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The Washington Metropolitan Area 2030 Economic Outlook:

Standard Forecast

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Key Research Findings

The Washington metropolitan area (see appendix for definition) will experience substantial growth in population, jobs and output value over the next twenty years but due to its constrained boundaries (contiguity to the Baltimore metropolitan area), growing dependency on non-resident labor, and structure of its economy, it will not grow as fast as the Dallas-Fort Worth and Atlanta metropolitan areas. The question is whether this projected economic future can be altered to achieve a structural capacity to accelerate the Washington area's growth by building on its emerging comparative advantages thereby advancing its economy faster than if these efforts to reposition the economy were not undertaken.

The first step in answering that question is to more fully understand the comparative positions of the Washington area economy relative to the economies of Dallas-Fort Worth and Atlanta and their projected growth patterns over the next twenty years. The analyses reported herein can be summarized as follows:

- The economies of both Dallas-Fort-Worth and Atlanta are projected to grow faster than the Washington area between 2010 and 2030;

- Both Dallas-Fort Worth and Atlanta will overtake the Washington area in the number of residents (population) and jobs;

Population, Employment and GRP Growth in the Washington, Dallas-Fort Worth and Atlanta Metropolitan Areas, 2010-2030 (population and jobs in millions, in billions of 2000 $s,)

Metro Area	Population	Employment	GRP
Washington			
2010	5.56	4.07	$352.07
2030	7.23	5.65	683.70
Dallas-Fort Worth			
2010	6.57	4.07	$339.26
2030	9.57	6.32	709.94
Atlanta			
2010	5.73	3.43	$253.74
2030	9.04	5.81	556.90

Sources: NPA Data Services, Inc., GMU Center for Regional Analysis

- The Washington area economy will be increasingly impacted by its growing commuter dependency that results in the transfer of income (Table 3) and consumer spending potential to jurisdictions outside of the metropolitan area as seen in disproportionally smaller employment in consumer and retail services, local government services and health services than exists in other metropolitan areas;

- If the Washington area economy had proportionally scaled consumer service sectors to Dallas-Fort Worth and Atlanta, its gross regional product would be an estimated 11.4% larger in 2010 and 14.2% larger by 2030 than currently forecast;

- Still, the Washington area economy is larger than what would be normally supported by its smaller population and resident job bases;

- The Washington area's larger economy is partially explained by its greater number of workers per capita (more workers per household) and fewer dependents; it is also explained by the economy's structure that favors higher-valued business activities and more advanced occupations supported by less cyclically sensitive core industries (e.g., the federal government, international business, hospitality, education and health, technology);

- The private sector strength in the Washington area economy is found in its service sector that is projected to account for between 60 and 70% of all net job growth over the next twenty years as well as similar percentages of new earnings; these are significantly greater percentages than projected for the Dallas-Fort Worth or Atlanta economies (Figures 6, 7, 8);

- The primary sources of new private sector jobs are found in professional and business services, health services and education services incorporating occupations that are projected to enjoy above-average growth rates and for which the Washington area has both numerical and earnings advantages, including business and financial operations; computer and mathematical; education and training; protective services; arts, design, entertainments, sports and media; legal; life, physical, and social science; and community and social services (Figures 9-16)

Historically, the growth of the Washington area economy has been dominated by its primary core sectors consisting of federal and national capital functions. While driving the area's economy along a less cyclical growth trajectory these core sectors also have supported the growth of occupations and businesses that are projected to be both rapidly growing and high value added. These faster growing sub-sectors, in combination with the area's historic strengths and its emerging attractiveness as a global center for governmental and international business activities, may provide the framework for raising the economy's growth trajectory in the coming decades.

Introduction

By 2030, the Washington metropolitan area is projected to have a resident population of 7.2 million people, up almost 30 percent from 2010, an employment base totaling 5.6 million jobs inclusive of part-time, contract, full-time and self-employed workers representing a gain of almost 40 percent, and an economy totaling $832.7 billion (in 2008 $s) reflecting growth of almost 95 percent. With the Washington area's population projected to increase 30 percent, its job base to increase almost 40 percent and its economy to expand by almost 95 percent between 2010 and 2030, the future would appear to be on a course that would advance it from its present ranking as fourth largest metropolitan area economy in the U.S. But, this may not be the case.

The Dallas-Fort Worth metropolitan area economy, which is currently the fifth largest in the nation, is projected to out-perform the Washington area economy over the next 20 years by these measures. With economic growth of 110 percent projected over this period, it will overtake the Washington area. While the Atlanta metropolitan area economy will not surpass the dollar value of the Washington area economy by 2030, its growth rate of 120 percent suggests that it will surpass the Washington metropolitan area's economy in the longer term. And, both of these metropolitan areas are projected to surpass the Washington area in the total number of jobs and population between 2010 and 2030.

The analyses in this report will document the population, employment and economic growth patterns projected for these three metropolitan areas between 2005 and 2030 and examine the reasons for their future performance differences. By documenting these performance differences, these analyses will identify the unique characteristics of the Washington economy that explain its economic outlook. These unique strengths (and weaknesses) may also represent opportunities that could result in a different growth path if the underlying conditions necessary for accelerating their growth were promoted through redirected public policy actions by the area's local and state governments.

This comparative analysis and identification of the underlying strengths and specializations in the Washington area economy will establish the framework for detailed analyses and projections of possible future economic activities that could combine with the Washington area's current core industrial structure to drive employment and income growth at a greater rate than currently forecast.

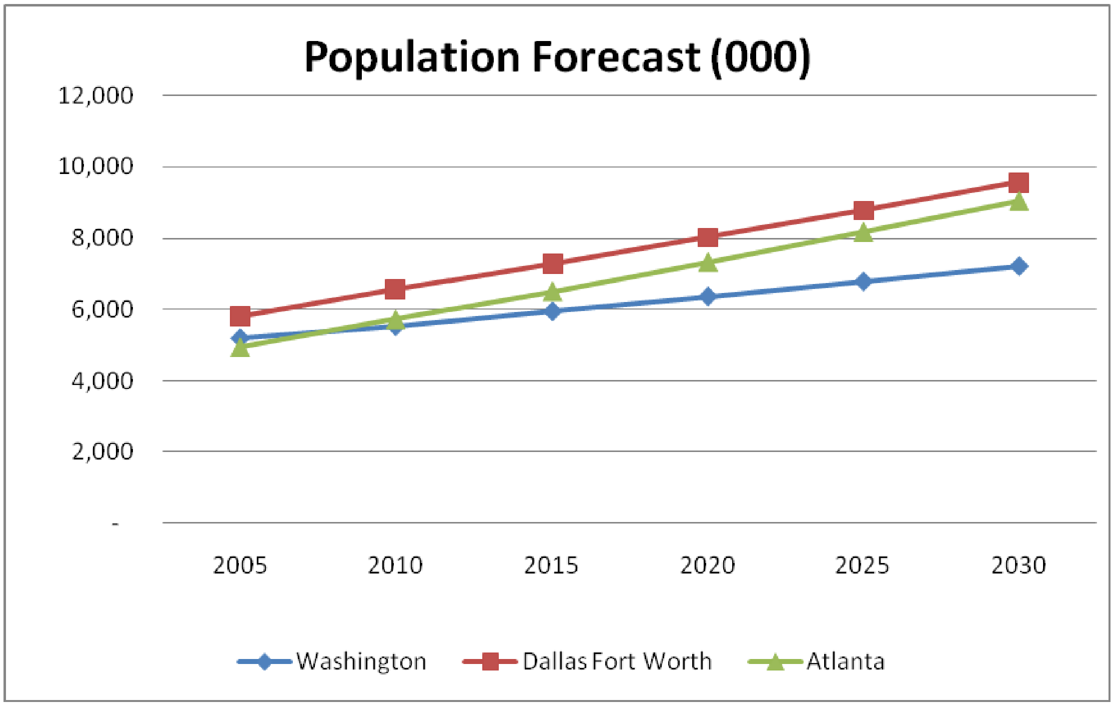
Population, Employment and Economic Growth: The Washington Area, Dallas-Fort Worth and Atlanta

The Washington area ranks higher in terms of jobs than population; that is, its employment base is not supported by a resident population to the same extent as in other metropolitan areas. This is a result of its adjacency with the Baltimore metropolitan area that supplies it with labor resources, as do other adjacent jurisdictions to the south, east and west. The Washington area laborshed also extends into Pennsylvania and Delaware. The Dallas-Fort Worth and Atlanta metropolitan areas do not abut other major metropolitan areas and can expand their boundaries as their economic influence expands over time.

Why is this important? The workers commuting into the Washington area from beyond its metropolitan boundaries (e.g., Howard and Anne Arundel Counties) return home at night with their pay checks and spend their earnings in their local economies supporting retail and consumer and government services there and not in the metropolitan area in which they work. As a result of the Washington area's constrained boundaries, its economic structure differs from that of most other metropolitan areas. This affects its job and income mix as well as its fiscal base.

As can be seen in Figures 1 and 2 and Table 1, the Washington area is projected to grow more slowly than the Dallas-Fort Worth and Atlanta metropolitan areas. It is surpassed by 2010 by both in terms of population and by 2015 and 2025 is surpassed for the number of jobs respectively by Dallas-Fort Worth and Atlanta. By 2030, Dallas-Fort Worth is projected to have 2.3 million more residents than the Washington metropolitan area and Atlanta's projected population will exceed that in the Washington area by 1.8 million. These population differences translate into a retail market potential advantage that will support residentially based services at a greater level than in the Washington area.

Figure 1



Sources: NPA Data Services, Inc; GMU Center for Regional Analysis

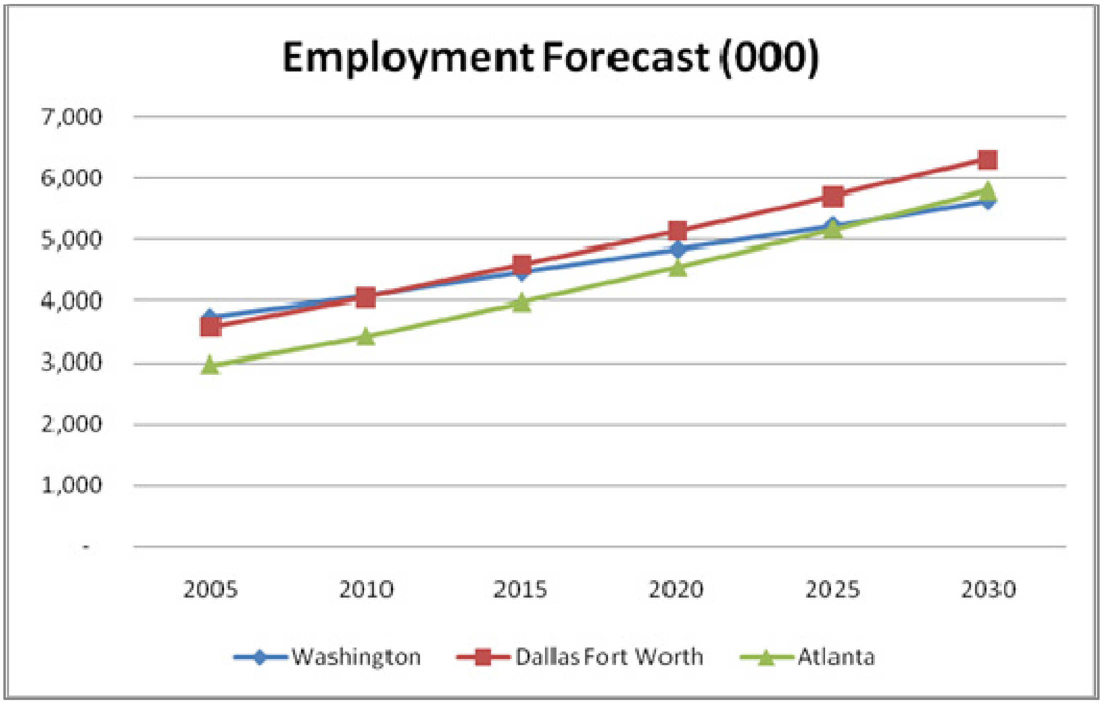
Table 1

Percent Change in Total Employment

	2010	2015	2020	2025	2030
US	6.3%	7.0%	6.1%	6.3%	6.6%
Washington	8.8%	9.8%	8.4%	8.0%	7.9%
Dallas Fort Worth	13.6%	13.2%	11.7%	10.9%	10.6%
Atlanta	15.6%	16.3%	14.4%	13.3%	12.5%

Sources: NPA Data Services, Inc; GMU Center for Regional Analysis

Figure 2



Sources: NPA Data Services, Inc.; GMU Center for Regional Analysis

These population growth differences also impact the growth of jobs in state and local government. This is seen when the employment growth projected for these metropolitan areas is divided into private and public sectors as shown in Table 2.

The projected job gains in both the private and public sectors in the Washington metropolitan area lag those for Dallas-Fort Worth and Atlanta. Atlanta's rapid economic growth is reflected in its faster job growth rates than for Dallas-Fort Worth for both private and public sectors. In all three cases state and local government is projected to grow faster than federal employment and approximately the same or slightly faster than private sector employment in the out years.

Table 2

Percent Change in Employment: Private and Public Sectors

	Washington		Dallas		Atlanta	
	Private	Public	Private	Public	Private	Public
05-10	9.6	5.3	13.7	12.4	15.8	14.0
10-15	10.2	7.8	13.0	14.9	16.4	15.4
15-20	8.7	6.9	11.5	13.3	14.5	13.8
20-25	8.3	6.8	10.8	12.5	13.3	12.7
25-30	8.1	7.1	10.4	12.2	12.5	12.2

The impact of the Washington area's growing dependency on non-local workers—commuters—can be demonstrated by the value of the area's GRP, its value of goods and services produced, that is exported to these non-resident workers' home regions. These losses and gains as a percent of GRP are shown in Table 3.

Table 3

Percent of GRP Lost To or Gained From Commuters

	2005	2010	2015	2020	2025	2030
Washington	-3.21%	-4.25%	-5.59%	-6.81%	-7.86%	-8.75%
Dallas Fort Worth	-1.00%	-0.15%	0.74%	1.56%	2.27%	2.87%
Atlanta	-.079%	-.065%	-.071%	-.085%	-1.03%	-1.21%

The net value of lost GRP resulting from the growing labor dependency on non-resident commuters is impacting the Washington area economy to a significantly greater degree than in Dallas-Fort Worth or Atlanta. As can be seen in Table 3, the Washington area economy is the biggest loser of local earnings to its adjacent regional economies. In fact, Dallas-Fort Worth is projected to be an importer of income; that is, it will have more resident workers commuting out to better paying jobs than it will have non-resident workers commuting in.

By 2030, non-resident workers will be accounting for a net loss of $72.9 billion (in 2008 $s) of income earned in the Washington metropolitan area and transported to the economies of the commuters' residence. This lost income has resulted in part from choices by local jurisdictions to restrict the development of sufficient housing to house the local workforce (jobs have been preferred to people) and now are forced to suffer the consequences (more congestion and a narrower mix of employment).

The value of goods and services produced by the Washington metropolitan area economy, its gross regional product, and the economies of Dallas-Fort Worth and Atlanta are shown below in Table 4 and their growth paths are shown in Figure 3.

Table 4

Gross Regional Product, 2005-2030
(in billions of 2000$)

Year	Washington	Dallas-FW	Atlanta
2005	$300.392	$278.507	$209.599
2010	352.066	278.255	253.742
2015	431.300	423.858	321.894
2020	505.729	506.662	389.945

2025	588.797	600.874	467.424
2030	683.695	709.939	556.896

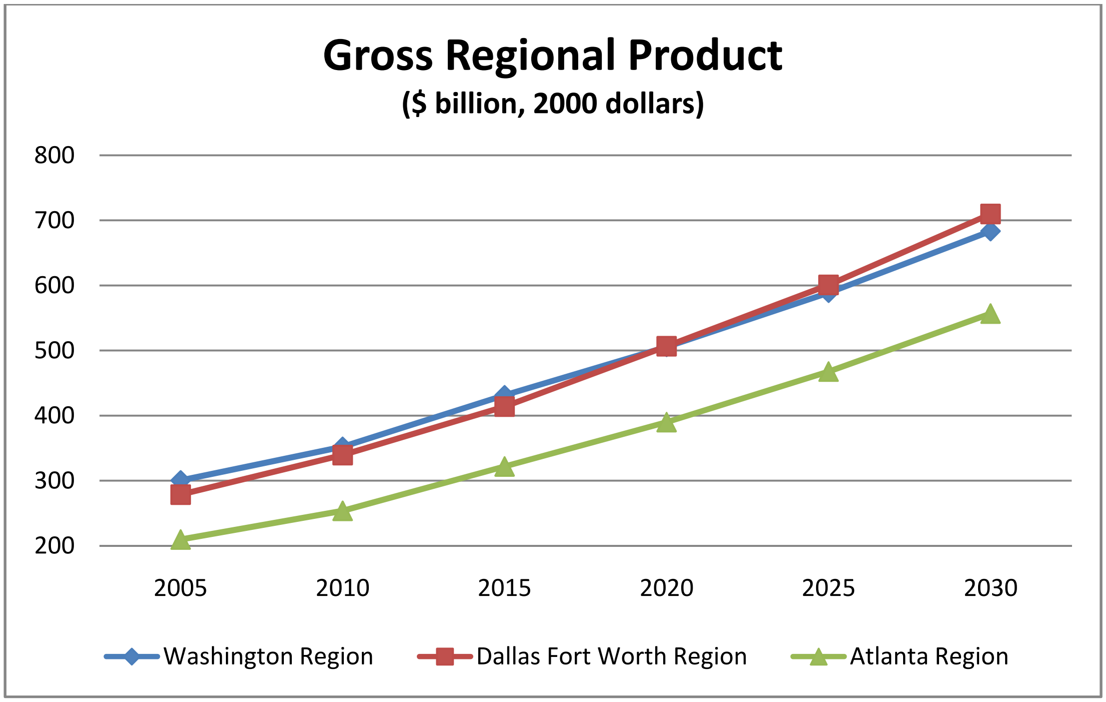
Source: GMU Center for Regional Analysis

While Dallas-Fort Worth's economy is projected to be larger than the economy of the Washington area by 2020, it will not be as much larger as its population or employment base. This difference is even greater in comparison to Atlanta's economy. While Atlanta's population and employment base are projected to exceed those of the Washington metropolitan area by 2030, its economy will remain considerably smaller.

These figures suggest that all jobs are not equal. The average income of workers in the Washington area is substantially greater than in either Dallas-Fort Worth or Atlanta, and with more workers per household and fewer dependents, the Washington area's per capita income levels are also substantially greater. These trends are projected to continue over the forecast period (see Figures 4 and 5).

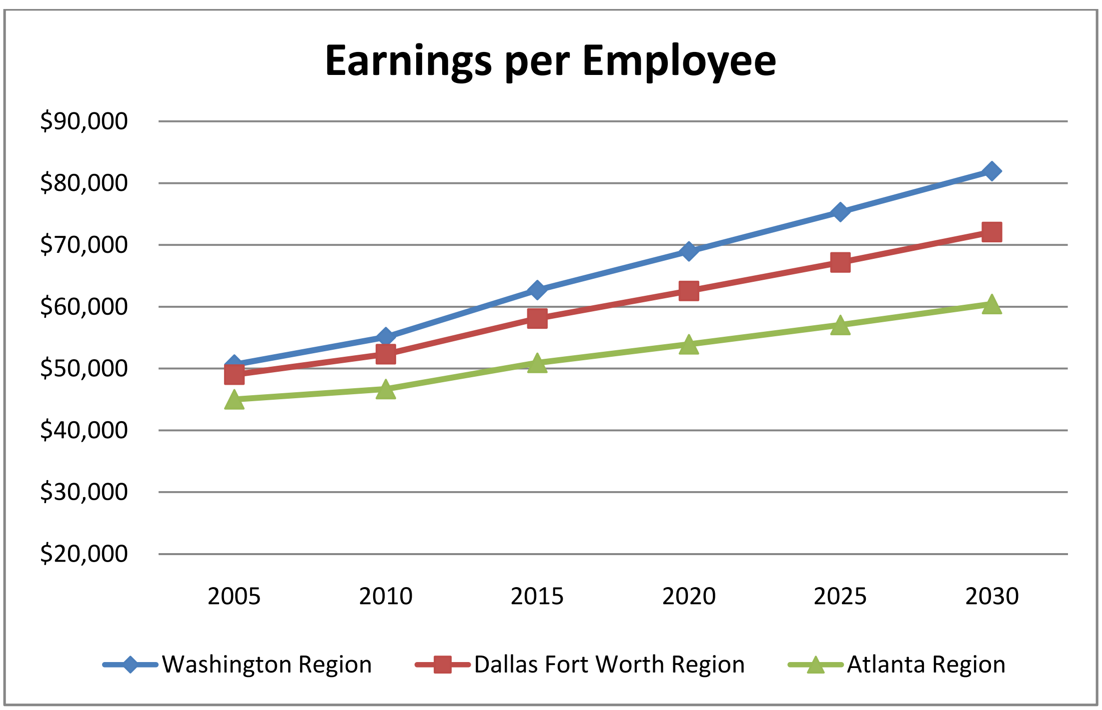
The metropolitan areas' population growth patterns offer a partial explanation for these income and earnings differences. With fewer residents than Dallas-Fort Worth and Atlanta, the employment base in the Washington area has a smaller proportion of retail and consumer service jobs that have lower average wages and salaries than the non-residentially supported employment base. Also, the Washington area has a larger proportion of higher value added jobs that are associated with federal contracting and other knowledge and technology intensive work that characterizes the professional and business services sector. These types of jobs support higher GDP per worker than in other metropolitan areas.

Figure 3



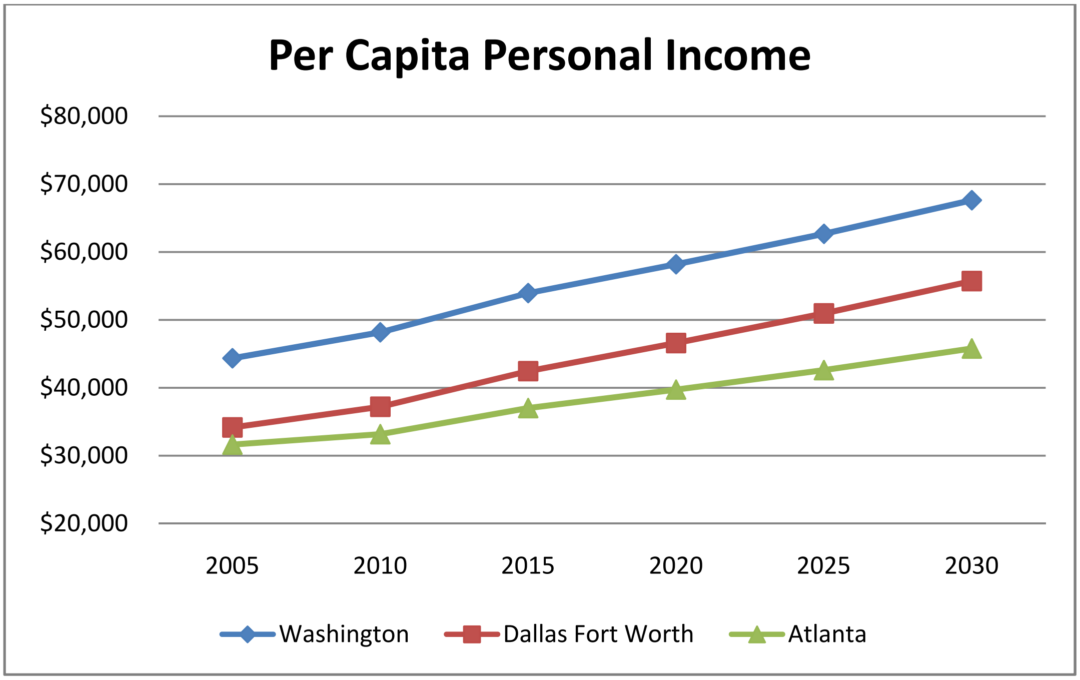
Source: GMU Center for Regional Analysis

Figure 4



Sources: NPA Data Services, Inc., GMU Center for Regional Analysis

Figure 5



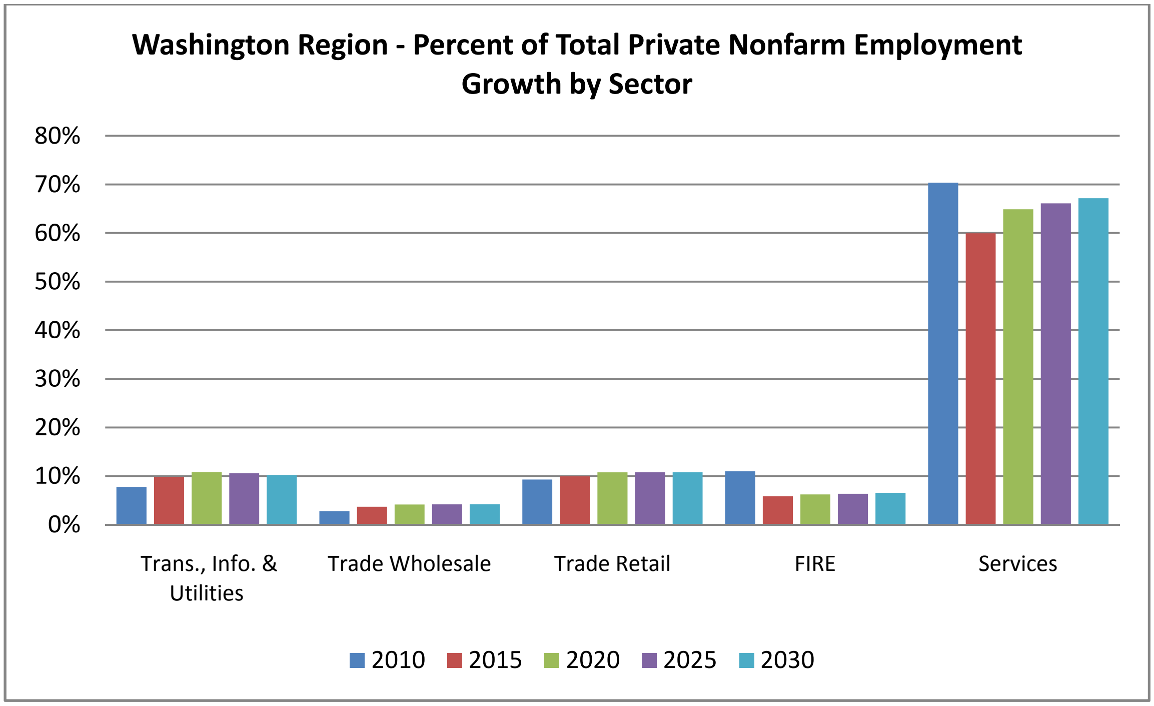
Sources: NPA Data Services, Inc.; GMU Center for Regional Analysis

Sources of Economic Strength in the Washington Area Economy

The service sector is the dominant source of employment in the Washington area economy accounting for approximately 60 percent of all private sector jobs in 2008. The continuing importance of the service sector in the Washington area's economic growth is illustrated by its contribution to job change over each of the future five-year periods. As shown in Figure 6, the service sector is projected to be the principal source of new jobs ranging from 70 percent of the private sector job growth projected between 2005 and 2010 and ranging from 60 to 67 percent of the area's new private sector job growth in each of the subsequent five-year periods through 2030. In comparison, retail trade is projected to account for only 10 percent of the area's new jobs.

In Dallas-Fort Worth and Atlanta, the service sectors are not as dominant accounting for 44 percent and 47 percent respectively of all private sector employment. Similarly, their contributions to job growth are projected to be much less (50% and 55%) than in the Washington area economy going forward. Charts showing these contributions to future job growth for the Dallas-Fort Worth and Atlanta economies are presented in the Appendix.

Figure 6

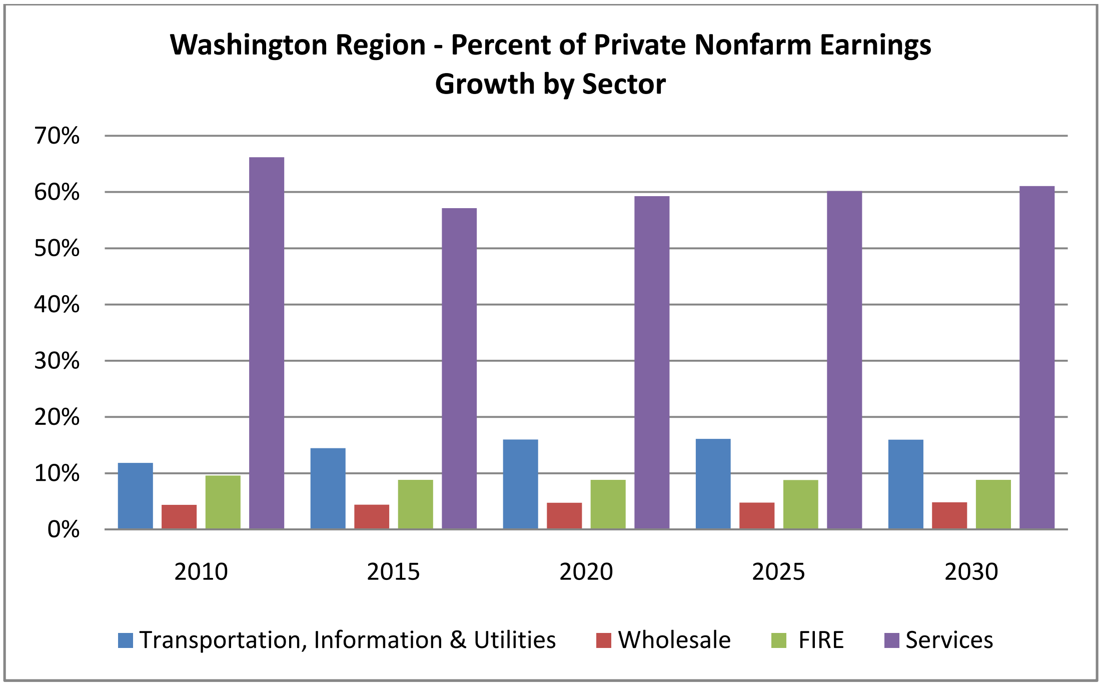


Sources: NPA Data Services, Inc.; GMU Center for Regional Analysis

The importance of the service sector as a source of income and its relative strength compared to the service sectors in Dallas-Fort Worth and Atlanta are illustrated in the following charts. As shown in Figure 7, services will account for 60 percent of the projected growth in private sector earnings followed by the transportation and utilities sector (largely reflecting jobs related to Dulles Airport). Besides being projected as the dominant source of earnings in the Washington area, the Area's service sector has much higher average earnings per employee than found in Dallas-Fort Worth or Atlanta, as shown in Figure 8.

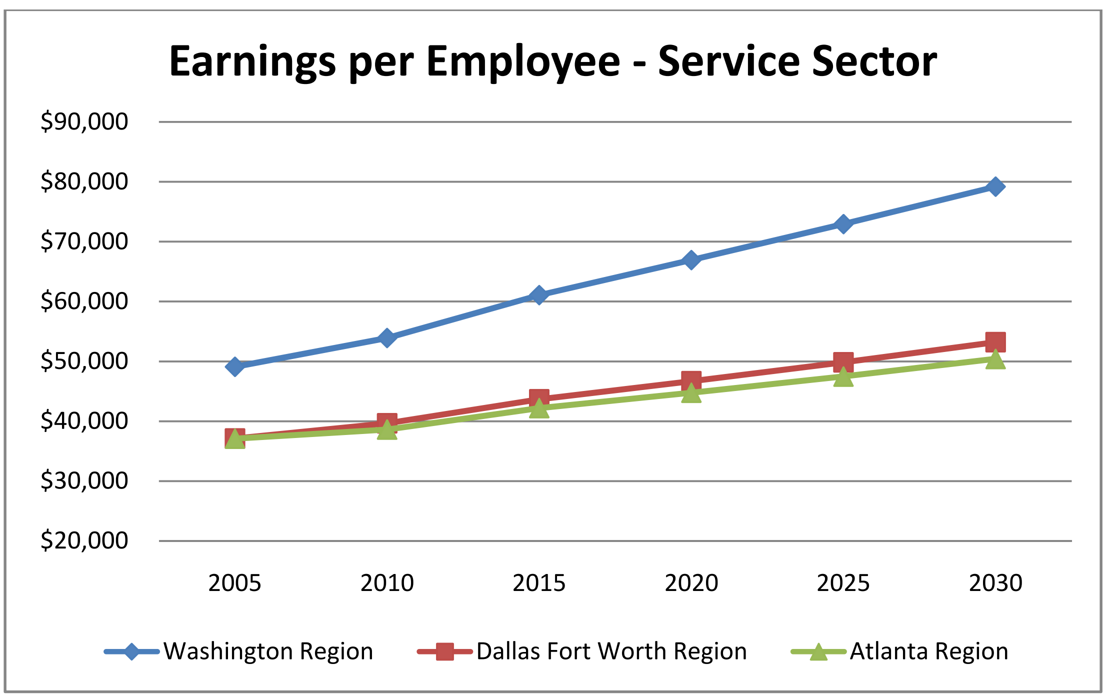
The Washington area's service sector is larger and consists of a mix of sub-sectors and occupations that distinguish it from other metropolitan area economies. This sub-sector and occupational mix accounts for higher average earnings per worker and supports higher-value added business activities. These factors account for the Washington area's higher gross regional product than would otherwise be supported by the size of its employment base. Identifying this mix of sub-sector specializations and occupations is the first step in measuring the Washington area's comparative advantages that may provide the basis for achieving greater economic growth over the next twenty years than that which is presently forecast.

Figure 7



Sources: NPA Data Services, Inc.; GMU Center for Regional Analysis

Figure 8

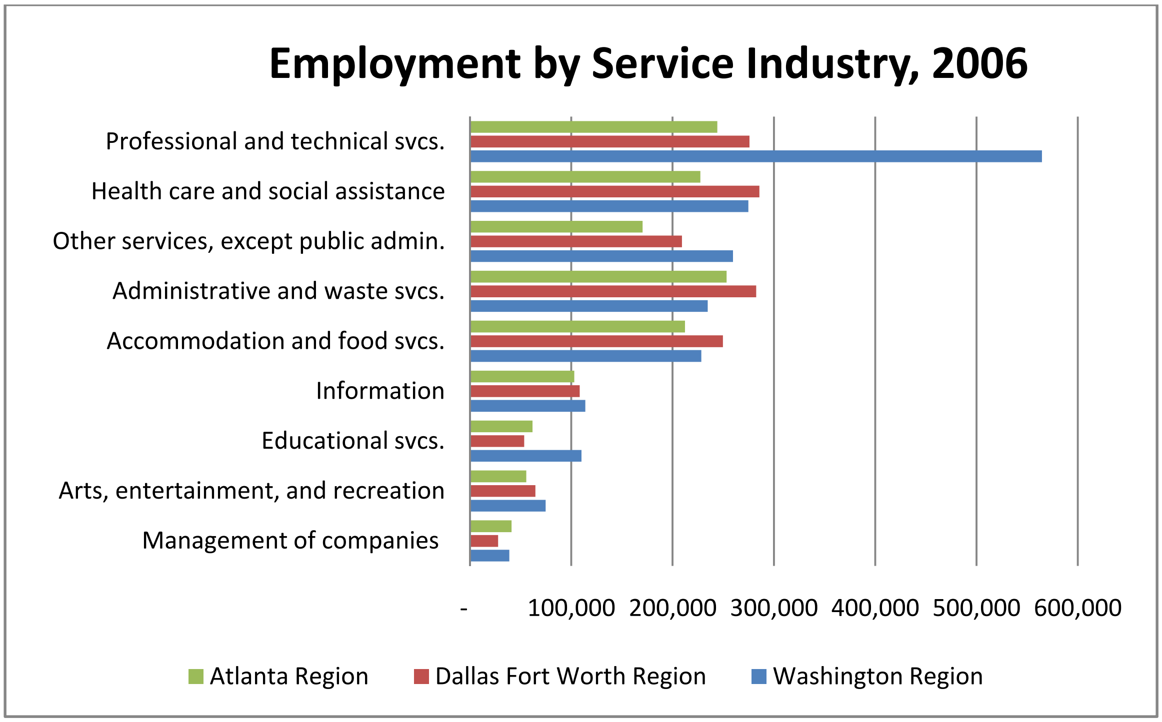


Sources: NPAS Data Services, Inc.; GMU Center for Regional Analysis

Sub-Sector Service Sector Strengths in the Washington Area

The principal structural difference that distinguishes the service sector in the Washington metropolitan area economy is the relative size of its professional and technical services sub-sector, its importance as a source of total earnings, and its higher earnings level per employee. The remaining major sub-sectors comprising the service sector are not significantly different from their counterparts in Dallas-Fort Worth and Atlanta. These comparisons are self-evident on the following three charts.

Figure 9

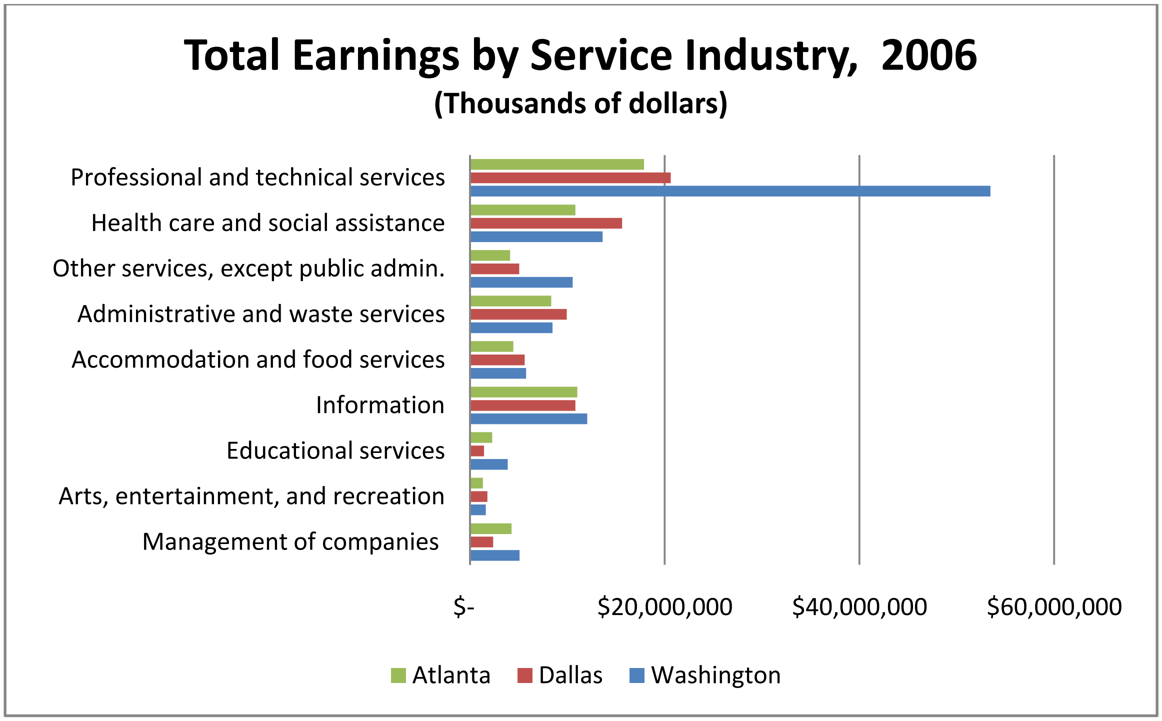


Sources: U.S. Bureau of Economic Analysis, GMU Center for Regional Analysis

The professional and technical services industry includes:

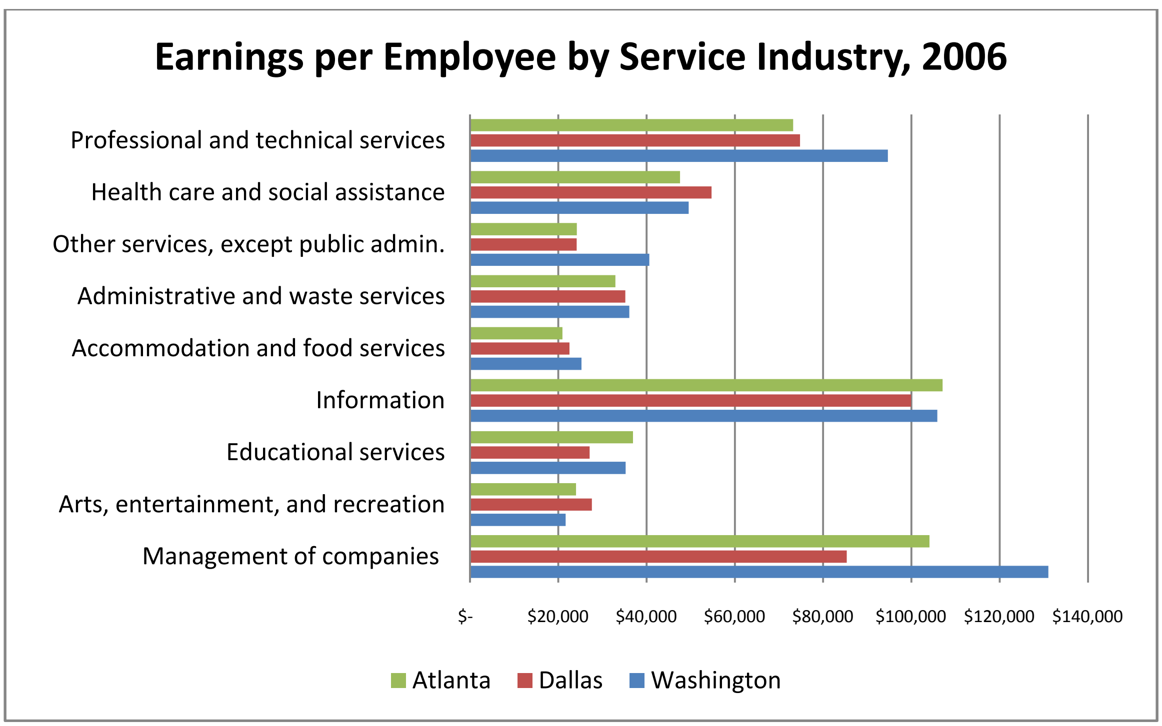
- Legal Services
- Accounting, Tax Preparation, Bookkeeping, and Payroll Services
- Architectural, Engineering, and Related Services
- Specialized Design Services (such as interior or graphic design)
- Computer Systems Design and Related Services
- Management, Scientific, and Technical Consulting Services
- Scientific Research and Development Services
- Advertising and Related Services
- Other Professional, Scientific, and Technical Services (such as market research and polling, photography, translation, and veterinary services)

Figure 10



Sources: U.S. Bureau of Economic Analysis, GMU Center for Regional Analysis

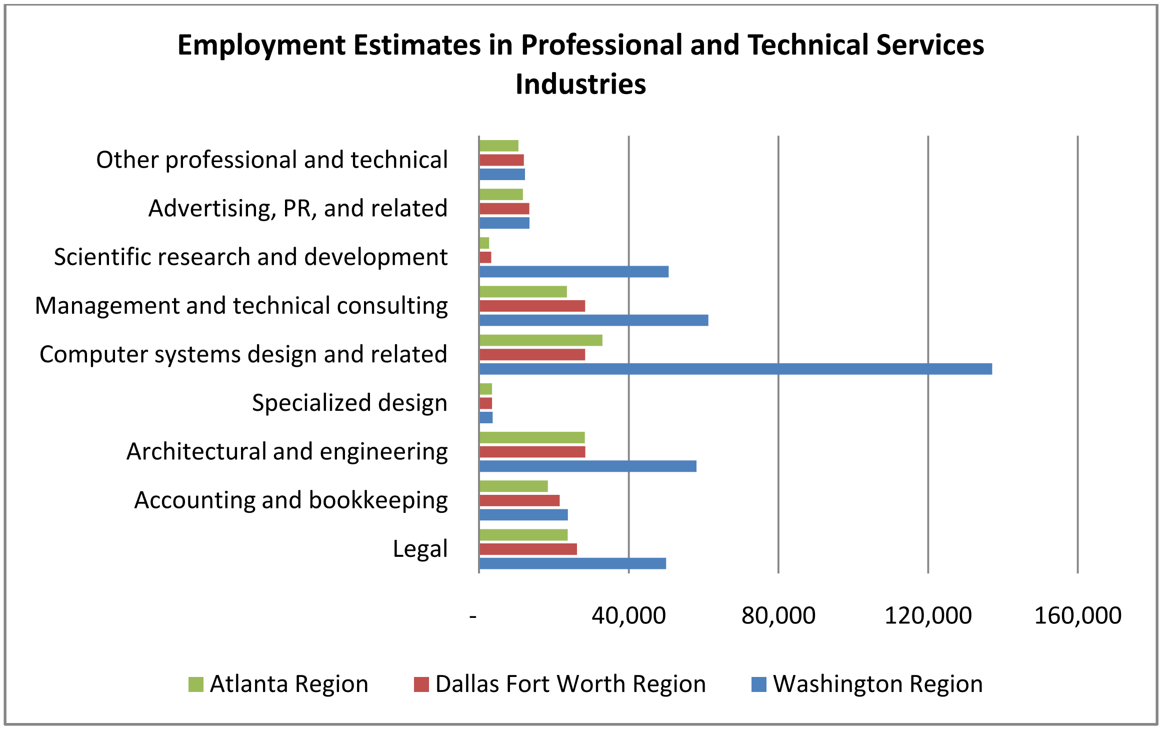
Figure 11



Sources: U.S. Bureau of Economic Analysis, GMU Center for Regional Analysis

Figure 12 shows the sources of the Washington area's strength in professional services are computer systems design and related services, scientific research and development services, and architectural and engineering services, as well as consulting and legal services.

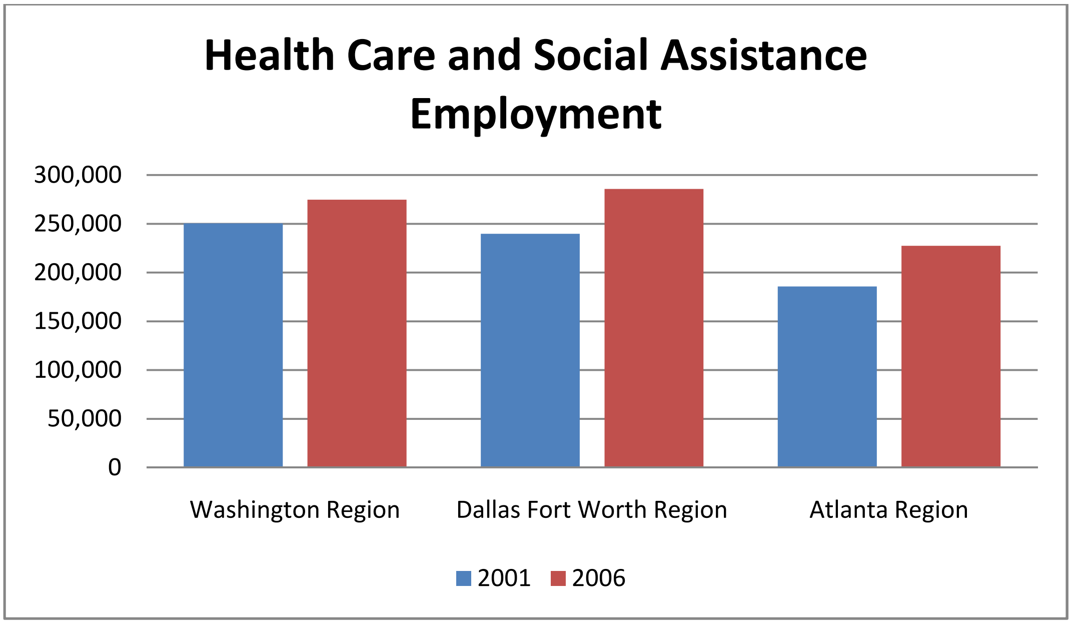
Figure 12



Sources: U.S. Bureau of Labor Statistics, GMU Center for Regional Analysis (estimates based on data for 2004-2007)

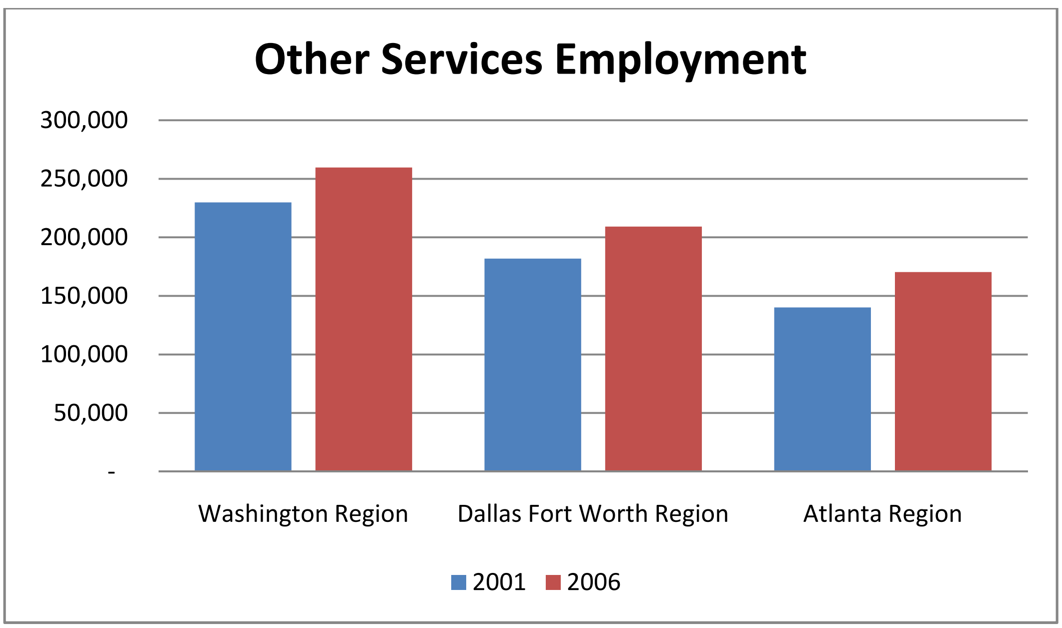
Other service sub-sectors beyond professional and technical services that show strength in number and earnings include: health care and social assistance and other services employment. Other service employment includes repair and maintenance; personal and laundry services; and membership associations and organizations - the latter of which appears to account for much of Washington's advantage in this category.

Figure 13



Sources: U.S. Bureau of Economic Analysis, GMU Center for Regional Analysis

Figure 14

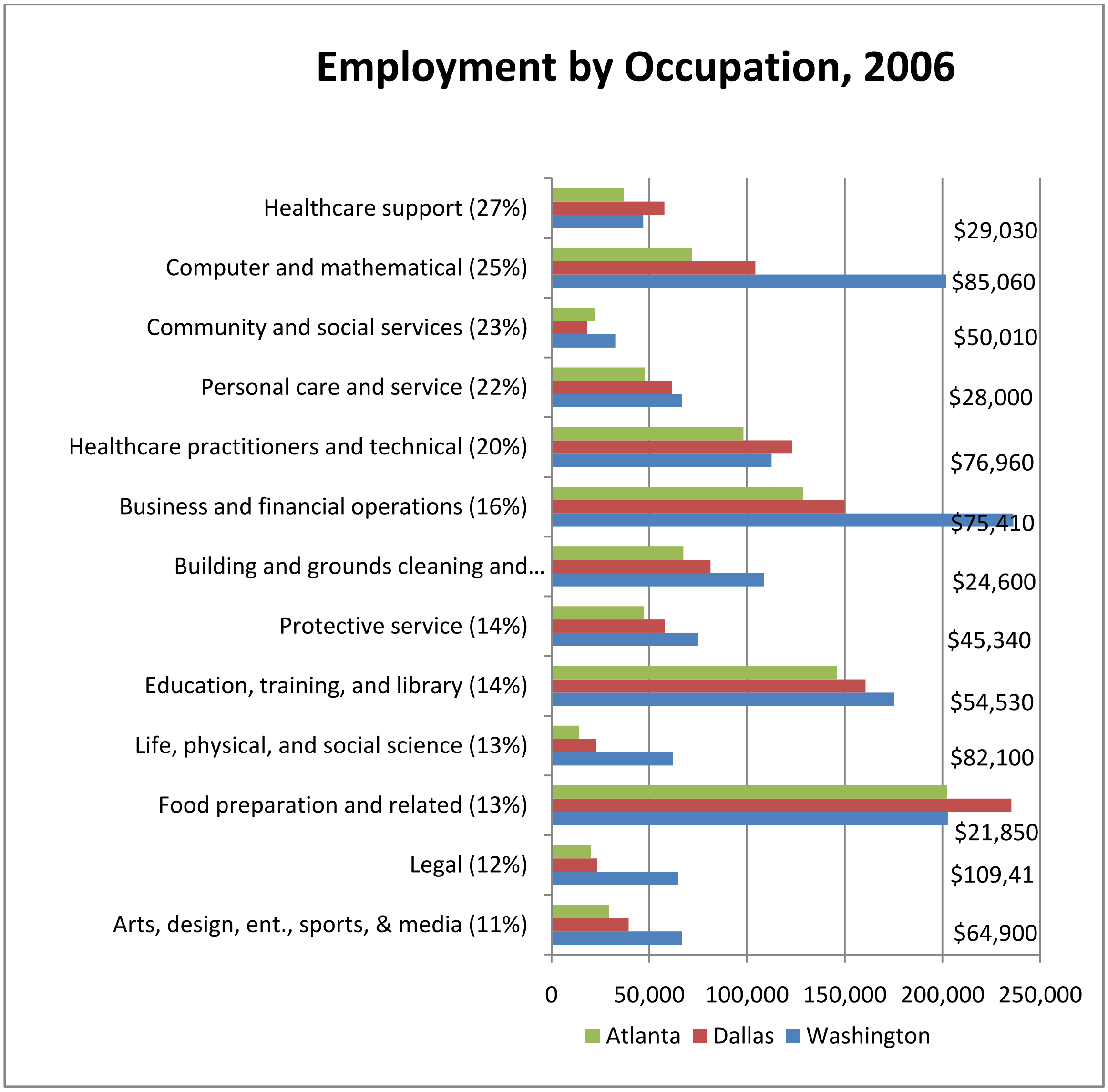


Sources: U.S. Bureau of Economic Analysis, GMU Center for Regional Analysis

Fast Growing Occupations, 2006-2016

The Washington metropolitan area specializes in some of the occupations projected to experience rapid growth over the 2006-2016 period. These fast-growing occupations are shown by descending rates of growth in Figure 15. Washington's mean annual wage for 2006 is also shown. In most of these fast-growing occupations, Washington has a larger base of workers who also earn more than their counterparts in Dallas-Fort Worth and Atlanta. The exceptions are in healthcare related occupations and food preparation.

Figure 15

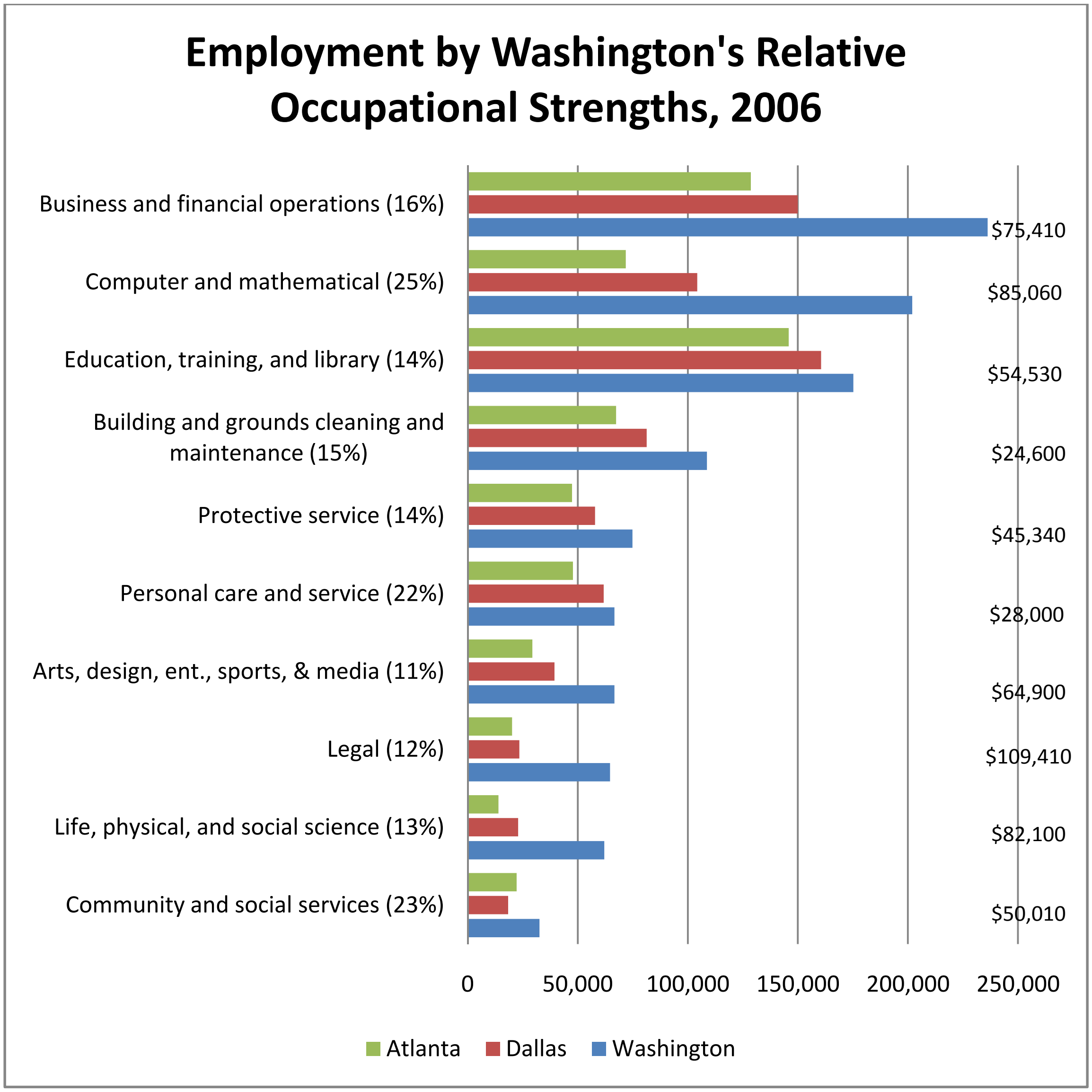


Sources: U.S. Bureau of Labor Statistics; GMU Center for Regional Analysis

The Washington Area's Comparative Strengths, 2006-2016

The fast-growing occupational categories in which the Washington area has the greatest relative strengths in comparison to Dallas-Fort Worth and Atlanta are presented in rank order in Figure 16. These occupations suggest some specializations that may offer faster future economic growth opportunities building on the Washington area's basic comparative strengths. Examples of specific occupations within some of these categories are listed in Table 5.

Figure 16



Sources: U.S. Bureau of Labor Statistics; GMU Center for Regional Analysis (with growth rate 2006-2016 in parentheses and mean annual wage, 2006)

Table 5

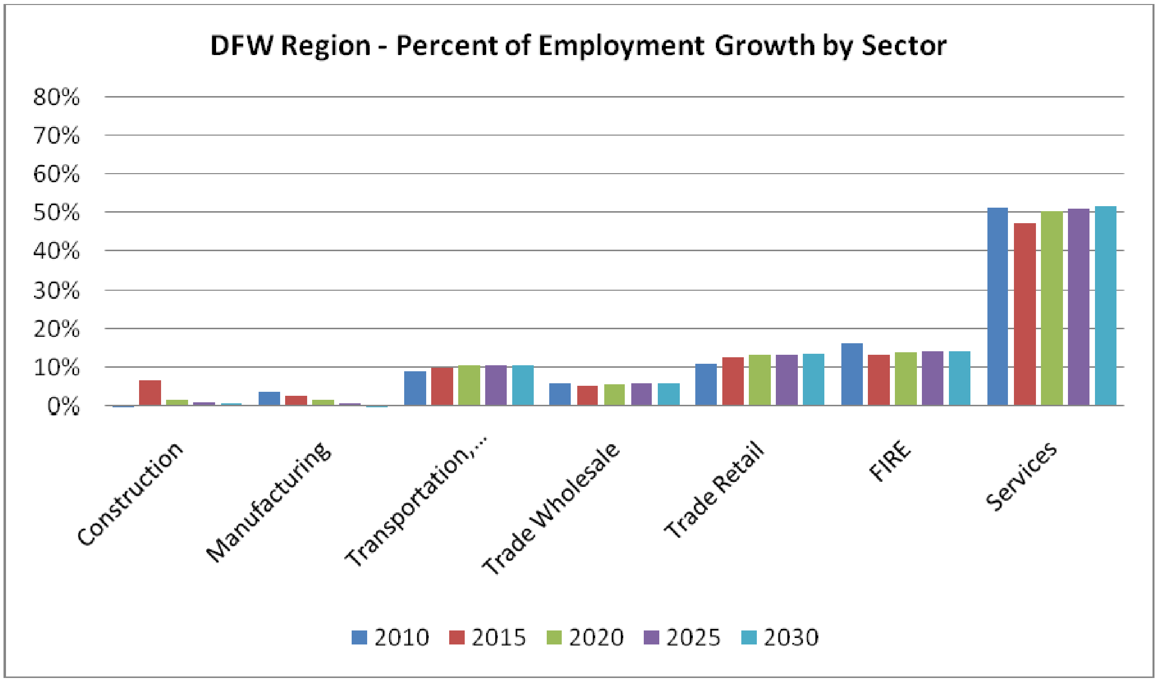
Leading Occupations by Occupational Category, Washington MSA, 2007

Business and Financial Operations	Computer and Mathematical Science	Education, Training and Library	Life, Physical and Social Science
Business Operations Specialists	Computer Software Engineers, Applications	Elementary and Middle, and School Teachers	Market Research Analysts
Management Analysts	Computer Systems Analysts	Postsecondary Teachers	Social Scientists and Related Workers
Accountants and Auditors	Computer Software Engineers, Systems Software	Secondary Teachers	Economists
Human Resources, Training and Labor Relations Specialists	Network and Computer Systems Administrators	Teacher Assistants	Environmental Scientists and Specialists
Purchasing Agents	Computer Specialists	Preschool Teachers	Chemists

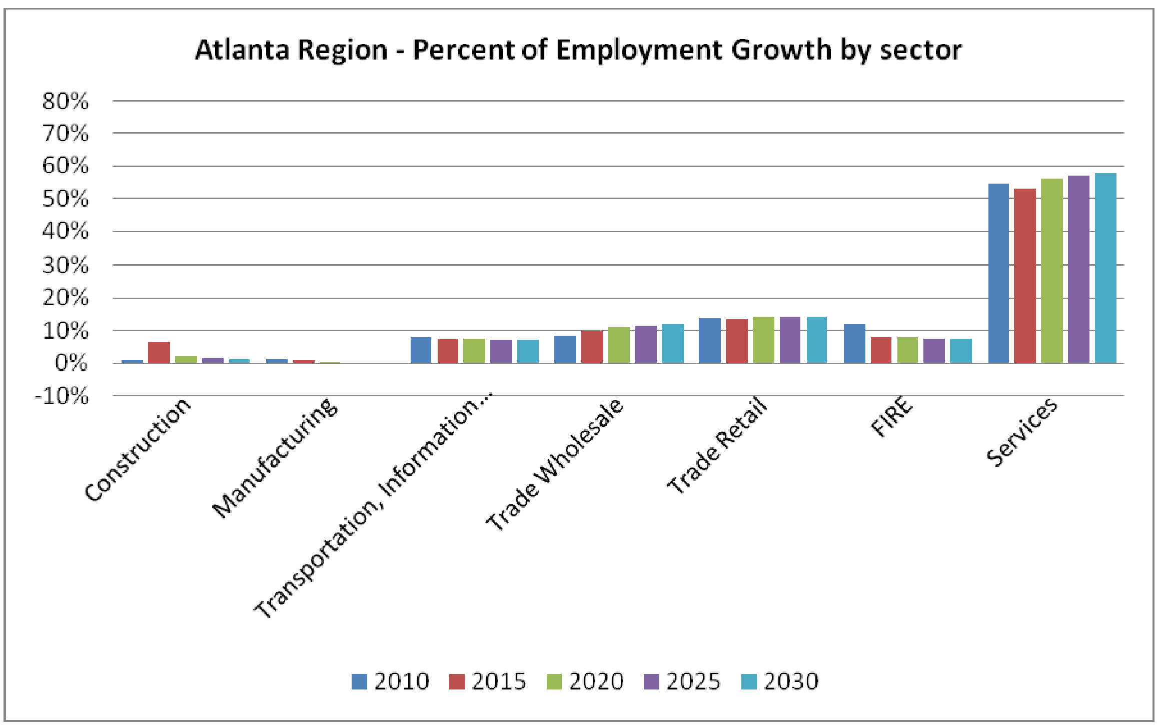
Sources: U.S. Bureau of Labor Statistics; GMU Center for Regional Analysis

Historically, the growth of the Washington area economy has been dominated by its primary core sectors consisting of federal and national capital functions. In addition to driving the area's economy along a less cyclical growth trajectory, these core sectors also have supported the growth of occupations and businesses that are projected to be both rapidly growing and high value added. These specialized occupations include: business and financial operations, computer and mathematical science, education, and life, physical and social science. These faster growing sub-sectors, in combination with the Washington metropolitan area's historic strengths and its emerging attractiveness as a global center for governmental and international business activities, may provide the framework for raising the economy's growth trajectory in the coming decades.

Appendices



Sources: NPA Data Services, Inc.; GMU Center for Regional Analysis



Sources: NPA Data Services, Inc.; GMU Center for Regional Analysis

U.S. Census Definition for the Washington Metropolitan Area

District of Columbia

Sub-urban Maryland

- Calvert County
- Charles County
- Frederick County
- Montgomery County
- Prince George’s County

Jefferson County, W. VA.

Northern Virginia

- Arlington County
- Clark County
- Fairfax County
- Fauquier County
- Loudoun County
- Prince William County
- Spotsylvania County
- Stafford County
- Warren County
- Alexandria City
- Fairfax City
- Falls Church
- Fredericksburg
- Manassas City
- Manassas Park