

## **COOPERATIVE FORECASTING GROUP**

December 16, 2020

Virtual Meeting

10:04 A.M. to 12:00 P.M.

### **MINUTES**

Ms. Kui Zhao, CFG Chair, called the meeting to order at 10:04 A.M.

#### **1. APPROVAL OF MINUTES**

Ms. Zhao moved to approve the minutes from the October meeting of the Cooperative Forecasting Group (CFG) with Mr. Jeff Bronow seconding the motion. The minutes were unanimously approved.

#### **2. JURISDICTIONAL LEVEL SUMMARY OF SECOND QUARTER 2020 QCEW DATA RELEASE**

Mr. Shawn Kimberly, Baltimore Metropolitan Council (BMC), provided a presentation on preliminary findings from the release of the Bureau of Labor Statistics' Quarterly Census of Employment and Wages (QCEW) second quarter 2020 dataset. The second quarter 2020 data was released on December 2, 2020 (each quarter of QCEW data is released approximately five months after the quarter's end). Mr. Kimberly reminded the group that at the onset of the pandemic, BMC created a "Regional Recovery Dashboard" in an effort to provide a collection of timely quantitative impacts of the pandemic to local government agencies, local public and private decision makers, as well as the public-at-large. BMC staff has worked to expand this Tableau-based interactive dashboard over time, and the QCEW dataset is the most recent addition.

Mr. Kimberly used the Tableau tool to highlight some of the main findings from the QCEW data release and to demonstrate the tool's use and capabilities to CFG membership. Starting with a look at total employment levels for the region, Mr. Kimberly noted the precipitous drop in jobs from March 2020 to April 2020, a result of the impacts of the pandemic and the related restrictions that were put into place at the end of March (including stay at home orders). On a regional basis, total jobs declined from 1,330,000 in March to 1,160,000 in April, a decrease of 173,000 - or 13.0%. He pointed out that the state of Maryland lost 13.1% of jobs over the same time period – with the Baltimore region accounting for a roughly proportionate share of the

state total (about half of the 348,000 jobs lost). The United States lost 13.5% of its jobs from March to April 2020 (losing 20.3 million jobs).

Mr. Kimberly demonstrated that the tool provides users with the capability to develop a query comparing the percent change in employment level across industries for a selected geography – for any time period selected. In an example, he showed the change in employment level by 2-digit NAICS industry for the Baltimore region, from March to April 2020 – in order to get a handle on the immediate employment level impacts of the pandemic upon the region's industries. While the employment level across all industries decreased by 13.0%, there were a several industries that were disproportionately affected, including: Arts, Entertainment, and Recreation (down 56.8%, approximately 12,000 jobs); Accommodation and food services (down 50.0%, approximately 53,000 jobs); Other services except public administration (down 33.1%, approximately 14,000 jobs); Retail trade (down 19.8%, approximately 25,000 jobs); and Administrative and waste services (down 13.1%, approximately 11,000 jobs).

The same visualization (with a change in the time period selected) was used to illustrate how employment levels fared within the second quarter, after the initial declines. Across all industries, there was a 5.1% gain in the number of jobs from April to June 2020 – and some of the hardest hit industries witnessed jobs gains. Mr. Kimberly added that the forthcoming data releases from the QCEW series would provide more perspective on the scale and pace of economic recovery by county and industry.

Mr. Kimberly demonstrated that the Tableau tool allows the user to customize their own analyses by creating their own filters and queries of the data by various geographies (including the United States, the state of Maryland, and Maryland counties), industries, and months throughout the dashboard.

### **3. BASE YEAR EMPLOYMENT METHODOLOGY DISCUSSION**

Mr. Kimberly explained that one of the goals for the meeting was to come out of this discussion on base year employment methodology with some form of consensus from the group about what method they would like to use to serve as the basis for the Round 10 jurisdictional level 2020 estimates. He reminded the group that he had given a presentation on this topic at the October CFG meeting and contacted each CFG member individually in the weeks leading up to the December meeting to review the topic and respond to any questions. In the October presentation and subsequent conversations, Mr. Kimberly had laid out the reasons why the group may need to consider a different methodology, discussed the different sources that are available (and the timing of their availability), and provided a series of example alternate methods and the results produced by each (at the jurisdictional and regional levels).

Now that the group had an understanding of the base year employment methodology issue, Mr. Kimberly said that he would like to hear what membership thinks about what method should serve as the basis for Round 10 jurisdictional level employment estimation for base year 2020. Mr. Kimberly asked if members had any thoughts or opinions about the sources and potential methods presented at the October CFG meeting. He emphasized that the

methods presented were not intended as a menu from which the group needs to pick, but rather were meant to serve as a few examples to provide context.

Ms. Zhao suggested using the BEA / QCEW ratio method (described in the presentation given by BMC staff at the October 28 meeting of the CFG) for the wage and salary portion of total employment and utilizing the Metropolitan Washington Council of Government's method for developing self-employment estimates using the ACS as the source.

Responding to a question about the use of the Census Bureau's ACS data vs Nonemployer Statistics, Mr. Kimberly explained that one of the principal differences between the datasets is that the ACS data considers only the respondent's primary job. In order to be considered self-employed in the ACS, self-employment must describe the job for which the respondent worked the most hours during the previous week. If the respondent worked multiple jobs, the ACS response is to include only the one for which the most hours were worked. The Nonemployer Statistics dataset does not have a limitation or requirement to count only the primary job, and can capture multiple jobs that might be held by the same person. It is this difference that accounts for a large portion of the variation between the self-employment estimates produced utilizing the two different sources.

If a given person works at grocery store (30 hours) and as a Lyft driver (15 hours) in the reference week, only the grocery job (the primary employment) would be counted by the ACS. In that example, the Lyft driving self-employment job would be excluded by the ACS, but would be counted in the Nonemployer Statistics data – and reflected in the self-employment component of total employment in the CFG's current base year employment methodology. Using the ACS as the source for counting self-employment will generally result in a lower estimate for self-employment. The estimate for regional total employment developed via the current method of the CFG produces a figure that is nearly 14% higher (about 200,000 jobs) than the estimate developed utilizing the MWCoG method. About 75% of the disparity in total employment (152,000 jobs) is accounted for by the self-employment component of total employment.

Ms. Sara Paraniyam of Baltimore City asked if the purpose of the development of these estimates is for transportation planning, wouldn't we want to capture all jobs - not just primary jobs? Mr. Kimberly said that it might be helpful to understand how the travel demand model would interpret the difference between BMC and MWCoG employment figures. He explained that from the modeling perspective, consistency in the definitions and estimation methods across jurisdictions is more important than modest differences in the numeric figures produced by one method compared with another. Concentrations of employment would still occur in the same places. The numeric values might be different, but the ratios / concentrations would be intact. Mr. Charles Baber, the BMC modeling lead, clarified that from a model perspective, while they want employment to be as "accurate" as possible, what is most important is the consistency in method across jurisdictions. If one jurisdiction were to use the current CFG method while an adjoining jurisdiction used an alternate method, then one would have employment that is artificially higher the other, and the two would not be comparable. At the TAZ level, zones developed from methods producing higher employment would generally be considered more attractive, and the model would send more workers to

those zones. Ms. Paraniham said that she understood the need to be consistent. She stated that it would be Baltimore City's preference to use a method that captures all jobs (not just primary jobs), but understands that the consistency of method is most important.

Mr. Bronow explained that part of the rationale for making the change to our current methodology (in 2012) was to lower the group's employment totals, because the jobs / housing ratio was not in alignment. The region was projecting more jobs than could be supported by the housing that was being projected in the same dataset. There was an implicit assumption built-in to the estimates and forecasts that the higher number of jobs would be filled by in-commutation. And it appeared that the Washington region had similar assumptions built into their forecasts as well. Mr. Bronow said that he feels that continuing to lower the base jobs (by using ACS data for the self-employment component of total employment) would be a good idea. He suggests using BEA (or the BEA / QCEW ratio method) for wage and salary employment, and adding self-employed from the ACS to reach total jobs.

Mr. Bronow then asked about the timing of the ACS self-employment data release. Mr. Kimberly explained that each annual 1-Year ACS dataset (which contains data for areas with populations of 65,000+) is typically released in September (2020 ACS data would be anticipated for a September 2021). By contrast, the 2020 Nonemployer Statistics data is scheduled for release in May of 2022. Mr. Kimberly explained that while the 2020 Nonemployer Statistics are released too late to incorporate into the Round 10 dataset, and waiting for the 2020 ACS data release in September could reduce the time that CFG members have to develop and refine their Round 10 employment estimates and forecasts, it would be possible to either use an older self-employment dataset as a proxy until the actual 2020 data is released (in the case of the ACS), or to develop an approach to estimate 2020 self-employment.

Mr. Kimberly described a potential technique that would evaluate historical self-employment growth by jurisdiction over time (through 2019), and monitor the self-employment share of total employment at the national level through monthly (and more current) data provided through the Current Population Survey. The historical county level self-employment data could be adjusted to compensate for 2020 events (pandemic impacts) based upon findings at the national level. The group could assume that national and local self-employment shares of total employment behaved similarly in 2020, and apply some portion of self-employment growth observed at the national level to the county level - incorporating a notion of what happened to self-employment in 2020 into the local base year estimates.

Mr. Bronow added that he thinks waiting for the ACS data release in September would work well for his process, as he can develop the Howard County TAZ level forecasts without having the finalized jurisdictional self-employment data. He can use the 2019 data as a placeholder for the base year, then project jobs based upon land use capacity, land use policy, and general plan considerations. When the county level figures are finalized, the TAZ level data can then be updated relatively easily and quickly – based upon the aforementioned allocation and projections completed with the use of the county level base year proxy.

Mr. Kimberly noted that while 2019 data might be utilized to an extent in the Round 10 process (the use of reviewed 2Q 2019 QCEW data for industry assignments for travel demand model

inputs, for example), it is important that the 2020 base year estimates attempt to reflect actual 2020 conditions – including pandemic impacts. There are a variety of ways to integrate 2020 wage and salary employment impacts into the Round 10 base year employment estimates with available federal data sources. A few such options include (but are not limited to):

- Waiting for the county level BEA data release in November 2021 (which does not leave much time in the schedule for CFG membership to complete TAZ level estimates and forecasts)
- Using the BEA/QCEW ratio method to develop 2020 jurisdictional level wage and salary estimates
  - o BMC will have all data necessary to develop these estimates in June 2021 (as all 2020 QCEW data will have been released in early June)
- Using the BEA/QCEW ratio method results as a proxy for base year wage and salary estimates
  - o Prepare TAZ level allocations, estimates and forecasts based upon the proxy jurisdictional totals starting in June
  - o Swap out the proxy jurisdictional level totals with the actual 2020 BEA data upon release in November, and update the TAZ level estimate and forecasts accordingly
- Using the Metropolitan Washington Council of Governments method of wage and salary employment estimation (using 2020 QCEW as the base, and augmented with Current Employment Statistics and military employment sources to account for employment not covered by UI)
- Other suggestions / options

Ms. Zhao reiterated that she supports the use of the BEA/QCEW ratio for development of wage and salary data (noting that the BEA accounts for some employment not covered in the QCEW) and the use of ACS data for the self-employment component of total employment. She added that in an analysis of her own she compared ACS self-employment data (utilizing self-employed in incorporated and in non-incorporated businesses) with Nonemployer Statistics data for Baltimore County, and found that her ACS self-employment definition accounted for about 9 percent of the county employment total and the Nonemployer Statistics self-employment accounted for approximately 18 percent of the county total. She pointed out that a significant benefit of using the ACS over the Nonemployer Statistics data is that it is available at subcounty geographies (including tract level) which can assist in the allocation process.

Ms. Zhao added that COVID impacts for Round 10 base year 2020 need to be considered at the county and TAZ levels. She emphasized that the 2Q 2019 file review required significant staff resources. Mr. Kimberly acknowledged that base year employment allocation might warrant special consideration this round because of the pandemic. He added that if CFG membership is interested in considering the spatial component of COVID impacts in their

allocation of jurisdictional level base year employment totals (which will reflect COVID impacts) to TAZs, the group can have access to the point level QCEW files for each quarter as the data is released. While CFG membership has put forth significant effort in the cleaning of the 2Q 2019 file for the purpose of the development of travel demand model inputs, it would be possible for the group to consider small area (point level or TAZ level) employment changes utilizing the raw QCEW files for all 2020 quarters as they are received from the Maryland Department of Labor. While these files would not contain the detailed adjustments made by CFG membership, the QCEW files in their raw form would be comparable to one another – and could provide insights as to the subcounty locations of COVID impacts for consideration in CFG employment allocation for base year 2020. Ms. Zhao agreed that reviewing two different raw QCEW files against one another would be a good way to get a sense of small area COVID impacts without needing to go through the effort required to perform an additional full-scale file review.

Mr. Kimberly asked for the thoughts and opinions of other jurisdictions on the topic of the development of a new base year employment methodology, starting with Anne Arundel County. Mr. Rick Fisher mentioned that there have been groups in the county that have looked at the forecasts and pointed out that there may not be enough housing being produced to support the employment that is being projected. Mr. Bronow pointed out that sometimes jurisdictions have strong economic development goals and job targets in their general plans, and this can lead to issues if supportive housing is not considered as well. Rick added that the issue of not having enough housing to meet employment demands is a concern in Anne Arundel County. He said that at the same time, there are some that do not want more housing coming in, which can lead to additional problems including affordability. Mr. Kimberly noted that different stakeholders may have competing perspectives on how to think about and to reconcile the relationship between jobs and households. Asked if Anne Arundel County had any thoughts or opinions on sources and methods to be used for the development of the base year employment estimates, Mr. Fisher said that he is fine with the consensus of the region. Mr. Fisher mentioned that he had spoken with staff in planning and zoning on this topic, but had not discussed it with economic development.

Noting that time was running short, Mr. Kimberly observed that it was unlikely that the group would complete discussion and reach consensus on a base year employment methodology for Round 10 during this meeting, and that the topic would likely need to be continued at the February meeting of the group. Rounding up the discussion, Mr. Kimberly summarized the thoughts and opinions expressed on the base year employment methodology by jurisdiction (and asked for input from those that had not yet participated).

- Howard County: Suggests using BEA (or the BEA / QCEW ratio method) for wage and salary employment, and adding self-employed from the ACS to reach total jobs.
- Baltimore County: Suggests using BEA (or the BEA / QCEW ratio method) for wage and salary employment, and adding self-employed from the ACS to reach total jobs.
- Anne Arundel County: Mr. Fisher said that Anne Arundel County will go with the consensus of the CFG membership.

- Baltimore City: Ms. Jamie Williams said that Baltimore City would prefer using a methodology that would not produce a lower employment figure. Baltimore City representatives expressed concern that a lower employment number might result in reduced transportation investment going to the city. Baltimore City wants to be consistent with the group, but does not want to see their employment figure drop.
- Carroll County: Mr. Cody Spaid said that Carroll County does not have a strong preference, but they could support the hybrid method. They are open to supporting the consensus of the group.
- Harford County: Ms. Deborah Grant said that she understands the impacts that employment can have upon the demand for housing. She is okay supporting the consensus of the group, but feels like the topic needs more discussion.
- Queen Anne's County: Mr. Steve Cohoon said that he agrees with using the BEA/QCEW ratio method for wage and salary and the self-employment method put forth by Baltimore County and Howard County. He noted that Queen Anne's County is a relatively small jurisdiction, and he is open to supporting the consensus of the group.

Mr. Kimberly noted that any change in base year employment would be attributable to a change in methodology, and should not be interpreted as a reduction in employment. The employment figures developed for a forecast round utilizing one methodology are not directly comparable to those from any other round developed with different methods and assumptions.

Mr. Kimberly said that given the time, the group would need to continue this discussion in February in order to reach a consensus. Ms. Zhao recommended that the CFG membership review the presentation on the base year employment methodology and meeting minutes from the October meeting before reconvening in February. She suggested the group be prepared to continue the discussion and reach a consensus at the February meeting. Mr. Kimberly agreed, asking group members to give this topic consideration between now and the February meeting, and to come to that meeting with a sense of how they would like to move forward. The group can have a vote in February to determine the selection of a methodology. He added that membership can contact him with any questions about the base year employment methodology topic.

Mr. Cohoon noted some jurisdictions may use these numbers outside the work of the CFG and BMC, and wondered what the impacts of a methodological change would be upon other users. Mr. Bronow added that it is also important to consider the fact that the data is publicly available for download from BMC. When consultants and / or the public are looking for regional demographic estimates and projections they often turn to BMC – where they can get the data for all jurisdictions in one place, and use it for any purpose. Mr. Cohoon noted that it will be important to have a notation where the data is made available to indicate that there was a change in base year employment methodology in Round 10. Mr. Kimberly agreed that clarifications should be made in the metadata for Round 10 products indicating that there had been a methodological change.

#### **4. ROUND 10 SCHEDULE – UPDATES AND OVERVIEW OF 2021 ACTIVITIES**

Mr. Kimberly said that because the time was now past noon, the scheduled end for the meeting, he would only take a moment for this item. He stated that the Census Bureau plans to release the 2020 Census geographic support products on a rolling basis by state from January 22 through February 28, 2021. He added that when the redistricting demographic data file is made available we should be able to begin the process of delineating Transportation Analysis Zones based upon 2020 census geography and data. BMC staff has already started looking into this and can address the CFG about preliminary findings based upon 2020 spatial data and present a proposed process for working with CFG membership on the 2020 TAZ boundary delineation. At the February meeting BMC can go over the available data and next steps for TAZ boundary delineation. Hopefully, by the end of March the Census Bureau will have released the 2020 Census redistricting data files (the statutory deadline for the release of the PL 94-171 demographic data is March 30, 2021), providing the first look at the small area decennial Census data.

#### **5. NEW BUSINESS**

Mr. Kimberly thanked Ms. Zhao for her time, work, and service as Chair of the Cooperative Forecasting Group for the past two years. He added that he enjoyed working with her and looks forward to her continued input and participation as a group member. Mr. Kimberly then welcomed Cody Spaid as the next Chair of the group (as Carroll County is next in the biennial alphabetical rotation of the group leadership). Harford County will serve as Vice-chair starting with February meeting.

The meeting adjourned at 12:07 A.M.

#### **ATTENDANCE**

##### ***Members***

Jeff Bronow, Howard County Department of Planning and Zoning  
Steve Cohoon, Queen Anne's County Department of Public Works  
Rick Fisher, Anne Arundel County Office of Planning and Zoning  
Deborah Grant, Harford County Department of Planning and Zoning  
Sara Paraniyam, Baltimore City Department of Planning  
Cody Spaid, Carroll County Department of Planning  
Krishna Akundi, Maryland Department of Planning  
James Wilkerson, Howard County Department of Planning and Zoning  
Jamie Williams, Baltimore City Department of Planning  
Kui Zhao, Baltimore County Department of Planning

##### ***Staff and Guests***

Charles Baber, BMC



Blake Fisher, BMC  
Greg Goodwin, Metropolitan Washington Council of Governments  
Crystal McDermott, BMC  
Shawn Kimberly, BMC