



MEMORANDUM

TO: Cooperative Forecasting and Data Subcommittee
FROM: Greg Goodwin and John Kent, COG/DCPS
SUBJECT: Update to Suggested Baseline Employment Estimates
DATE: March 10, 2026

This memo provides an update to the suggested baseline employment estimates for the Metropolitan Washington Council of Government’s Cooperative Forecasting program.

The baseline employment estimates are updated to reflect new and revised data, including: (1) revised 2010-2023 and new 2024 Bureau of Labor Statistics estimates, (2) 2024 Census Public Use Microdata Sample (PUMS) 1-Year files, and (3) military estimates from S&P Global. In Table 1 below, the data includes revisions in civilian employment for the years 2010 through 2023, and the military employment counts for all years come from S&P Global.

Table 1 Suggested Baseline Employment Estimates (Thousands), 2010, 2015, 2020-2024

| Jurisdiction | 2010 | 2015 | 2020 | 2021 | 2022 | 2023 | 2024 |
|------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| District of Columbia | 756.76 | 808.32 | 783.36 | 780.69 | 806.17 | 809.41 | 808.93 |
| Arlington County | 186.23 | 194.93 | 201.81 | 203.95 | 205.58 | 211.74 | 211.05 |
| Alexandria City | 108.77 | 107.87 | 93.97 | 95.49 | 97.42 | 92.82 | 93.85 |
| Montgomery County | 501.00 | 521.53 | 501.18 | 512.96 | 527.24 | 530.31 | 538.40 |
| Prince George's County | 330.73 | 334.00 | 334.65 | 343.00 | 355.43 | 358.79 | 364.47 |
| Fairfax County | 634.51 | 656.09 | 679.01 | 701.49 | 719.60 | 728.89 | 736.69 |
| City of Fairfax | 21.72 | 21.53 | 20.36 | 21.46 | 24.86 | 26.70 | 27.61 |
| City of Falls Church | 13.54 | 12.70 | 12.31 | 13.02 | 13.20 | 13.91 | 14.19 |
| Loudoun County | 145.14 | 173.41 | 188.96 | 194.63 | 208.35 | 216.94 | 227.17 |
| Prince William County | 120.48 | 143.24 | 153.03 | 156.51 | 161.67 | 170.13 | 173.35 |
| City of Manassas | 25.95 | 24.99 | 25.68 | 26.23 | 27.18 | 28.53 | 28.51 |
| City of Manassas Park | 3.09 | 3.27 | 4.28 | 4.49 | 5.02 | 4.99 | 4.27 |
| Charles County | 44.29 | 46.00 | 43.80 | 45.13 | 46.49 | 45.75 | 47.84 |
| Frederick County | 103.83 | 111.25 | 110.77 | 113.53 | 117.55 | 122.09 | 123.79 |
| Region | 2,996.03 | 3,159.14 | 3,153.17 | 3,212.58 | 3,315.77 | 3,361.00 | 3,400.12 |

METHODOLOGY

Below is an overview of how the baseline employment estimates are developed using the latest available data from the following sources:

- Quarterly Census for Employment and Wages (QCEW)
- Current Employment Statistics (CES)
- American Community Survey (ACS)
- S&P Global¹

The baseline employment estimate for 2024 includes latest data from specified sources. The BLS data is subject to post hoc revision, though any changes are typically small.



Figure 1 Baseline Employment Method Components

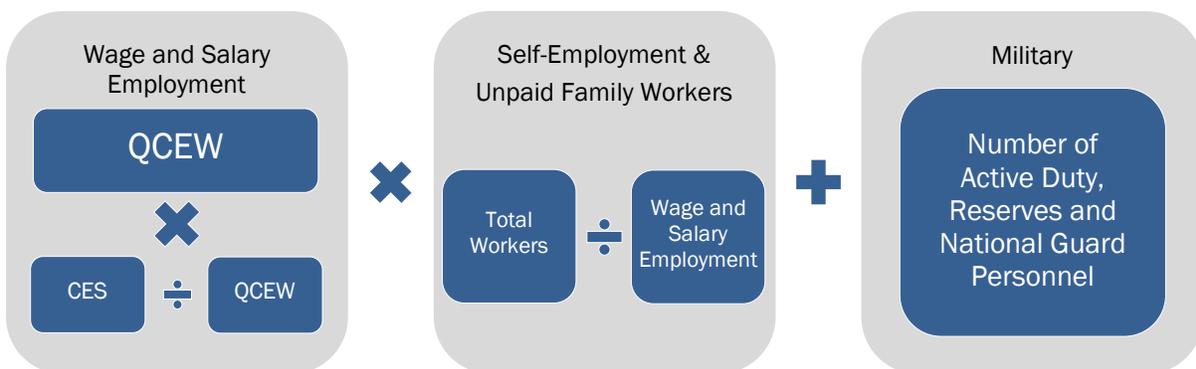


Figure 2 Baseline Employment Formula

The baseline employment is calculated, as outlined in Figure 2, by multiplying the QCEW by the CES Adjustment Factor to produce the total wage and salary employment. Next, the total wage and salary employment is multiplied by the Self-Employment (and Unpaid Family Workers) Adjustment Factor to produce total civilian employment. Finally, military employment is added to obtain total employment.

¹ Previous year's version of this memo used local government sources or Bureau of Economic Analysis (BEA) for military employment.

1. Wage and Salary Employment

The Wage and Salary Employment component entails data from the Bureau of Labor Statistics' (BLS) Quarterly Census for Employment and Wages (QCEW) program and the Current Employment Survey (CES).

Employment Covered by Unemployment Insurance (UI)

The Wage and Salary Employment data comes from the Bureau of Labor Statistics' (BLS) Quarterly Census for Employment and Wages (QCEW) program.² These estimates are shown, in thousands, in the below table.

Table 2 Employment Covered by Unemployment Insurance, 2024 (Thousands)

| Jurisdiction | Employment |
|------------------------|-------------------|
| District of Columbia | 759.67 |
| Arlington County | 179.24 |
| Alexandria City | 81.34 |
| Montgomery County | 462.30 |
| Prince George's County | 329.48 |
| Fairfax County | 636.43 |
| City of Fairfax | 24.18 |
| City of Falls Church | 12.42 |
| Loudoun County | 198.11 |
| Prince William County | 143.35 |
| City of Manassas | 24.89 |
| City of Manassas Park | 3.73 |
| Charles County | 43.09 |
| Frederick County | 108.44 |
| Region | 3,006.66 |

Source: BLS QCEW

Employment covered by the UI programs represents about 95% of wage and salary civilian employment in the country. While there are slight differences in coverage between the District of Columbia (DC), Maryland (MD), and Virginia (VA) (see Appendix A), the following types of employment are typically excluded by UI coverage:

- Unincorporated self-employed workers
- Unpaid family workers
- Agricultural workers on small farms
- Religious organizations
- Very small non-profit organizations
- Railroad workers

² QCEW, also known as the ES-202 program, publishes a quarterly count of employment and wages of establishments which report to the unemployment insurance (UI) programs of the United States.

- Service by students and spouses of students in the employ of a school, college, or university by a student enrolled and regularly attending classes at such school; spouse is excluded provided employment is under a program designed to give financial assistance to the student
- Domestic service in a private home, local college club, or local chapter of a college fraternity or sorority.
- Service performed for government entities:
 - As an elected official;
 - As a member of a legislative body or a member of the judiciary;
 - As a member of the state National Guard or Air National Guard;
 - As an employee serving on a temporary basis in case of fire, storm, snow, earthquake, flood, or similar declared emergency;
 - In a position which, under the state law, is designated as a major, non-tenured, policymaking or advisory position, or a part-time policymaking position which ordinarily requires 8 or fewer hours a week;
 - Or as a member of the military
- U.S. residents employed by foreign government (including embassies and consulates) or international organization
- Military and certain national security agencies
- Commissioned Corps of the National Oceanic and Atmospheric Administration
- Individuals serving on a temporary basis in case of fire, storm, earthquake, or other similar emergency
- Individuals employed under a Federal relief program to relieve them from unemployment

Employment Not Covered by UI

Data from BLS' Current Employment Statistics (CES) program is used to account for civilian wage and salary employment that is not covered by UI.³ The CES has a broader definition of employment than the QCEW and includes persons on establishment payrolls who worked or received pay for any part of the pay period that includes the 12th day of the month. BLS constructs an annual benchmark for its CES program to (1) realign the sample-based employment totals with the UI based counts for March, and (2) account for wage and salary civilian employment not covered by UI⁴.

However, unlike QCEW, the CES is not published at the County level⁵. The relevant geographies at which the CES is available are the states, metropolitan areas and divisions. As shown in Tables 3 and 4 on the following pages, estimates for our region were derived respectively in order to:

- adjust and help better geographically match COG's planning area and TPB's modeled region

³ CES accounts for industry estimates of nonfarm employment, hours, and earnings of workers on payrolls.

⁴ Sources of data used to account for noncovered employment include: Railroad Retirement Board, Census Bureau's County Business Patterns and Annual Survey of Public Employment and Payroll (ASPEP), and Labor Market Information Agencies (LMI).

⁵ Since the publication of the previous Baseline Employment Memo, the CES updated their tabulations to follow the revised MSA geographies for 2023. See OMB Bulletin No. 23-01.

- derive and apportion relative non-covered employment for COG jurisdictions aligned with CES metro designations

For our region, the employment estimates for the following areas are used

- District of Columbia
- 23224 - Frederick-Gaithersburg-Bethesda, MD Metropolitan Division
- 11694 - Arlington-Alexandria-Reston, VA-WV Metropolitan Division

For Charles and Prince George’s Counties, employment was derived by subtracting the total employment of the District of Columbia from the 47764 - Washington, DC-MD Metropolitan Division.

Table 3 Wage and Salary Civilian Employment for Charles and Prince George’s Counties (Thousands), 2024

| Metropolitan Area or Division | Employment |
|---|-------------------|
| 47764 - Washington, DC-MD Metropolitan Division | 1,153.50 |
| District of Columbia | 769.40 |
| Charles and Prince George’s Counties | 384.10 |

Source: BLS CES

After identifying and assigning the appropriate relative CES values for COG jurisdictions, a CES Wage and Salary Adjustment Factor, the ratio of CES to QCEW, is derived and makes the following assumption:

- COG jurisdictions within a given CES designation, the ratio of covered employment to non-covered employment is constant.

As shown in Table 4 on the following page, in order to arrive at this ratio, QCEW values were aggregated as appropriate for all jurisdictions aligned with a given CES designation (to establish the same geographic basis for comparison). It should be noted that these adjustment factors vary over time due to cyclical and structural changes in the region’s economy.

Table 4 CES Adjustment Factors, 2024

| Jurisdiction | CES State or Metro Area | QCEW (Thousands) | CES (Thousands) | Adjustment factor |
|---|---|---------------------|--------------------|----------------------|
| District of Columbia | District of Columbia | 759.67 | 769.40 | 1.01 |
| Frederick and Montgomery | 23224 - Frederick-Gaithersburg-Bethesda, MD Metropolitan Division | 570.74 | 612.10 | 1.07 |
| Charles and Prince George's | 47764 - Washington, DC-MD Metropolitan Division - minus District of Columbia | 372.56 | 384.10 | 1.03 |
| Arlington, Clarke, Culpeper, Fairfax, Fauquier, Loudoun, Prince William, Rappahannock, Spotsylvania, Stafford, Warren, City of Alexandria, City of Fairfax, City Falls Church, City of Fredericksburg, City of Manassas, City of Manassas Park, Jefferson, WV | 11694 - Arlington-Alexandria-Reston, VA-WV Metropolitan Division | 1,488.53 | 1,622.50 | 1.09 |
| Region | 47900 - Washington-Arlington-Alexandria, DC-VA-MD-WV MSA | 3,191.50 | 3,388.10 | 1.06 |

Source: BLS CES and QCEW

2. Self-Employment and Unpaid Family Workers

Self-employed as well as unpaid family workers should also be included in the employment estimate. The Census Bureau's American Community Survey (ACS) provides data on the class of worker including wage and salary, self-employed not incorporated, and unpaid family worker. The Public Use Microdata Sample (PUMS) 1-Year files are used to summarize the data by place of work.

For the baseline employment estimates shown in Table 1, the 2013 Self-Employment (and Unpaid Family Workers) Adjustment Factor is applied to the CES adjusted wage and salary employment for years prior to 2015 (in 2010), and the 2015 through 2024 Self-Employment Adjustment factors are applied to the CES adjusted wage and salary employment for 2015 through 2024.

Table 5 Self-Employment (and Unpaid Family Workers) Adjustment Factor, 2024

| Jurisdiction | Wage and Salary Employment (Thousands) | Self-Employed Not Incorporated & Unpaid Family (Thousands) | Total Workers (Thousands) | Self-Employment Factor |
|---|--|--|---------------------------|------------------------|
| District of Columbia | 727.97 | 24.04 | 752.01 | 1.03 |
| Arlington County | 196.64 | 6.74 | 203.38 | 1.03 |
| City of Alexandria | 92.77 | 4.93 | 97.71 | 1.05 |
| Montgomery County | 511.57 | 35.99 | 547.56 | 1.07 |
| Prince George's County | 356.61 | 18.10 | 374.71 | 1.05 |
| Fairfax County / City of Fairfax / City of Falls Church | 684.51 | 32.58 | 717.08 | 1.05 |
| Loudoun County | 230.15 | 10.61 | 240.76 | 1.05 |
| Prince William County/ City of Manassas / City of Manassas Park | 203.60 | 10.33 | 213.93 | 1.05 |
| Charles County | 58.93 | 3.09 | 62.02 | 1.05 |
| Frederick County | 132.73 | 6.25 | 138.98 | 1.05 |
| COG Region | 3,195.47 | 152.66 | 3,348.13 | 1.05 |

Source: Census ACS PUMS 1-Year Files

3. Military

The military employment data for 2024 comes from S&P Global, which estimates military employment data that was previously available from the Bureau of Economic Analysis' (BEA). The BEA definition of military employment (Table CAEMP25N) included both full-time active-duty members, as well as part-time reserves and National Guard members of the US Armed Forces, including the Coast Guard. Each branch of the armed forces reported employment to the BEA based on monthly counts, which were averaged to produce the annualized employment count. The counts for full-time and part-time military service were not broken out separately. The BEA discontinued Table CAEMP25N for the year 2023 and thereafter on July 25, 2024, but this datapoint continues to be available via estimates provided by S&P Global.

Prior to the 2022 memo, the military employment data came from the from the Department of Defense's (DOD) Base Structure report, which discontinued personnel counts in 2018, and the Defense Manpower Data Center (DMDC), which provides personnel counts by state but not by county or by installation. COG staff also reached out to Cooperative Forecasting and Data Subcommittee members to solicit input on a military employment estimate. These Department of Defense sources delineated active-duty and reserve employment separately, enabling the previous reports to only include active-duty military employment. This year's memo differs from those produced prior to 2022 in that the military employment figure includes activity duty, reserves and National Guard personnel. Table 1 on page 1 of this memo utilizes a consistent methodology for each year shown, and the final estimates include estimated military employment data from S&P Global.



Figure 3 Military Employment Method Detailed, 2024

The below table shows annualized active duty and reserve duty count of military personnel in each jurisdiction from S&P Global. Independent city employment is aggregated with the city's adjoining county.

Table 6 Military Employment Estimate (Thousands), 2019 through 2024

| Jurisdiction | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|
| District of Columbia | 14.07 | 14.04 | 14.34 | 14.25 | 14.18 | 14.12 |
| Arlington County | 9.41 | 9.43 | 9.33 | 9.25 | 9.10 | 8.97 |
| City of Alexandria | 0.54 | 0.52 | 0.51 | 0.49 | 0.48 | 0.47 |
| Montgomery County | 8.27 | 8.20 | 8.21 | 7.99 | 7.81 | 7.72 |
| Prince George's County | 7.48 | 7.62 | 7.80 | 7.73 | 7.62 | 7.56 |
| Fairfax County | 11.21 | 10.84 | 10.67 | 10.26 | 10.10 | 9.96 |
| City of Fairfax | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| City of Falls Church | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Loudoun County | 1.30 | 1.30 | 1.32 | 1.31 | 1.29 | 1.27 |
| Prince William County | 9.76 | 9.51 | 9.43 | 9.46 | 9.31 | 9.18 |
| City of Manassas | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| City of Manassas Park | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Charles County | 1.12 | 1.13 | 1.15 | 1.12 | 1.10 | 1.09 |
| Frederick County | 2.11 | 2.16 | 2.20 | 2.09 | 2.04 | 2.02 |
| Region | 65.27 | 64.75 | 64.96 | 63.94 | 63.04 | 62.36 |

Source: S&P Global

RESULTS

To obtain the baseline employment, as outlined in Figure 2, the QCEW is multiplied by the CES Adjustment Factor to produce the total wage and salary employment. Next, the total wage and salary employment is multiplied by the Self-Employment (and Unpaid Family Workers) Adjustment Factor to produce total civilian employment. Finally, military employment is added to obtain total employment.

Table 7 Baseline Employment, 2024

| Jurisdiction | QCEW (Thousands) | CES Adjustment Factor | Self- Employment Adjustment Factor | Military Employment (Thousands) | Baseline Employment (Thousands) |
|--------------------------|-----------------------------|--------------------------------------|---|--|--|
| District of Columbia | 759.67 | 1.01 | 1.03 | 14.12 | 808.93 |
| Arlington County | 179.24 | 1.09 | 1.03 | 8.97 | 211.05 |
| City of Alexandria | 81.34 | 1.09 | 1.05 | 0.47 | 93.85 |
| Montgomery County | 462.30 | 1.07 | 1.07 | 7.72 | 538.40 |
| Prince George's County | 329.48 | 1.03 | 1.05 | 7.56 | 364.47 |
| Fairfax County | 636.43 | 1.09 | 1.05 | 9.96 | 736.69 |
| City of Fairfax | 24.18 | 1.09 | 1.05 | 0.00 | 27.61 |
| City of Falls Church | 12.42 | 1.09 | 1.05 | 0.00 | 14.19 |
| Loudoun County | 198.11 | 1.09 | 1.05 | 1.27 | 227.17 |
| Prince William County | 143.35 | 1.09 | 1.05 | 9.18 | 173.35 |
| City of Manassas | 24.89 | 1.09 | 1.05 | 0.00 | 28.51 |
| City of Manassas Park | 3.73 | 1.09 | 1.05 | 0.00 | 4.27 |
| Charles County | 43.09 | 1.03 | 1.05 | 1.09 | 47.84 |
| Frederick County | 108.44 | 1.07 | 1.05 | 2.02 | 123.79 |
| Region | 3,006.66 | 1.07 | 1.05 | 62.36 | 3,400.12 |

RECOMMENDATION

For consistency purposes, COG suggests the method described in this memo be used to develop baseline employment estimates for the Cooperative Forecasting Program. If jurisdictions have access to additional data to inform these baseline employment estimates or choose to utilize a different methodology, please share it with the Committee and include a description as a part of the transmittal package.

NOTE

This approach is tailored for jurisdictions where estimates from the Bureau of Labor Statistics (BLS) Quarterly Census of Employment and Wages (QCEW) are available. While the QCEW is published for independent cities in Virginia, this data is not available for cities in Maryland. It is recommended that cities in Maryland should work with their surrounding county and use other existing resources to develop Baseline Employment Estimates.

SOURCES

<https://www.bls.gov/cew/downloadable-data-files.htm>

<https://download.bls.gov/pub/time.series/sm/>

<https://oui.doleta.gov/unemploy/pdf/uilawcompar/2023/coverage.pdf>

<https://www.irs.gov/individuals/international-taxpayers/employees-of-a-foreign-government-or-international-organization-futa>

<https://www.bls.gov/cew/questions-and-answers.htm>

<https://www.whitehouse.gov/wp-content/uploads/2023/07/OMB-Bulletin-23-01.pdf>

CREATE CUSTOMIZED TABLES – BLS WEBSITE

**Employment, Hours, and Earnings – State and Metro Areas
(Current Employment Statistics – CES)**

<https://data.bls.gov/cgi-bin/dsrv?sm>

**State and County Employment and Wages
(Quarterly Census of Employment & Wages – QCEW)**

<https://data.bls.gov/PDOWeb/en>

S&P Global is a subscription service. For more information, contact COG Staff

ATTACHMENTS

Appendix A. Employment Not Covered by QCEW



| Employment Not Covered by Unemployment Insurance (UI) | | District of Columbia | Maryland | Virginia |
|--|--|---|---|----------|
| Self-Employment | | X | X | X |
| Unpaid Family Workers | | X | X | X |
| Religious Organizations | A church, convention, or association of churches | X | X | X |
| | An organization operated primarily for religious purposes, which is operated, supervised, controlled, or principally supported by a church, convention, or association of churches | X | X | X |
| | An elementary or secondary school operated primarily for religious purposes, regardless of affiliation with a church, convention, or association of churches | X | X | X |
| Non-Profit Organizations with 4 or fewer Employees | | Expanded coverage provisions beyond Federal Requirements, States cover organizations with 1 or more employees | Expanded coverage provisions beyond Federal Requirements, States cover organizations with 1 or more employees | X |
| Railroad Workers | | X | X | X |
| Insurance Agents on Commission | | X | X | X |
| Real Estate Agents on Commission | | | X | X |
| Part-time Service for Nonprofit Organizations Exempt from Federal Income Tax | | X | X | X |

| Not Covered by QCEW | | District of Columbia | Maryland | Virginia |
|--|--|---|-------------------------------------|--|
| Service by Students and Spouses of Students in the employ of a school, college, or university by a student enrolled and regularly attending classes at such school; Spouse is excluded provided employment is under a program designed to give financial assistance to the student | Student Nurses and Interns in Employ of a Hospital | X | X | X |
| | Students Working for Schools | X (Do not exclude service by the spouse of a student in the employ of the school) | X | X (Do not exclude service by the spouse of a student in the employ of the school) |
| Domestic service in a private home, local college club, or local chapter of a college fraternity or sorority. | | Quarterly payroll less than \$500 | Quarterly payroll less than \$1,000 | Exclude: (1) Medical services performed by an individual employed to perform those services in a private residence or medical institution if the employing unit is the person receiving the services; and (2) services performed under agreement with a Public Human Service Agency in the home of the recipient of the service or the provider of the service |

| Not Covered by QCEW | District of Columbia | Maryland | Virginia |
|---|----------------------|----------|----------|
| Government Entities, service performed: <ul style="list-style-type: none"> • As an elected official; • As a member of a legislative body or a member of the judiciary; • As a member of the state National Guard or Air National Guard; • As an employee serving on a temporary basis in case of fire, storm, snow, earthquake, flood, or similar declared emergency; • in a position which, under the state law, is designated as a major, non-tenured, policymaking or advisory position, or a part-time policymaking position which ordinarily requires 8 or fewer hours a week • Military | X | X | X |
| U.S. Residents employed by Foreign Government (including embassies and consulates) or International Organization located within the U.S. | X | X | X |

X=Not covered by UI (not represented in QCEW)