

# **Request for Proposals for the Further Development of A Skills Shed Analysis Methodology in Support of the Midwest Innovation Initiative**

**January 13, 2010**

The Institute for Work and the Economy is requesting proposals from qualified persons for the further development of a skills shed analysis methodology in support of the Midwest Innovation Initiative. Proposals are due by e-mail to Peter A. Creticos by 5 p.m. CST on Friday, January 29, 2010.

## **Background**

The Midwest Innovation Initiative (MI2) is a project organized by the Great Lakes Employment and Training Association, an association of local workforce development executives, and the state workforce development administrators from the Midwestern states of Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, Ohio and Wisconsin. It is working in collaboration with the Midwestern Legislative Conference of the Council of State Governments, an association of state legislators from the Midwestern states plus North Dakota and South Dakota. It is funded by a grant from the Employment and Training Administration, U.S. Department of Labor to the State of Minnesota in behalf of the region. The Institute for Work and the Economy provides project management.

The mission of MI2 is to:

- Identify and address the barriers preventing Midwestern states and communities from making full use of the competitive advantages of the region functioning as a single, integrated economy
- Take stock of:
  - The talent and skills of Midwesterners
  - The institutions and systems that foster the development of talent
  - The investments that we are making in our human resources
- Look forward to the region's collective future workforce needs and less on today's demand
- Assist in the development and implementation of talent-based models that foster invention, innovation, entrepreneurship and business growth in industries in which the Midwest can obtain a competitive advantage
- Support the development of agile education and job training structures
- Support efforts to integrate investments across the region to reach the critical mass needed for a virtuous cycle of self-sustaining growth
- Join with other regional initiatives to integrate workforce development with economic development efforts

The goals and objectives of the initiative are:

- Develop a research framework that deepens our understanding of:
  - The economic connections that bind together Midwest communities and states

- The talent base of the region and the institutions and systems that support its development
- The interplay of the state and local workforce systems with large-scale initiatives and trends in the region and global changes
- Talent-based models that lead as well as support innovation, invention, entrepreneurship and business development
- Support the integration of workforce development and economic development in furtherance of Midwest growth by:
  - Forging and strengthening social networks connecting the region's WIRED and RIG projects
  - Furthering the development of state and local workforce leadership to help them understand and respond to shifting global, national and regional economic changes
  - Co-hosting gatherings of policy makers and opinion leaders with other Midwestern groups
  - Leveraging other resources in furtherance of this Initiative
- Identify and, where necessary, develop and publish possible policies and programs that are consistent with the goal of greater collaboration and coordination. The Initiative will not lobby for any specific policy or program.

The Initiative will produce several products and services. Over the course of the project, the Institute for Work and the Economy will commission several policy and program development-related research papers and reports on regional economic issues, the transition from automobile manufacturing to other manufacturing products and services, on talent driven development, and on regional workforce challenges, opportunities and solutions. It has and will continue to convene a series of working sessions focused on the development of new tools that will aid local and state workforce agencies in their work to grow local, state and regional economies. Finally, it will support the exchange of ideas and solutions amongst practitioners and policy makers in the region through conferences, workshops and through the initiative's website: [midwestinnovate.org](http://midwestinnovate.org).

### **Project for which proposals are requested**

#### Background:

The State of Iowa Workforce Development agency (IWD) has developed a skills shed analysis as a form of labor market analysis for a commuting area. IWD defines a skills shed as "the geographic area from which a region pulls its workforce and the skills, education and experience that the workforce possesses."<sup>i</sup> The analysis itself: 1) identifies the current skill and knowledge level of the workforce within the region based on a labor shed area (commuting area); 2) identifies the needs of the industries within the region based on a workforce needs assessment; 3) identifies the occupational clusters based on the work activities, knowledge, and skills identified in O\*Net for high growth and emerging occupations, and current vacancy needs; and 4) identifies the education and training needs to bridge the gap between the current workforce and current or anticipated demand.<sup>ii</sup>

Iowa Workforce Development currently employs several sources and methods in its skills shed analysis. It conducts a telephone survey of a random sample of the workforce population aged 18 to 64 within actual commuting areas. The survey collects information on the availability and willingness to change or enter employment, prior and current occupations, current and desired wages, traditional and non-traditional benefits, current commuting distance and the distance that the respondent is willing to commute, current level of education and training, education and training needs, job search mediums, employment status – including whether underemployed, languages spoken, basic demographics, and other work-pertinent information.<sup>iii</sup>

Employer needs are determined through an on-line job vacancy survey of establishments with five or more workers. Employers are queried about current vacancies (full/part time, seasonal/permanent), the length of the vacancy, required education and training, required experience, hiring competition, and the missing required qualifications within the applicant pool. Employers are also queried about upcoming vacancies (e.g., due to retirements) and expansion plans.<sup>iv</sup>

The state then performs an analysis that: 1) maps the current skills sets to the skills sets of a targeted industry and determines the education and training needed to bridge any gaps; 2) gives direction to the economic development system regarding prospect recruitment and business retention that builds on the strengths of an area's workforce; 3) gives direction to community colleges, training institutions and universities with respect to curriculum needs; and 4) provides guidance on plans to transition the workforce to meet the demands of emerging and high-growth occupations.<sup>v</sup>

### Challenges of skills shed analyses

A skills shed analysis is a workforce development methodology that works outside of the boundaries set by occupational groupings. While occupational groups are useful for industries characterized by a stable occupational structure and for research and policy development, they are less-so during times when the required knowledge, skills and attributes (KSAs) of an occupation are changing, when new occupations are emerging, or when there are great ranges in the proficiencies associated with a given occupation.

But, a skills-based approach presents several methodological challenges with respect to consistency, replicability, and scalability. *First*, is the issue of survey data collection. IWD operates an in-house survey research unit that is able to inexpensively conduct telephone interviews in targeted areas, however, it still is limited in its capacity to respond quickly enough to demand. Also, there are few states that operate internal survey research unit. This may make it more difficult for them to go routinely into the field for skills-focused data collection and to support state-to-state comparisons. Sampling methods and response rates have differed by population density (urban vs. rural), demography, and area culture. The issue is whether these can be made more standardized so as to improve consistency and

comparability over time and across labor market areas without sacrificing internal validity. Finally, are there other methodologies or sources, including secondary data sources, that may be used in characterizing the current KSAs of the workforce in a given labor market area? Is the American Community Survey a possible suitable source? Are the data collected from unemployed workers at state workforce offices a better source for characterizing the KSAs of the available workforce?

*Second*, disaggregating the occupational labor profile to its skills components may improve matching efficiencies, but create other problems of misalignment to occupational groupings that form the basis for reporting wages and for making occupational projections. Also, there are some occupations, notably in “green” jobs, that are so new that they fall into the “other” category. This makes the process of re-aggregating the occupational labor profile more difficult since there is nothing that is routine about the new title.

*Third*, are the knowledge, skills and attributes tied to the existing occupational profile of the labor market area the correct variables on which to focus? The skills shed strategy in force today begins with the assumption that the occupational titles in use in the area are an accurate reflection of the work that is being done in the area. This is related to another issue: whether the correct choices are being made regarding the occupations that get collapsed into families or clusters. The reason for doing so is to recognize that many occupations share a preponderance of KSAs, so it makes good sense to include all workers who seem to be alike. The problem that arises is that the groupings may not be along characteristics that are most relevant to emerging or expanding industries.

*Fourth*, employers have little disincentive to over-reach with respect to their expectations and expressions of need. It is in their interest to encourage an oversupply of well-qualified workers so as to improve choice and drive down wages – in effect, make it a buyer’s market. The occupational KSAs within O\*Net are constructed in part through third party observation and assessments. Survey data collected directly from employers are not subjected to independent validation and do not distinguish between what employers must see in their workforce vs. what they would like to see. This ambiguity on need vs. want may result in over-expenditures in training and delays in placements.

*Fifth*, knowing the gaps in KSAs between what employers want and what workers offer is a first order problem. Developing the curriculum and training programs to address these gaps present significant second order challenges. The question here is whether the information regarding these gaps is appropriate to guide training and curricula decisions and, if not, what constitutes the “right” kind of information? What are the data development and cost implications? Is relying on existing sources more cost-effective?

*Finally*, anticipating emerging industries and projecting the long-term growth value of industries experiencing rapid growth in the near term and then disaggregating the occupational demands into the appropriate skills sets are daunting challenges.

Knowing what to target and then understanding the implications of those decisions in workforce terms is more of an art than a science. A skills shed strategy is fundamentally one that is inclusive of the incumbent workforce and is, but the very nature of the target working population, more surgical in how it responds to shifting labor demand. Workforce development strategies that essentially start from scratch are relatively unburdened by the problem of meeting the precise needs of an industry: they can simply call for the mass training of new entrants to meet all possible requirements. The skills shed approach is seemingly more efficient – but, it is also more difficult to pull off.

### Request for proposals

The MI2 project is requesting proposals by multi-state teams to develop a theoretical framework and programmatic elements of replicable skills shed methodology that may be applied by states within the Midwest and that addresses the six sets of issues identified above. The winning team will be awarded up to \$20,000 to reimburse travel, meeting and technical support and as a partial offset on direct wages. The award will be made on the basis of the work plan presented by the team and proposed outline of a final report, the technical qualifications of the team, the extent to which it involves members from a diverse set of Midwestern states, and the ability to deliver a report by June 15, 2010.

*Budget.* The budget for this project is \$20,000. Pursuant to the terms of the grant funding the Midwest Innovation Initiative, indirect expenses are not allowed. All travel, meeting and other expenses are subject to the governing laws, rules and regulations of the United States and the State of Minnesota (the grant fiscal agent).

*Timeframe.* The final report in electronic portable document format (PDF) form is due to the Institute for Work and the Economy by no later than 5 p.m. CDT on June 15, 2010.

*Desired Skills.* Respondents to this proposal:

- Must have suitable experience in the labor market information
- A member or members of the respondent group must have demonstrated an expert knowledge of skills shed methodologies and analysis
- Must have a strong track record for on-time, on-budget performance and high customer satisfaction
- Must have a working knowledge of workforce development or economic development

*Questions.* Questions concerning this request for proposal should be directed to:

Peter A. Creticos, Ph.D., President  
Institute for Work and the Economy  
70 E. Lake Street, Suite 1700  
Chicago, IL 60601  
creticos [at] workandeconomy.org  
312-332-8508

*Response content.* Responses to this proposal shall include the following elements:

1. Conceptualization of the project and a strategy for addressing each of the six sets of issues described above
2. Timetable and project plan, including milestones
3. Description of existing intellectual property rights
4. Qualifications and C.V. of core members of the respondent team
5. Acknowledgement that the respondent has reviewed and is prepared to accept the standard contract for services posted on the website for the Institute for Work and the Economy.

*Term of the project.* All work must be completed on or before 5 p.m. CDT, June 15, 2010.

*Response Delivery.* All responses must be in writing in Adobe Portable Document Format (pdf) and delivered by e-mail to:

Peter A. Creticos at [creticos \[at\] workandeconomy.org](mailto:creticos@workandeconomy.org), with a copy to:  
[pacreticos \[at\] gmail.com](mailto:pacreticos@gmail.com) for back-up.

All proposals must be received by not later than 5 p.m. Central Standard Time, Friday, January 29, 2010. The burden for determining timely receipt is upon the responder. All proposals received by the due date and time will be evaluated. Late responses will be considered only if 1) no other response that is received on time is determined to fulfill the requirements of this project within the time period and budget specified by this request, and 2) no combination of respondents filing on time can fulfill the requirements of this project within the time period and budget specified by this request.

*Response Evaluation.* Responses will be evaluated on “best value”: including the geographic diversity of the respondent team, the qualifications of the members of the team, the plan and timetable for accomplishing the tasks outlined in this request, and costs considerations (the budget as outlined is the “not to exceed” amount; a proposal may be for a lesser amount). No foreign outsourcing is permitted on this project.

*Decision.* The Institute for Work and the Economy expects to make an award to a single winning respondent, however, it reserves the option to request two or more respondents to re-submit a joint proposal when the Institute determines that such a

joint proposal takes advantage of complimentary strengths in each of the proposals and provides the highest likelihood of success. A final decision will be made within one week of the deadline for receiving proposals.

*Conflicts of Interest.* Responder must provide a list of all entities with which it has relationships that create, or appear to create, a conflict of interest with the work that is contemplated in this request for proposal. The list should indicate the name of the entity, the relationship and a discussion of the conflict or appearance of a conflict.

*Disposition of Responses.* All materials submitted in response to this Request will become public record after the evaluation process is complete.

*Contractual Requirements.* A copy of the standard contract for services is available on the website of the Institute for Work and the Economy ([www.workandeconomy.org](http://www.workandeconomy.org)).

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<sup>i</sup> From the presentation: *Skillshed Analysis: Identifying the Gap*, by Paula Nissen, Bureau Chief, Regional Research & Analysis, Iowa Workforce Development, delivered on July 17, 2009 at a workshop on Innovations in Labor Market Information as part of the Midwest Innovation Initiative.

<sup>ii</sup> Ibid.

<sup>iii</sup> Ibid.

<sup>iv</sup> Ibid.

<sup>v</sup> Ibid.