington—had wage increases higher than the metropolitan area average. (See table 8.) Fairfax City and the District of Columbia were also close to the average increase over this time span, with wage gains of \$861 and \$840, respectively.

Not only was the wage increase the largest in Fauquier, but the county had the highest wage level in Federal Government in the metropolitan area in 2005. At \$2,211, the average wage of federal employees in Fauquier surpassed second-ranked Montgomery County's by \$561. (See table 9.) The presence of the Federal Aviation Administration's Terminal Radar Approach Control (TRACON) center in Vint Hill Farms Station, VA, located approximately 35 miles southwest of the District of Columbia, accounted for the high-wage scale. This facility controls the air traffic for Andrews Air Force Base, Ronald Reagan-Washington National, Dulles International, and Baltimore/Washington International Thurgood Marshall Airports. The majority of workers at this center were air traffic controllers, which are

**Chart 5. Percentage of Federal Government employment in the nine largest counties in the Washington metropolitan area, first quarter 1990 and first quarter 2005**



typically among the highly skilled and highly paid in the Federal Government.

Of the nine largest counties, only two had federal wage levels exceeding the Washington metropolitan area average—Montgomery (\$1,650) and Arlington (\$1,645). As noted, these two counties are home to NIH and the Pentagon, both of which have cultivated well-paid technical workforces such as medical doctors and PhDs in a variety of fields (biology, chemistry, computer science, engineering, management, mathematics, and physics). Elsewhere among the largest counties, Federal Government wages in the District (\$1,547) were about equal to the area average, but those in Fairfax (\$1,430) fell \$120 short in 2005.

State and local government payrolls expanded by more than 55,000 workers in the Washington metropolitan area from 1990 to 2005. Growth on State and local government payrolls was dominated by the suburban counties, as these jurisdictions tried to keep pace with their increasing populations and their increased need for services. So, as the Federal Government has continued to downsize, State and local governments have stepped up their services and expanded their payrolls. The notable exception to this pattern was the District of Columbia

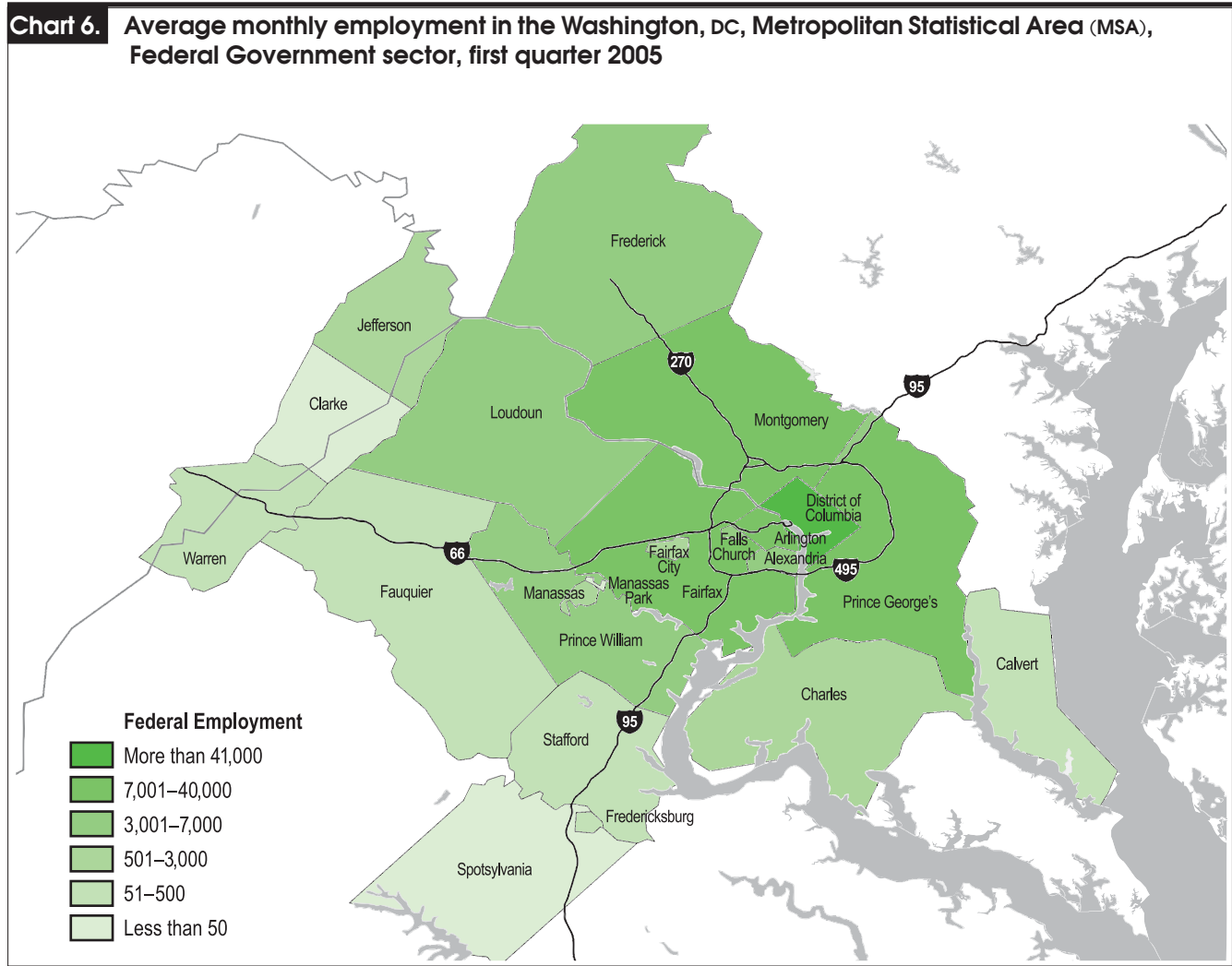
which lost 17,347 local government jobs during the period under study.

Fairfax and Prince George's Counties led the way over the 15-year time span with the addition of 14,277 and 12,733 jobs, respectively. (See table 7.) Growth in State and local government jobs was strong in other counties, though the actual number of new jobs dropped off considerably. Loudoun County added 7,959 new jobs, Prince William (7,194), Montgomery (6,058), and Frederick (4,446).

Growth was also noteworthy in some of the exurban counties of the metropolitan area as demands for community and social services, health services, and protective services, increased to accommodate the needs of individuals moving into these more rural jurisdictions. For example, Spotsylvania County added 3,125 jobs and Stafford County added 2,888 jobs over the 15-year period.

### Other supersectors

In addition to professional and business services, other industry supersectors have contributed to the job growth in



the Washington metropolitan area, changing the industry distribution of the workforce over the 15-year period. The following tabulation shows the change in employment distribution by industry in the Washington metropolitan area.<sup>11</sup>

	1990	2005
Construction .....	6.3	6.2
Trade, transportation, and utilities .....	16.0	14.0
Information .....	4.0	3.6
Financial activities .....	5.9	5.5
Professional and business services .....	16.5	21.6
Educational and health services .....	8.5	10.4
Leisure and hospitality .....	7.7	8.5
Other services .....	4.9	5.2
Government		
Federal .....	16.4	10.1
State and local .....	12.2	10.2
Other supersectors .....	3.8	2.8

Employment gains in Fairfax County were again among the largest in most of these industries.

*Educational and health services.* Employment in educational and health services grew by almost 97,000 in the Washington metropolitan area from the first quarter 1990 to the first quarter 2005, with more than four-fifths of these new jobs located in the nine largest counties. (See table 10.) Montgomery County and Fairfax County led the way with the addition of 23,237 and 22,515, respectively. The District of Columbia added 10,993 new educational and health services jobs. Job gains in the remaining six largest counties ranged from 7,477 in Prince George’s County to 680 in Alexandria City. Of the area’s 22 jurisdictions, only one, the exurban county of Clarke, lost jobs in educational and health services during the 15-year time span.

*Leisure and hospitality.* Employment in leisure and hospitality grew by 61,738 in the Washington metropolitan

**Table 9. Average weekly wages in the Federal Government by county for the Washington metropolitan area, first quarter 1990 and first quarter 2005**

County	Wages					
	First quarter 1990	First quarter 2005	Net change 1990–2005	Percent change 1990–2005	Ranked by net change	Ranked by percent change
United States .....	\$580	\$1,138	\$558	96.2	...	...
Washington, DC-VA-MD-WV MSA .....	686	1,550	864	125.9	...	...
Alexandria City, VA .....	735	1,547	812	110.5	8	15
Arlington County, VA .....	730	1,645	915	125.3	5	8
Calvert County, MD .....	678	1,031	353	52.1	21	21
Charles County, MD .....	593	1,297	704	118.7	12	11
Clarke County, VA .....	622	1,058	436	70.1	17	19
District of Columbia .....	707	1,547	840	118.8	7	10
Fairfax City, VA .....	560	1,421	861	153.8	6	5
Fairfax County, VA .....	640	1,430	790	123.4	9	9
Falls Church City, VA .....	579	1,568	989	170.8	2	2
Fauquier County, VA .....	678	2,211	1,533	226.1	1	1
Frederick County, MD .....	524	1,289	765	146.0	11	7
Fredericksburg City, VA .....	584	971	387	66.3	19	20
Jefferson County, WV .....	486	1,026	540	111.1	16	14
Loudoun County, VA .....	762	1,532	770	101.0	10	16
Manassas City, VA .....	405	1,073	668	164.9	13	3
Manassas Park City, VA .....	( <sup>1</sup> )	1,258	( <sup>1</sup> )	( <sup>1</sup> )	...	...
Montgomery County, MD .....	670	1,650	980	146.3	3	6
Prince George's County, MD .....	566	1,486	920	162.5	4	4
Prince William County, VA .....	474	1,036	562	118.6	15	12
Spotsylvania County, VA .....	480	834	354	73.8	20	18
Stafford County, VA .....	480	894	414	86.3	18	17
Warren County, VA .....	535	1,130	595	111.2	14	13

<sup>1</sup> Data do not meet BLS or State agency disclosure standards.

area from 1990 to 2005, spurred on by the demands of a growing population and the income generated by the large number of dual-income families. Nearly four-fifths of these new jobs were located in the nine largest counties. (See table 10.) Fairfax led the way over this 15-year period with the addition of 14,818 jobs. Loudoun was second with 6,974 jobs, followed by Montgomery, which added 6,773. Growth in the remaining six large counties ranged from 4,898 in Prince William to 1,436 in Alexandria City.

*Other services.* Employment in the other services sector grew by 35,192 in the Washington metropolitan area from the first quarter 1990 to the first quarter 2005, with 60 percent of these jobs located in three of the four largest counties—the District of Columbia (9,895), Fairfax (5,820) and Montgomery (5,417). (See table 10.) The remaining county of Prince George's shed jobs over the 15-year period, though losses numbered less than 600. (The other services supersector is engaged in a wide variety of activities including equipment and machinery repairing, grantmaking, advocacy, and providing dry cleaning and laundry services, and personal care services.)

Four out of the five remaining largest counties—Alexandria City, Arlington, Loudoun, and Frederick—each added more than 1,000 but less than 3,500 jobs to their counts. Prince William County and most of the smaller jurisdictions in the Washington

metropolitan area added less than 1,000 other services jobs to their counts over this 15-year span.

*Construction.* The Washington metropolitan area was among the fastest growing areas in the Nation, and the construction industry contributed to this growth with the addition of nearly 30,000 jobs to its payrolls from 1990 to 2005, with most of the increase occurring in the outer suburban counties.

Loudoun and Prince William Counties led the way over this 15-year period, with the addition of 7,324 and 7,132 jobs, respectively. Prince George's County added 4,486 new construction jobs and Frederick County, 3,910. With the exception of Prince George's, the three other growth leaders were located on the outer edge of the suburban ring. The five remaining large counties—Arlington, the District, Fairfax, Alexandria City, and Montgomery—either lost jobs or were little changed from 1990 to 2005.

*Trade, transportation, and utilities.* Trade, transportation, and utilities was the third largest supersector in the Washington metropolitan area, composing 14 percent of the workforce in 2005. Employment in trade, transportation, and utilities grew by 28,510 in the Washington metropolitan area from 1990 to 2005, despite shedding more than 24,000 jobs in the District of Columbia and Prince George's County. (See table 11.)

**Table 10. Employment in the educational and health services and leisure and hospitality supersectors for the nine largest counties in the Washington metropolitan area, first quarter 1990 and first quarter 2005**

County	Educational and health services		Leisure and hospitality	
	First quarter 1990	First quarter 2005	First quarter 1990	First quarter 2005
Alexandria City, VA .....	7,142	7,822	7,290	8,726
Arlington County, VA .....	7,763	11,175	12,074	14,860
District of Columbia .....	73,373	84,366	47,063	51,154
Fairfax County, VA .....	24,330	46,845	26,358	41,176
Frederick County, MD .....	4,791	10,084	4,264	7,805
Loudoun County, VA .....	2,406	7,203	2,878	9,852
Montgomery County, MD .....	32,968	56,205	30,549	37,322
Prince George's County, MD .....	18,182	25,659	20,887	24,209
Prince William County, VA .....	2,741	7,074	6,026	10,924

**Table 11. Employment in selected supersectors for the nine largest counties in the Washington metropolitan area, first quarter 1990 and first quarter 2005**

County	Other services		Construction		Trade, transportation, and utilities		Financial activities		Information	
	First quarter 1990	First quarter 2005	First quarter 1990	First quarter 2005	First quarter 1990	First quarter 2005	First quarter 1990	First quarter 2005	First quarter 1990	First quarter 2005
Alexandria City, VA .....	6,929	10,182	4,133	3,898	16,674	13,246	7,423	6,420	3,208	1,931
Arlington County, VA .....	5,531	8,411	4,222	2,773	22,359	19,631	7,849	7,259	6,470	5,227
District of Columbia .....	44,360	54,255	13,611	12,339	39,781	26,737	33,863	26,865	25,783	22,712
Fairfax County, VA .....	14,009	19,829	31,544	31,207	72,753	77,845	23,139	33,790	22,518	30,966
Frederick County, MD .....	1,592	3,030	6,200	10,110	10,179	16,052	3,333	7,888	711	1,534
Loudoun County, VA .....	1,266	3,835	5,404	12,728	10,271	29,052	1,181	3,728	839	10,182
Montgomery County, MD .....	15,981	21,398	27,699	27,943	60,987	63,540	30,543	35,850	21,036	14,822
Prince George's County, MD .....	10,585	10,078	25,279	29,765	73,697	62,568	15,162	13,532	5,841	6,282
Prince William County, VA .....	2,117	3,009	6,820	13,952	14,014	21,841	2,448	3,332	1,329	1,196

Job growth in trade, transportation, and utilities was dominated by the outer suburban counties, in particular Loudoun, which added 18,781 jobs over the 15-year period. Employment gains in the trade subdivision, especially other general merchandise stores, grocery stores, clothing stores, and automobile dealers, contributed most to the increase in the trade, transportation, and utilities payrolls in Loudoun County.

Prince William (7,827), Frederick (5,873), and Fairfax (5,092) Counties also had reasonably strong growth over the 15-year time span. Growth in Prince William was led by the expansion in clothing stores and other general merchandise stores, whereas the addition to grocery stores payrolls guided the way in Frederick. Increases in employment levels for grocery stores, home furnishing stores, and building material and supplies dealers were mainly responsible for the advance in Fairfax.

The District of Columbia and Prince George's County, by contrast, experienced relatively sharp employment losses from 1990 to 2005, dropping 13,044 and 11,129 jobs, respectively. In the District of Columbia, the reductions in department stores and clothing stores contributed most to the decline, while waning payrolls in grocery stores and health and personal care stores led the way in Prince George's.

*Financial activities.* Employment in the financial activities supersector grew by more than 20,500 in the Washington metropolitan area from the first quarter 1990 to the first quarter 2005. Fairfax County led the way with the addition of 10,651 jobs. Three other counties—Montgomery, Frederick, and Stafford (one of which was in the exurbs), added between 4,000 and 5,500 jobs. Rounding out the top five in growth was Loudoun County with the addition of more than 2,500 financial activities jobs over this 15-year period.

*Information.* Four of the large jurisdictions lost jobs in the financial activities supersector, led by the District of Columbia (-6,998). Prince George's, Alexandria City, and Arlington, all had employment declines of less than 2,000.

Employment in the information supersector grew by around 8,000 in the Washington metropolitan area over the 15-year span, and most of this growth occurred during the 1990's. This industry has yet to make a full recovery from the impact of the last recession (March 2001 through November 2001<sup>12</sup>), as evidenced by the continuing losses or small gains that have occurred in most of the counties.

Growth in the information supersector was largely limited to the counties of Loudoun and Fairfax. Even with substantial job losses from the downturn in 2001, Loudoun county added



9,343 jobs and Fairfax added 8,448, during the 15-year period. No other jurisdiction in the Washington metropolitan area added more than 1,000 information jobs over this time span.

But there were losses. Montgomery County (-6,214) shed the largest number of information jobs, followed by the District of Columbia (-3,071). Alexandria City and Arlington County each lost more than 1,000 jobs from 1990 to 2005.

## Conclusion

Along with professional and business services, seven other supersectors in private industry in the Washington metropolitan area contributed to its expanding job market from 1990 to 2005. Of the 22 jurisdictions making up the metropolitan area, Fairfax County ranked first or second in job growth in every private-industry supersector except trade, transportation, and utilities and construction. By contrast, the number of private-sector jobs

added in the District of Columbia over this time span could not offset the large losses sustained in the public sector.

Despite the loss of federal positions in the District, the seat of power for the executive, legislative, and judicial branches of the Federal Government will continue to be based in the urban core, and this will continue to have a far-reaching impact on the surrounding counties where numerous jobs have arisen in support of government operations. A strong case could be made that the explosion of jobs in the professional and business services sector in the suburban county of Fairfax has created another core area of employment apart from the traditional central business district of the District of Columbia, but it has not replaced it. As we have seen, these two jurisdictions are not independent of each other, but rather supportive of one another, providing alternative environments to foster and enhance business development throughout the metropolitan area.



## Notes

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<sup>1</sup> The Washington-Arlington-Alexandria, DC-VA-MD-WV Metropolitan Statistical Area (MSA) is comprised of 22 counties: the District of Columbia; Arlington, Clarke, Fairfax, Fauquier, Loudoun, Prince William, Spotsylvania, Stafford, and Warren Counties, and Alexandria, Fairfax, Falls Church, Fredericksburg, Manassas, and Manassas Park Cities in Virginia; Calvert, Charles, Frederick, Montgomery, and Prince George's Counties in Maryland; and Jefferson County in West Virginia. Though the "county" designation in the MSA applies to the District of Columbia and the cities of Alexandria, Fairfax, Falls Church, Fredericksburg, Manassas and Manassas Park, "jurisdiction" was often substituted, especially when referring to a mix of counties and cities.

<sup>2</sup> The District of Columbia is designated a county in the Quarterly Census of Employment and Wages (QCEW) program, the foundation on which this article rests. The QCEW, a cooperative program involving the Bureau of Labor Statistics (BLS) and the various State Workforce Agencies (SWAs), provides employment and wage data for workers covered by State Unemployment Insurance (UI) laws that are compiled from quarterly contribution reports submitted to the SWAs by employers. For federal civilian workers covered by the Unemployment Compensation for Federal Employees (UCFE) program, employment and wage data are compiled from quarterly reports that are sent to the appropriate SWA by the specific federal agency. The employment and wage data used in this article are derived from microdata summaries of more than 8 million employer reports of employment and wages submitted by States to BLS. These reports are based on place of employment rather than place of residence.

<sup>3</sup> The authors have defined three geographic categories in the Washington metropolitan area based on the following criteria: population, employment, and commuting patterns. The core, though generally defined as the urban central business district of a metropolitan area, in this case,

the District of Columbia, has been expanded to include a second county—Fairfax County, VA—due to its increased population density, rapid job expansion, and influx of workers from outside the county over the 15-year time span; the suburban counties, or inner ring, contain seven large counties (Frederick County, MD; Montgomery County, MD; Prince George's County, MD; Alexandria City, VA; Arlington County, VA; Loudoun County, VA; and Prince William County, VA), four independent cities (Fairfax City, VA; Falls Church City, VA; Manassas City, VA; and Manassas Park City, VA) surrounded by these counties, and the less populous Charles County, MD; and the exurban counties, or outer ring, contain the eight jurisdictions more on the periphery of the core areas (Calvert County, MD, Clarke County, VA.; Fauquier County, VA; Fredericksburg City, VA; Spotsylvania County, VA; Stafford County, VA; Warren County, VA; and Jefferson County, WV).

<sup>4</sup> Under the North American Industry Classification System (NAICS), the industrial composition and organization of industries is defined by the type of activity, or sector, they are engaged in. For purposes of analysis, the Bureau of Labor Statistics has further aggregated NAICS sectors into groupings called "supersectors" of which there are 11: natural resources and mining; construction; manufacturing; trade, transportation, and utilities; information; financial activities; professional and business services; educational and health services; leisure and hospitality; other services; and government.

<sup>5</sup> There are nine large counties in the Washington-Arlington-Alexandria, DC-VA-MD-WV Metropolitan Statistical Area (MSA) with employment of 75,000 or more: the District of Columbia; Arlington, Fairfax, Loudoun, Prince William Counties and Alexandria City in Virginia; Frederick, Montgomery, and Prince George's Counties in Maryland.

<sup>6</sup> The Bureau of Labor Statistics has installed a powerful tool, the Location Quotient Calculator, on its Web site which greatly aids labor market analysis by generating location quotients—the ratio of analysis-industry employment in the analysis area to base-industry employment in the analysis area divided by the ratio of analysis-industry employment in the base area to base-industry employment in the base area. To access the Location Quotient Calculator, visit the Bureau's Web site at: <http://www.bls.gov/CEW>.

<sup>7</sup> Data from the U.S. Census Bureau Web site: <http://www.census.gov/population/www/cen2000/commuting.html> (visited May 2005).

<sup>8</sup> Edgar M. Hoover and Raymond Vernon, *Anatomy of a Metropolis: The Changing Distribution of People and Jobs within the New York Metropolitan Region* (Cambridge, MA, Harvard University Press, 1959), ch. 6, p. 127.

<sup>9</sup> *Career Guide to Industries*, 2006–07 Edition, Bulletin 2601 (Bureau of Labor Statistics, February 2006). Also available on the Internet at [www.bls.gov/oco/cg/home.htm](http://www.bls.gov/oco/cg/home.htm).

<sup>10</sup> Hoover and Vernon, *Anatomy of a Metropolis*, ch. 2, pp. 25–61.

<sup>11</sup> Other industries include the manufacturing and natural resources and mining supersectors, which were not covered in this article due to lack of detailed data for a number of counties in the Washington metropolitan area.

<sup>12</sup> Time period established by the National Bureau of Economic Research (NBER). The NBER does not define a recession in terms of two consecutive quarters of decline in real GDP. Rather, a recession is a significant decline in economic activity spread across the economy, lasting more than a few months, normally visible in real GDP, real income, employment, industrial production, and wholesale-retail sales.