Growth Trends to 2030:
Cooperative Forecasting in the Washington Region

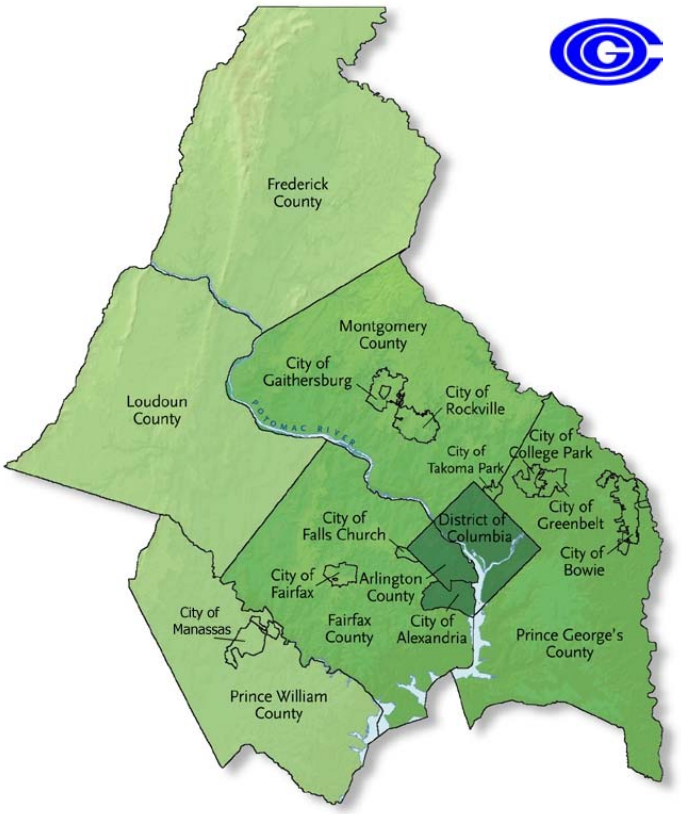
Autumn 2003

Local governments in the Washington region have worked cooperatively for many years to develop region-wide and neighborhood level forecasts of employment, households, and population. Through this effort, a consistent set of local and regional forecasts is developed for use in program and facilities planning throughout the region.

The Cooperative Forecasting Program, established in 1975 and administered by the Metropolitan Washington Council of Governments (COG), enables local, regional, and federal agencies to coordinate planning using common assumptions about future growth and development. Each series of forecasts constitutes a "Round," and each round covers a period of 20 to 30 years.

The Cooperative Forecasting process provides data necessary for regional planning activities including analyzing the effects of growth and developing policy responses to regional issues. In addition, the forecasts are used to determine the demand for public facilities including schools, parks, medical facilities, roads, stores, and services.

Membership of the Metropolitan Washington Council of Governments



Process

Developing the Cooperative Forecasts is a multi-stage, "top-down/bottom-up" process involving COG's regional economic model and jurisdictional forecasts. The regional model projects employment, households, and population for the metropolitan Washington area based on national economic trends and local demographic factors. At the same time, local jurisdictions develop projections of population, households, and employment based on pipeline development, market conditions, planned transportation improvements, and adopted land use plans and zoning, taking into account the preliminary regional projections.

Local government planners, economists, and demographers, working through COG's Cooperative Forecasting Subcommittee, then reconcile the two sets of projections. The local forecasts may be adjusted to reflect any impacts of growth on the transportation network. Once completed, the forecasts are approved by the COG Board of Directors, which is composed of local elected officials from throughout the region.

For each Round, forecasts are produced for three scenarios – high, intermediate, and low – reflecting the range of uncertainty about long-range market and development trends. Recognizing that market conditions and policies may change, the subcommittee also reviews the forecasts annually, and local governments make minor adjustments to reflect these changes. These updated forecasts are referred to as Round 6.1, Round 6.2, etc. The forecasts in this report are Round 6.3, intermediate series, as adopted by the COG Board in October 2003.

The Round 6.3 Forecasts reveal dramatic increases in employment, households, and population by 2030, the end of the forecast period. Under the intermediate scenario, regional employment would total more than 4.1 million jobs by 2030, a 46 percent increase over the 2000 employment base of 2.8 million jobs. Also, under this scenario, households would reach nearly 2.4 million, a 37 percent increase.

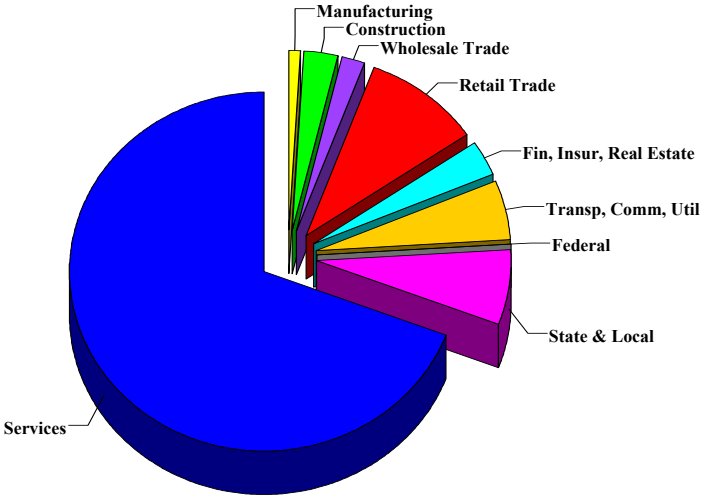
After modest growth in the 1970s and early 1980s, the region's population grew rapidly in the late 1980s. During the 1990s, the region also experienced growth with the population reaching nearly 4.6 million residents in 2000. Regional population is forecast to increase by 34 percent during the forecast period, reaching nearly 6.1 million in 2030. This will add about the same number of people as during the previous 30-year period.

Employment

Regional employment, projected to increase 46 percent from 2000 to 2030, will experience a slightly higher rate of growth than both population and households. Employment growth would be the greatest during the 2005 to 2010 time period when an average of 59,000 new jobs are anticipated per year– slightly more than the amount of jobs added during the latter half of the 1990s. Nearly two-thirds of all new jobs are anticipated in service industries such as engineering, computer and data processing, business services, and medical research. Job growth in Northern Virginia (61%) will outpace growth in the Maryland suburbs (47%), and the District (23%).

Fairfax, Prince George's, Loudoun, and Montgomery counties would add the largest numbers of new jobs to the region's employment base during the 2000 to 2030 forecast period, followed by the District of Columbia, Arlington County, and Prince William County. Collectively, the region's inner suburbs will add the largest number of new jobs, 611,000, by 2030. However, as with population and household growth, the largest percentage increases in employment will occur in the outer suburbs of Virginia and Maryland. Although together they will add only 397,000 jobs to the region's base, they will nearly double the number of jobs by 2030.

Nearly Two-thirds of All New Jobs in Services
(Industry Shares of 2000—2030 Growth)



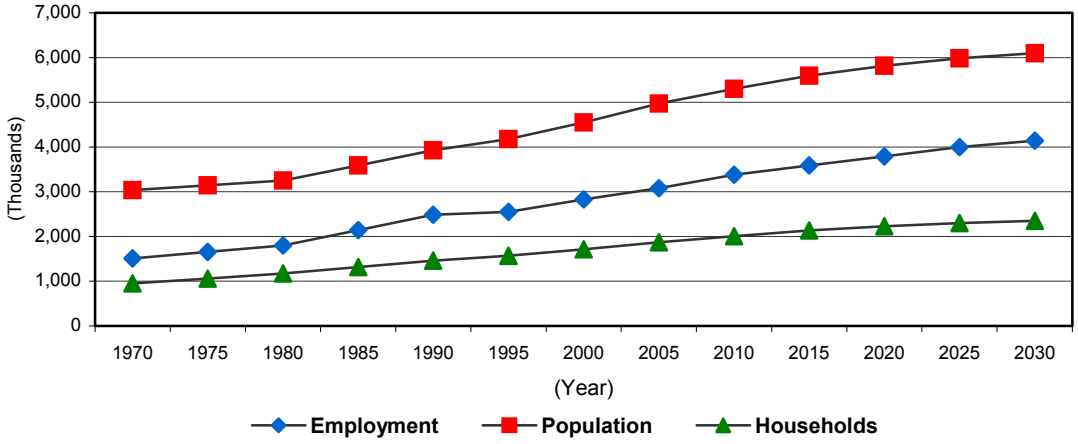
Summary of Intermediate Employment Forecasts
Round 6.3 Cooperative Forecasts
(Thousands)

JURISDICTION	1990	2000	2010	2020	2030
District of Columbia	747.3	678.0	752.0	807.1	831.2
Arlington County	183.1	201.7	236.0	274.1	301.9
City of Alexandria	93.2	98.6	120.7	137.0	148.1
Central Jurisdictions	**1,023.6**	**978.3**	**1,108.7**	**1,218.2**	**1,281.2**
Montgomery County (1)	466.0	545.0	630.0	680.0	705.0
Rockville (2)	56.9	68.7	92.8	101.3	103.5
Prince George's County	310.4	327.5	399.9	465.0	550.0
Fairfax County (3)	403.7	532.8	653.2	708.5	758.9
City of Fairfax	26.9	32.9	33.9	33.9	33.8
City of Falls Church	9.2	9.4	10.0	10.5	10.7
Inner Suburbs	**1,216.1**	**1,447.6**	**1,727.0**	**1,897.9**	**2,058.4**
Loudoun County	39.3	87.0	137.1	195.3	253.6
Prince William County	68.8	91.6	124.0	152.8	173.5
City of Manassas	17.2	19.9	23.0	24.1	24.2
City of Manassas Park	2.3	2.7	4.7	5.1	5.2
Calvert County (4)	18.1	25.9	32.9	34.5	35.6
Charles County (4)	38.7	50.1	62.9	66.8	69.1
Frederick County	54.0	99.7	120.7	148.5	177.8
Stafford County (5)	11.0	25.3	38.4	49.2	59.7
Anne Arundel County (6)	*249.4*	*291.7*	*312.0*	*322.0*	*330.1*
Howard County (6)	*106.3*	*160.0*	*200.0*	*230.0*	*249.9*
Outer Suburbs (6)	**249.4**	**402.2**	**543.7**	**676.3**	**798.7**
Northern Virginia	**854.7**	**1,101.9**	**1,381.0**	**1,590.5**	**1,769.6**
Suburban Maryland (6)	**887.1**	**1,048.2**	**1,246.4**	**1,394.8**	**1,537.5**
REGIONAL TOTAL (6)	**2,489.1**	**2,828.1**	**3,379.4**	**3,792.4**	**4,138.3**

(1) Forecasts for years 2000 to 2030 include all of Takoma Park.
(2) Included in Montgomery County total.
(3) Totals for all years include Fairfax County government employees working in the Massey Complex.
(4) Tri-County Council for Southern Maryland develops 10-year incremental population, housing unit, and employment forecasts for Calvert County, Charles County, and St. Mary's County.
(5) Source: Rappahanock Area Development Commission (RADCO), March 2003.
(6) Baltimore Metropolitan Council (BMC) Round 5-D Forecasts (2000 to 2025) for Anne Arundel and Howard counties are shown for reference purposes only and are not included in any other totals. Howard County and Anne Arundel County provided 2000 to 2025 projections and the Metropolitan Washington Council of Governments extrapolated their data to 2030. The official forecasts for Anne Arundel County for 2030 will not be available until January 2004.

Historic and Forecast Growth
Washington DC-MD-VA MSA[1]

Round 6.3 Cooperative Forecasting



[1]Based on the 1983 definition of the Washington Metropolitan Statistical Area (MSA)

Summary of Intermediate Population Forecasts
Round 6.3 Cooperative Forecasts
(Thousands)

JURISDICTION	1990	2000	2010	2020	2030
District of Columbia (1)	606.9	572.1	627.0	688.1	702.4
Arlington County	170.9	189.5	202.5	215.5	221.9
City of Alexandria	111.2	128.3	142.9	147.8	151.7
Central Jurisdictions	**889.0**	**889.9**	**972.4**	**1,051.4**	**1,076.0**
Montgomery County (2)	757.0	873.3	975.0	1,050.0	1,080.0
Rockville (3)	44.8	47.4	60.4	63.3	64.4
Prince George's County	729.3	808.0	881.1	932.3	967.8
Fairfax County (4)	818.6	969.8	1,114.1	1,174.6	1,197.4
City of Fairfax	19.6	22.9	24.1	24.7	24.3
City of Falls Church	9.6	10.4	11.3	11.9	12.2
Inner Suburbs	**2,334.1**	**2,684.4**	**3,005.6**	**3,193.5**	**3,281.7**
Loudoun County	86.1	169.6	300.4	393.7	441.9
Prince William County	215.7	280.8	376.2	414.8	433.1
City of Manassas	28.0	35.1	36.9	37.1	37.5
City of Manassas Park	6.7	10.3	15.3	15.7	15.8
Calvert County (5)	51.4	74.6	86.6	95.6	104.4
Charles County (5)	101.2	120.5	147.4	183.0	205.0
Frederick County	150.2	195.3	238.3	281.9	324.6
Stafford County (6)	61.2	92.5	121.7	151.0	180.4
Anne Arundel County (7)	*427.2*	*489.7*	*532.2*	*552.7*	*572.0*
Howard County (7)	*187.3*	*250.7*	*274.2*	*294.6*	*292.1*
Outer Suburbs (7)	**700.5**	**978.7**	**1,322.8**	**1,572.8**	**1,742.7**
Northern Virginia	**1,527.7**	**1,909.2**	**2,345.4**	**2,586.8**	**2,716.2**
Suburban Maryland (7)	**1,789.0**	**2,071.7**	**2,328.4**	**2,542.8**	**2,681.8**
REGIONAL TOTAL (7)	**3,923.6**	**4,553.0**	**5,300.8**	**5,817.7**	**6,100.4**

(1) The Round 6.3 population and household forecasts for the District of Columbia reflect Census 2000 counts, which showed the city's population to be higher than estimated in Round 6.2.
(2) Forecasts for years 2000 to 2030 include all of Takoma Park.
(3) Included in Montgomery County total.
(4) Includes Fairfax County group quarters population in the Massey Complex.
(5)Tri-County Council for Southern Maryland develops 10-year incremental population, housing unit and employment forecasts for Calvert County, Charles County and St. Mary's County.
(6) Source: Rappahanock Area Development Commission (RADCO), March 2003. The estimates for 2010, 2020, and 2030 are control totals provided by the Virginia Employment Commission (VEC) and should only be used for transportation planning purposes. Incremental five-year estimates (2005, 2015, and 2025) have been developed by MWCOG for the purpose of transportation modeling and air quality analysis.
(7) Baltimore Metropolitan Council (BMC) Round 5-D Forecasts (2000 to 2025) for Anne Arundel and Howard counties are shown for reference purposes only and are not included in any other totals. Howard County and Anne Arundel County provided 2000 to 2025 projections and the Metropolitan Washington Council of Governments extrapolated their data to 2030. The official forecasts for Anne Arundel County for 2030 will not be available until January 2004.

Summary of Intermediate Household Forecasts
Round 6.3 Cooperative Forecasts
(Thousands)

JURISDICTION	1990	2000	2010	2020	2030
District of Columbia (1)	249.6	248.3	272.2	298.7	304.4
Arlington County	78.5	86.4	94.6	102.5	106.2
City of Alexandria	53.3	61.9	70.0	73.0	75.3
Central Jurisdictions	**381.4**	**396.6**	**436.8**	**474.2**	**485.9**
Montgomery County (2)	282.0	324.6	370.0	405.0	420.0
Rockville (3)	15.7	17.2	22.8	24.2	24.7
Prince George's County	258.0	288.6	319.0	346.7	369.8
Fairfax County	292.3	350.7	408.7	430.5	438.4
City of Fairfax	7.4	8.5	9.3	9.5	9.7
City of Falls Church	4.2	4.5	4.9	5.2	5.4
Inner Suburbs	**843.9**	**976.9**	**1,111.9**	**1,196.9**	**1,243.3**
Loudoun County	30.7	59.9	106.6	139.6	156.7
Prince William County	69.7	94.6	127.3	143.4	152.1
City of Manassas	9.5	11.8	12.7	13.2	13.6
City of Manassas Park	2.2	3.3	4.2	4.3	4.3
Calvert County (4)	17.0	25.4	29.1	33.0	36.6
Charles County (4)	33.0	41.7	51.3	66.4	76.1
Frederick County	52.6	70.1	84.7	101.7	120.2
Stafford County (5)	19.4	30.7	41.4	52.4	63.5
Anne Arundel County (6)	*149.1*	*178.7*	*202.1*	*217.0*	*229.8*
Howard County (6)	*68.3*	*91.0*	*107.5*	*121.0*	*121.7*
Outer Suburbs (6)	**234.0**	**337.5**	**457.3**	**554.0**	**623.1**
Northern Virginia	**567.2**	**712.3**	**879.7**	**973.6**	**1,025.2**
Suburban Maryland (6)	**642.5**	**750.4**	**854.1**	**952.8**	**1,022.7**
REGIONAL TOTAL (6)	**1,459.3**	**1,711.0**	**2,006.0**	**2,225.1**	**2,352.3**

(1) The Round 6.3 population and household forecasts for the District of Columbia reflect Census 2000 counts, which showed the city's population to be higher than estimated in Round 6.2.
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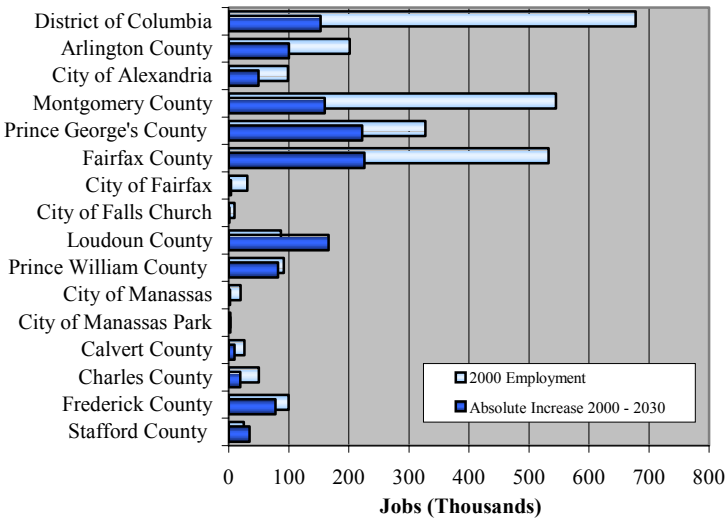
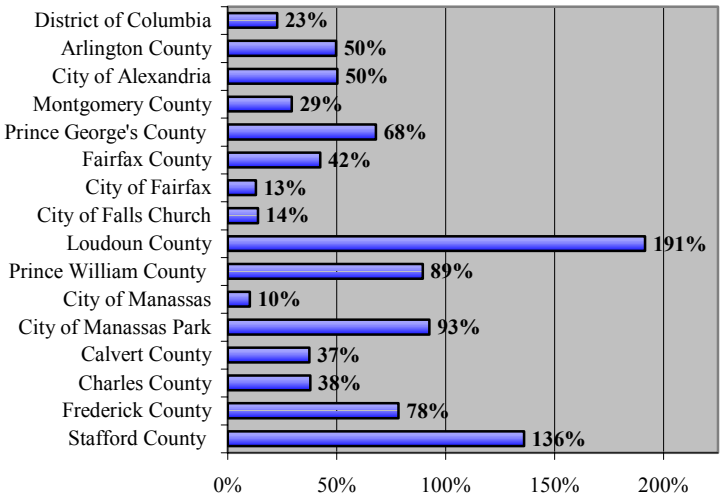
Employment Growth by Jurisdiction
2000 Employment and Forecast 2000 - 2030



Percent Employment Growth by Jurisdiction
Forecast 2000 - 2030



Despite the tremendous growth in suburban employment shown in the forecasts, the District of Columbia will continue to have the largest number of jobs of any single jurisdiction and would account for a fifth of the region's employment. Collectively, the central jurisdictions, will account for nearly one-third of regional employment.

Households

Regional economic growth will continue to attract new residents and fuel a general demand for new housing. Households, or occupied housing units, in turn form the basis for population forecasts for most jurisdictions participating in the Cooperative Forecasting process. Planners monitor housing construction and estimate population growth by multiplying the number of occupied housing units by the average number of people in the jurisdictions' households.

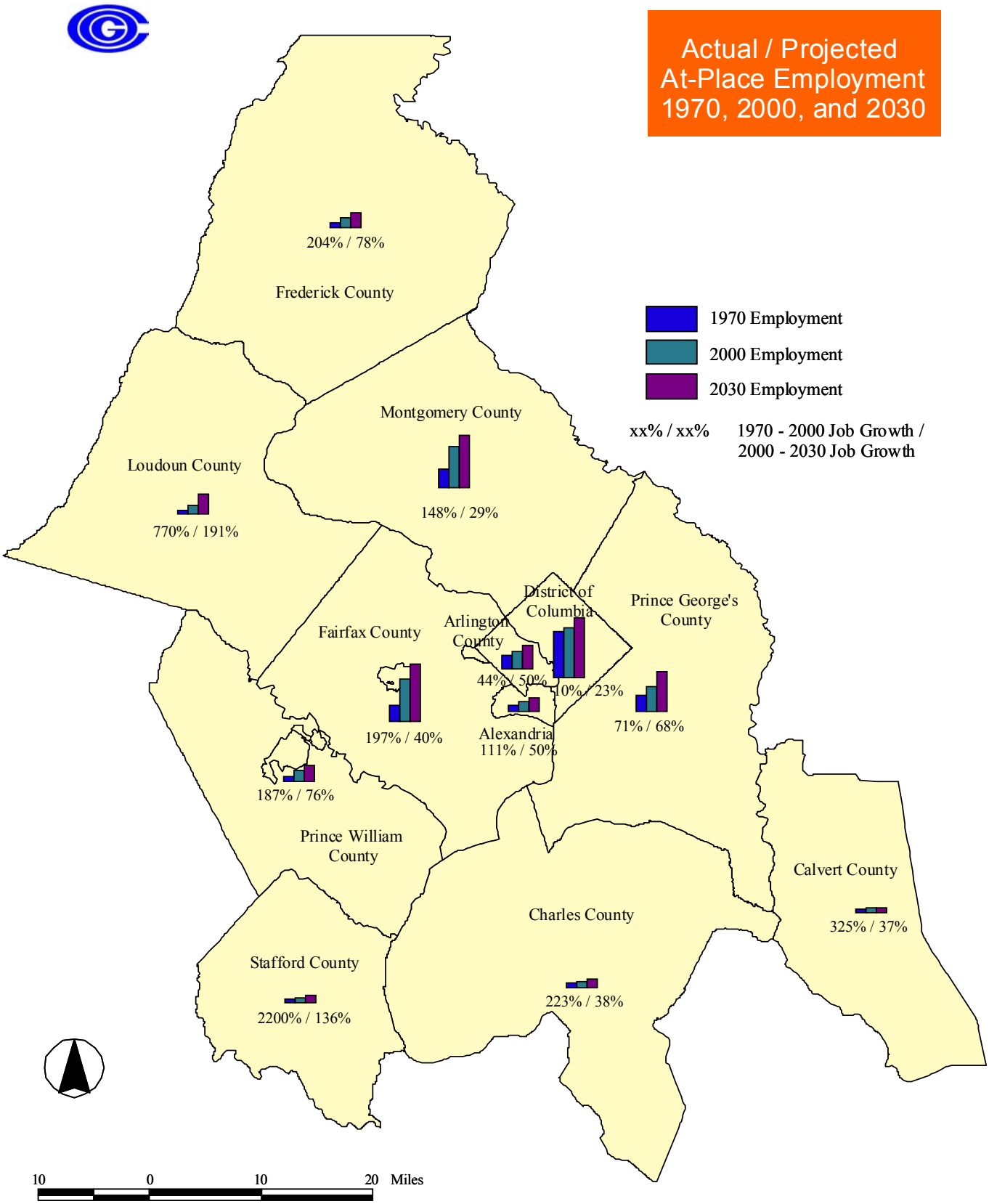
The addition of more than 641,000 households during the 2000 to 2030 forecast period reflects the growth in jobs and in-migration to the region. The largest number of new households will be in Loudoun, Montgomery, Fairfax, and Prince George's counties, which collectively contribute more than half of the household growth during the forecast period.

Loudoun County will grow the most rapidly of all jurisdictions, adding nearly 97,000 households to the 2000 base of 60,000 households.

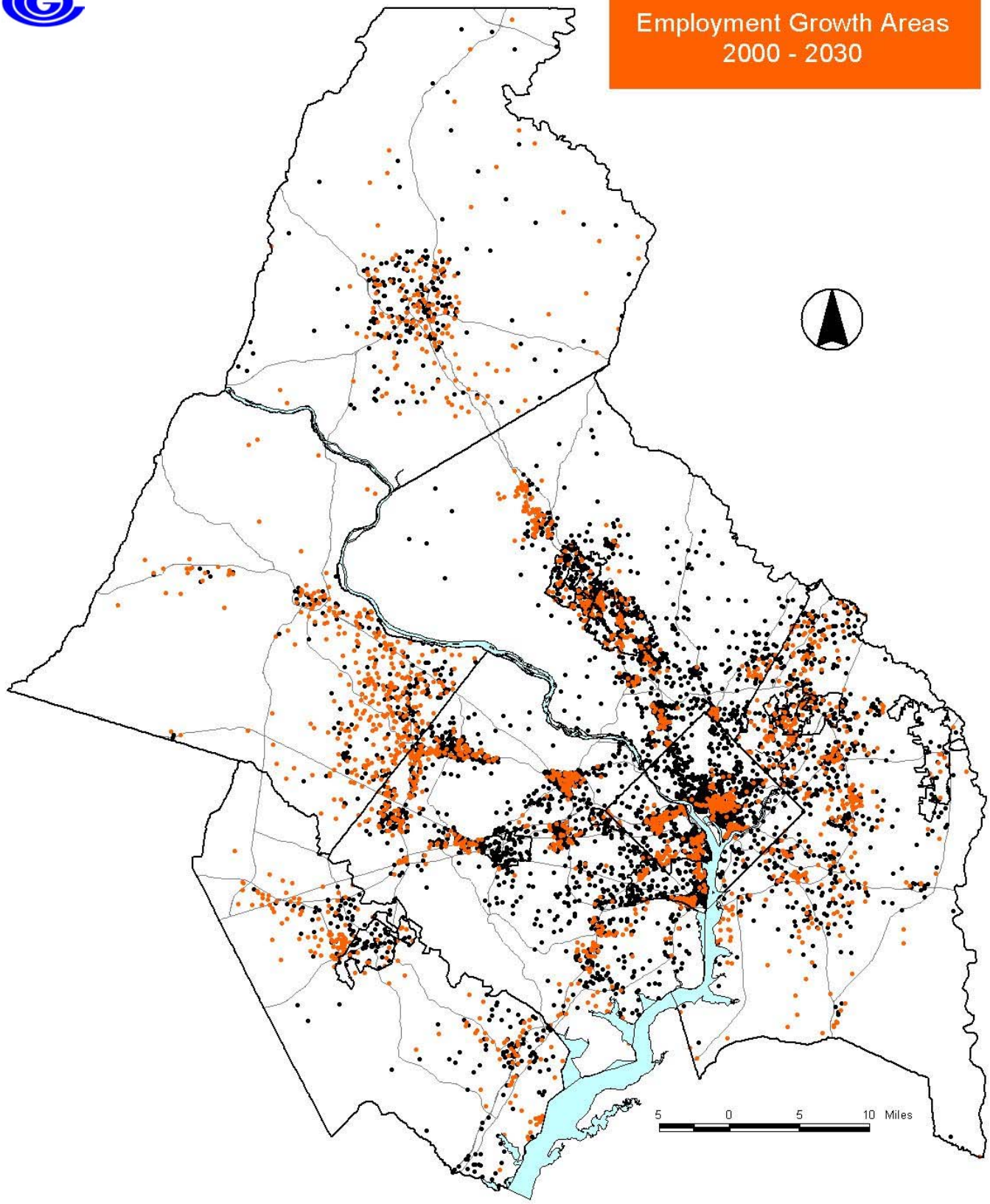
Population

The region's population is expected to grow steadily through the forecast period, adding an average of approximately 52,000 persons a year. Population will be spurred by the long-term strength of the region's economy, high rates of in-migration and international immigration, and declines in average household size less rapid than previously anticipated. The region's population 65 years of age and older will more than double from 2000 to 2030, while the number of children will increase by about 30 percent during the period.

Most of the population growth will be in Loudoun, Fairfax, and Montgomery counties. However, the outer jurisdictions will experience the fastest rates of growth, led by Loudoun (161 percent), Stafford (95 percent), and Charles (70 percent) counties. The region's central jurisdictions will grow more slowly. In Arlington County and the City of Alexandria, population will increase by 17 and 18 percent, respectively. The District of Columbia will experience an end of short-term population loss and will grow by 23 percent during the forecast period.


Actual / Projected
At-Place Employment
1970, 2000, and 2030
1970 Employment
2000 Employment
2030 Employment
xx% / xx% 1970 - 2000 Job Growth /
2000 - 2030 Job Growth
204% / 78%
Frederick County
Montgomery County
148% / 29%
Loudoun County
770% / 191%
Fairfax County
197% / 40%
Arlington County
44% / 50%
District of Columbia
10% / 23%
Alexandria
111% / 50%
Prince George's County
71% / 68%
187% / 76%
Prince William County
Calvert County
325% / 37%
Charles County
223% / 38%
Stafford County
2200% / 136%
10 0 10 20 Miles

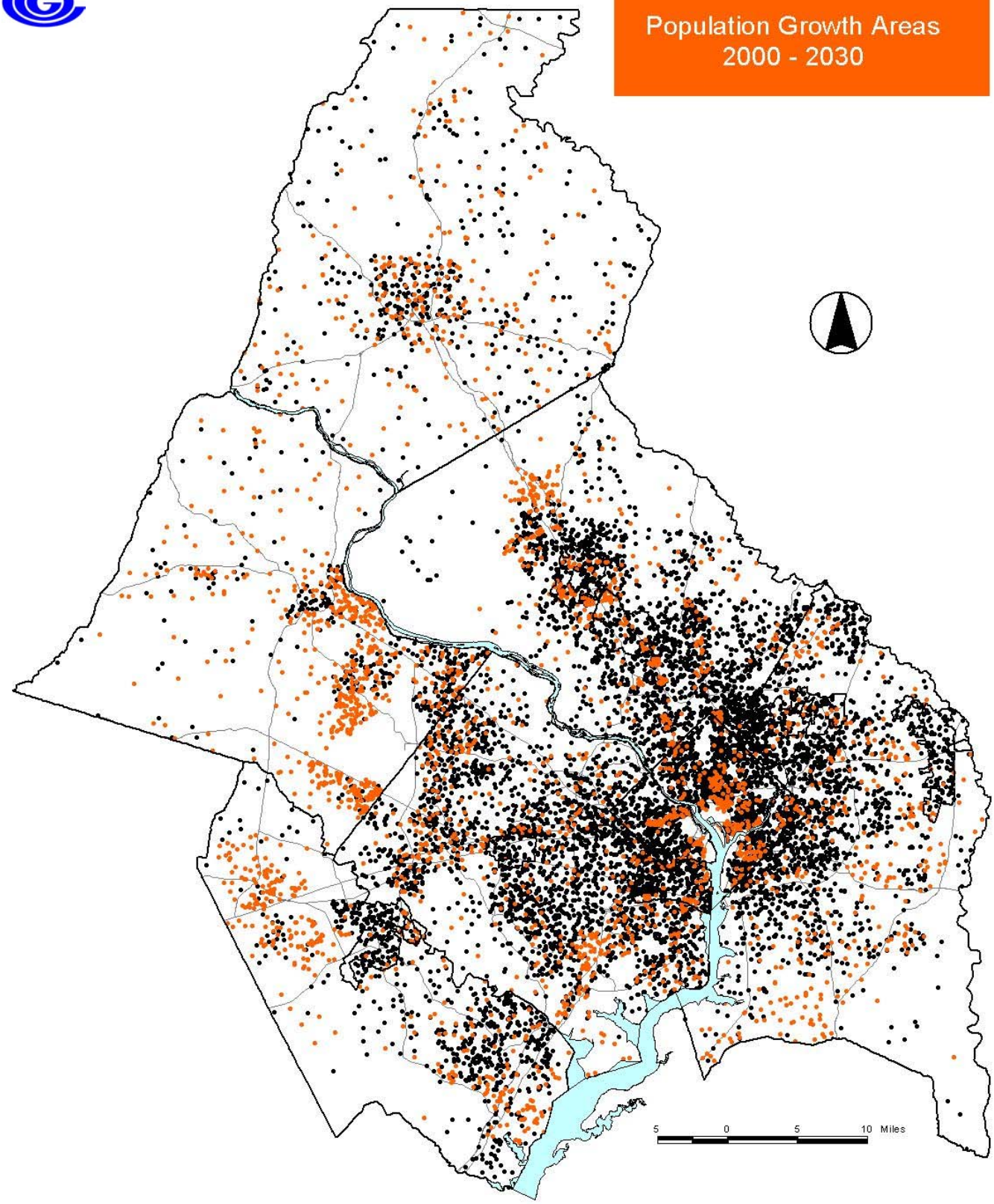
Employment Growth Areas 2000 - 2030



Note: One dot represents 500 jobs. Black dots indicate 2000 employment, orange dots indicate 2000 to 2030 employment growth.

Source: Round 6.3 Cooperative Forecasts

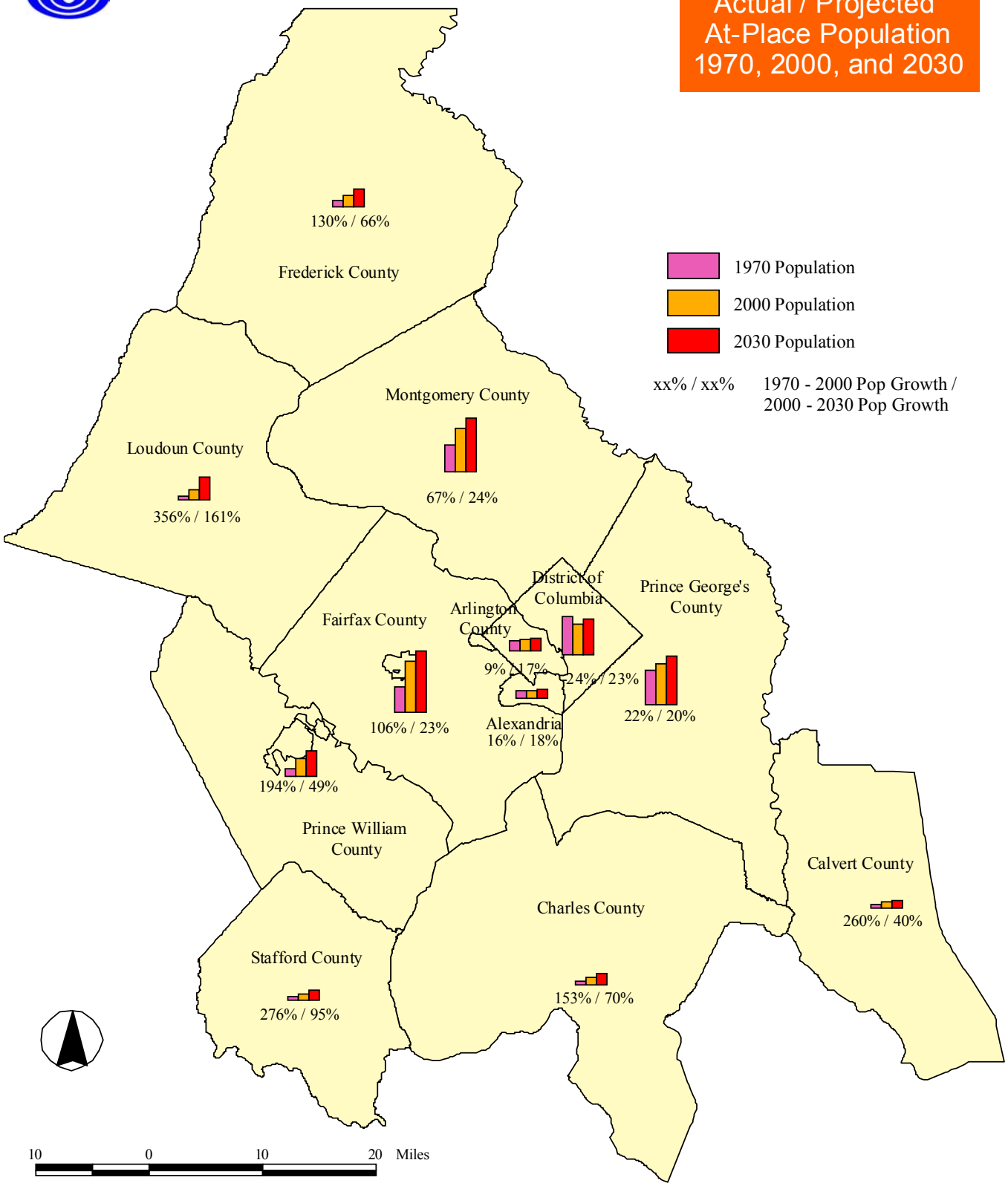
Population Growth Areas 2000 - 2030



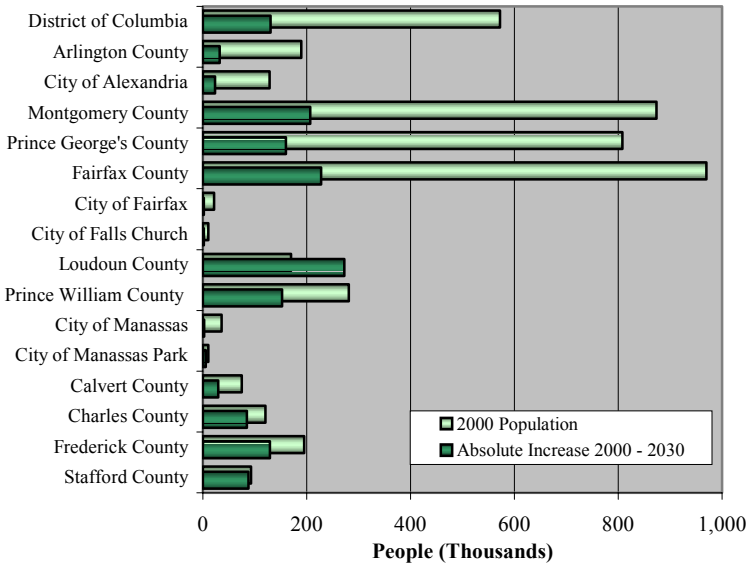
Note: One dot represents 500 people. Black dots indicate 2000 population, orange dots indicate 2000 to 2030 population growth.

Source: Round 6.3 Cooperative Forecasts

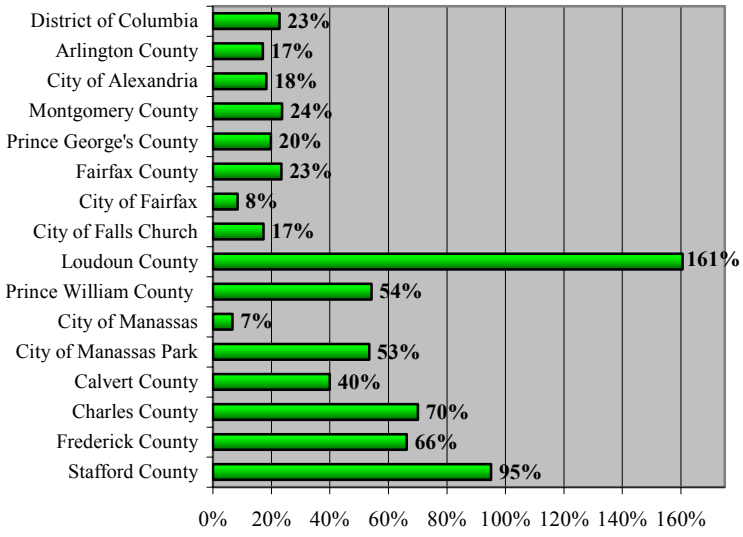
Actual / Projected At-Place Population 1970, 2000, and 2030



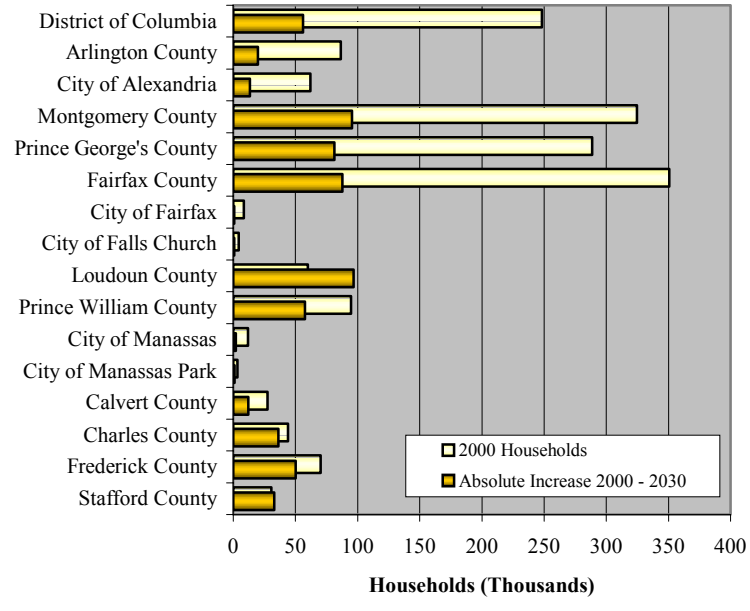
Population Growth by Jurisdiction
2000 Population and Forecast 2000 - 2030



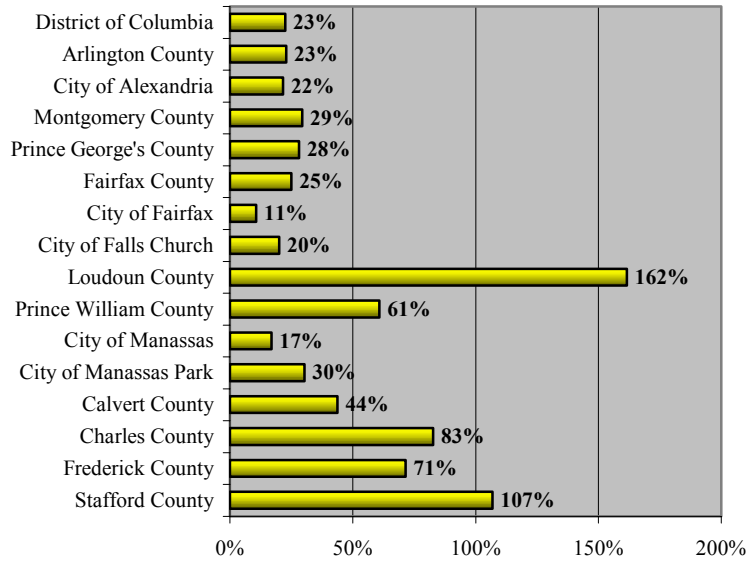
Percent Population Growth by Jurisdiction
Forecast 2000 - 2030



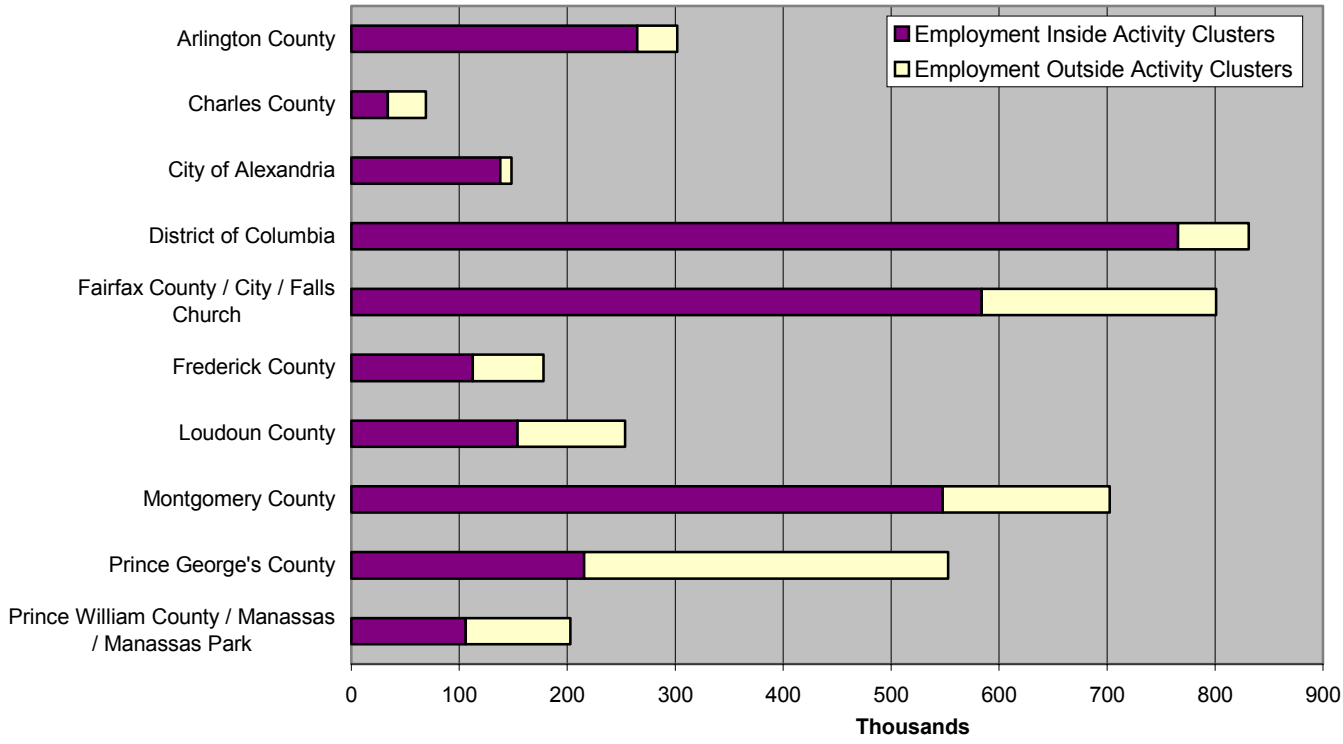
Household Growth by Jurisdiction
2000 Household and Forecast 2000 - 2030



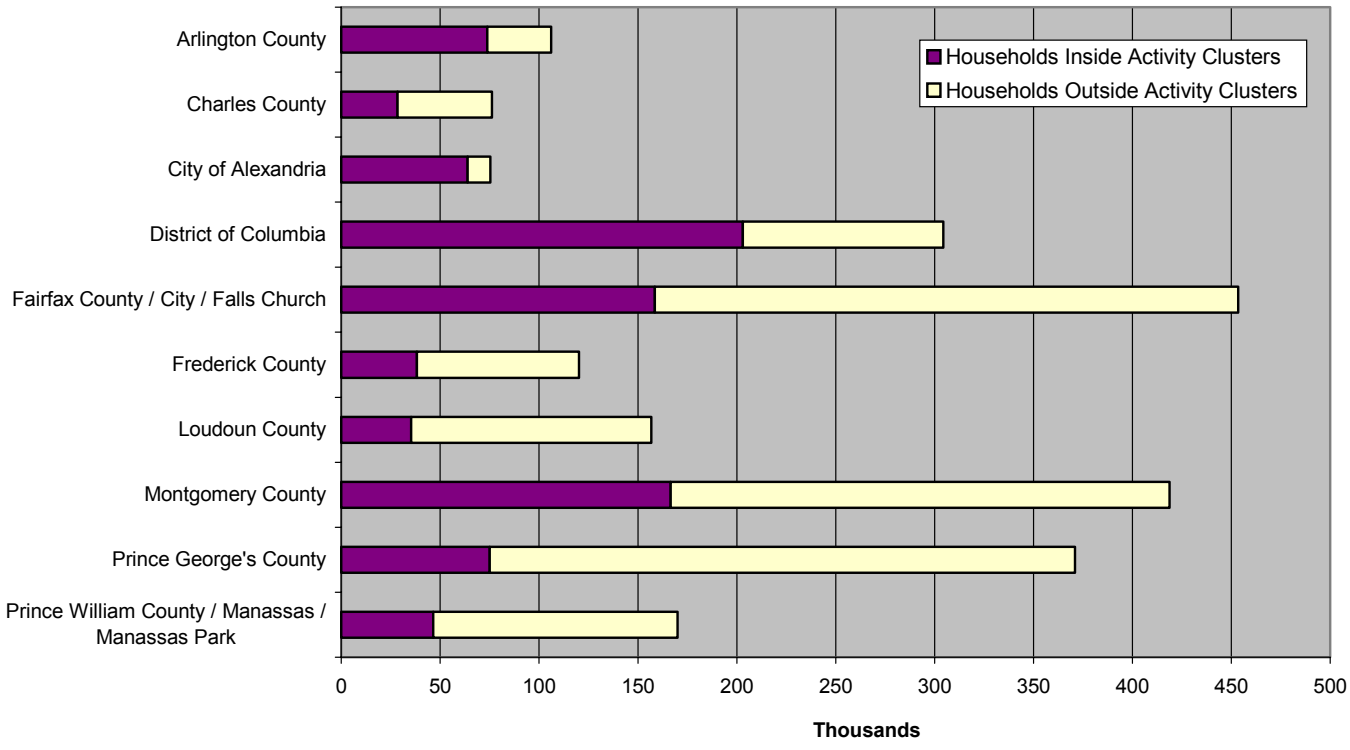
Percent Household Growth by Jurisdiction
Forecast 2000 - 2030



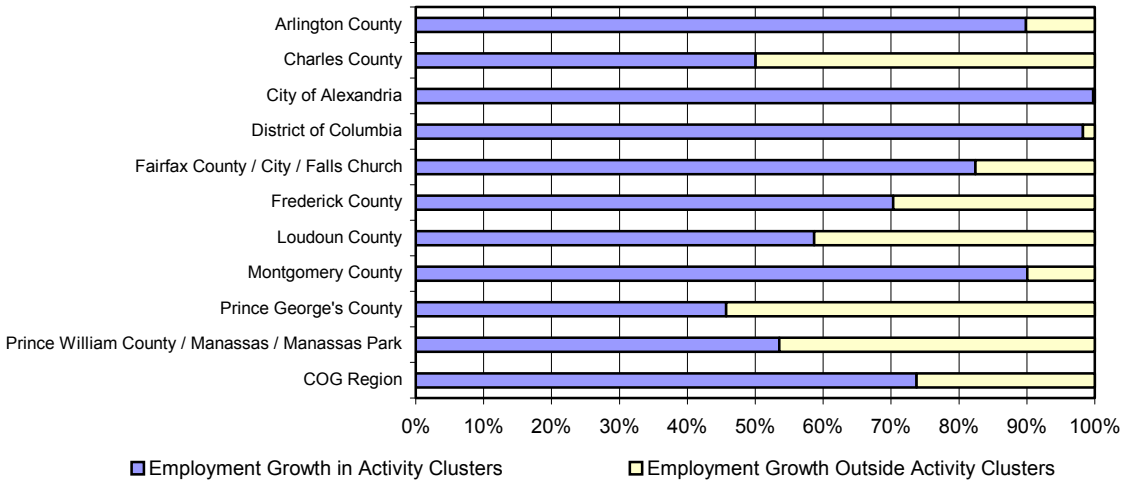
Round 6.3 Employment in Activity Clusters by Jurisdiction in 2030



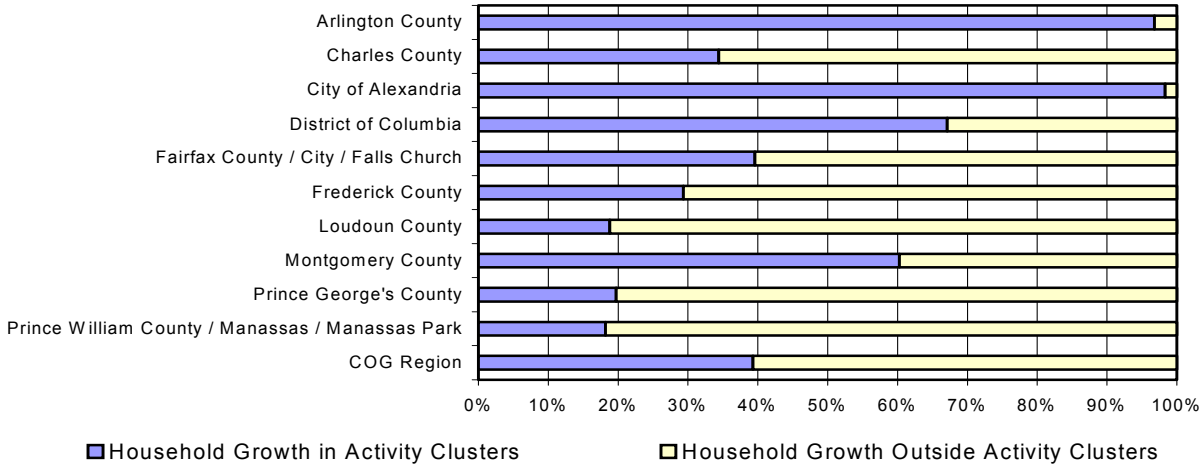
Round 6.3 Households in Activity Clusters by Jurisdiction in 2030



Round 6.3 Percent of Employment Growth Between 2000 and 2030 Occurring in Activity Clusters



Round 6.3 Percent of Household Growth Between 2000 and 2030 Occurring in Regional Activity Clusters



Regional Activity Clusters

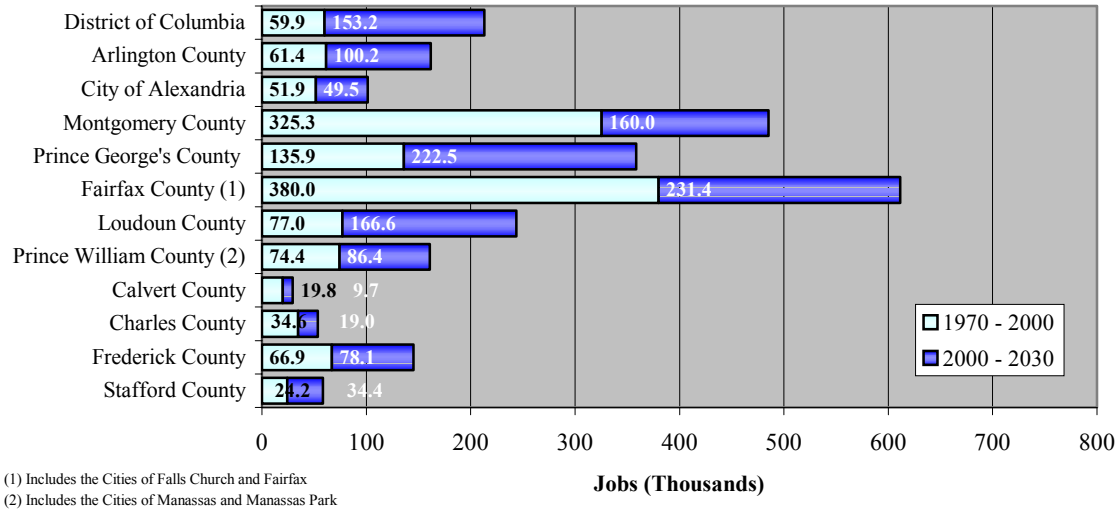
Regional activity clusters are based on aggregated regional activity centers that were delineated to both simplify the regional activity center map and to describe the related or companion areas within the major transportation corridors. Clusters were created by selecting the Traffic Analysis Zones (TAZ) that are directly adjacent to the activity centers with special consideration given to those TAZs that follow major transportation corridors.

In 2000, 72 percent of the region's jobs are located in regional activity clusters. This percentage will be the same for the horizon forecast year of 2030. The highest percentages of jobs located in regional activity clusters in 2030 will be the City of Alexandria (93 percent), the District of Columbia (92 percent), and Arlington County (88 percent).

Households in regional activity clusters account for approximately 40 percent of the region's total households. This number is projected to decline slightly to 39 percent be 2030. The highest percentages of households located in regional activity clusters in 2030 will be the City of Alexandria (85 percent), Arlington County (70 percent), and the District of Columbia (67 percent).

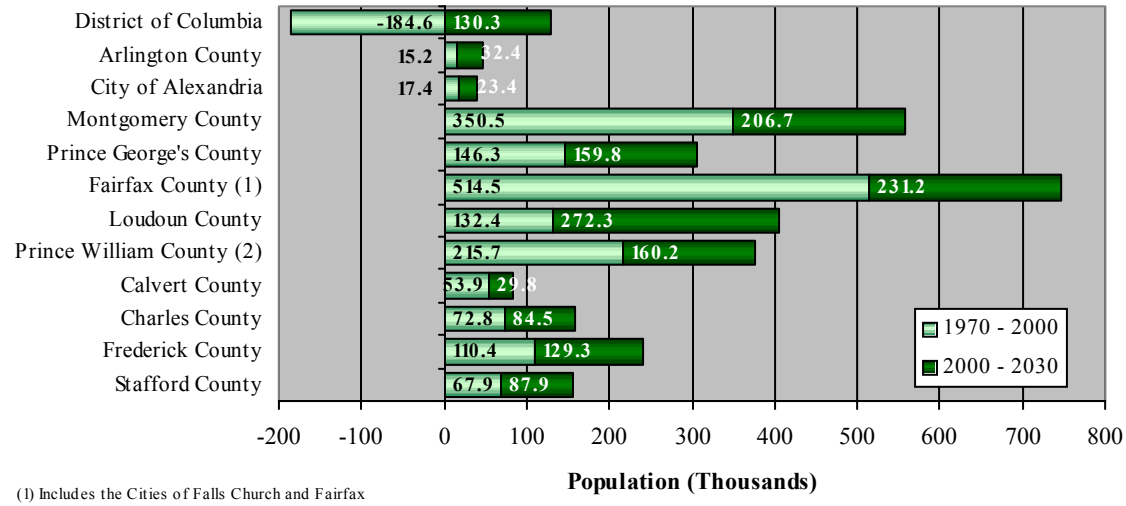
For more information on regional activity centers and clusters go to http://www.mwcog.org/planning/planning/activitycenters/.

Historic and Forecast Employment Growth
1970 - 2000 & 2000 - 2030



(1) Includes the Cities of Falls Church and Fairfax
(2) Includes the Cities of Manassas and Manassas Park

Historic and Forecast Population Growth
1970 - 2000 & 2000 - 2030



(1) Includes the Cities of Falls Church and Fairfax
(2) Includes the Cities of Manassas and Manassas Park

The Metropolitan Washington Council of Governments (COG) is the regional organization of the Washington area's major local governments and their governing officials. COG works toward solutions to such regional problems as growth, transportation, inadequate housing, air pollution, water supply, water quality, economic development, and noise, and serves as the regional planning organization for the metropolitan Washington region.

The Cooperative Forecasting "Round 6a Technical Report," published by COG, contains more detailed information about the Cooperative Forecasts, including the assumptions and methodologies employed by each jurisdiction. For more information contact the Information Center, Metropolitan Washington Council of Governments, 777 North Capitol Street, N.E. Suite 300, Washington, D.C. 20002-4226; (202) 962-3256, Hours 1-5 p.m.

This publication is available in PDF format at http://www.mwcog.org/planning/planning/trends/.

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