In July 2021, the Anderson Forecast, in partnership with GoDaddy Inc., first published a new index for the formation, growth, and dynamics of online microbusinesses using data provided by GoDaddy.¹ We call it the Microbusiness Activity Index (MAI). Online microbusinesses are defined as small businesses with an online presence. We find the evidence that microbusiness formation and growth may boost local economic activity. For example, each additional 1 unit gain in the MAI is associated with a 0.1 percentage point decline of the unemployment rate. The Forecast subsequently publishes updated index and report every quarter.

This report is the first update and contains data up to September 2021 for the nation, states, metros, and counties in the U.S. The activity index for microbusinesses in the U.S. (the blue line in Figure 1) declined from 101.5 in June to 100.4 in September. Two possible reasons could explain this slowdown of online microbusinesses. First, the overall U.S. economic growth has slowed down. The U.S. GDP growth has declined from 6.3% in 2021Q1, 6.7% in Q2, to 2.1% in Q3. Second, there is seasonality in online activity. When there are a sufficient number of observations, we hope to release a seasonally adjusted index.

The Microbusiness Activity Index is decomposed into three components: (1) *Infrastructure* (black line) includes human capital and digital infrastructure, e.g. broadband and computer access. These are more long-term factors, which do not change from one quarter to the next. (2) *Participation* (green line) includes the density

¹ See https://www.anderson.ucla.edu/about/centers/ucla-anderson-forecast/projects-and-partnerships/godaddy
and growth rate of online microbusinesses and online microbusiness owners. We can see that the participation index slightly declined from the peak of 101.33 in January 2021 to 100.36 in September. This seasonality is consistent with typical (pre-pandemic) business trends in online microbusinesses. (3) Engagement (red line) includes all kinds of online/website engaged activities. The engagement index dropped significantly from 103.8 in June to 100.3 in September. There could be some seasonal patterns in online activities. Over time, as we gather more times series data, we will be more certain about the role of seasonality in the index fluctuations.

Figure 2 shows the changes of the microbusiness activity index by state from September 2020 to September 2021. The darker the blue color, the larger the increase. We can see Vermont, Oklahoma, Indiana, North Dakota, Ohio, and Minnesota had a higher growth in the index over the past year. In contrast, Delaware, Washington DC, California, Mississippi, and Arkansas had larger declines.
Figure 2. Microbusiness Activity Index Changes by State, September 2020 to September 2021

Figure 3 shows the microbusiness activity index by county in September 2021. The blue colors mean higher index values while red colors mean lower index values. By and large, the variation across counties is similar to the variation we saw in prior months. Coastal regions and major cities have higher values of the online microbusiness index, while inland and rural regions have lower values. Falls Church (116) and Fairfax (115.5), VA, and Lake County, IL (115.8) have the highest values mostly due to their exceptional values for the infrastructure index (which includes a measure of human capital). Lexington, VA has a very high value (133) in the engagement index. Butler County (110), NE and Dallas County (109), IA have very high values of the participation index.
Figure 3. Microbusiness Activity Index by County, September 2021

Figure 4 shows the activity index for selected 30 major metros (Metropolitan Statistical Areas) in September 2020 and 2021. San Jose (Silicon Valley) has the highest activity index value (112.9) in September 2021, followed by Washington DC (109.5), San Francisco (109), San Diego (108), and Boston (107.8). On the other end, Houston (104), Las Vegas (103.8), and San Antonio (101.8) have the lowest activity values. Over the past year, Columbus, OH has the largest increase of value in terms of the activity index. Denver, Minneapolis, and San Antonio also have sizable increases.

In terms of the participation index in Figure 5, Miami (106.8) has the highest value in September 2021, followed by Los Angeles (106.8), San Diego (106.6), Denver (105.9), and Orlando (105.8). While most metros have a decline of the participation index year over year, Chicago and Philadelphia have the deepest fall. Denver is the only metro that has an increase of the participation index value.

In terms of the engagement index in Figure 6, San Jose (108) has the highest value in September 2021, followed by Columbus (107), Chicago (103.3), St. Louis (101.8), Minneapolis (101.7). Over the past year, Columbus, Chicago, and San Antonio have the largest increase of the engagement index values.
Figure 4. Microbusiness Activity Index, Selected 30 Metros, Sept. 2020 to Sept. 2021
Figure 5. Microbusiness Participation Index, Selected 30 Metros, Sept. 2020 to Sept. 2021
Figure 6. Microbusiness Engagement Index, Selected 30 Metros, Sept. 2020 to Sept. 2021