Fact Sheet: Interpreting the Dakota Access Economic Impact Study Dave Swenson, ISU

Economic impact studies are conducted with input-output (IO) models of a regional economy. These models can be useful in helping consumers and policymakers understand the economic outcomes that might happen from policy decisions. As with any analytical tool, IO models have limitations. First, the results of an IO model are only as good as the information and assumptions fed into it. Second, not all modelers follow the same conventions for presenting the results. Following is my critique of the economic impact analysis of the Dakota Access pipeline.

Issue #1. The study reports there will be 7,600 jobs and nearly \$1.1 billion in economic output at the state level if all of the economic activity occurred in one year. This is called "job years" reporting. The activity, however, will take two years. For clarity's sake, then, it is most appropriate to report the economic activity per year of activity, i.e., this construction may support as many as 3,800 total jobs in year 1 and 3,800 total jobs in year 2. Doing so gives citizens, regulators, and policy makers a conventional gauge as to the annual worth of the activity in relation to the economy.

Issue #2. The study indicates that the jobs reported are full-time equivalencies (FTE). I believe they are not. The job values typically reported by the IO modeling system used for this study are not full-time equivalent values, but instead are "annualized" job counts that treat full-time and part-time jobs equally. The translation of results into FTEs is a separate step that must be done outside of the model. I found no evidence this was done in the Dakota Access study.

Issue #3. The study assumes that a fraction of the very specialized pipe, valve, fitting, and pump inputs will be manufactured in Iowa (as well as in the larger region the pipeline will traverse). Although Iowa has firms that produce pipe and related products, they do not currently supply the specialized types of inputs that would be required for this project. If one searches the American Petroleum Institute's directory of API certified manufacturers, one will not find within the region of study a manufacturer of the 30" O.D. pipe or other API-certified inputs. Although these inputs represent a comparatively small percentage of the overall project requirements, the economic activity generated by the assumed linkages with Iowa manufacturers inflates the total job value (annually or in "job years") by at least 16 percent.

Issue #4. The study assumes that there are firms that specialize in pipeline construction in lowa that will be able to accommodate this large, multi-year project. Iowa has a gas and oil pipeline construction industry. The industry had 245 payroll employees in 34 firms in 2013. These firms typically lay new gas lines for residential or commercial developments, along with those feeding into new manufacturing plants (like, for example, the Orascom fertilizer plant in Lee County or the many ethanol plants that went up in Iowa last decade).

Neither these extant firms, nor the remainder of Iowa's civil engineering construction industry, however, has significant recent experience laying a pipeline with these characteristics, especially considering the important regulatory and safety considerations involved. It is much more likely that out-of-state major contractors with large-pipeline construction experience will be retained who will bring with them their most skilled workers. Those firms will, of course, subcontract within the state of Iowa, but the IO modeling results suggested that 100 percent of those major construction jobs would go to Iowa firms and workers.

My conclusion on this point was recently validated by Energy Transfer spokesman Chuck Frey, as reported by the Des Moines Register (5/12/14). According to that article,

"Frey said the company has entered into an agreement with the labor union, committing to hire lowans for at least 50 percent of the positions on work done in lowa."

Taken at face value, then, at least 50 percent of the positions will go to non-lowans.