

Appendix D: Assessing the Green Jobs Survey Results

As stated in **Chapter 5**, the green jobs survey that Michigan conducted in 2009 was incorporated into the larger Driving Change project that included Indiana (and Ohio) to gauge the presence and potential of the green economy to absorb many of the workers affected by the economic downturn and the auto sector restructuring. What do the survey results say?

The percentage of all jobs that are green in Indiana is about half that in Michigan. A couple of methodological reasons for this difference come to mind immediately: data collection timing was different, and Indiana surveyed both public and private establishments.

There are other considerations, however. The structure of the economy is different in the two states. While both are heavily dependent on the auto industry, their auto production activities differ. For example, Michigan is home to corporate headquarters, and there is considerably more automobile and component design, engineering and testing in Michigan than in Indiana. This is reflected in the rankings of the five core areas, as **Table 10** showed. In Michigan, clean transportation and fuels account for over 40 percent of the green jobs in the state, while in Indiana, this core area accounts for less than 5 percent of all green jobs.

In Michigan, engineers accounted for a significant share of the jobs in clean transportation and fuels. One can surmise that these Michigan engineers are working in advanced lightweight materials to improve vehicular fuel efficiency or to transform the powertrain to electric. In contrast, the workers in clean transportation and fuels in Indiana tend to be in production and specialized trades, with engineers representing only 10 percent of the jobs in this core area.

The greatest proportion of green jobs in Indiana is in the core area of increasing energy efficiency. In this core area, however, Indiana and Michigan tend to resemble each other. Many of the businesses hiring these green workers are in the construction trades and the occupations involve installing or servicing heating and air conditioning or construction workers insulating floors, ceilings and walls.

Other differences between the states may be more of a puzzle. One would expect that the percentage of green jobs in a particular industry would not diverge so greatly between states. Staffing patterns—the mix of occupations reported at a particular type of establishment, for example, a headquarters, call center or a stamping plant—can differ however. Moreover, and potentially more importantly, the survey responses of what constitutes a green job can differ from one employer to another. The consistency of the results is predicated on the consistency of those respondents—staff in human resources or in operations management—who complete the survey to have a common understanding of a green job.

Contrasting the results based on core area may provide some clues. When dominant green job industries are classified based on core area, the differences between the states do not appear to be significant. Of the top five industries for each core area, the states share three. Three core areas share professional, scientific and technical services, and the fact that this industry in Michigan, unlike in Indiana, is in the clean transportation and fuels core area makes sense.

When dominant green job occupations are classified based on core area, the differences between the states appear substantial. There is no overlap among the top five occupations in the core area of renewable energy production. Three core areas share only one top five

occupation. Only the core area of agriculture and natural resource conservation shares two occupations. However, it is likely that the occupational distribution of green jobs may show more similarities in the two states when the data is aggregated to broader occupational groups.

A full explanation of the observed differences in the occupational make-up for the same type of production

activity across state lines remains an open question. Additional research to answer that question is warranted to ensure that future green jobs surveys reliably and robustly measure the number and growth of green jobs and the green economy. 