



Community and Economic Development in North Carolina and Beyond Blog: The Importance of “Good” Data

By CED Program Interns & Students

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The Development Finance Initiative's Community Revitalization Fellows represent students from a variety of graduate programs: City and Regional Planning, Business, Public Administration, Information and Library Science, Applied Geography, and Public Health. In addition to working as DFI Fellows, these students have something else in common: their respective graduate programs all require that they take at least one course focused on statistics and data analysis. No exceptions.

Why is this requirement so important? Because decision making in the modern world is based on data. Statistical analysis offers the most objective, informed way to analyze a situation and project the impact of different courses of action.

This is certainly true for community economic development. Decision makers in both the public and private sectors rely on data to make decisions. Businesses leverage numbers from the Federal, State, and local government agencies, to decide where to invest their resources. From simple population facts to more sophisticated surveys of household expenditures, data is the best way for companies to forecast revenues and costs under several circumstances. These projections ultimately drive all major business decisions.

Similarly, government agencies and public leaders utilize data to inform public policy. State and Federal governments often allocate resources according to the population or economic statistics. Regulations and laws dealing with economic development are analyzed using a cost-benefit analyses, which also draw on data. At every level, economic development decisions are driven by numbers.

Good data and statistical information helps public and private decision makers to invest in a particular project by shedding light on the project's likelihood for success.

The Danger of Data

While statistical analysis is central to decision making, one should be mindful of the quality and source of the data, as well as the analytical process utilized. Computer scientists refer to this dilemma as “garbage-in, garbage-out”. If one has bad data – inaccurate, flawed, incomplete or misleading statistics – then the result of a statistical analysis will be wrong. No matter how good one's econometric model, machine learning algorithm, or decision-making process, there is no substitute for good data.

In fact, bad data is worse than no data at all. At least with no data, a decision maker is aware of his or her ignorance. With bad data, a decision maker is tempted to confidently choose the wrong option.

For example, imagine two people are in a car on the way to a new place:

- If they have good data, then they will confidently turn right to get to their destination.
- If they have no data, then they know they are lost and knows to ask for directions or be extra careful to look for signals they are on the right way.
- However, if they have bad data, then the driver will confidently turn left. They will be heading in the wrong direction, completely ignorant of their mistake.

Good Data Habits

Fear of bad data should not (and will not) stop decision makers from using numbers to inform decisions. Local



governments and those involved in community economic development should instead focus on collecting accurate and representative information. When there are potential errors or limitations in the data, these factors should be clearly noted.

Communities with large minority or transient populations (like students or migrant workers) should be particularly cognizant of the quality of their data. These groups are more challenging to survey, and thus are less likely to respond to surveys or be included in data sets.

Similarly, businesses may consider investments in rural communities to be riskier, since there are less potential customers and workers. Thus, these communities often need to present even more statistical information to provide a business case that will convince investors.

A good place for local governments to start collecting better data is in their geographic information systems (GIS) data sets. This publicly available information is used by businesses to determine when they locate stores, factories, and other buildings. Town and urban planners use the same data sets to plan new roads or investments in other infrastructure.

Investing in a data may seem like an indirect way to promote economic development. However, decisions in the modern world are made with data. Communities that fail to recognize and leverage this reality may fall behind those they choose to utilize good data and analysis for decision making.

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