

Congressional Districts Map Methodology

The congressional districts interactive map highlights the potential near-term economic impacts associated with battery supply chain investment in Alabama, Georgia, North Carolina, South Carolina, and Tennessee. Congressional districts shown in solid colors reflect estimated economic benefits tied to battery manufacturing facilities that have been announced or are under construction within those districts based on data from the Clean Investment Monitor. Hatched districts represent modeled future opportunities based on economically similar districts elsewhere in the Southeast with comparable workforce and industrial characteristics.

The matching analysis draws on two datasets published by the U.S. Census Bureau that provide economic and workforce information at the U.S. congressional district level:

- American Community Survey (ACS) for counts of civilian employed population 16 years and over across 5 occupational groups and across 13 industry groups.
- County Business Patterns (CBP) for number of establishments across 18 industry groups and number of employees across 18 industry groups.

18 of the 51 congressional districts across the 5 states in the interactive map have announced or under construction facilities in the Clean Investment Monitor data. The estimated capital expenditure information for each of these facilities is used within IMPLAN to estimate the economic impacts from the facility investment, including output, jobs, and labor income.

The remaining 33 congressional districts are matched to one of the 18 congressional districts with IMPLAN results. This is done in two main steps:

1. For each of the 33 districts, the analysis calculates the difference between the ACS and CBP variables for that district and the corresponding variables for each of the 18 IMPLAN districts, converting those differences into percentages.
2. The analysis takes a weighted average of the percentage differences for each pair of districts, which results in a single difference score for each pair of districts.

The table below shows the variable weights in more detail.

Data Source	Variable Group	Variable Group Weight	Individual Variable	Individual Variable Weight
ACS	Counts of civilian employed population 16 years and over across occupational groups	10%	Natural resources, construction, and maintenance occupations	20%
			Production, transportation, and material moving occupations	30%
			All others (3)	50% split evenly
	Counts of civilian employed population 16 years and over across industry groups	10%	Construction	20%
			Manufacturing	30%
			All others (11)	50% split evenly
CBP	Number of establishments across industry groups	40%	Construction	20%
			Manufacturing	30%
			All others (16)	50% split evenly
	Number of employees across industry groups	40%	Construction	20%
			Manufacturing	30%
			All others (16)	50% split evenly

For each of the 33 districts without announced/under construction facilities, whichever of the 18 IMPLAN districts has the lowest difference score becomes its assigned match. In the interactive map, the IMPLAN results for the matched district are presented as a proxy for potential future near-term economic benefits.

The table below shows the 51 congressional districts across the 5 states in the interactive map. For each district, the “Matched?” column indicates whether the results for the district were drawn from a matched district (“Yes”) or whether the results were calculated for the district itself based on Clean Investment Monitor data for the district (“No”). The last column shows which set of results from the 18 IMPLAN districts was used.

Congressional District	Matched?	IMPLAN Results Used
AL-01	Yes	NC-09
AL-02	Yes	GA-02
AL-03	Yes	AL-04
AL-04	No	AL-04
AL-05	Yes	NC-09
AL-06	Yes	SC-02
AL-07	Yes	TN-08
GA-01	No	GA-01
GA-02	No	GA-02
GA-03	Yes	NC-09
GA-04	Yes	GA-11
GA-05	Yes	NC-04
GA-06	Yes	NC-04
GA-07	Yes	NC-04
GA-08	Yes	GA-12
GA-09	No	GA-09
GA-10	Yes	NC-09
GA-11	No	GA-11
GA-12	No	GA-12
GA-13	Yes	NC-09
GA-14	Yes	NC-09
NC-01	Yes	NC-09
NC-02	Yes	NC-04
NC-03	Yes	SC-07
NC-04	No	NC-04
NC-05	Yes	NC-09
NC-06	No	NC-06
NC-07	No	NC-07
NC-08	Yes	NC-09

NC-09	No	NC-09
NC-10	Yes	NC-06
NC-11	Yes	NC-07
NC-12	Yes	GA-11
NC-13	Yes	NC-09
NC-14	Yes	NC-06
SC-01	Yes	NC-07
SC-02	No	SC-02
SC-03	Yes	AL-04
SC-04	No	SC-04
SC-05	No	SC-05
SC-06	No	SC-06
SC-07	No	SC-07
TN-01	Yes	NC-09
TN-02	Yes	NC-09
TN-03	No	TN-03
TN-04	Yes	AL-04
TN-05	Yes	NC-04
TN-06	Yes	NC-09
TN-07	No	TN-07
TN-08	No	TN-08
TN-09	Yes	NC-04