

COOPERATIVE FORECASTING GROUP

June 28, 2023
10:00 A.M. to 12:00 P.M.

MINUTES

Ms. Deborah Price, Harford County, called the meeting to order at 10:03 A.M.

1. APPROVAL OF MINUTES

Ms. Price asked for approval of the minutes from the April 26, 2023 meeting of the Cooperative Forecasting Group (CFG). Ms. Kathleen Comber moved to approve the minutes with Mr. Jeff Bronow seconding the motion. The minutes were unanimously approved.

2. METHODS FOR CALCULATING HOLDING CAPACITY / LAND USE POTENTIAL: HARFORD COUNTY

A holding capacity analysis provides an estimate of the amount of development that can be accommodated in an area, with consideration given to applicable land-use policies and regulations and environmental constraints. While this type of analysis is performed in most long-range planning efforts, methods may vary by jurisdiction. Ms. Price provided a presentation on the methods utilized in calculating holding capacity in Harford County.

Ms. Price said that Harford County uses Model Builder in ArcGIS Pro to determine Harford County's residential and commercial/industrial land inventories. The land inventories include both vacant and underutilized land.

- The Residential Inventory Model contains 164 variables and 105 processes.
- The Commercial/Industrial Inventory Model contains 88 variables and 58 processes.

Harford County performs their residential and commercial/industrial land inventory analyses utilizing the county's parcel layer. Excluded from the analyses are government-owned parcels; public utility parcels; parcels in land preservation; open space; and cemeteries. Also excepted are the three municipalities in the county, and Aberdeen Proving Ground. The inventory analyses include the following steps:

- Development Envelope Analysis: The models intersect parcels with the development envelope and tag each parcel record as inside or outside the development envelope.
- Zoning Analysis: The models intersect the parcel layer with the county's zoning layer and attach a zoning type for each parcel. (See provided presentation for a list of Harford County's residential and commercial/industrial zoning types.)

- Environmental Constraint Analysis: The models delete all portions of a parcel that have environmental constraints, which include:
 - 150’ buffer of major streams;
 - 75’ buffer of smaller streams;
 - 50’ buffer of the 100 year floodplain;
 - Slopes of >25% that are >40,000 square feet in size;
 - 75’ buffer of national wetland inventory areas;
 - 100’ buffer of wetlands of special state concern;
 - Resource Conservation Area designation in the Critical Area;
 - One hundred foot buffer of the Critical Area.
- Residential Land Inventory Analysis: This step calculates the number of allowable units in each parcel. This is computed using information on lot size, lot type, and zoning. In order to determine the number of units remaining, the number of units already within a parcel is subtracted from the allowable units in each parcel.
- For the Commercial/Industrial Land Inventory, building square footage potential and buildable parcel acreage are calculated using the following criteria:

| INVENTORY | BUILDING SF POTENTIAL FORMULA | BUILDABLE PARCEL ACREAGE FORMULA | ZONING CRITERIA |
|------------|------------------------------------|----------------------------------|---|
| COMMERCIAL | (Acreage * 10,000) - STRUCTURAL SF | Acreage - (STRUCTURAL SF/10,000) | B1, B2, B3, CI w/NON-INDUSTRIAL LAND USE, RO WITH COMMERCIAL LAND USE, VB |
| INDUSTRIAL | (Acreage * 15,000) - STRUCTURAL SF | Acreage - (STRUCTURAL SF/15,000) | CI w/ INDUSTRIAL LAND USE, GI, LI |

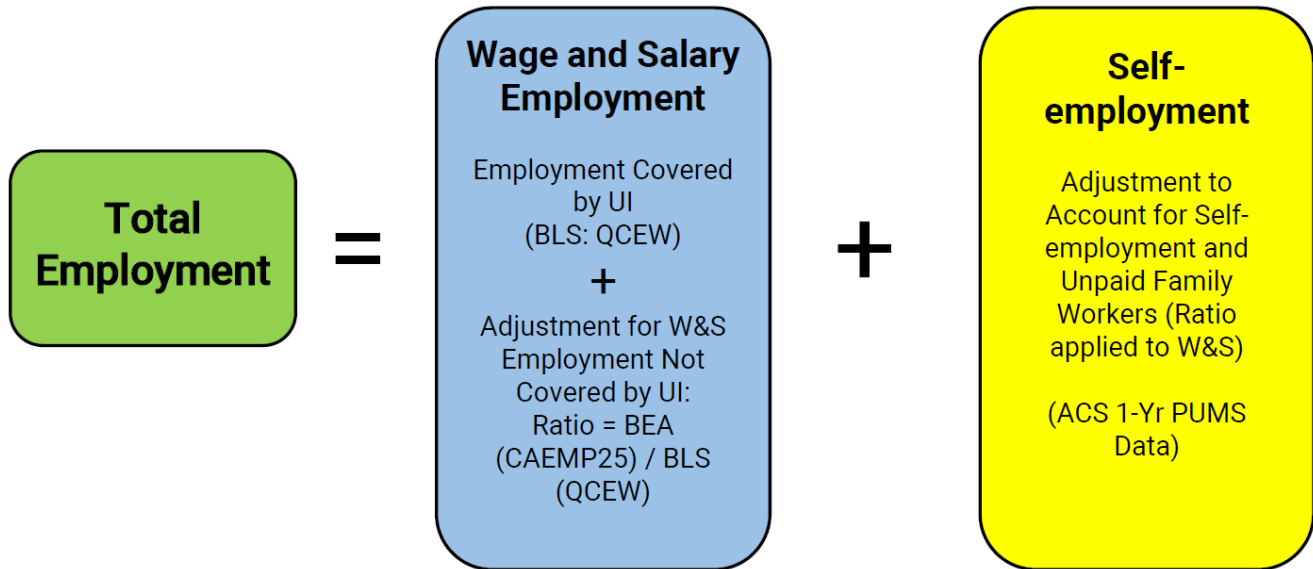
MARK AS DEVELOPED: Parcels with BUILDABLE PARCEL ACREAGE <0.2 and STRUCTURAL SF = 0
 Parcels with BUILDABLE PARCEL ACREAGE <2 and STRUCTURAL SF >0

The residential inventory model output summarizes zoning, acreage, units remaining, and number of parcels information for the areas inside the development envelope and areas outside the development envelope. The Commercial/Industrial Land Inventory summary displays the zoning types, acreage (and buildable parcel acreage), building square feet potential, and number of parcels information for the areas inside the development envelope and areas outside the development envelope. The Land Inventory analysis maps show the zoning and the locations of the parcels with remaining development potential.

[PowerPoint: Harford County Maryland – Land Inventory Analysis Presentation]

3. EMPLOYMENT ESTIMATES FOR 2022

Mr. Shawn Kimberly, Baltimore Metropolitan Council, provided a presentation on jurisdiction and region level employment estimates for 2022. He noted that the information in the presentation is intended to provide support for CFG membership consideration of the timing for an update to the Round 10 cooperative forecasts. Mr. Kimberly reminded the group of the current base year employment estimation methodology as adopted by the CFG in February 2021 (and used in Round 10), and shared the following explanatory graphic:



Mr. Kimberly reminded the group that the reason the CFG uses the QCEW in addition to the Bureau of Economic Analysis data is the timing of the data release dates. The fourth quarter QCEW data is released in June; the BEA data (released annually) is not made available until mid-November. The application of this approach allows the group to evaluate a “current” estimate of jurisdiction level employment about six months prior to the release of the BEA dataset. The timing benefit of this method allows the group to evaluate the need for forecast updates about six months before updates would need to be completed, and delivered to BMC.

Using the CFG methodology, the regional Round 10 employment estimate for base year 2020 is 1.47 million jobs. Of that employment total, 94.6% comes from wage and salary employment while 5.4% comes from self-employment. Mr. Kimberly then shared what the employment estimates are (by component) for year 2022, following the same methodology as was utilized in the development of the base-year 2020 estimates for Round 10. The regional employment estimate for 2022 is 1.52 million, with 95.2% of that coming from wage and salary employment and 4.8% from self-employment.

When comparing the Round 10 2020 estimate to the 2022 estimate developed with the same methods and updated source data, total employment for the region increased by 3.2%. The wage and salary component of total employment saw 3.9% growth while self-employment experienced an 8.4% decline compared to 2020.

When comparing the Round 10 forecast 2022 employment figure (derived through interpolation of given 2020 and 2025 Round 10 data) to the newly developed 2022 estimates at the regional level, the Round 10 forecast employment came in 1.1% lower than the 2022 estimate. Mr. Kimberly pointed out that differences between the forecasts and estimates are to be expected, particularly as the forecasts were developed in the midst of the pandemic (before its full impacts, duration, and recovery period could be assessed).

To help understand the decline in the self-employment component of total employment, Mr. Kimberly shared a table highlighting historical self-employment factors (developed from 1-year

ACS data) from 2015 through 2021. The table showed some significant disparities between years for the region and jurisdictions – including sizable declines between the factors used in the Round 10 base-year estimates and the updated 2022 estimates. Recognizing the volatility present in the 1-year ACS data for this datapoint, Mr. Kimberly suggested that the CFG consider utilizing the 5-year ACS estimates to support the development of the self-employment ratios for future forecast rounds. The 5-year ACS contains 60 months of collected data (versus 12 months for the 1-year ACS), and yields a more precise (although less current) estimate.

Mr. Kimberly compared the CFG employment forecast with those of the Maryland Department of Planning (MDP, released October 2022) and S&P Global (released March 2023) in both the short and long-terms, from 2020 to 2050.

Alternate Forecasts – Source data:

- **MDP** uses the BEA definition of employment for both wage and salary, and self-employment jobs.
- **S&P Global** uses the Current Employment Statistics dataset from the Bureau of Labor Statistics as a base. It includes some wage and salary employment beyond what is accounted for in the QCEW, but excludes self-employment.

While the methods and sources may differ by the forecasting organization (leading to differences in employment levels), comparing the rates of growth can be useful. S&P Global shows the region's strongest employment growth from 2020 to 2025, then drops markedly from 2025 to 2030, then flattens out at a rate of approximately 0.3% per year. MDP projections indicate substantial growth from 2020 to 2030 with the highest growth in the 2025 to 2030 five-year increment, and then flattens out in the longer term. The CFG's forecasted growth rate falls between those of S&P Global and MDP in the short-term (for the first two five-year increments from 2020 to 2030), but then remains well above the S&P Global and MDP projections when looking out to 2050. Mr. Kimberly noted that CFG membership could give consideration to the long-term forecasts presented by these alternate sources in future forecast rounds.

When analyzing regional growth rates by source applied to the Round 10 base year estimate, it is seen that the CFG has the most optimistic 30-year employment forecast, anticipating growth of approximately 374,000 jobs from 2020 to 2050 (25.5% growth). MDP's employment growth rates from 2020 to 2050 yield about 256,000 jobs (17.4% growth) over the next 30 years. The growth rates in S&P Global's forecasts revealed growth of about 219,000 jobs (14.9% growth) over the next 30 years. It can be observed in the chart in the presentation that the divergence between the CFG forecast and the two alternate sources increases as you look farther out in the forecast (particularly between 2030 and 2050).

Mr. Kimberly then shared a series of selected demographic data points comparing the newly released data from the 2020 decennial census (the Demographics and Housing Characteristics file (DHC), released on May 25) with historical decennial census data going back through 1980.

- Median age for the Baltimore region was 30.6 in 1980, and increased to 38.6 in 2020 (an age increase of 8 years).
- Detailed age data was released with the DHC, enabling a comparison of the population of seniors (age 65+) and children (age 0-17) over time. The share of the region's population that are seniors increased from 10% in 1980 to 16% in 2020. The share of the population that are children decreased from 27% in 1980 to 22% in 2020.
- Homeownership rates have fluctuated over time. At the regional level, the homeownership rate was 64.1% in 2020 (a rate that is higher than 1980 and 1990, but lower than 2000 and 2010).
- The vacancy rate for housing units in the Baltimore region was 7.5% in 2020, and consistently lower than the state and national vacancy rates between 1980 and 2020.
- Average Household Size in the region was 2.53 in 2020. While the average household size has declined with each decennial census in the 1980-2020 time-period, the reduction has slowed dramatically since 2000.

BMC staff is developing a GIS dataset containing the following data from the 2010 and 2020 decennial censuses, mapped to 2020 TAZ Geography. The file will be finished and available to the CFG in a few weeks.

- Population
- Hispanic or Latino Origin by Race
- Sex by Age (selected age categories)
- Group Quarters Population by Type
- Household Population
- Housing Units by Occupancy Status
- Average Household Size
- Tenure (owner/renter)

Ms. Comber asked how the CFG defines self-employment.

Mr. Kimberly said that the group uses the ACS in the development of its self-employment estimates. If the respondent to the ACS says their primary job (the one at which they worked the most hours "last week") is as "self-employed, not incorporated" or "unpaid family worker", they are included as self-employed by the CFG definition.

[PowerPoint: Employment Estimates 2022 – CFG Methodology - Jurisdiction Totals]

4. GROUP DISCUSSION: CONSIDERATION OF A FORECAST ROUND UPDATE

Mr. Kimberly opened a discussion on CFG membership perspective regarding a potential update to the Round 10 cooperative forecasts. Mr. Kimberly noted that participation in a "round update" is not mandatory (some member jurisdictions may choose to participate while others do not). In addition, the update can be for population, households, and/or employment (does not have to be an update to all three).

The group members present at the meeting (all except Anne Arundel County) were unanimous in the decision to not submit updates to the Round 10 cooperative forecasts in calendar year 2023. The group would prefer to give this consideration again in early 2024.

5. UPWP TASK UPDATE

Mr. Kimberly updated the CFG on the status of the UPWP task “Post-pandemic Trends in Employment, Commercial Real Estate, Housing Location Choice, and Travel Demand.” He said that there had been a modest delay in getting the RFP out, but that it was scheduled for release on July 6. The consultant selection process will begin in August. Mr. Kimberly said that he is requesting volunteers from the CFG to review the proposals, and asked that interested members contact him directly.

6. NEW BUSINESS

Al Sundara, MDP, shared a [link to MDP’s most recent set of jurisdiction level employment projections](#).

Ms. Comber volunteered to provide a presentation on Carroll County’s approach to holding capacity analysis at the August 23 CFG meeting.

The meeting adjourned at 11:15 A.M.

ATTENDANCE

Members

Krishna Akundi, Maryland Department of Planning
Austin Broderick, Baltimore County Planning Department
Jeff Bronow, Howard County Department of Planning and Zoning
Steve Cohoon, Queen Anne’s County Department of Planning and Zoning
Kathleen Comber, Carroll County Department of Planning
Deborah Price, Harford County Department of Planning and Zoning
Alfred Sundara, Maryland Department of Planning
Kristopher Weaver, Baltimore County Planning Department
James Wilkerson, Howard County Department of Planning and Zoning
Jamie Williams, Baltimore City Department of Planning

Staff and Guests

Jennifer Duffy, Baltimore Development Corporation
Blake Fisher, BMC
Shawn Kimberly, BMC
Crystal McDermott, BMC