The Vision Series, 2012-2013

The Washington Area Economy: Transitioning From Federal Dependency to a Global Business Base

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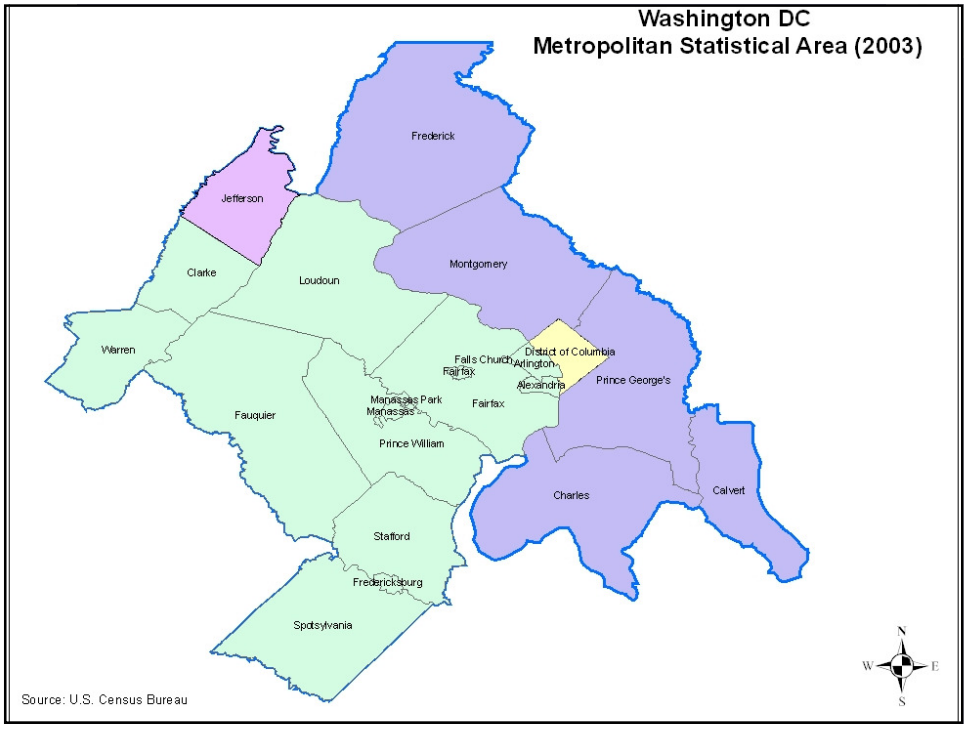
The Washington Metropolitan Area from The International Space Station, January 20, 2013



The Washington Metropolitan Area in 2042

(population and employment in millions, GRP in billions of 2012 $s)

Metric	2012	2042	Change
Population	5.810	7.938	36.6
Employment	3.915	6.074	55.1
Gross Regional Product (GRP)	$450.9	$1,149.2	154.9
Current Year $s		$2,273.0	404.1

Source: IHS Global Insight, GMU Center for Regional Analysis

The Washington Area Economy's Competitive Position

- 1st in percent of residents with graduate or professional degrees
- 3rd in number of workers per household
- 2nd in labor force participation rate
- 1st in median household income
- Lowest unemployment rate among peer metropolitan areas
- 1st for traffic congestion
- 2nd in the number of square feet of total office space
- 4th largest economy among U.S. metropolitan areas but only 7th in population

The First 200 Years

The Capital City in 1800

"The Washington Daily *Advertizer* had reported on June 11, 1800, that the State, War, Navy, and Post Office departments—all but the Treasury—had been moved from Philadelphia. It sounded impressive, but the total number of employees (inclusive of Treasury) was only 131." (p.11)

"A great many of the federal employees thought well of their new location. While there was a great housing shortage and rents were high, provisions were plentiful and cheaper than in Philadelphia. They liked the situation and thought the place beautiful, and with good prospects for growth." (p. 12)

From The Potomac (1949), by Frederick Gutheim

The Capital City in 1800

"The Census of 1800 found about 5,000 persons each in the established towns of Georgetown and Alexandria and about 3,000 in the rest of the Federal District." (p. 12)

"Nearly a million dollars had been spent in the nine years since the permanent seat of government had been chosen, but so huge the task that there was remarkably little to show for it." (p.13)

"Most of the difficulties…were due to a simple lack of funds. Since the commencement of work on the public buildings there were seldom adequate plans and estimates, and when there were, the funds requested were not appropriated by Congress. (p. 17)

From The Potomac (1949), by Frederick Gutheim

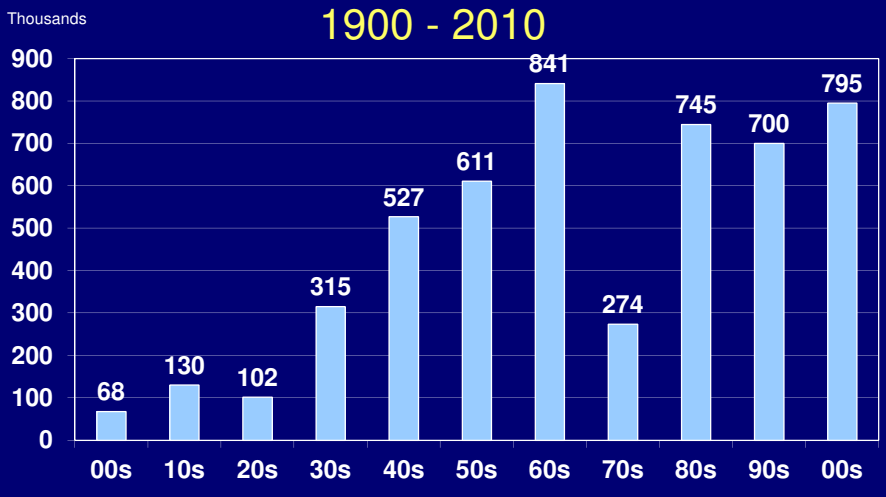
Population and Federal Employment Growth In the Washington Area, 1800-2000

Years	DC	Metro Area	Federal Employees
1800	8,144	63,653*	131**
1860	75,080	141,215*	2,199**
1870	131,700	203,108*	6,222**
1900	278,718	378,605*	20,834**
1930	486,869	672,198	68,510**
1940	663,091	967,985	133,645**
1950	792,234	1,452,349	214,077**
1992	597,350	4,271,800	355,310
1998	566,320	4,645,080	326,540
2000	572,510	4,843,280	326,230

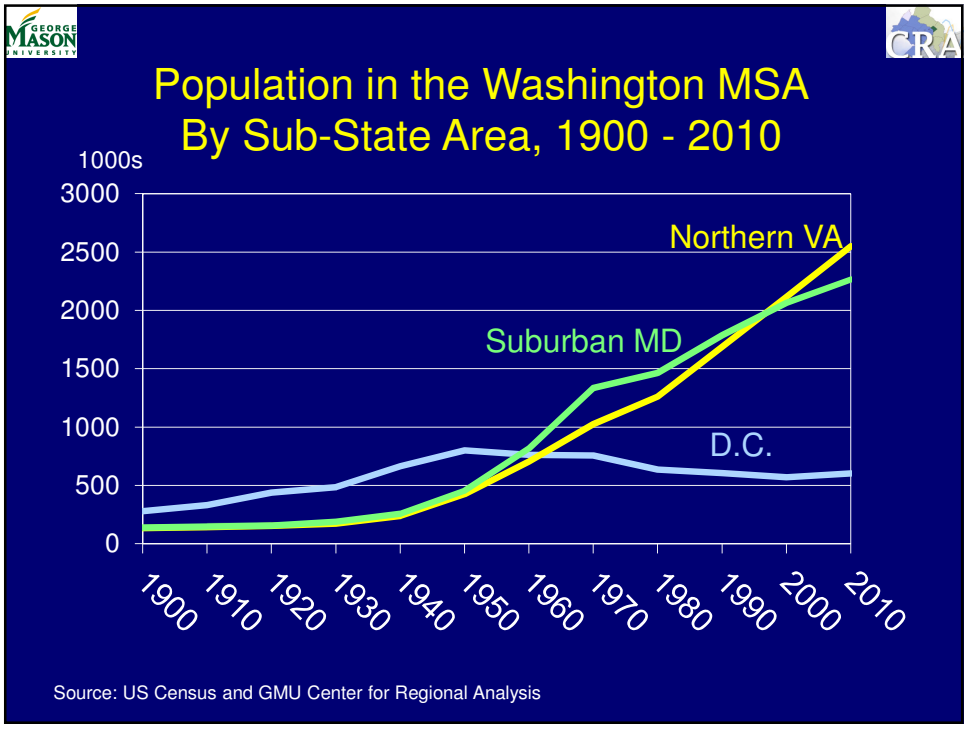
*DC, Alexandria, Arlington, Fairfax, Montgomery, Prince George's, **in DC only

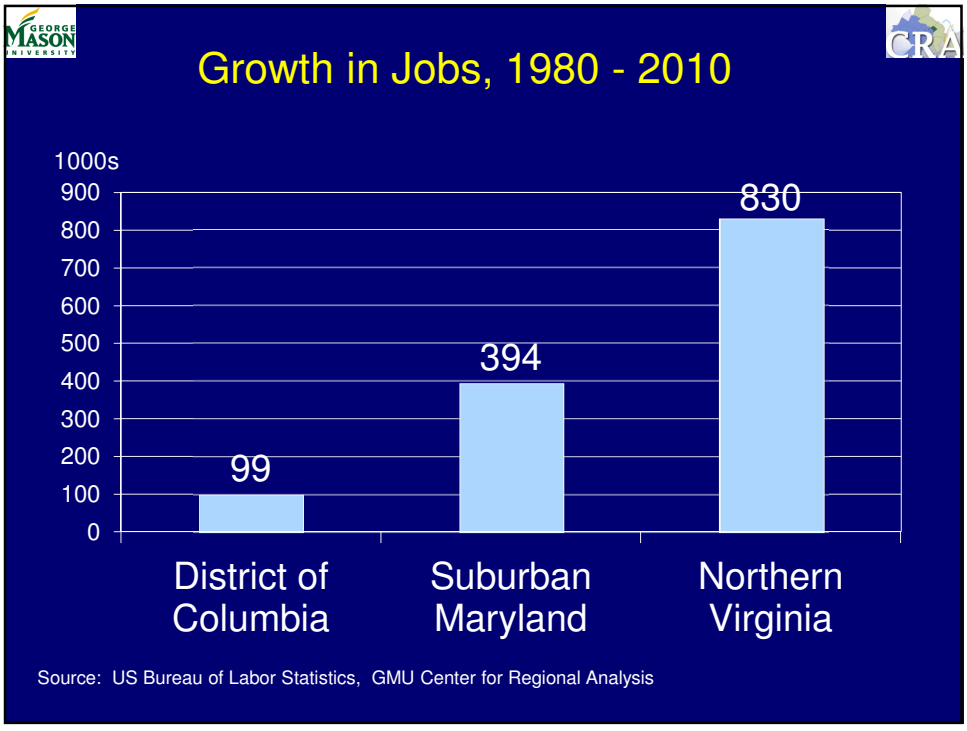
Source: GMU Center for Regional Analysis

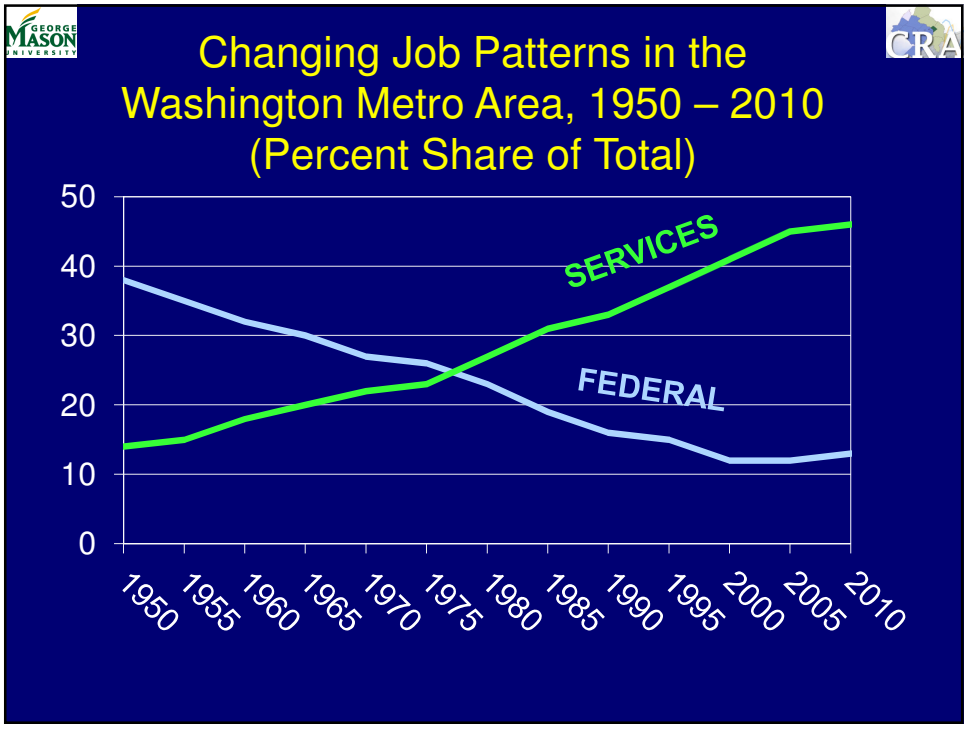
Population Growth by Decade Washington MSA 1900 - 2010

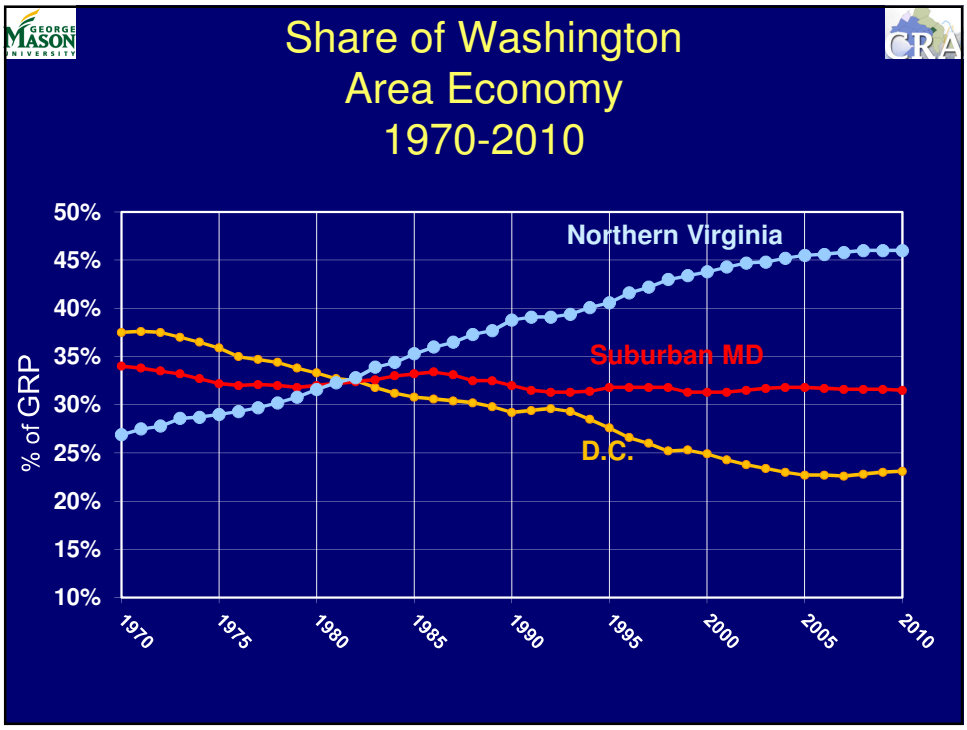


Source: US Census and GMU Center for Regional Analysis


Population in the Washington MSA
By Sub-State Area, 1900 - 2010
1000s
3000
2500
2000
1500
1000
500
0
Northern VA
Suburban MD
D.C.
1900
1910
1920
1930
1940
1950
1960
1970
1980
1990
2000
2010
Source: US Census and GMU Center for Regional Analysis

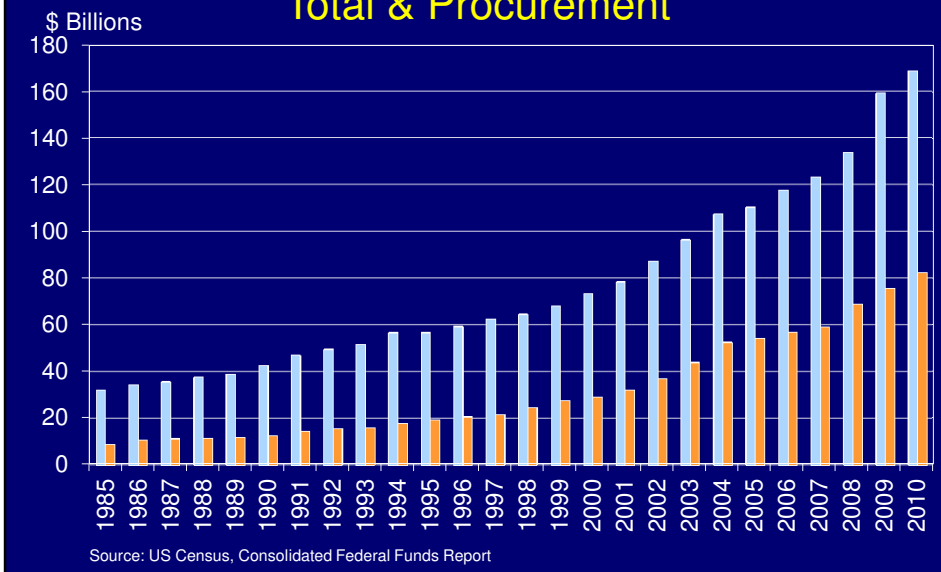

Growth in Jobs, 1980 - 2010
1000s
900
800
700
600
500
400
300
200
100
0
99
394
830
District of Columbia
Suburban Maryland
Northern Virginia
Source: US Bureau of Labor Statistics, GMU Center for Regional Analysis

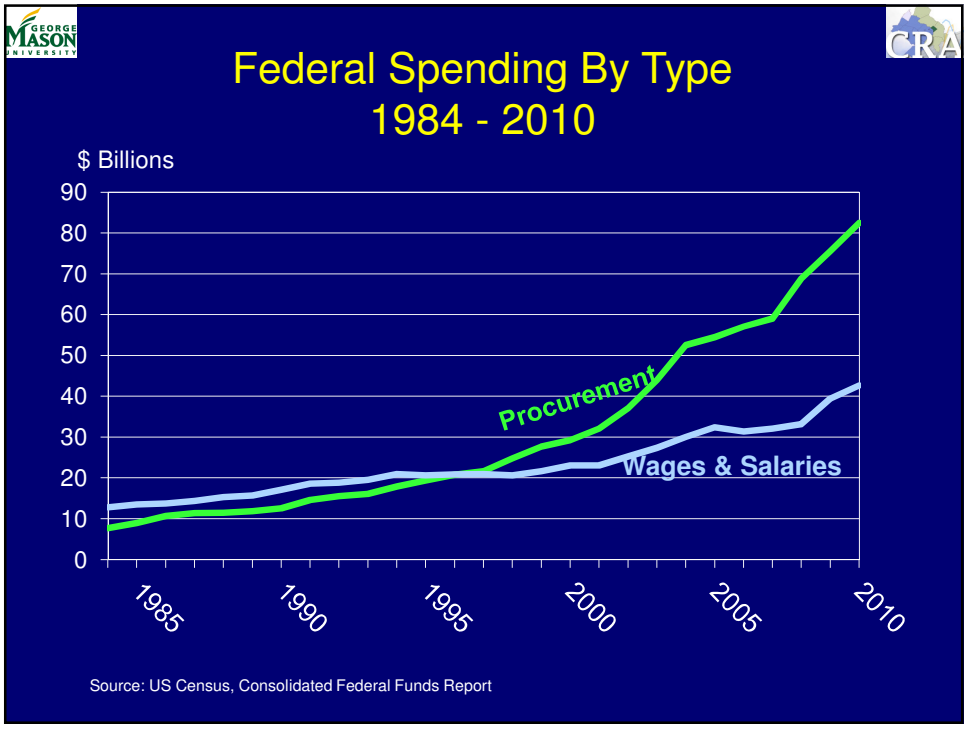

Changing Job Patterns in the
Washington Metro Area, 1950 – 2010
(Percent Share of Total)
50
40
30
20
10
0
SERVICES
FEDERAL
1950
1955
1960
1965
1970
1975
1980
1985
1990
1995
2000
2005
2010

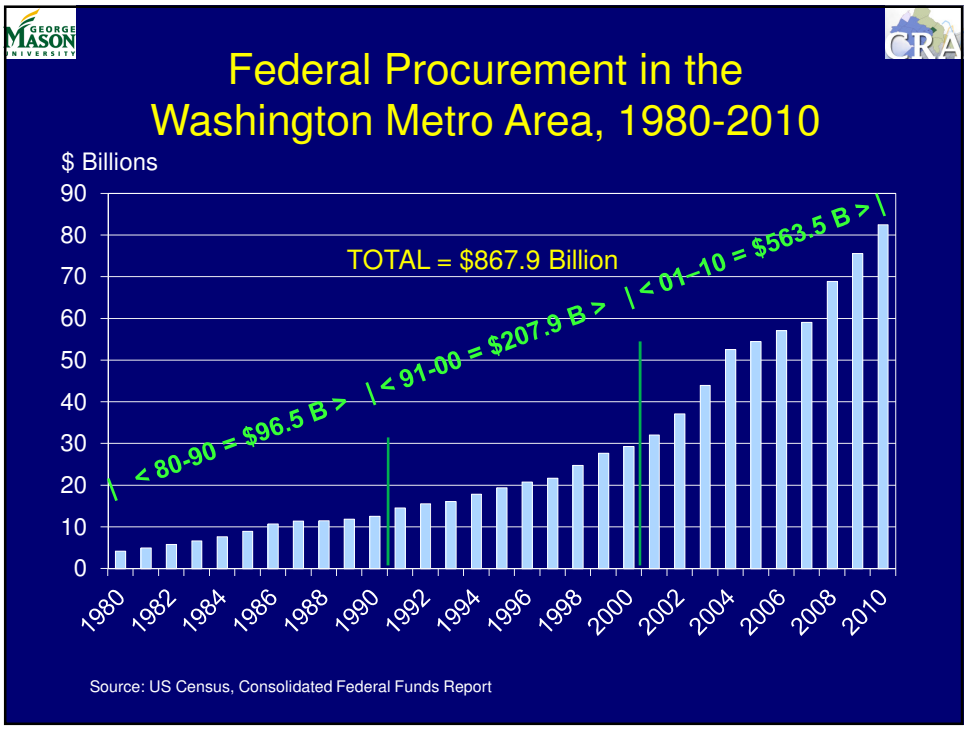

Share of Washington
Area Economy
1970-2010
% of GRP
50%
45%
40%
35%
30%
25%
20%
15%
10%
Northern Virginia
Suburban MD
D.C.
1970
1975
1980
1985
1990
1995
2000
2005
2010

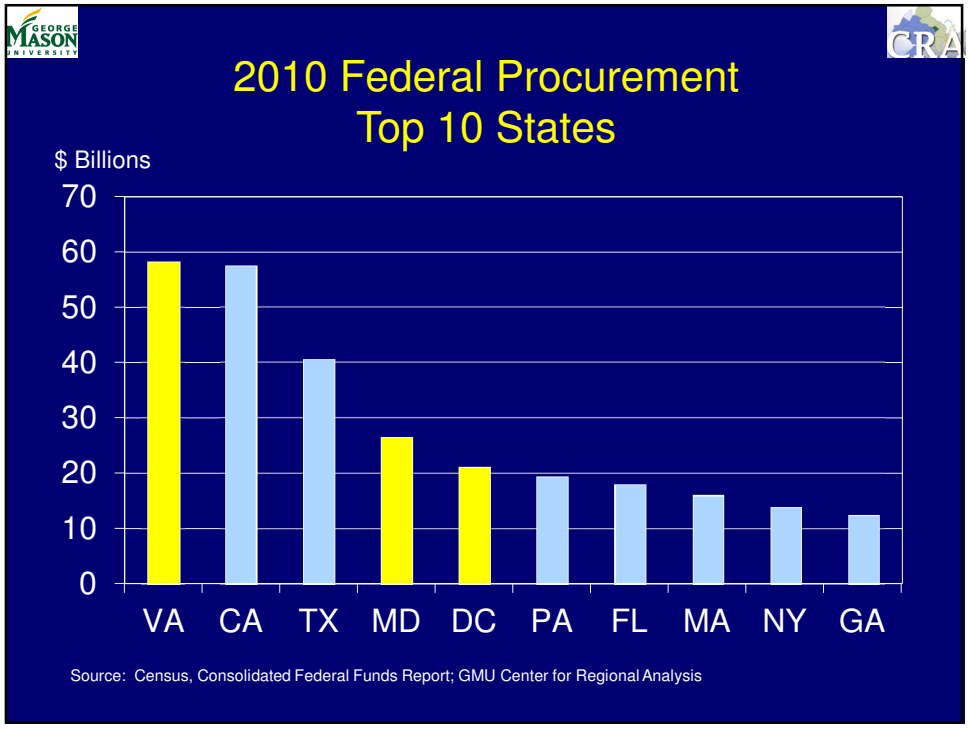
Federal Spending Patterns In the Washington Area

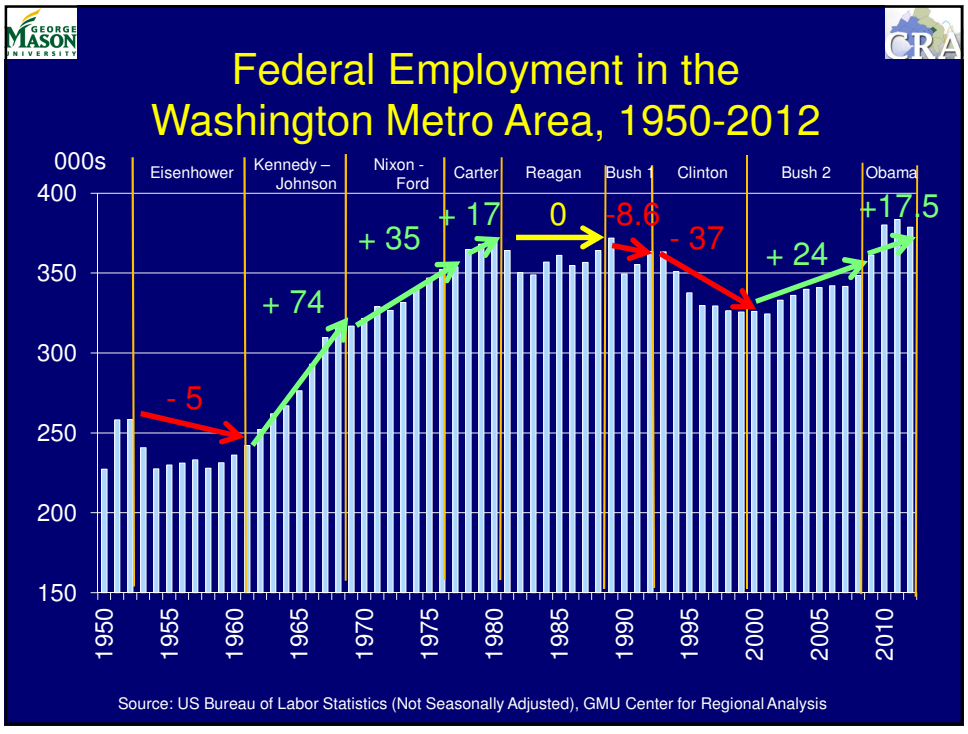
Federal Spending – Washington MSA Total & Procurement

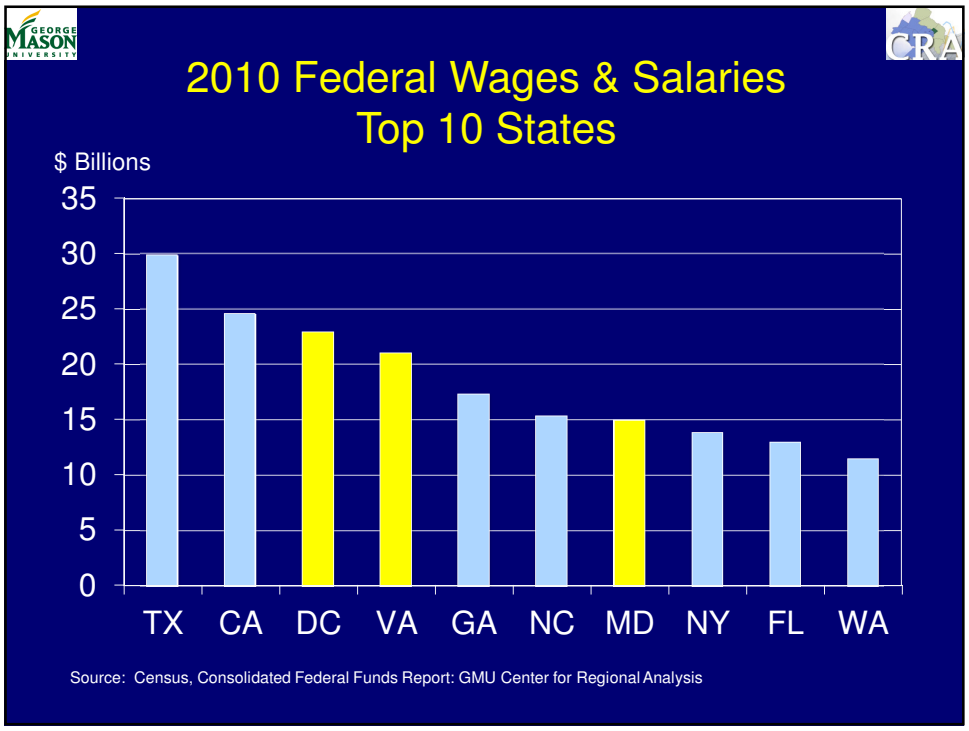


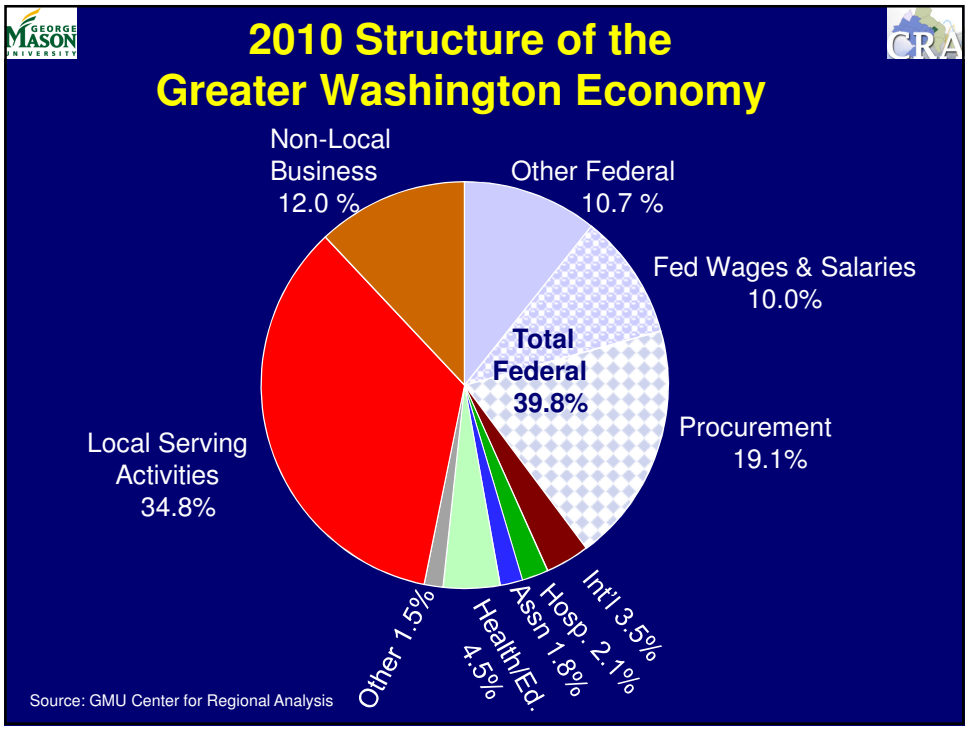

Federal Spending By Type
1984 - 2010
$ Billions
90
80
70
60
50
40
30
20
10
0
1985
1990
1995
2000
2005
2010
Procurement
Wages & Salaries
Source: US Census, Consolidated Federal Funds Report


Federal Procurement in the
Washington Metro Area, 1980-2010
$ Billions
90
80
70
60
50
40
30
20
10
0
TOTAL = $867.9 Billion
< 80-90 = $96.5 B >
< 91-00 = $207.9 B >
< 01-10 = $563.5 B >
1980
1982
1984
1986
1988
1990
1992
1994
1996
1998
2000
2002
2004
2006
2008
2010
Source: US Census, Consolidated Federal Funds Report


2010 Federal Procurement
Top 10 States
$ Billions
70
60
50
40
30
20
10
0
VA
CA
TX
MD
DC
PA
FL
MA
NY
GA
Source: Census, Consolidated Federal Funds Report; GMU Center for Regional Analysis


Federal Employment in the
Washington Metro Area, 1950-2012
000s
400
350
300
250
200
150
Eisenhower
Kennedy – Johnson
Nixon - Ford
Carter
Reagan
Bush 1
Clinton
Bush 2
Obama
- 5
+ 74
+ 35
+ 17
0
-8.6
- 37
+ 24
+17.5
1950
1955
1960
1965
1970
1975
1980
1985
1990
1995
2000
2005
2010
Source: US Bureau of Labor Statistics (Not Seasonally Adjusted), GMU Center for Regional Analysis

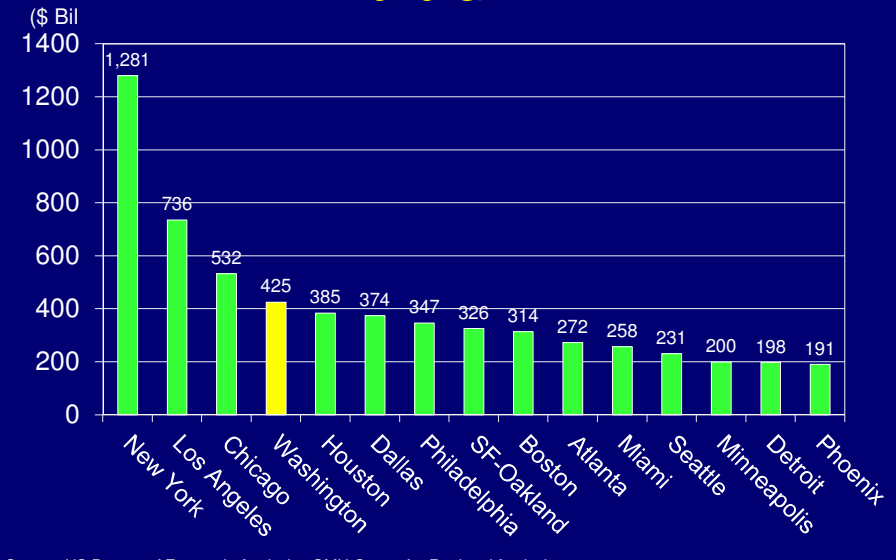

2010 Federal Wages & Salaries
Top 10 States
$ Billions
35
30
25
20
15
10
5
0
TX
CA
DC
VA
GA
NC
MD
NY
FL
WA
Source: Census, Consolidated Federal Funds Report: GMU Center for Regional Analysis


2010 Structure of the
Greater Washington Economy
Non-Local
Business
12.0 %
Other Federal
10.7 %
Fed Wages & Salaries
10.0%
Total
Federal
39.8%
Procurement
19.1%
Local Serving
Activities
34.8%
Other 1.5%
Health/Ed.
4.5%
Assn 1.8%
Hosp. 2.1%
Int'l 3.5%
Source: GMU Center for Regional Analysis

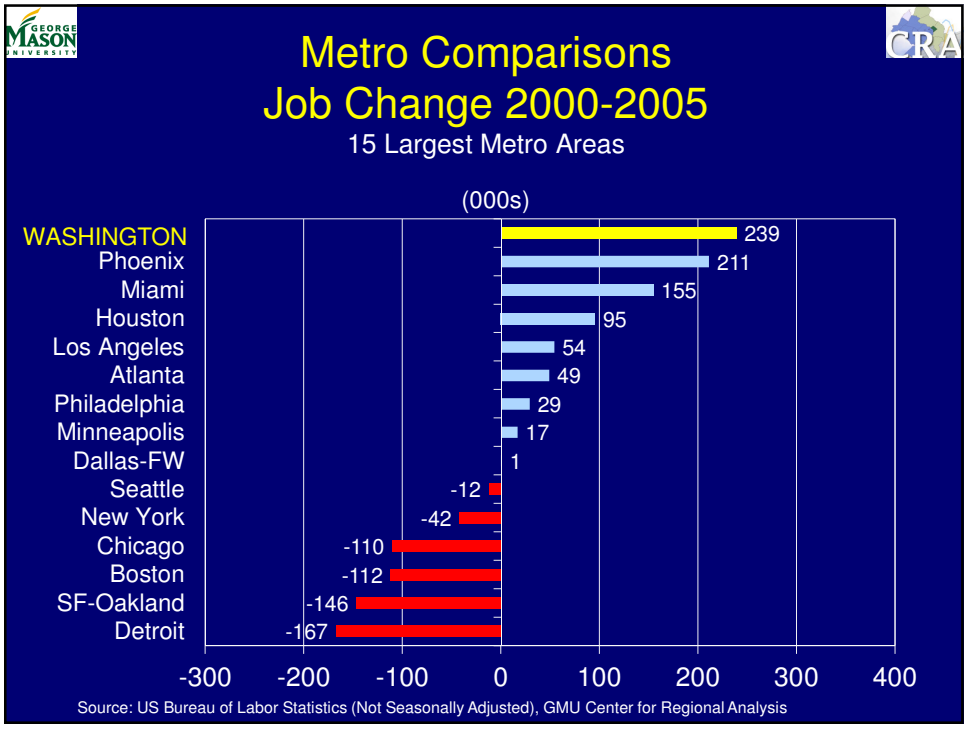
The Washington Metropolitan Area Is Different

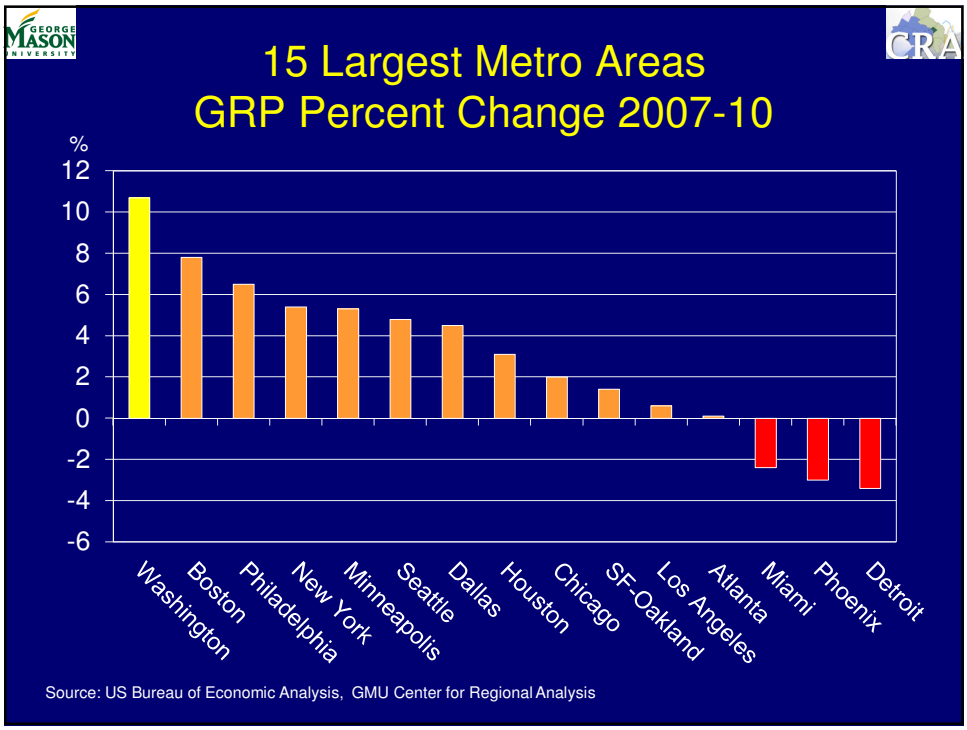
It has the 4th largest economy but only ranks 7th in number of residents and is 2nd to NYC in the square footage of total office space.

15 Largest Metro Areas 2010 GRP

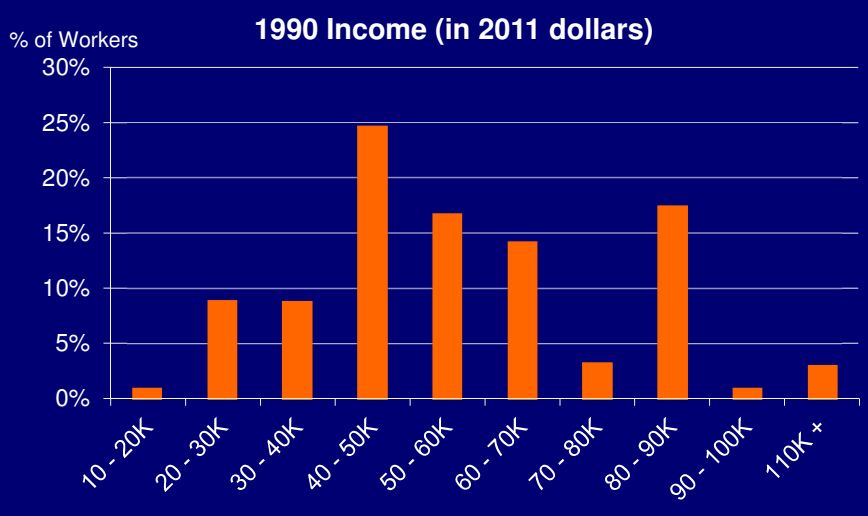


Source: US Bureau of Economic Analysis, GMU Center for Regional Analysis


Metro Comparisons
Job Change 2000-2005
15 Largest Metro Areas
(000s)
WASHINGTON
Phoenix
Miami
Houston
Los Angeles
Atlanta
Philadelphia
Minneapolis
Dallas-FW
Seattle
New York
Chicago
Boston
SF-Oakland
Detroit
239
211
155
95
54
49
29
17
1
-12
-42
-110
-112
-146
-167
-300
-200
-100
0
100
200
300
400
Source: US Bureau of Labor Statistics (Not Seasonally Adjusted), GMU Center for Regional Analysis

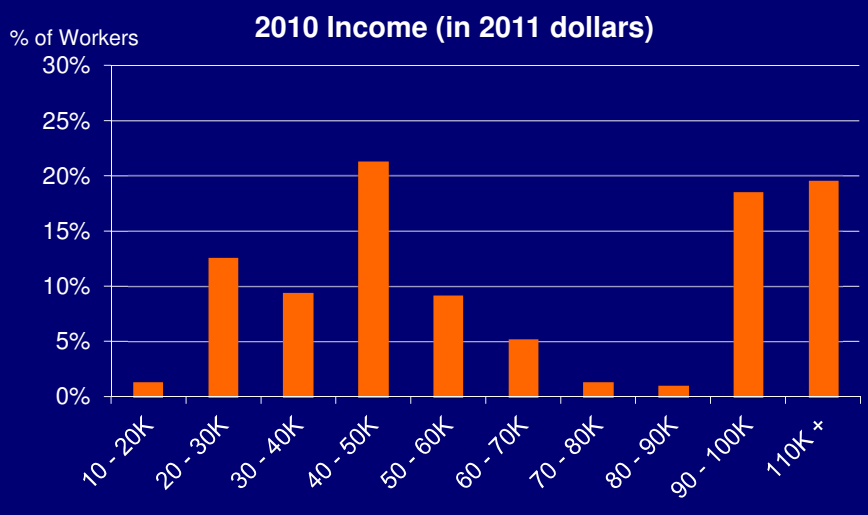

15 Largest Metro Areas
GRP Percent Change 2007-10
%
12
10
8
6
4
2
0
-2
-4
-6
Washington
Boston
Philadelphia
New York
Minneapolis
Seattle
Dallas
Houston
Chicago
SF-Oakland
Los Angeles
Atlanta
Miami
Phoenix
Detroit
Source: US Bureau of Economic Analysis, GMU Center for Regional Analysis

Average Income Levels In the Washington Metropolitan Area, 1990



Sources: Reuters, GMU Center for Regional Analysis

Average Income Levels In the Washington Metropolitan Area, 2010



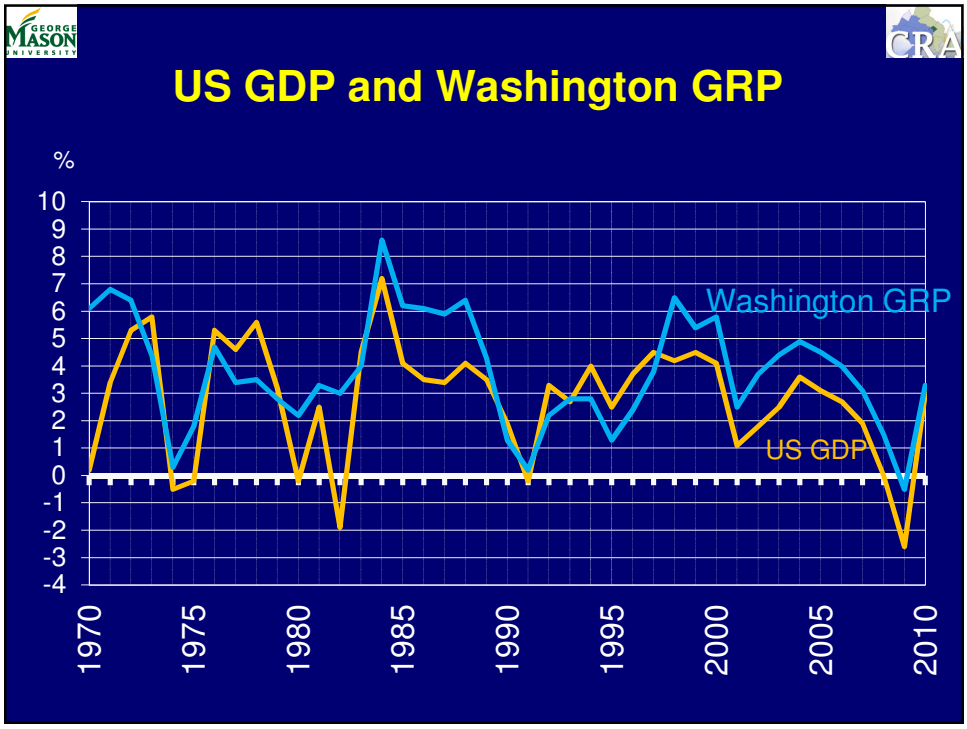
Sources: Reuters, GMU Center for Regional Analysis

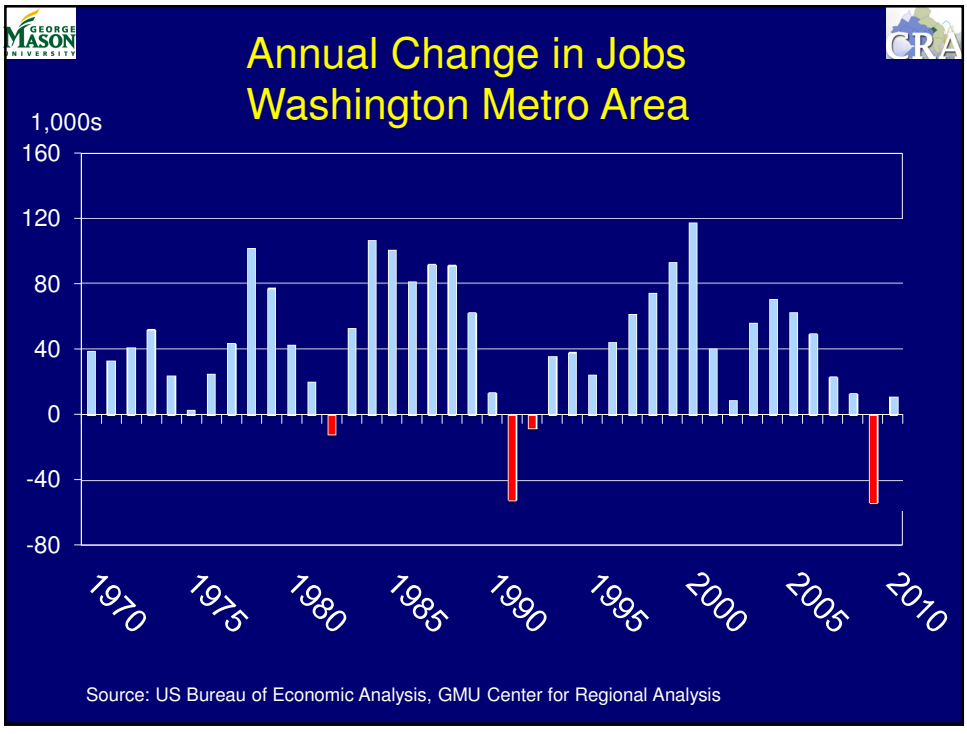
The Changing Income Pattern in the Washington Area, 1990 and 2010
(percent share, inflation adjusted $s)

Income Range	1990	2010
$10K-$50K	44%	44%
$50K-$70K	31%	14%
$70K-$90K	20%	2%
$90K and above	4%	39%

Source: Reuters, GMU Center for Regional Analysis

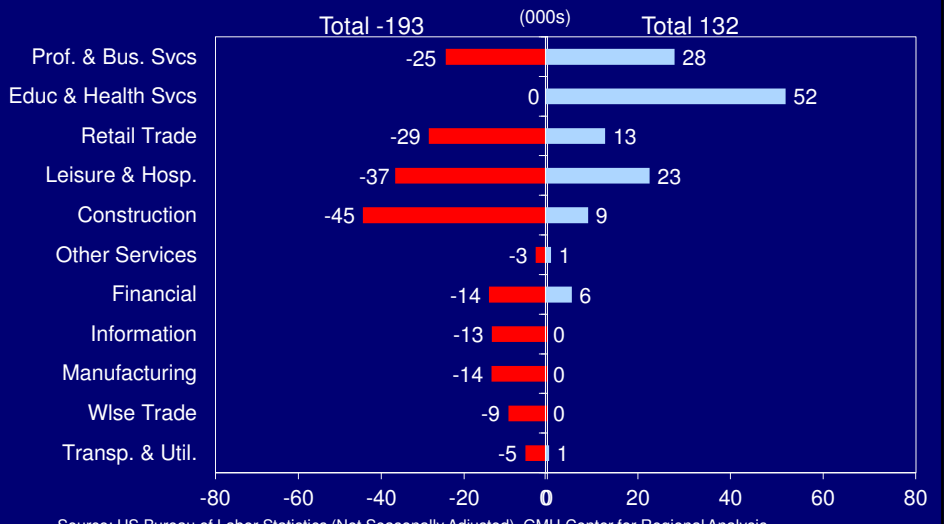
How did the recession change the Washington Area economy?


US GDP and Washington GRP
%
10
9
8
7
6
5
4
3
2
1
0
-1
-2
-3
-4
Washington GRP
US GDP
1970
1975
1980
1985
1990
1995
2000
2005
2010


Annual Change in Jobs
Washington Metro Area
1,000s
160
120
80
40
0
-40
-80
1970
1975
1980
1985
1990
1995
2000
2005
2010
Source: US Bureau of Economic Analysis, GMU Center for Regional Analysis

Wash MSA Payroll Job Change: Private Sector

The Great Recession and Recovery To December 2012



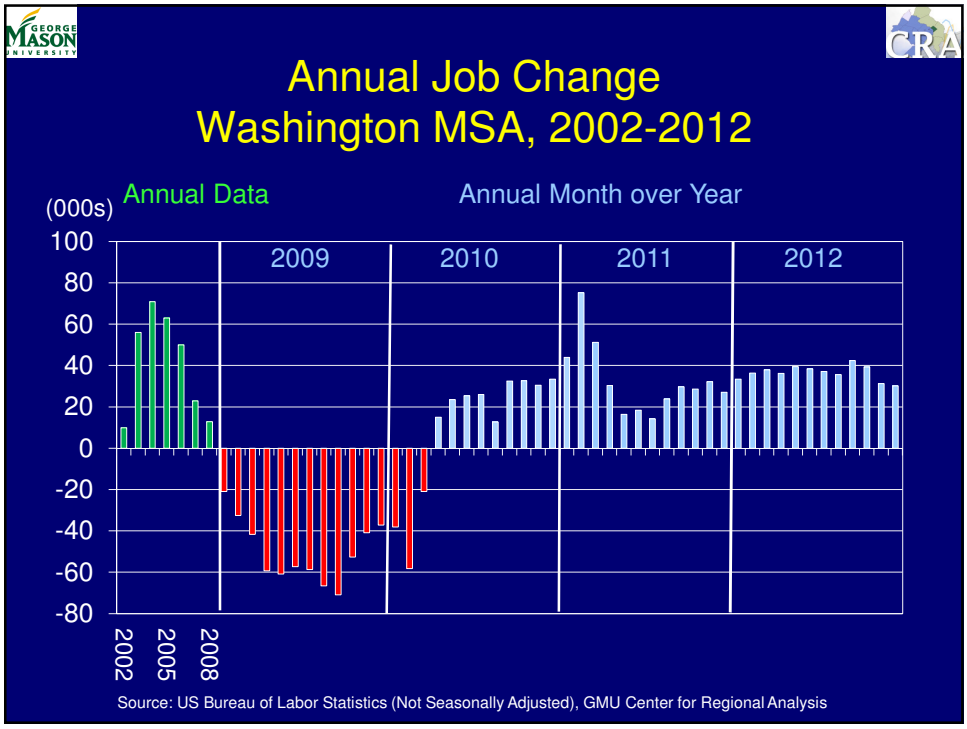
Source: US Bureau of Labor Statistics (Not Seasonally Adjusted), GMU Center for Regional Analysis

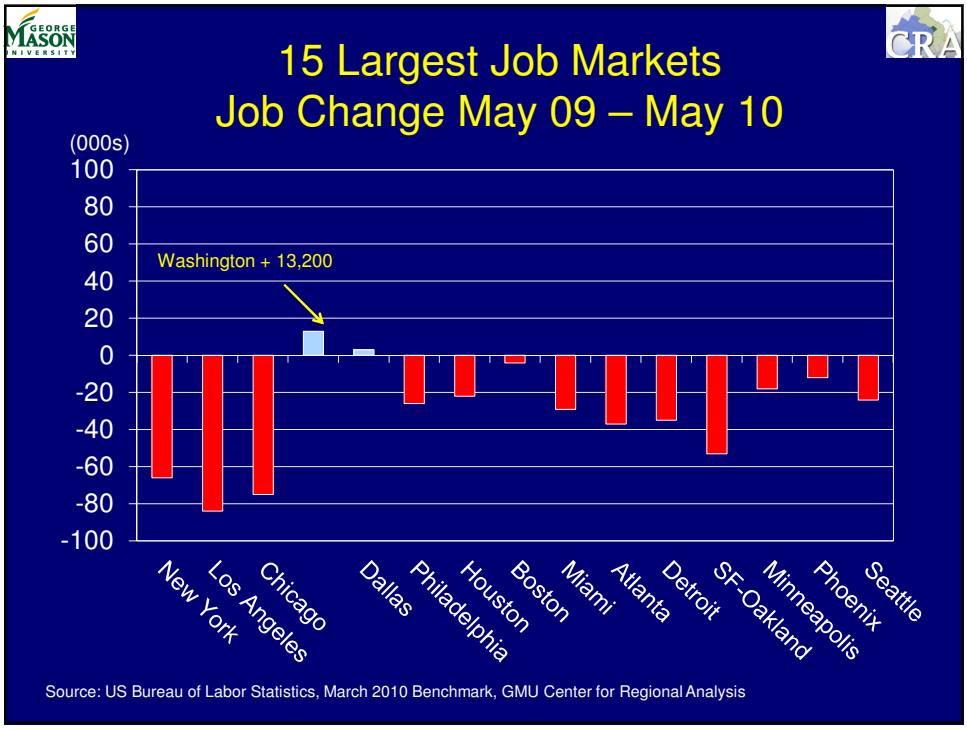
Washington Area Job Changes By Sector, 2008-2012 (through Dec)

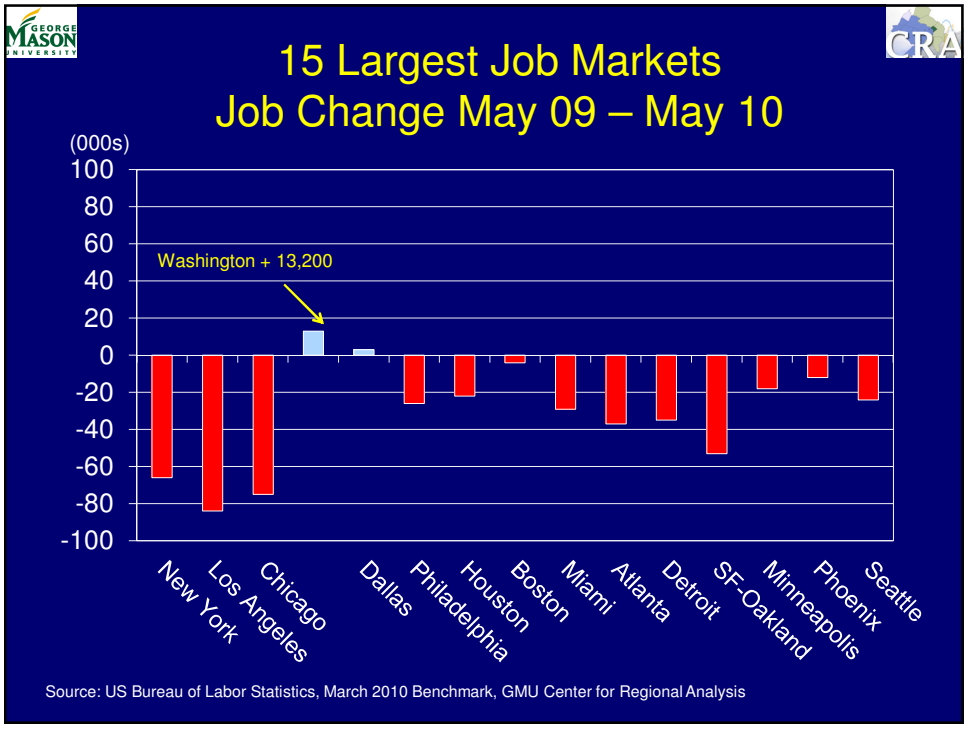
(in thousands)

SECTOR	Washington Metro Area	D.C.	Suburban MD	Northern Virginia
Professional, Business Services	39.2	1.0	6.6	31.6
Government	59.3	12.4	19.2	27.7
Health, Educ. Svcs.	60.8	23.8	13.7	23.3
Other Services	7.2	7.4	-0.7	0.5
Hospitality	26.1	8.1	6.1	11.9
All Other	-64.8	-4.5	-36.6	-23.7
TOTAL	127.8	48.2	8.3	71.3

Source: US Bureau of Labor Statistics (Not Seasonally Adjusted), GMU Center for Regional Analysis

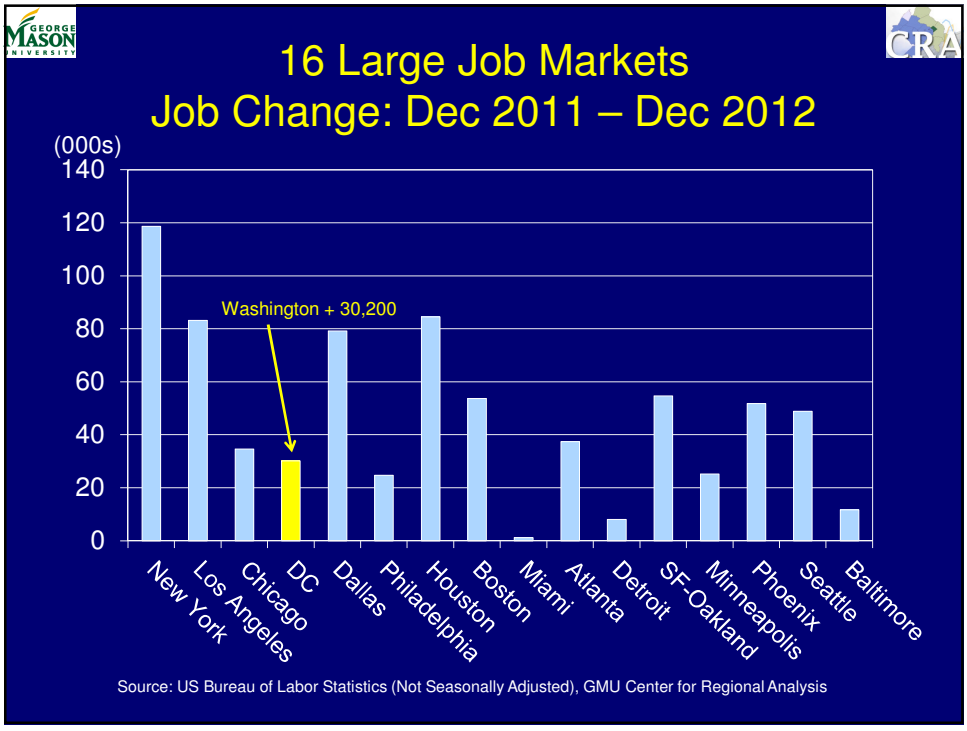

Annual Job Change
Washington MSA, 2002-2012
Annual Data
Annual Month over Year
(000s)
100
80
60
40
20
0
-20
-40
-60
-80
2009
2010
2011
2012
2002
2005
2008
Source: US Bureau of Labor Statistics (Not Seasonally Adjusted), GMU Center for Regional Analysis

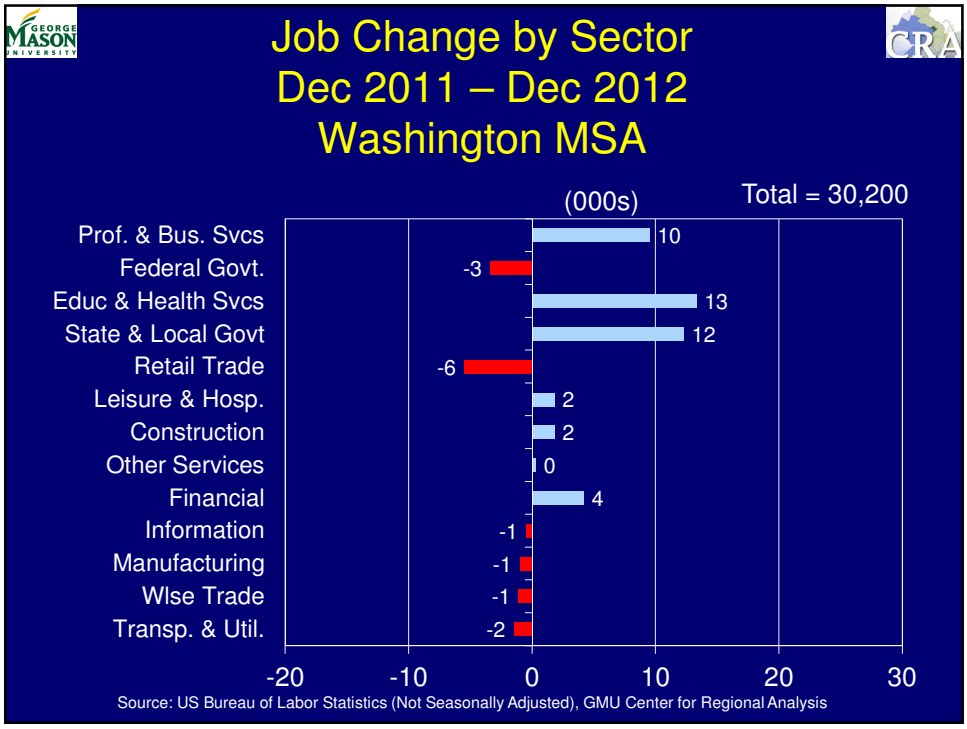

15 Largest Job Markets
Job Change May 09 – May 10
(000s)
100
80
60
40
20
0
-20
-40
-60
-80
-100
Washington + 13,200
New York
Los Angeles
Chicago
Dallas
Philadelphia
Houston
Boston
Miami
Atlanta
Detroit
SF-Oakland
Minneapolis
Phoenix
Seattle
Source: US Bureau of Labor Statistics, March 2010 Benchmark, GMU Center for Regional Analysis

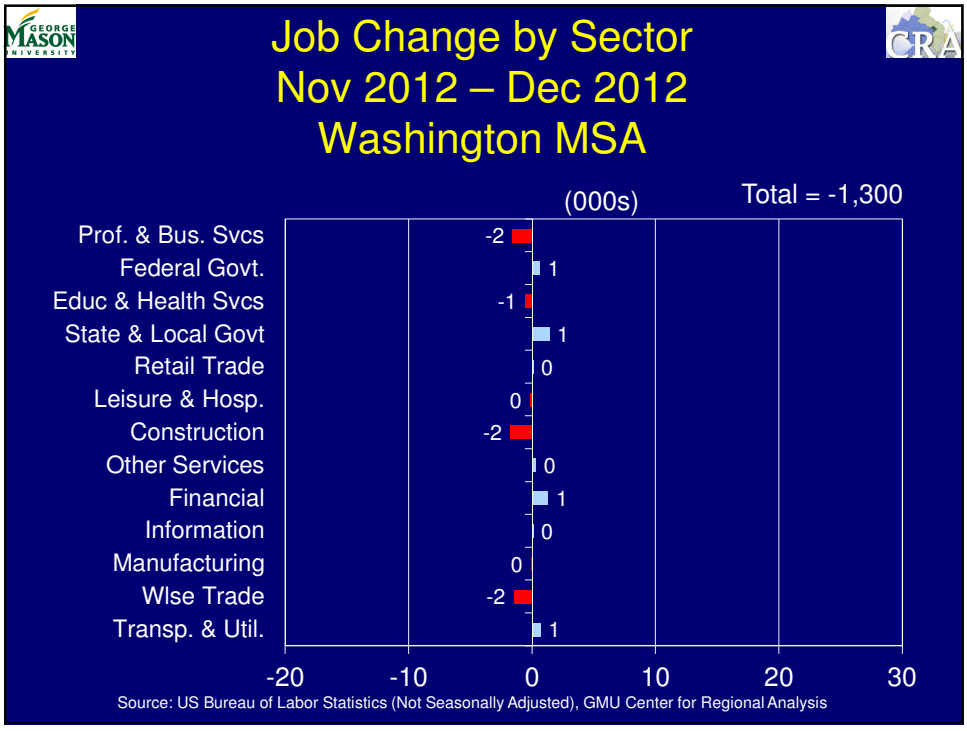

15 Largest Job Markets
Job Change May 09 – May 10
(000s)
100
80
60
40
20
0
-20
-40
-60
-80
-100
Washington + 13,200
New York
Los Angeles
Chicago
Dallas
Philadelphia
Houston
Boston
Miami
Atlanta
Detroit
SF-Oakland
Minneapolis
Phoenix
Seattle
Source: US Bureau of Labor Statistics, March 2010 Benchmark, GMU Center for Regional Analysis

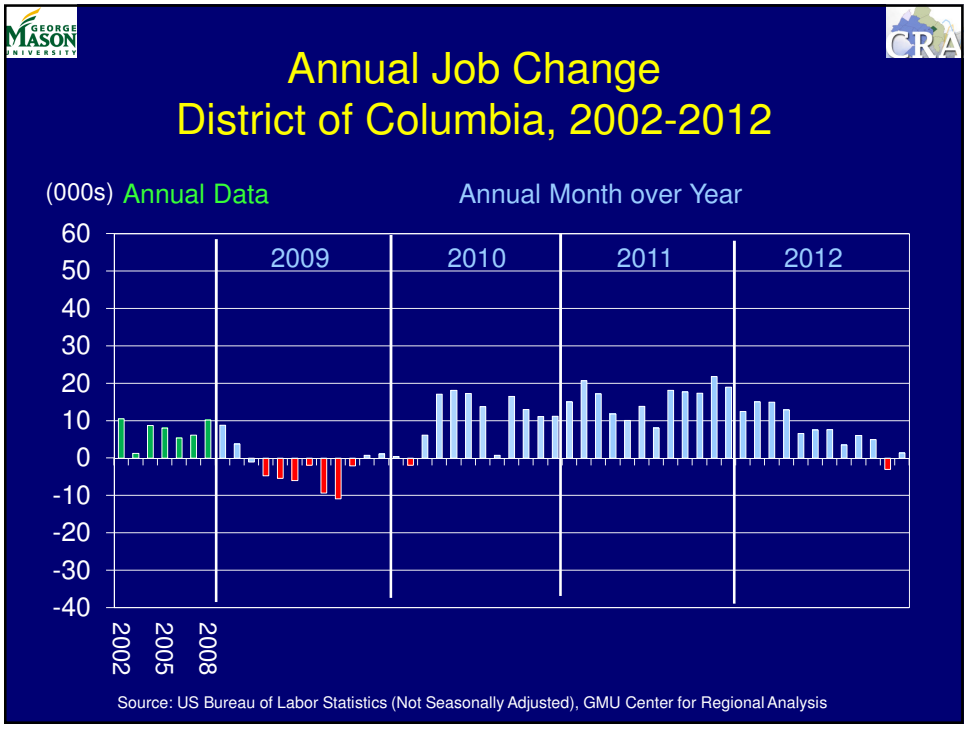
15 Largest Job Markets
Job Change 2009 - 2010
(000s)
100
80
60
40
20
0
-20
-40
-60
-80
-100
Washington + 11,300
New York
Los Angeles
Chicago
Dallas
Philadelphia
Houston
Boston
Miami
Atlanta
Detroit
SF-Oakland
Minneapolis
Phoenix
Seattle
Source: US Bureau of Labor Statistics, March 2011 Benchmark, GMU Center for Regional Analysis

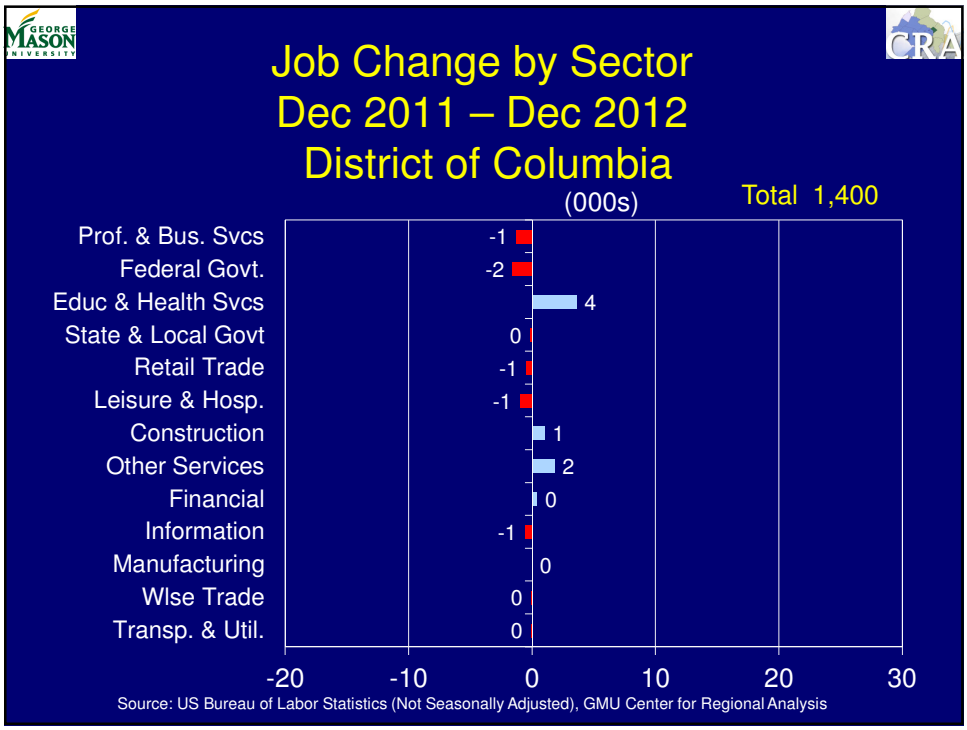
15 Largest Job Markets
Job Change: 2010 –2011
(000s)
120
100
80
60
40
20
0
-20
Washington + 32,600
New York
Los Angeles
Chicago
Dallas
Philadelphia
Houston
Boston
Miami
Atlanta
Detroit
SF-Oakland
Minneapolis
Phoenix
Seattle
Source: US Bureau of Labor Statistics, March 2011 Benchmark, GMU Center for Regional Analysis

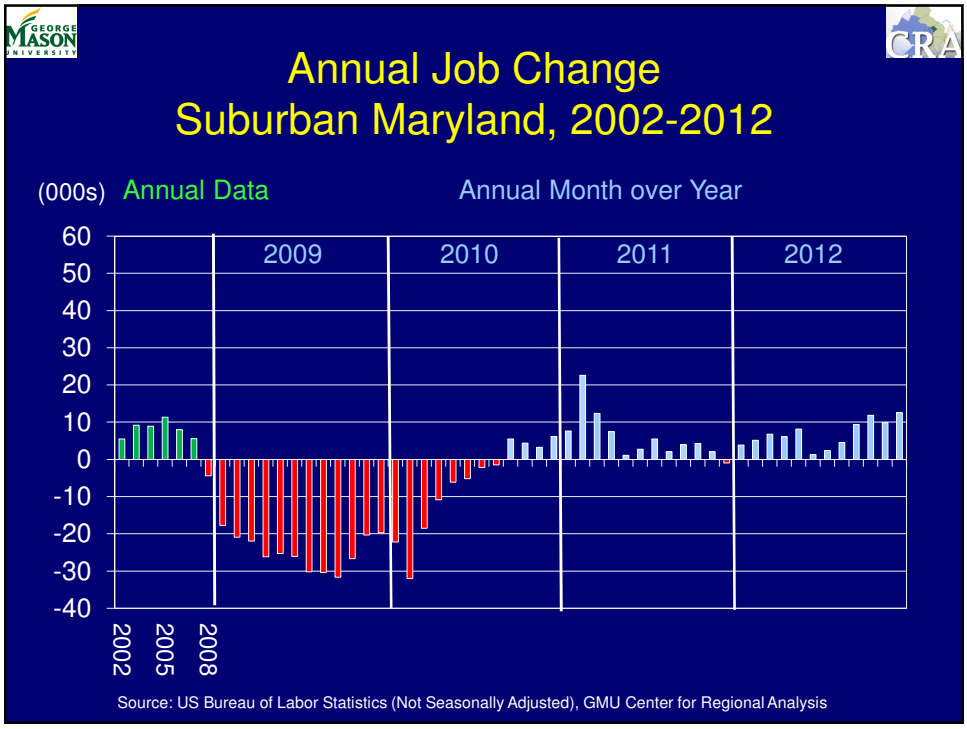

16 Large Job Markets
Job Change: Dec 2011 – Dec 2012
(000s)
140
120
100
80
60
40
20
0
Washington + 30,200
New York
Los Angeles
Chicago
DC
Dallas
Philadelphia
Houston
Boston
Miami
Atlanta
Detroit
SF-Oakland
Minneapolis
Phoenix
Seattle
Baltimore
Source: US Bureau of Labor Statistics (Not Seasonally Adjusted), GMU Center for Regional Analysis

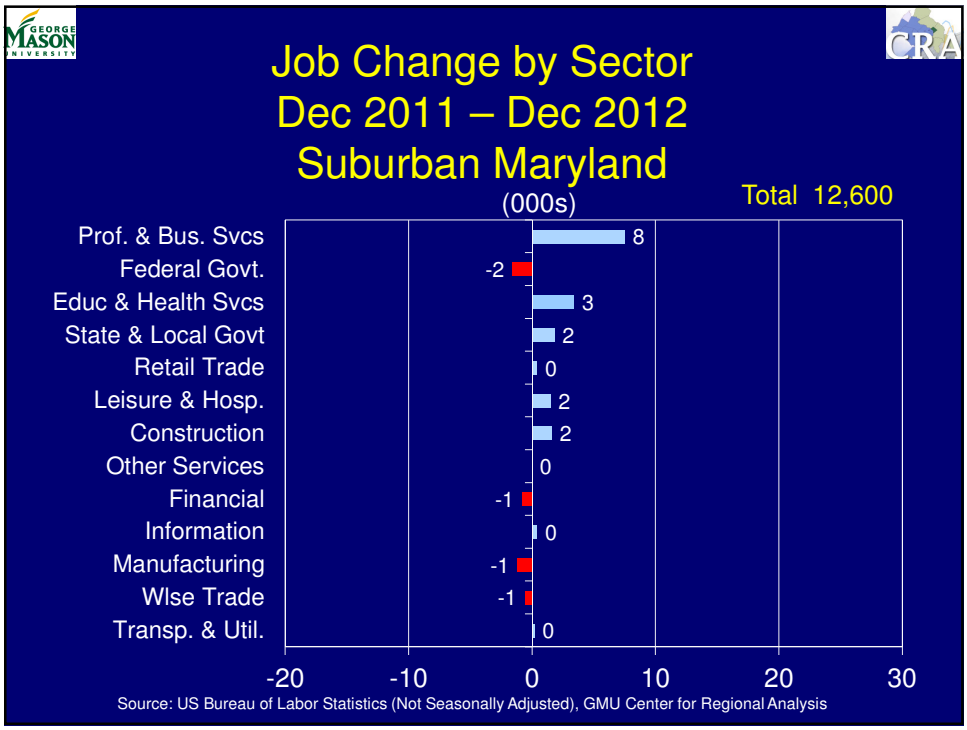

Job Change by Sector
Dec 2011 – Dec 2012
Washington MSA
(000s)
Total = 30,200
Prof. & Bus. Svcs 10
Federal Govt. -3
Educ & Health Svcs 13
State & Local Govt 12
Retail Trade -6
Leisure & Hosp. 2
Construction 2
Other Services 0
Financial 4
Information -1
Manufacturing -1
Wlse Trade -1
Transp. & Util. -2
-20 -10 0 10 20 30
Source: US Bureau of Labor Statistics (Not Seasonally Adjusted), GMU Center for Regional Analysis


Job Change by Sector
Nov 2012 – Dec 2012
Washington MSA
(000s)
Total = -1,300
Prof. & Bus. Svcs -2
Federal Govt. 1
Educ & Health Svcs -1
State & Local Govt 1
Retail Trade 0
Leisure & Hosp. 0
Construction -2
Other Services 0
Financial 1
Information 0
Manufacturing 0
Wlse Trade -2
Transp. & Util. 1
-20 -10 0 10 20 30
Source: US Bureau of Labor Statistics (Not Seasonally Adjusted), GMU Center for Regional Analysis

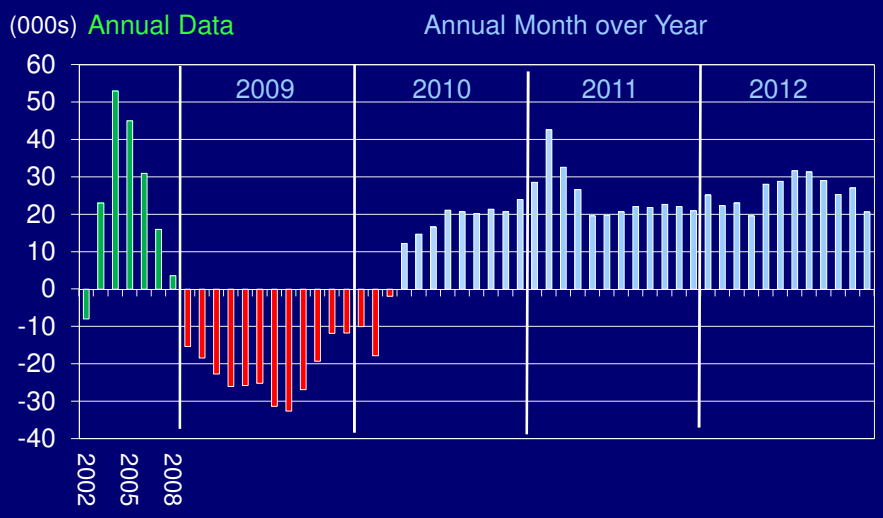

Annual Job Change
District of Columbia, 2002-2012
(000s) Annual Data
Annual Month over Year
60
50
40
30
20
10
0
-10
-20
-30
-40
2009
2010
2011
2012
2002
2005
2008
Source: US Bureau of Labor Statistics (Not Seasonally Adjusted), GMU Center for Regional Analysis


Job Change by Sector
Dec 2011 – Dec 2012
District of Columbia
(000s)
Total 1,400
Prof. & Bus. Svcs -1
Federal Govt. -2
Educ & Health Svcs 4
State & Local Govt 0
Retail Trade -1
Leisure & Hosp. -1
Construction 1
Other Services 2
Financial 0
Information -1
Manufacturing 0
Wlse Trade 0
Transp. & Util. 0
-20
-10
0
10
20
30
Source: US Bureau of Labor Statistics (Not Seasonally Adjusted), GMU Center for Regional Analysis


Annual Job Change
Suburban Maryland, 2002-2012
(000s)
Annual Data
Annual Month over Year
60
50
40
30
20
10
0
-10
-20
-30
-40
2009
2010
2011
2012
2002
2005
2008
Source: US Bureau of Labor Statistics (Not Seasonally Adjusted), GMU Center for Regional Analysis

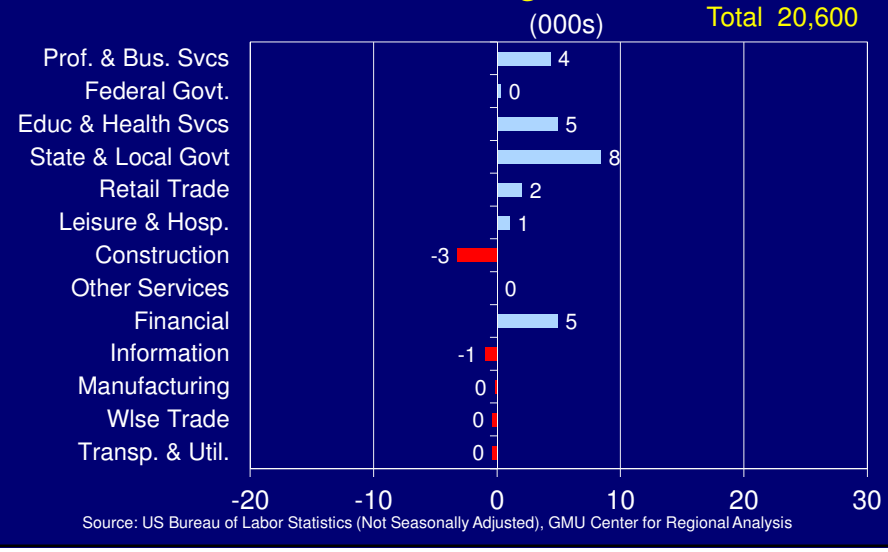

Job Change by Sector
Dec 2011 – Dec 2012
Suburban Maryland
(000s)
Total 12,600
Prof. & Bus. Svcs 8
Federal Govt. -2
Educ & Health Svcs 3
State & Local Govt 2
Retail Trade 0
Leisure & Hosp. 2
Construction 2
Other Services 0
Financial -1
Information 0
Manufacturing -1
Wlse Trade -1
Transp. & Util. 0
-20
-10
0
10
20
30
Source: US Bureau of Labor Statistics (Not Seasonally Adjusted), GMU Center for Regional Analysis

Annual Job Change
Northern Virginia, 2002-2012

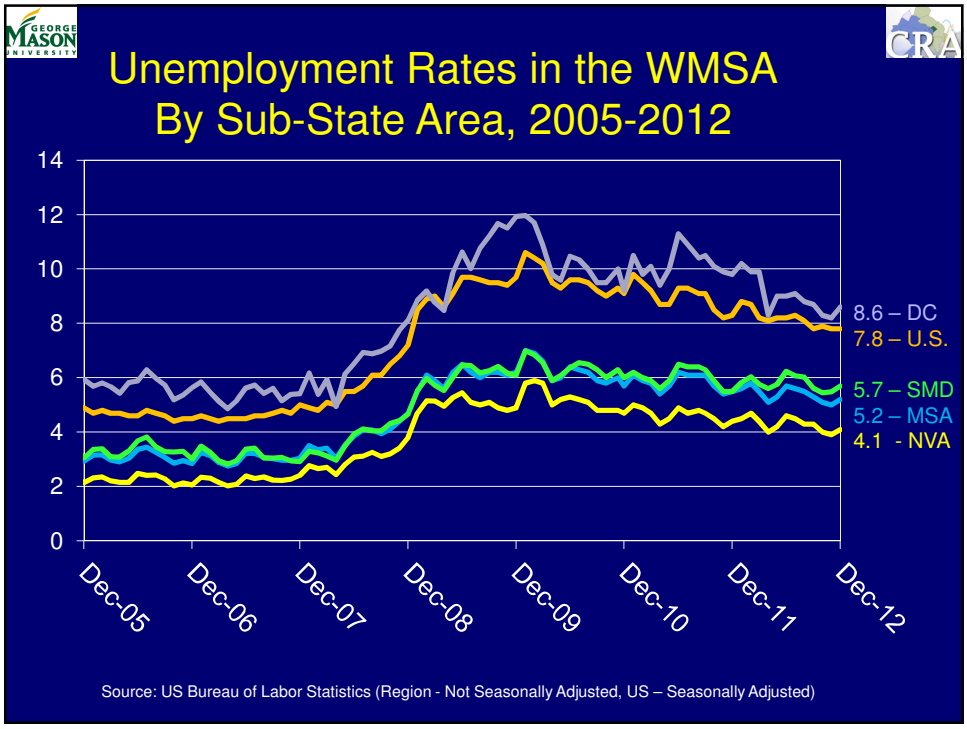


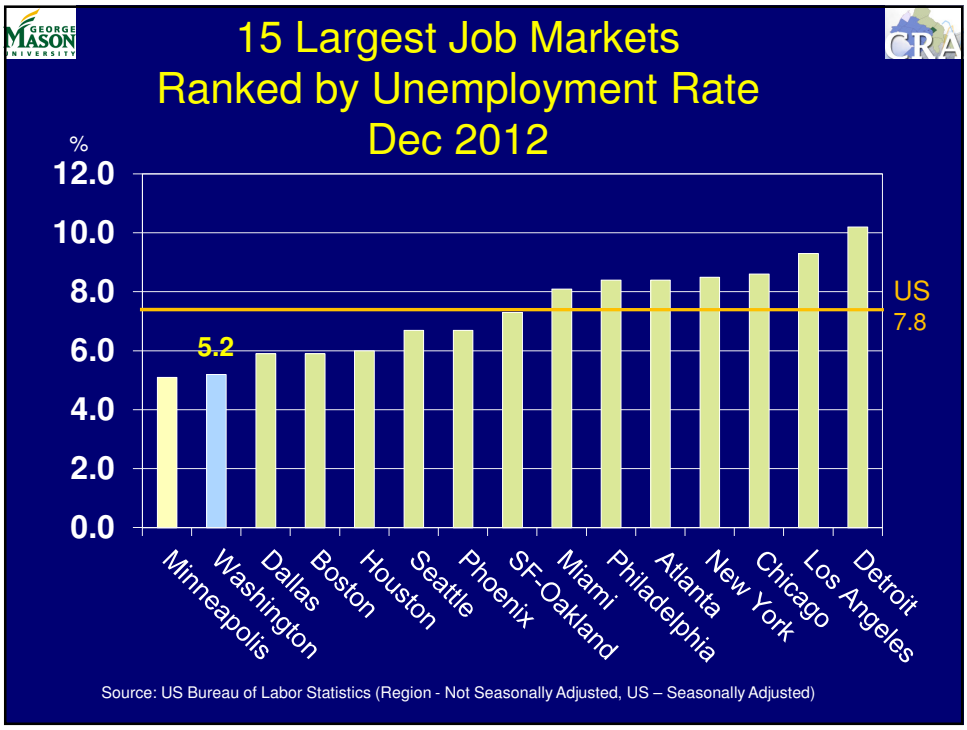
Source: US Bureau of Labor Statistics (Not Seasonally Adjusted), GMU Center for Regional Analysis

Job Change by Sector
Dec 2011 – Dec 2012
Northern Virginia

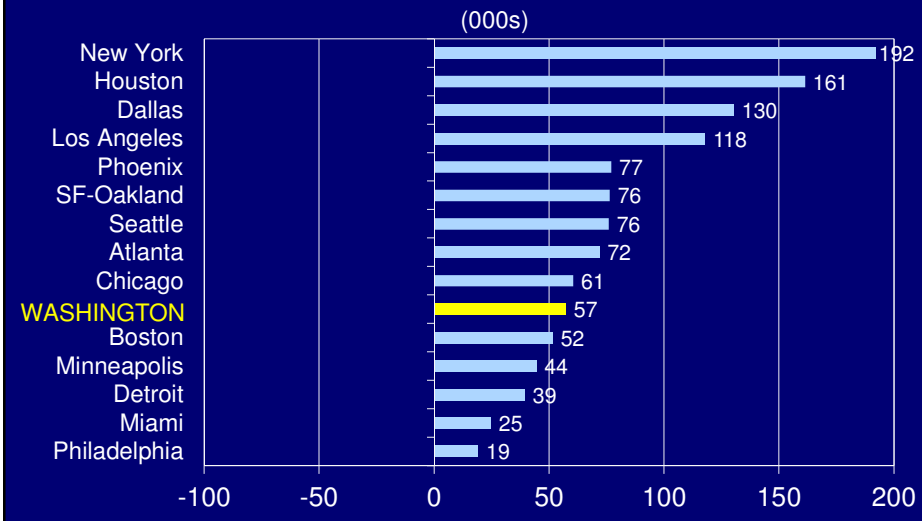


Source: US Bureau of Labor Statistics (Not Seasonally Adjusted), GMU Center for Regional Analysis


Unemployment Rates in the WMSA
By Sub-State Area, 2005-2012
14
12
10
8
6
4
2
0
Dec-05
Dec-06
Dec-07
Dec-08
Dec-09
Dec-10
Dec-11
Dec-12
8.6 – DC
7.8 – U.S.
5.7 – SMD
5.2 – MSA
4.1 - NVA
Source: US Bureau of Labor Statistics (Region - Not Seasonally Adjusted, US – Seasonally Adjusted)


15 Largest Job Markets
Ranked by Unemployment Rate
Dec 2012
%
12.0
10.0
8.0
6.0
4.0
2.0
0.0
5.2
US
7.8
Minneapolis
Washington
Dallas
Boston
Houston
Seattle
Phoenix
SF-Oakland
Miami
Philadelphia
Atlanta
New York
Chicago
Los Angeles
Detroit
Source: US Bureau of Labor Statistics (Region - Not Seasonally Adjusted, US – Seasonally Adjusted)

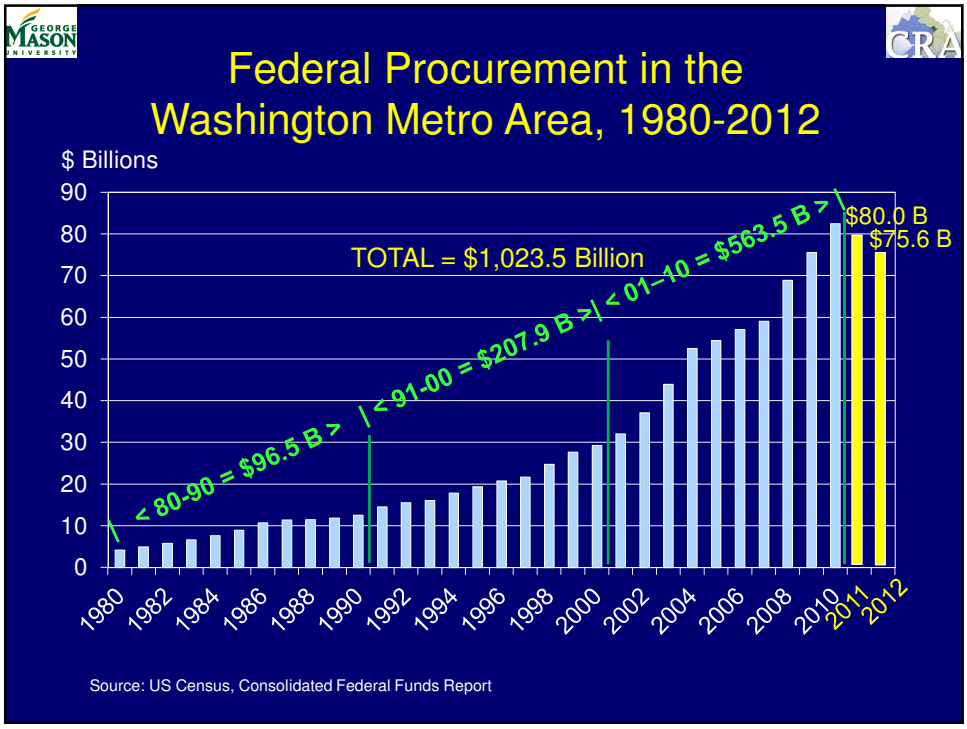
Metro Area Comparisons
Job Change Dec 2010 – Dec 2012
15 Largest Metro Areas

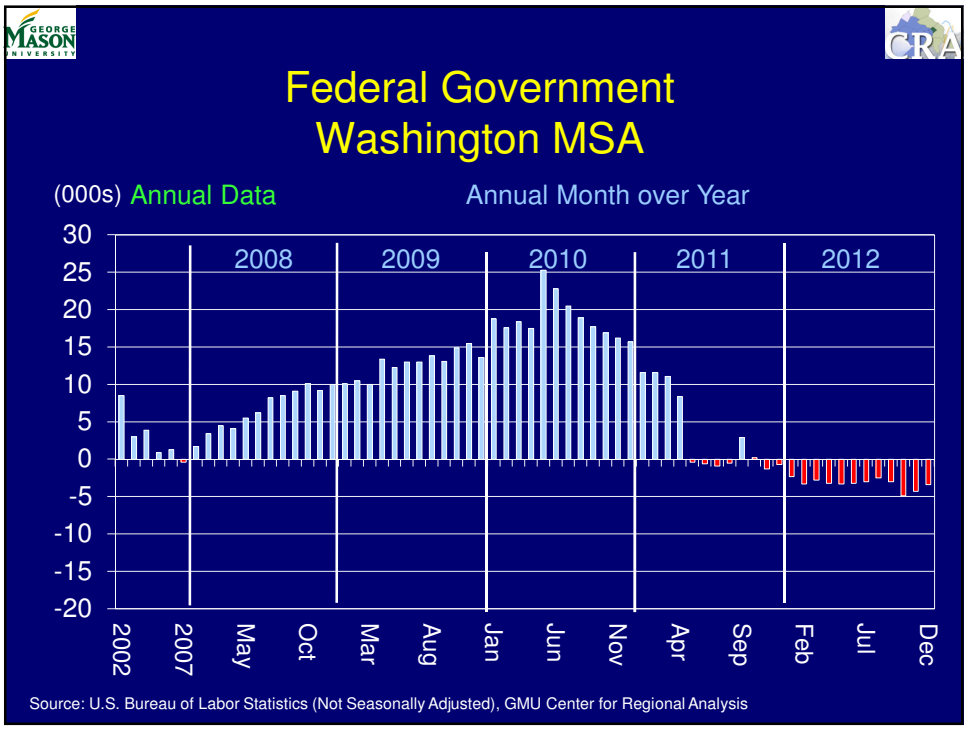


Source: US Bureau of Labor Statistics (Not Seasonally Adjusted), GMU Center for Regional Analysis

Key Conditions Shaping the Future Washington Area Economy:

Declining Federal Spending
Wage and Salary Compression
Population Change

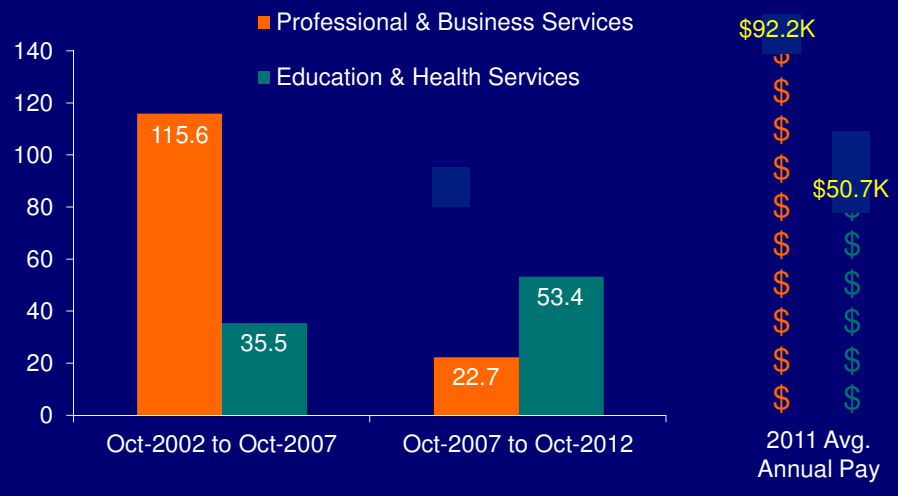

Federal Procurement in the
Washington Metro Area, 1980-2012
$ Billions
90
80
70
60
50
40
30
20
10
0
TOTAL = $1,023.5 Billion
< 80-90 = $96.5 B >
< 91-00 = $207.9 B >
< 01–10 = $563.5 B >
$80.0 B
$75.6 B
1980
1982
1984
1986
1988
1990
1992
1994
1996
1998
2000
2002
2004
2006
2008
2010
2011
2012
Source: US Census, Consolidated Federal Funds Report


Federal Government
Washington MSA
(000s) Annual Data
Annual Month over Year
30
25
20
15
10
5
0
-5
-10
-15
-20
2008
2009
2010
2011
2012
2002
2007
May
Oct
Mar
Aug
Jan
Jun
Nov
Apr
Sep
Feb
Jul
Dec
Source: U.S. Bureau of Labor Statistics (Not Seasonally Adjusted), GMU Center for Regional Analysis

Summary for Federal Spending Trends in the Washington Metropolitan Area, 2010-2012

- Federal Procurement Outlays declined 8.4% between FY 2010 and FY 2012.
- Federal employment has declined since peaking in July 2010, losing 8,700 jobs or 2.25%.
- Federal payroll declined by 0.6% between FY 2010 and FY 2011 and will continue to decline as the workforce shrinks and older workers retire and are replaced by younger workers.

Changing Job and Income Patterns In the Washington Metropolitan Area



Source: US Bureau of Labor Statistics, GMU Center for Regional Analysis

Early Signs of Income Compression
Washington MSA

Source: US Bureau of Economic Analysis, GMU Center for Regional Analysis

The Washington Metropolitan Area Population Is Aging
(percent share, total population in millions)

Age Group	2012	2017	2029	Change
Less than 25 years	32.7%	32.0%	31.5%	17.2%
25 to 44 years old	30.2	30.0	29.5	19.5%
45 to 64 years old	26.6	25.3	23.3	6.8%
65 years old +	10.5%	12.7%	15.7%	82.4%
Totals	5.810	6.213	7.087	22.0%

Source: IHS Global Insight, GMU Center for Regional Analysis

Having Had a Rich Uncle Was Great, But Now What?

Job Growth in the Washington Area By Sector, 2012-2017 (in thousands)

Sector	2012	2017	Change	Percent
Prof. & Bus. Ser.	697.4	841.2	143.8	20.6
Federal Gov't	380.4	358.4	- 22.0	- 5.8
Education/Health	380.2	419.0	38.8	10.2
S & L Gov't	309.7	321.6	11.9	3.8
Hospitality	276.8	285.0	8.2	3.0
Retail Trade	254.1	266.6	12.5	4.9
Other Services	182.8	185.3	2.5	1.4
Financial Services	150.0	154.7	4.7	3.1
Construction	146.4	201.8	55.4	37.8
Information Ser.	80.6	87.6	7.0	8.7
Other Sectors (3)	175.0	193.2	18.2	10.4
Total Jobs	3,033.4	3,314.4	281.0	9.3

Major Sources of Job Growth in the Washington Area , 2012-2017 (in thousands)

Growth Sectors	2012	2017	Change	Percent
Prof. & Bus. Ser.	697.4	841.2	143.8	20.6
Education/Health	380.2	419.0	38.8	10.2
Construction	146.4	201.8	55.4	37.8
Sub-Totals	1,224.0	1,462.0	238.0	19.4
% Total	40.4	44.1	84.7	
Totals	3,033.4	3,314.4	281.0	9.3

Sources: IHS Global Insight; GMU Center for Regional Analysis

GRP Per Job in the Washington Area By Sector (in 2005 dollars)

Sector	2012	2017	% Change
Prof. & Bus. Services	$134,750	$154,656	14.8%
Federal Gov't	138,361	138,566	0.1
Education/Health	59,730	57,508	- 3.7
S & L Gov't	60,975	56,920	- 6.6
Hospitality	42,883	42,391	- 1.1
Retail Trade	60,807	64,136	5.5
Other Services	70,339	69,151	- 1.7
Financial Services	543,482	578,062	6.4
Construction	98,824	82,490	- 16.5
Information Services	349,868	468,376	33.9
Other Sectors	147,903	151,120	2.2
GRP per Job	$130,653	$138,881	6.3

GRP Per Job in the Washington Area By Sector (in 2005 dollars)

High Job Growth	2012	2017	% Change
Prof. & Bus. Svs. (20.6%)	$134,750	$154,656	14.8
Education/Health (10.2%)	59,730	57,508	- 3.7
Construction (37.8%)	98,824	82,490	- 16.5
Other High Value-Added Sectors			
Information Services (8.7%)	349,868	468,376	33.9
Financial Services (3.1%)	543,482	578,062	6.4
Federal (-5.8%)	138,361	138,566	0.1
Wholesale Trade (8.9%)	183,006	191,884	4.8
Transport/Warehsg (16.1%)	138,768	135,938	- 2.0
GRP per Job	$130,653	$138,881	6.3

GRP, Job and Workforce Growth in the Washington Metropolitan Area, 2012 – 2017

(in billions of current $s, jobs in thousands)

Indicator	2012	2017	Change
GRP Growth	$450.9	$571.8	26.8%
Net Job Growth	3,915.3	4,271.5	356.2 9.1%
Replacement Job Growth		459.1	11.7%
Resident Workforce	3,203.1	3,427.9	224.8 7.0%

Washington Metropolitan Area: Major Sources of Workforce Growth 2012-2017

Occupation	Total Openings	% of Total	% Change
Sales Occupations	92,556	11.4	22.2
Business and Financial	89,058	10.9	23.3
Office Admin Support	85,320	10.5	17.7
Food Prep & Serving	60,652	7.4	26.2
Management Occupations	59,203	7.3	18.2
Computer, Math and Sci	55,059	6.8	23.3
Health Care (all)	53,594	6.6	22.9
Education & Training	42,952	5.3	21.1
Personal Care Occup.	42,371	5.2	26.9
Totals	580,765	71.2	21.8

Washington Metropolitan Area: Major Sources of Net New Jobs 2012-2017

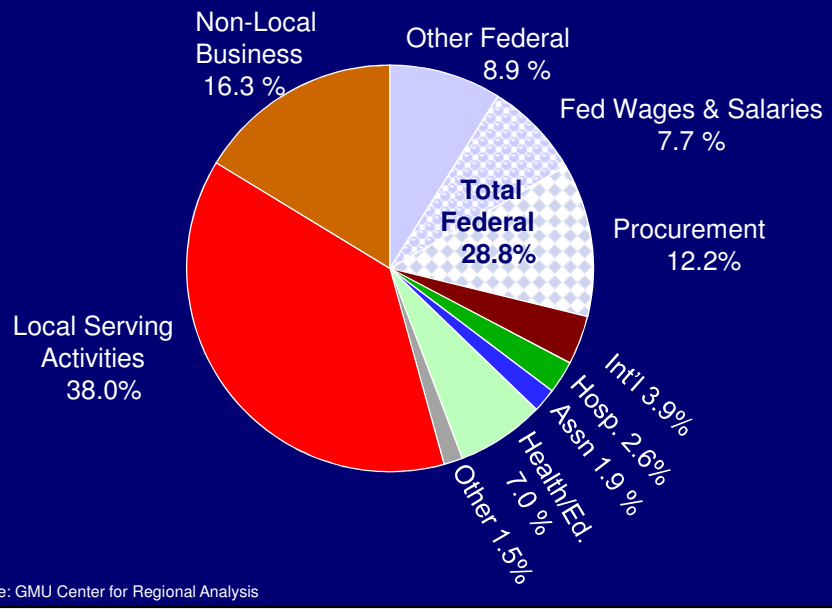
Occupation	Net New	% of Total	% Change
Business and Financial	52,253	14.7	13.7
Computer, Math and Sci	33,630	9.4	14.2
Health Care (all)	31,915	9.0	13.7
Office Admin Support	30,334	8.5	6.3
Sales & Related Occup.	29,246	8.2	7.0
Personal Care Occup.	23,892	6.7	15.2
Management Occupations	22,964	6.4	7.1
Education & Training	21,642	6.1	10.6
Totals	224,234	63.0	10.0

Source: EMSI Inc., GMU Center for Regional Analysis

Educational Levels of Net New and Replacement Jobs in the Washington Metropolitan Area, 2012 – 2017

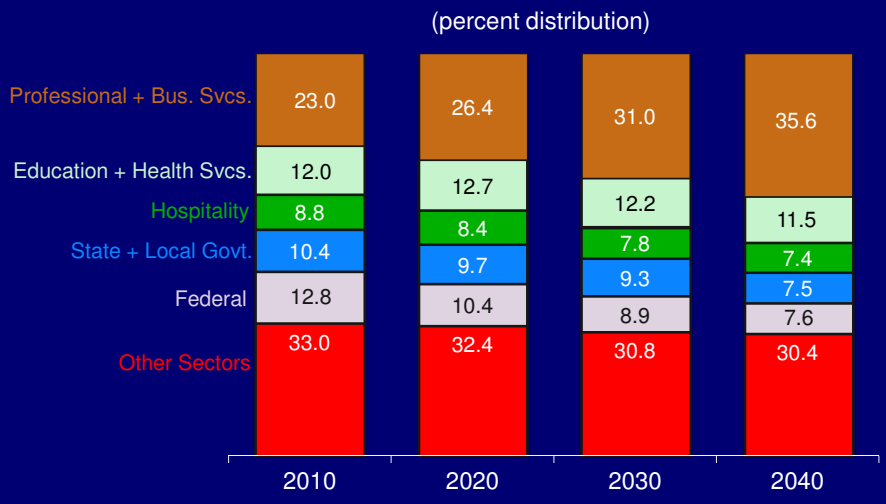
Educational Level	All Jobs	Net New	Replacement
Bachelor's or more	34.1% 278,163	40.6% 144,518	29.1% 133,645
Associate's	4.3% 35,458	5.1% 18,341	3.7% 17,117
HS/Voc. Ed. GED/OJT	61.4% 500,373	54.1% 192,827	67.0% 307,546

2017 Structure of the Greater Washington Economy



Source: GMU Center for Regional Analysis

The Changing Structure of the Washington Area Economy, 2010-2040



Source: IHS Global Insight, GMU Center for Regional Analysis

Key Development Challenges for the Washington Region

- Shortage of workers to fill the region's projected job growth
- Growing dependency on non-resident workforce;
- Shortages of housing in all jurisdictions to house the future workforce
- Lack of long-term regional solutions and implementation of public sector investments to support the growth and development of the Washington area economy
- Need for local and regional leadership

Thank You
Questions
cra.gmu.edu