# **GROWTH TRENDS TO 2045**

Cooperative Forecasting in Metropolitan Washington

November 2016



#### **GROWTH TRENDS TO 2045:**

#### **COOPERATIVE FORECASTING IN METROPOLITAN WASHINGTON**

Prepared by the Cooperative Forecasting and Data Subcommittee on behalf of the Planning Directors Technical Advisory Committee Adopted on November 9, 2016

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The Metropolitan Washington Council of Governments (COG) is an independent, nonprofit association that brings area leaders together to address major regional issues in the District of Columbia, suburban Maryland, and Northern Virginia. COG's membership is comprised of 300 elected officials from 23 local governments, the Maryland and Virginia state legislatures, and U.S. Congress.

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# **INTRODUCTION**

Local governments in metropolitan Washington have worked cooperatively for many years to develop region-wide and neighborhood level forecasts of employment, population, and households. This year is the  $40^{th}$  anniversary of the adoption of the very first round of Cooperative Forecasts – Round 1 – adopted by the COG Board. 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 decisions using common assumptions about future growth and development in the region. Each series of forecasts, or a "Round," provides land use activity forecasts of employment, population, and households by five-year increments. 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.

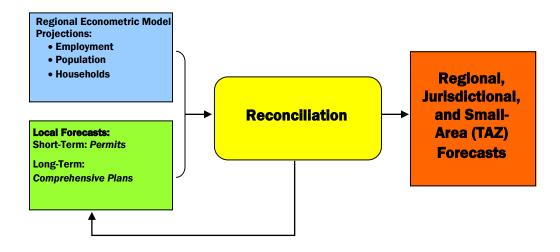


#### **Map of COG Member Governments**

## **PROCESS**

The Cooperative Forecast is a multi-stage, "top-down/bottom-up" process undertaken by COG's Planning Directors Technical Advisory Committee and the Cooperative Forecasting and Data Subcommittee. It employs a regional econometric model and local jurisdictional forecasts. The model projects employment, population, and households for the metropolitan Washington region based on national economic trends and local demographic factors.

While, the model is based on the COG / TBP (Transportation Planning Board) Planning Area geography, at the time of the development of the Round 9.0 model, the urbanized portion of Fauquier County, VA was not included. Concurrently, local jurisdictions develop independent 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.



#### Figure 1: Cooperative Forecasting Model

The Cooperative Forecasting and Data Subcommittee, which is comprised of local government planners, economists, and demographers, reviews and reconciles the two sets of projections. The model and local jurisdictional projections must be within three percent of each other for the new set of Cooperative Forecasts to be reconciled.

The forecasts are presented and approved by the Planning Directors Technical Advisory Committee (PDTAC) and the COG Board of Directors.

Recognizing that market conditions and policies may change, the subcommittee reviews the forecasts annually, and allows local governments to make minor adjustments. The forecasts may also be adjusted to reflect local governments' assessment of the likely housing and employment impact due to major new transportation facilities. Updated forecasts are referred to as Round 8.1, Round 8.2, etc. These forecasts are Round 9.0 as adopted by the COG Board in November 2016.

#### Table 1: Previous Rounds of Cooperative Forecasts, 1976 - 2016

| Round 1 - 1976         | Round 6.3 - 2003          |
|------------------------|---------------------------|
| Round 2 - 1979         | Round 6.4A - 2004         |
| Round 3 - 1983         | Round 7.0 - 2005          |
| Round 3.5 - 1985       | Round 7.0a - 2006         |
| Round 4 – 1987         | Round 7.1 - 2008          |
| Round 4-1 - 1991       | Round 7.2 – July 2009     |
| Round 5 – January 1994 | Round 7.2A – October 2009 |
| Round 5.1 – May 1994   | Round 8.0 - 2010          |
| Round 5.2 - 1995       | Round 8.0a - 2011         |
| Round 5.3 - 1996       | Round 8.1 - 2012          |
| Round 5.4 – 1997       | Round 8.2 - 2013          |
| Round 6a – 1998        | Round 8.3 - 2014          |
| Round 6.1 - 1999       | Round 8.4 - 2015          |
| Round 6.2 – 2000       | Round 9.0 - 2016          |

### **COORDINATION**

In February 2003, the COG Board of Directors adopted a resolution to further enhance coordination between regional land use and transportation planning in metropolitan Washington. Beginning with Round 6.3 and for all subsequent rounds, the Cooperate Forecasts are approved by the COG Board concurrently with the TPB approval of the results of the annual air quality conformity analysis of the Transportation Improvement Program (TIP) and the Financially-Constrained Land Range Plan (CLRP).

In reviewing the Round 7.0 forecasts in 2005, the PDTAC and MDPC determined that local plans and zoning in the metropolitan Washington region do not currently provide for housing necessary for workers to fill the forecasted jobs. Previously, forecasts adopted by the COG Board were based on local plans and zoning capacities as provided for in adopted land use plans. In approving Round 7.0, the COG Board concluded that certain localities will need to re-plan and rezone land to provide sufficient housing to meet employment projections. This assumption is still implicit in the Round 9.0 Forecasts.

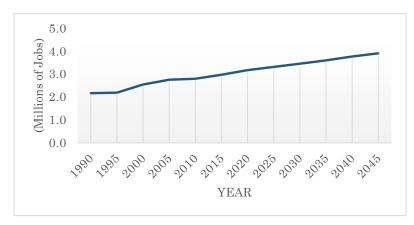
For the Round 8.0 Cooperative Forecasts, COG contracted with the George Mason University Center for Regional Analysis (CRA) for the development of new regional benchmark totals. With the guidance of COG staff and the CRA, the regional benchmark totals were developed using the econometric modeling forecasts from Global Insight, Inc. for the Washington Metropolitan region. The Planning Directors Technical Advisory Committee was briefed on the development of the benchmark totals methodology and gave their final approval of the benchmark totals at their June 2009 meeting. Results of the Round 8.2 Cooperative Forecasts started to show a divergence from the Round 8.0 regional benchmark totals and starting in 2013, the Cooperative Forecasting and Data Subcommittee began the work to re-examine the economic outlook of the region. A data product from Global Insight, Inc. was examined in anticipation of developing a new regional benchmark total.

### **ECONOMETRIC MODEL**

### **Employment**

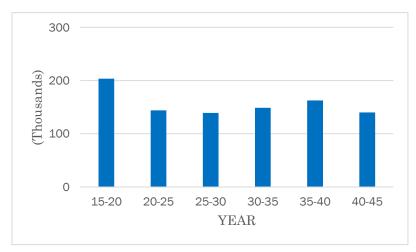
The Round 9.0 econometric model projections reveal significant increases in employment, households, and population through 2045, the end of the forecast period.

Employment in the region will reach 4.2 million jobs by 2045. The region will add 1.0 million jobs or a 32 percent to an existing 2015 base of 3.1 million jobs.



#### Figure 2: Historic and Forecast Employment, 1990 to 2045

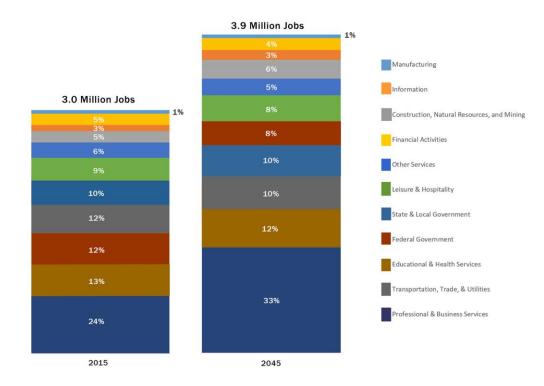




#### Table 2: Round 9.0 Econometric Model Results - Employment (Thousands)

|   | 2015          | 2020          | 2025          | 2030          | 2035          | 2040          | 2045          |
|---|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Construction, Natural Resources, and Mining | 139.1         | 180.8         | 192.9         | 200.8         | 207.4         | 218.7         | 230.8         |
| Manufacturing                               | 42.5          | 43.2          | 42.4          | 41.4          | 40.6          | 40.1          | 39.2          |
| Transportation, Trade, & Utilities          | 369.1         | 377.1         | 377.9         | 377.8         | 379.3         | 377.6         | 375.1         |
| Information                                 | 75.0          | 83.5          | 94.6          | 101.5         | 109.8         | 115.6         | 124.1         |
| Financial Activities                        | 139.6         | 137.0         | 137.3         | 138.6         | 142.4         | 145.3         | 148.3         |
| Professional & Business Services            | 704.0         | 816.1         | 912.5         | 1,007.5       | 1,104.1       | 1,214.9       | 1,306.2       |
| Educational & Health Services               | 385.8         | 406.5         | 418.6         | 428.0         | 443.3         | 456.8         | 468.5         |
| Leisure & Hospitality                       | 276.8         | 294.6         | 297.0         | 300.2         | 309.1         | 319.4         | 327.3         |
| Other Services                              | 185.5         | 183.6         | 185.8         | 191.3         | 192.9         | 195.8         | 200.2         |
| Government                                  | 652.2         | 650.8         | 658.3         | 669.4         | 676.3         | 683.7         | 688.2         |
| Federal Government                          | 354.8         | 336.8         | 327.1         | 324.9         | 318.7         | 316.2         | 310.6         |
| State & Local Government                    | 297.4         | 313.9         | 331.2         | 344.5         | 357.6         | 367.4         | 377.6         |
| Total Nonfarm                               | 2,969.7       | 3,173.1       | 3,317.3       | 3,456.4       | 3,605.2       | 3,767.9       | 3,907.8       |
| CES Correction                              | 2,956.0       | 3,189.0       | 3,333.9       | 3,473.7       | 3,623.2       | 3,786.7       | 3,927.4       |
| Military<br>Self-Employed                   | 42.4<br>147.8 | 42.4<br>159.4 | 42.4<br>166.7 | 42.4<br>173.7 | 42.4<br>181.2 | 42.4<br>189.3 | 42.4<br>196.4 |
| Total Employment                            | 3,146.2       | 3,390.8       | 3,542.9       | 3,689.8       | 3,846.8       | 4,018.4       | 4,166.2       |

#### Figure 4: Comparison of 2015 and 2045 of NAICS Industry Shares of Employment



### **Population and Households**

Population in the region will reach nearly 6.9 million people by 2045. The region will add 1.4 million people to an existing 2015 total of 5.5 million people, or a 26 percent increase.

The region will have 2.8 million households by 2045. An additional 766 thousand households to an existing 2015 total of 2.0 million households, or a 38 percent increase.

#### Table 3: Round 9.0 Econometric Model Results - Total Population and Heads of Households (Thousands)

|                     | 2015    | 2020    | 2025    | 2030 | 2035    | 2040    | 2045    |
|---------------------|---------|---------|---------|------|---------|---------|---------|
| Total Population    | 5,486.5 | 5,793.6 | 6,043.6 | -,   | 6,488.7 | 6,686.6 | 6,888.4 |
| Heads of Households | 2,009.4 | 2,146.2 | 2,276.2 |      | 2,519.6 | 2,642.7 | 2,775.4 |

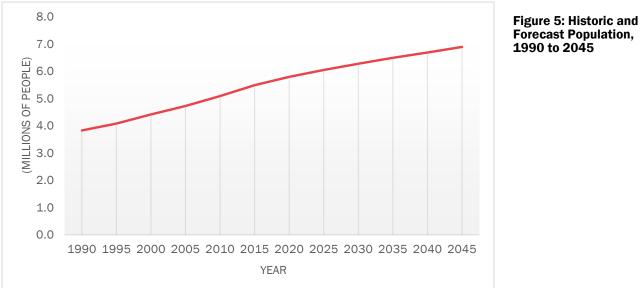
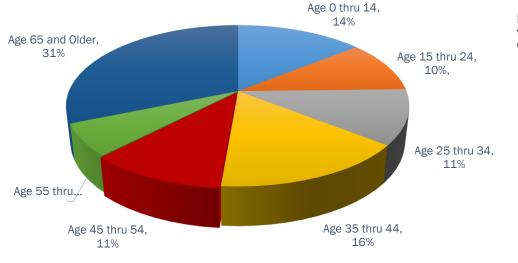


Figure 6: Share of 2015



#### to 2045 Population Growth by Age Group

# **JURISDICTIONAL FORECASTS**

### Employment

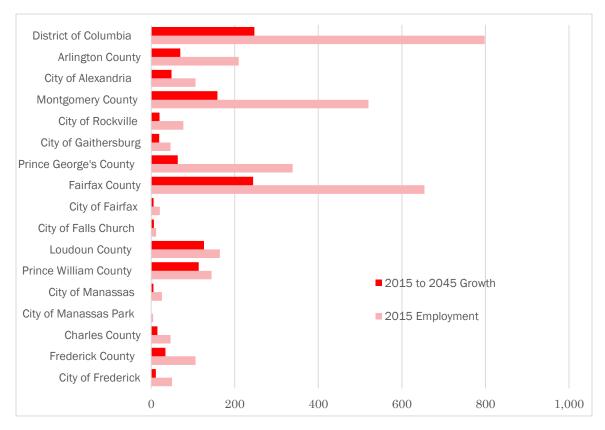
Job growth in Northern Virginia (55%) will outpace the growth anticipated in the Maryland jurisdictions (24%), and the District of Columbia (22%). The District of Columbia, Fairfax County, and Montgomery County would add the largest number of new jobs to the region's employment base during the 2015 to 2045 forecast period, followed by Loudoun and Prince William counties.

Collectively, the region's inner suburbs will add the largest number of new jobs, 478,600 by 2045. As with population and household growth, the largest percentage increases in the employment will occur in the outer suburbs of Virginia and Maryland. Together, these outer jurisdictions will add 295,000 jobs to the region's base, increasing their total number of jobs 26 percent by 2045. Despite the tremendous growth in suburban employment shown in the forecasts, the District of Columbia will continue to have largest number of jobs of any single jurisdictions and would account for about a fifth of the region's employment in 2045. Collectively, the central jurisdictions will account for 32 percent of regional employment.

|                        |         |         |         |         |         |         |         | 2015    | to 2045 G | rowth  |
|------------------------|---------|---------|---------|---------|---------|---------|---------|---------|-----------|--------|
| JURISDICTION           | 2015    | 2020    | 2025    | 2030    | 2035    | 2040    | 2045    | Number  | % Change  | Share  |
|                        |         |         |         |         |         |         |         |         |           |        |
| District of Columbia   | 798.3   | 846.3   | 895.1   | 937.9   | 978.2   | 1,011.8 | 1,045.4 | 247.1   | 31.0%     | 21.7%  |
| Arlington County       | 209.6   | 213.2   | 225.2   | 242.1   | 255.8   | 267.6   | 279.6   | 69.9    | 33.4%     | 6.1%   |
| City of Alexandria     | 106.2   | 110.1   | 121.8   | 127.3   | 135.3   | 142.7   | 155.1   | 48.9    | 46.0%     | 4.3%   |
| Central Jurisdictions  | 1,114.1 | 1,169.6 | 1,242.1 | 1,307.3 | 1,369.2 | 1,422.2 | 1,480.0 | 365.9   | 32.8%     | 32.1%  |
| Montgomery County      | 520.2   | 543.5   | 572.5   | 604.5   | 627.4   | 653.9   | 678.7   | 158.5   | 30.5%     | 13.9%  |
| City of Rockville      | 76.9    | 78.3    | 80.5    | 82.5    | 86.8    | 91.2    | 96.8    | 19.8    | 25.8%     | 1.7%   |
| City of Gaithersburg   | 46.4    | 47.6    | 50.0    | 52.7    | 56.1    | 61.1    | 65.7    | 19.3    | 41.5%     | 1.7%   |
| Prince George's County | 338.6   | 349.0   | 366.3   | 375.7   | 385.5   | 393.3   | 402.1   | 63.6    | 18.8%     | 5.6%   |
| Fairfax County         | 654.1   | 702.6   | 749.3   | 790.6   | 827.8   | 864.5   | 898.1   | 244.0   | 37.3%     | 21.4%  |
| City of Fairfax        | 20.8    | 21.9    | 22.8    | 23.7    | 24.6    |         | 26.6    | 5.8     | 28.0%     | 0.5%   |
| City of Falls Church   | 12.0    | 14.3    | 16.2    | 17.6    | 18.0    | 18.3    | 18.6    | 6.6     | 55.0%     | 0.6%   |
| Inner Suburbs          | 1,545.6 | 1,631.4 | 1,727.1 | 1,812.1 | 1,883.3 | 1,955.7 | 2,024.1 | 478.6   | 31.0%     | 42.0%  |
| Loudoun County         | 164.2   | 188.0   | 211.0   | 235.5   | 255.6   | 273.9   | 290.8   | 126.5   | 77.1%     | 11.1%  |
| Prince William County  | 144.6   | 165.0   | 184.4   | 204.5   | 223.1   | 245.1   | 258.3   | 113.7   | 78.6%     | 10.0%  |
| City of Manassas       | 25.7    | 26.9    | 28.3    | 28.8    | 29.6    | 30.3    | 31.0    | 5.3     | 20.7%     | 0.5%   |
| City of Manassas Park  | 4.6     | 4.7     | 4.8     | 4.9     | 5.0     | 5.1     | 5.2     | 0.6     | 12.5%     | 0.1%   |
| Charles County         | 46.6    | 47.0    | 49.2    | 52.2    | 55.4    | 58.8    | 61.5    | 14.9    | 32.0%     | 1.3%   |
| Frederick County       | 106.2   | 110.6   | 115.6   | 121.3   | 127.8   | 133.9   | 140.2   | 34.0    | 32.0%     | 3.0%   |
| City of Frederick      | 50.1    | 51.8    | 53.5    | 55.4    | 57.3    | 59.2    | 61.2    | 11.1    | 22.2%     | 1.0%   |
| Outer Suburbs          | 492.0   | 542.1   | 593.4   | 647.3   | 696.5   | 747.2   | 787.0   | 295.0   | 60.0%     | 25.9%  |
| Virginia Jurisdictions | 1,341.9 | 1,446.6 | 1,563.8 | 1,675.1 | 1,774.8 | 1,873.3 | 1,963.2 | 621.4   | 48.7%     | 54.5%  |
| Maryland Jurisdictions | 1,011.5 | 1,050.2 | 1,103.7 | 1,153.7 | 1,196.0 | 1,239.9 | 1,282.5 | 271.0   | 27.8%     | 23.8%  |
| COG REGION             | 3,151.7 | 3,343.0 | 3,562.6 | 3,766.7 | 3,949.0 | 4,125.0 | 4,291.2 | 1,139.5 | 36.2%     | 100.0% |

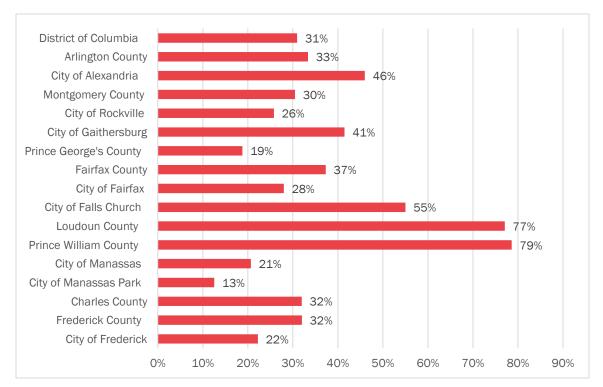
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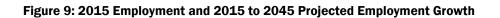
Growth Trends to 2045: Cooperative Forecasting in Metropolitan Washington | 7

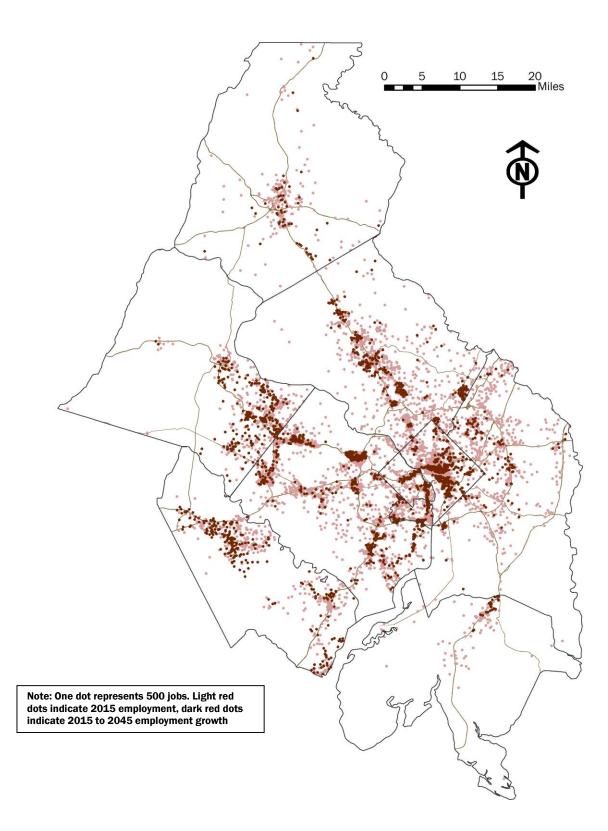


#### Figure 7: Employment Growth by Jurisdiction, 2015 to 2045 (Thousands)

Figure 8: Percent Change in Employment by Jurisdiction, 2015 to 2045







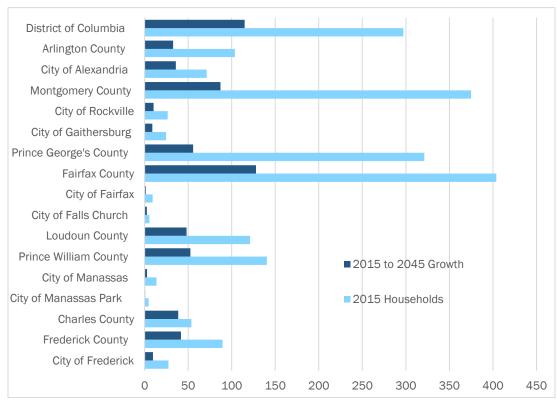
### Households

The addition of more than 641,900 households during the 2015 to 2045 forecast period reflects the growth in jobs and in-migration to the region. The largest number of new households will be in Fairfax County, the District of Columbia, and Montgomery County, which collectively contribute more than half of the household growth during the forecast period. Charles County will grow at a rate of 72 percent, the most rapidly of all jurisdictions, adding about 39,000 households to the 2015 total of 53,700.

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 jurisdiction's households.

|                        |         |         |         |         |         |         |         | 2015 to 2045 Growth |          |        |
|------------------------|---------|---------|---------|---------|---------|---------|---------|---------------------|----------|--------|
| JURISDICTION           | 2015    | 2020    | 2025    | 2030    | 2035    | 2040    | 2045    | Number              | % Change | Share  |
| District of Columbia   | 297.1   | 319.3   | 341.0   | 362.5   | 380.6   | 396.2   | 411.9   | 114.8               | 38.6%    | 17.9%  |
| Arlington County       | 103.6   | 109.3   | 115.2   | 120.7   | 125.8   | 131.1   | 136.3   | 32.6                | 31.5%    | 5.1%   |
| City of Alexandria     | 71.2    | 75.7    | 80.8    | 84.1    | 87.8    | 92.9    | 107.1   | 35.9                | 50.4%    | 5.6%   |
| Central Jurisdictions  | 471.9   | 504.3   | 537.0   | 567.3   | 594.3   | 620.3   | 655.2   | 183.3               | 38.8%    | 28.6%  |
| Montgomery County      | 374.9   | 391.1   | 405.6   | 422.3   | 438.1   | 450.9   | 461.9   | 87.1                | 23.2%    | 13.6%  |
| City of Rockville      | 26.4    | 28.5    | 30.8    | 32.5    | 34.0    | 35.4    | 36.8    | 10.3                | 39.0%    | 1.6%   |
| City of Gaithersburg   | 24.7    | 26.0    | 27.5    | 28.9    | 30.5    | 32.1    | 33.4    | 8.8                 |          | 1.4%   |
| Prince George's County | 321.1   | 334.3   | 343.9   | 355.5   | 363.3   | 370.0   | 376.8   | 55.6                | 17.3%    | 8.7%   |
| Fairfax County         | 403.9   | 421.1   | 444.5   | 467.8   | 490.2   | 511.9   | 531.8   | 127.9               | 31.7%    | 19.9%  |
| City of Fairfax        | 9.2     | 9.7     | 9.9     | 10.0    | 10.2    | 10.3    | 10.5    | 1.3                 | 13.8%    | 0.2%   |
| City of Falls Church   | 5.5     | 6.2     | 6.9     | 7.4     | 7.7     | 7.9     | 8.1     | 2.6                 | 47.3%    | 0.4%   |
| Inner Suburbs          | 1,114.7 | 1,162.5 | 1,210.7 | 1,263.0 | 1,309.4 | 1,351.1 | 1,389.2 | 274.5               | 24.6%    | 42.8%  |
|                        |         |         |         |         |         |         |         |                     |          |        |
| Loudoun County         | 121.1   | 137.9   | 150.8   | 158.6   | 164.3   | 167.6   | 169.3   | 48.2                | 39.8%    | 7.5%   |
| Prince William County  | 140.4   | 151.9   | 164.4   | 173.8   | 181.6   | 187.9   | 192.9   | 52.5                | 37.4%    | 8.2%   |
| City of Manassas       | 13.6    | 14.2    | 15.0    | 15.4    | 15.7    | 16.0    | 16.4    | 2.7                 | 19.9%    | 0.4%   |
| City of Manassas Park  | 4.5     | 5.0     | 5.0     | 5.0     | 5.0     | 5.0     | 5.0     | 0.5                 | 11.7%    | 0.1%   |
| Charles County         | 53.7    | 60.3    | 65.5    | 72.9    | 78.6    | 83.4    | 92.2    | 38.5                |          | 6.0%   |
| Frederick County       | 89.5    | 99.0    | 107.9   | 115.1   | 121.1   | 126.5   | 131.2   | 41.7                | 46.6%    | 6.5%   |
| City of Frederick      | 27.3    | 30.9    | 34.1    | 35.2    | 35.9    | 36.6    | 36.7    | 9.5                 | 34.8%    | 1.5%   |
| Outer Suburbs          | 422.7   | 468.3   | 508.6   | 540.8   | 566.5   | 586.6   | 606.9   | 184.1               | 43.6%    | 28.7%  |
| Virginia Jurisdictions | 873.1   | 931.1   | 992.5   | 1,042.8 | 1,088.5 | 1,130.8 | 1,177.3 | 304.2               | 34.8%    | 47.4%  |
| Maryland Jurisdictions | 839.1   | 884.7   | 922.9   | 965.8   | 1,001.1 | 1,030.9 | 1,062.1 | 222.9               | 26.6%    | 34.7%  |
| COG REGION             | 2.009.3 | 2.135.1 | 2.256.4 | 2.371.1 | 2.470.2 | 2,557.9 | 2.651.3 | 641.9               | 31.9%    | 100.0% |

#### Table 5: Summary of Intermediate Household Forecasts Round 9.0 Cooperative Forecasts (Thousands)





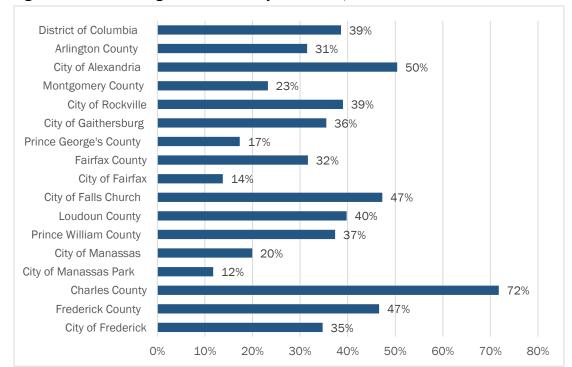
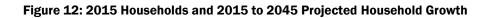
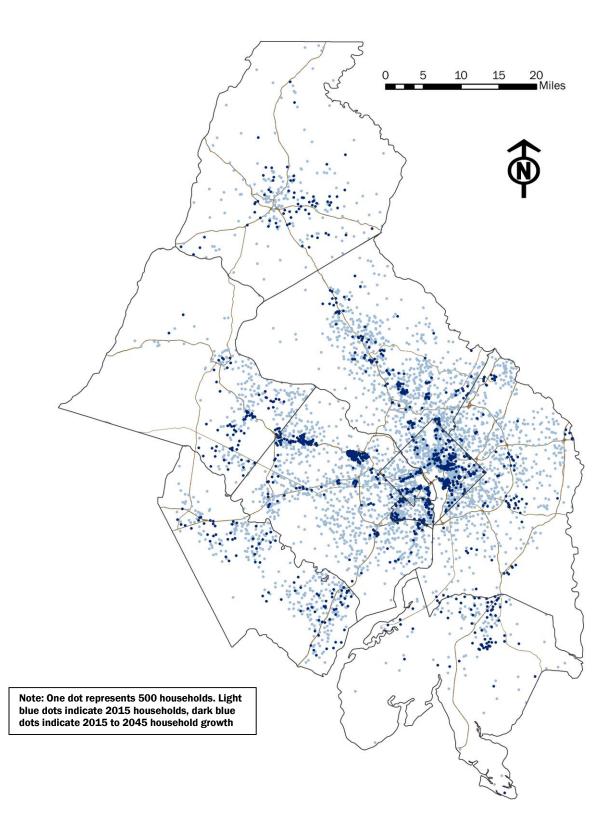


Figure 11: Percent Change in Households by Jurisdiction, 2015 to 2045





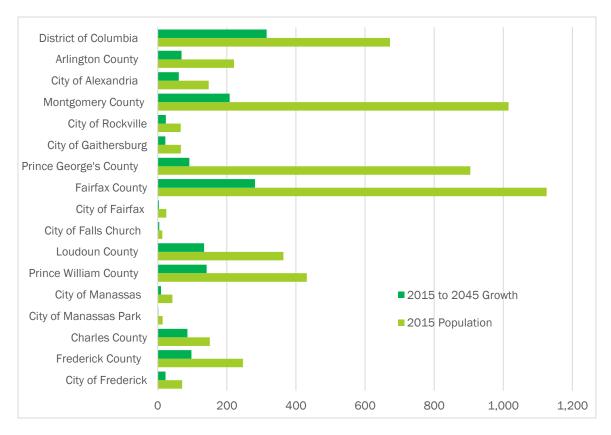
### **Population**

The region's population is expected to grow steadily through the forecast period, adding an average of approximately 50,000 persons a year. Population will be spurred by the long-term strength of the region's economy, high rate of in-migration and international immigration, and decline in average household size.

Most of the population growth will be in the District of Columbia, Fairfax, and Montgomery counties. The outer jurisdiction will experience the fastest rates of growth, led by Charles (57 percent), Frederick (40 percent), and Loudoun (37 percent) counties. The region's central jurisdictions will also grow. In the District of Columbia, population will increase by 47 percent during the forecast period. In the City of Alexandria and Arlington County, population will increase by 41 and 31 percent, respectively.

|                        |         |         |         |         |         |         |         | 2015    | to 2045 G | rowth  |
|------------------------|---------|---------|---------|---------|---------|---------|---------|---------|-----------|--------|
| JURISDICTION           | 2015    | 2020    | 2025    | 2030    | 2035    | 2040    | 2045    | Number  | % Change  | Share  |
|                        |         |         |         |         |         |         |         |         |           |        |
| District of Columbia   | 672.2   | 729.5   | 787.1   | 842.2   | 893.9   | 940.7   | 987.2   | 315.0   | 46.9%     | 20.9%  |
| Arlington County       | 220.5   | 232.7   | 244.8   | 256.0   | 266.3   | 278.1   | 289.5   | 69.0    | 31.3%     | 4.6%   |
| City of Alexandria     | 147.6   | 159.2   | 167.5   | 172.8   | 180.5   | 190.8   | 208.5   | 60.8    | 41.2%     | 4.0%   |
| Central Jurisdictions  | 1,040.4 | 1,121.4 | 1,199.4 | 1,270.9 | 1,340.7 | 1,409.6 | 1,485.2 | 444.8   | 42.7%     | 29.6%  |
| Montgomery County      | 1,015.3 | 1,052.0 | 1,087.3 | 1,128.8 | 1,167.7 | 1,197.1 | 1,223.3 | 208.1   | 20.5%     | 13.8%  |
| City of Rockville      | 66.3    | 71.5    | 76.9    | 80.4    | 83.6    | 86.8    | 89.9    | 23.6    | 35.6%     | 1.6%   |
| City of Gaithersburg   | 67.1    | 70.7    | 74.6    | 78.7    | 82.4    | 86.1    | 89.3    | 22.2    | 33.0%     | 1.5%   |
| Prince George's County | 904.4   | 923.1   | 938.0   | 953.0   | 967.8   | 982.4   | 995.9   | 91.4    | 10.1%     | 6.1%   |
| Fairfax County         | 1,125.4 | 1,162.5 | 1,213.2 | 1,264.7 | 1,314.3 | 1,362.5 | 1,406.7 | 281.4   | 25.0%     | 18.7%  |
| City of Fairfax        | 24.7    | 26.0    | 26.4    | 26.9    | 27.4    | 27.9    | 28.3    | 3.7     | 14.8%     | 0.2%   |
| City of Falls Church   | 13.1    | 14.2    | 15.5    | 16.4    | 17.0    | 17.3    | 17.6    | 4.5     | 34.4%     | 0.3%   |
| Inner Suburbs          | 3,082.9 | 3,177.9 | 3,280.4 | 3,389.8 | 3,494.2 | 3,587.1 | 3,671.9 | 589.0   | 19.1%     | 39.2%  |
| Loudoun County         | 363.5   | 414.7   | 451.1   | 470.7   | 484.4   | 492.5   | 497.5   | 134.0   | 36.9%     | 8.9%   |
| Prince William County  | 431.2   | 464.7   | 496.7   | 521.3   | 541.9   | 558.9   | 572.8   | 141.6   | 32.8%     | 9.4%   |
| City of Manassas       | 42.5    | 43.8    | 45.5    | 47.5    | 49.0    | 50.6    | 52.1    | 9.7     | 22.7%     | 0.6%   |
| City of Manassas Park  | 14.3    | 15.9    | 15.9    | 15.9    | 15.9    | 15.9    | 15.9    | 1.6     | 11.1%     | 0.1%   |
| Charles County         | 150.8   | 167.0   | 178.2   | 194.7   | 207.5   | 218.6   | 236.5   | 85.7    | 56.8%     | 5.7%   |
| Frederick County       | 246.5   | 267.8   | 288.7   | 303.6   | 319.4   | 332.2   | 344.1   | 97.6    | 39.6%     | 6.5%   |
| City of Frederick      | 70.4    | 79.4    | 87.0    | 89.6    | 91.1    | 92.8    | 93.1    | 22.7    | 32.2%     | 1.5%   |
| Outer Suburbs          | 1,248.8 | 1,373.9 | 1,476.1 | 1,553.6 | 1,618.1 | 1,668.6 | 1,719.0 | 470.2   | 37.7%     | 31.3%  |
| Virginia Jurisdictions | 2,382.8 | 2,533.6 | 2,676.6 | 2,792.1 | 2,896.7 | 2,994.4 | 3,089.0 | 706.1   | 29.6%     | 47.0%  |
| Maryland Jurisdictions | 2,317.0 | 2,410.0 | 2,492.2 | 2,580.0 | 2,662.4 | 2,730.2 | 2,799.8 | 482.8   | 20.8%     | 32.1%  |
| COG REGION             | 5,372.0 | 5,673.1 | 5,956.0 | 6,214.3 | 6,453.0 | 6,665.3 | 6,876.0 | 1,504.0 | 28.0%     | 100.0% |

| Table 6: Summary of Intermed | liate Population Forecasts Round 9 | .0 Cooperative Forecasts (Thousands) |
|------------------------------|------------------------------------|--------------------------------------|
|                              |                                    |                                      |



#### Figure 13: Population Growth by Jurisdiction, 2015 to 2045 (Thousands)

Figure 14: Percent Change in Population Growth by Jurisdiction, 2015 to 2045

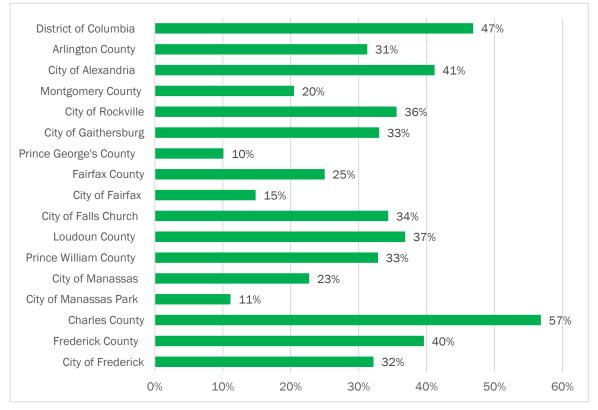
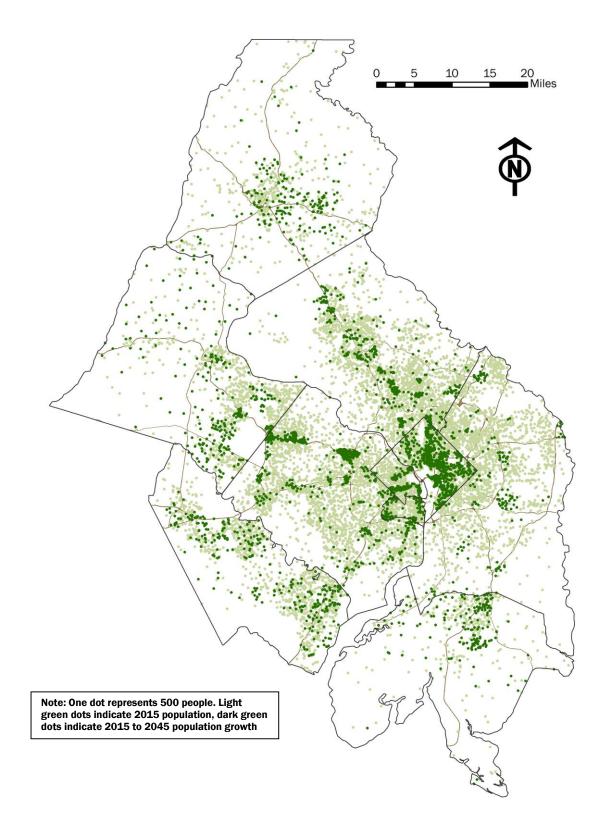


Figure 15: 2015 Population and 2015 to 2045 Projected Population Growth



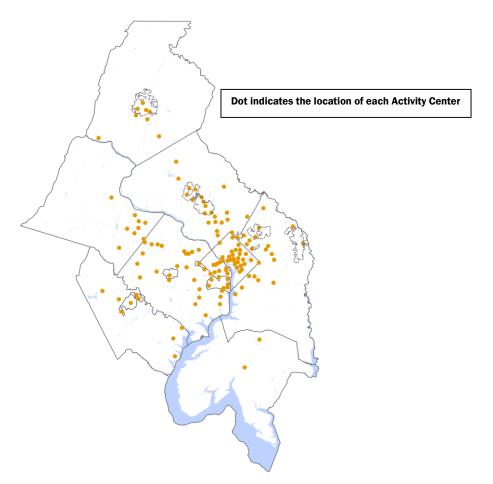
# **REGIONAL ACTIVITY CENTERS**

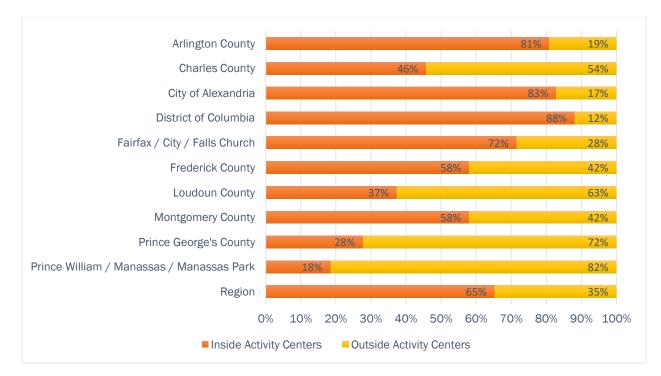
In 2012, COG worked with local planning officials to carry out an extensive redesign of the regional Activity Centers map. The new map was approved by the COG Board of Directors in 2013 and reflects 141 Activity Centers that include urbanized place to traditional downtowns.

The Region Forward Coalition established a target for the Washington region to capture 75 percent of the square footage of new commercial construction and 50 percent of new households in regional Activity Centers. Based on the new Round 9.0 Cooperative Forecasts, in 2015, 65 percent of the region's jobs were located in regional Activity Centers. During the 2015 and 2045 forecast period, 76 percent of job growth will be concentrated in Activity Centers. The highest percentage of jobs located in regional activity centers in 2045 will be found in the Central Jurisdictions: District of Columbia (88 percent), City of Alexandria (87 percent), and Arlington County (85 percent).

Households in regional Activity Centers accounted for 32 percent of the region's total households in 2015. From 2015 to 2045, 65 percent of the household growth is projected to occur in regional Activity Centers. In 2045, jurisdictions having the highest share of households located in regional Activity Centers will be in the Central Jurisdictions: City of Alexandria (71 percent), District of Columbia (69 percent), and Arlington County (67 percent).

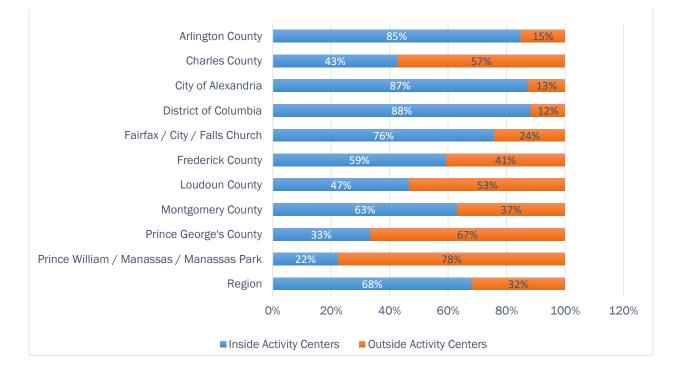
#### **Map of Regional Activity Centers**





#### Figure 16: Round 9.0 Share of Employment in Activity Centers by Jurisdiction in 2015

Figure 17: Round 9.0 Share of Employment in Activity Centers by Jurisdiction in 2045



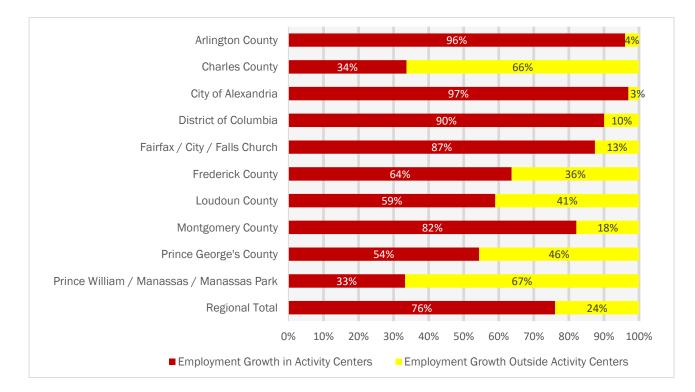
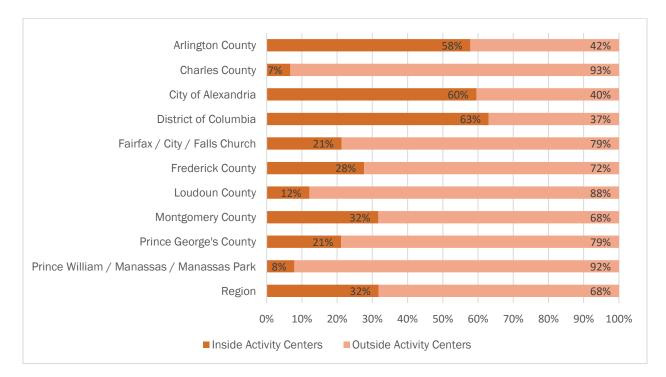
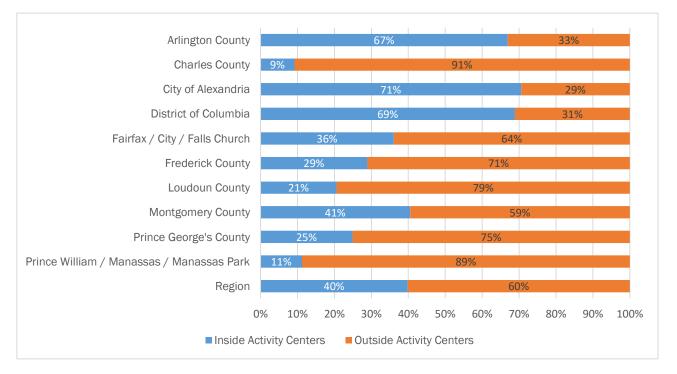


Figure 18: Round 9.0 Employment Growth Between 2015 and 2045 Occurring in Regional Activity Centers

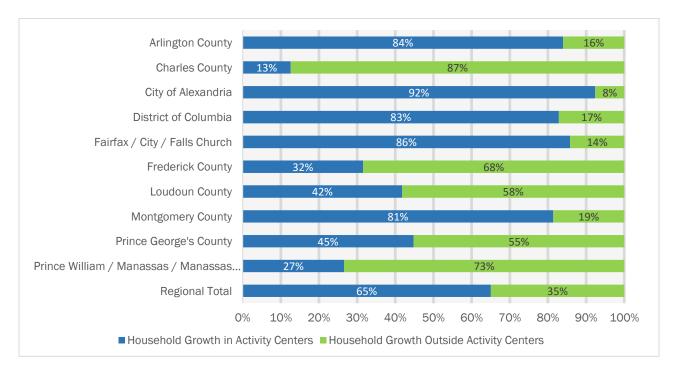
Figure 19: Round 9.0 Share of Households in Activity Centers by Jurisdiction in 2015





#### Figure 20: Round 9.0 Share of Households in Activity Centers by Jurisdiction in 2045

Figure 21: Round 9.0 Share of Household Growth Between 2015 and 2045 Occurring in Regional Activity Centers





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