How we determine demand for occupations

Introduction: Determining "in demand," "not in demand" or "balanced"
The 2021 methodology is based on occupational projections and current supply-demand data. Specific levels of job growth and total job openings are used to designate an occupation as "in demand," "not in demand" or "balanced."

Occupations that are included
Unsuppressed occupations with employment in base year 2019, consisting of 50 or more jobs, are included in this analysis.

Time frames used for projections

- Five-year projections for 2019-2024, using average annual growth rates and total job openings.

- Ten-year projections for 2019-2029, using average annual growth rates and total job openings.

- A combination of two-year (2020Q2-2022Q2) and ten-year (2019-2029) projections, using average annual growth rates and total job openings.

The methodology

Step one: Identifying initial "in demand" and "not in demand" categories for each time frame

- Occupations with average annual growth rates of at least 90 percent of their respective geographic areas (statewide or workforce development area) total average annual growth rates **and** a share of total openings of at least .08 percent are "in demand."

- Occupations with average annual growth rates less than 70 percent of their respective geographic areas total growth rates **and** a share of total openings of less than 1 percent are "not in demand."

Step two: Identifying provisional occupational categories

- If within any of the three projection time frames (five years, ten years and two/ten years), an occupation is categorized as being "in demand," it receives a first provisional identification of "in demand."

- If within any of the three projection time frames, an occupation is categorized as "not in demand," it receives a second provisional identification of "not in demand."

Step three: Create final projections definitions

- If an occupation has only one provisional definition, it equals the final definition.
- If an occupation has two provisional definitions of "in demand" and "not in demand," it gets identified as "balanced."
- All other occupations, without provisional definitions (i.e., not meeting the thresholds from stage one), are identified as "balanced."

All occupations, at this stage of the process, have definitions of "in demand," "not in demand" or "balanced."

Step four: Create final adjustment definitions

The projections definitions are now put through an adjustment process, using current labor market supply/demand data which compares online job announcements to information on unemployment insurance (UI) claimants.

Adjustments are applied when current supply/demand data significantly contradicts the model-based projections definitions.

The adjustment methodology

- Supply/demand data are used for adjustments if they are significant. Significant supply/demand data exist when the largest values between announcements and UI claimants/seekers are greater than 100 or are between 50 and 100 **and** these values are more than 10% of annual job openings for the period 2019 to 2029;
- If the projections definition is "in demand" or "balanced" but the ratio of supply to demand is more than 2.5, then the adjusted definition is "not in demand";
- If the projections definition is "in demand" and the ratio of supply to demand is not larger than 2.5, but more than 1.5, then the adjusted definition is "balanced";
- If the projections definition is "not in demand" or "balanced," but the ratio of supply to demand is less than 0.4, then the adjusted definition is "in demand";
- If the projections definition is "not in demand" and the ratio is at least 0.4, but less than 0.6, then the adjusted definition is "balanced".

The final list: Local adjustments

The Employment Security's Labor Market and Economic Analysis division uses the methodology outlined above to prepare the initial lists for the state as a whole and by workforce development area. Those lists are then given to local workforce development councils to review, adjust and approve on the basis of their local, on-the-ground experience.