Using Data to Support Rapid Response Activities

Introduction

"Rapid response" refers to action by regional, state, or federal agencies to provide comprehensive re-employment services to workers who are about to be laid off by large employer cutbacks or closings. By identifying local employment and/or economic development opportunities, relevant agencies can reduce the impact of the job losses on the workers and the community as a whole.

Rapid response actions are in part defined by federal legislation such as WARN and WIA.

- Worker Adjustment and Retraining Notification (WARN) Act: This law became effective in 1989 and requires employers to notify workers (or their representatives), state government rapid response unit, and local government sixty days in advance of a plant closing or mass layoff that will involve 50 or more full-time workers. This allows time for relevant agencies to address affected workers' needs and help them find new jobs.

- Workforce Investment Act (WIA): The Workforce Investment Act is the nation's comprehensive legislation for integrated delivery of employment services to businesses and workers. WIA requires states to form rapid response units (RRUs) that work with local workforce boards and officials. RRU activities must include:

  1. Immediate, on-site contact with local stakeholders to assess the layoff, potential ways to avert it, economic development alternatives, likely worker retraining needs, local employment opportunities, and available resources.

  2. Information for affected workers about the employment services available to them (especially unemployment insurance, local one-stop center services, and TAA / NAFTA-TAA assistance).

  3. The formation of a committee to create implementation strategies to respond to worker needs.

  4. Emergency assistance to local agencies as appropriate.

  5. Assistance to local agencies in developing a coordinated plan, which may include application for a National Emergency Grant.

  In addition, states may use WIA funds for other (related) rapid response activities as defined in 20CFR665.320.

Summary

The basic approach of using economic and labor market data for rapid response can be summarized as follows:

1. Model and verify a large event's economic impact, or "ripple effects," on the whole area's economy. This can help identify other affected industries and give state and local government information to help them determine the investment feasibility of averting the event through financial incentives and support.

2. Assess the regional and national economy to identify economic development opportunities to replace the lost jobs.

3. Profile workers by occupation and see if there are likely to be any other employers in the region who are hiring in those occupations.

4. Profile workers' knowledge and skill sets and identify potential skills-compatible occupations, or the skill gaps between current occupations and regional high-growth, high-wage occupations.

5. Identify regional post-secondary education and training opportunities.

Details: Step by Step

1. Model the total impact.

When a large business establishment closes or downsizes, many other businesses are affected by it. By using an input-output model—which represents inter-industry relationships mathematically—planners can predict these effects. For example, suppose the region faced a loss of 350 jobs in a business categorized as "NAICS 315200: Cut and sew apparel manufacturing." An analyst would input this change into a regional input-output model, and the results might show, for example, that the region will lose an additional 210 jobs as a result of the initial event. These jobs would be spread out over other industries such as retail/wholesale trade, food services, local government, real estate, hospitals and physicians' offices, construction, and so on. The model might also show the total loss in regional earnings as a result of the event (e.g., $20 million).

This gives local officials a clearer picture of the event's total impact. (They may even want to use a fiscal impact model to estimate the effects on state/local government revenues—this is the starting point for cost/benefit analysis of any intervention/incentive packages to avert the layoff.) It is advisable to supplement the model with information from the affected employer about its workers' earnings, as well as who its major suppliers are. If it has any major suppliers in the region, they are likely to be heavily impacted by the event as well, and may need early interventions to help them overcome the lost sales.

2. Assess the regional economy for other economic development options.

If the layoff/closure cannot be averted, the region must seek economic development alternatives to replace the lost jobs. Ideally, any new businesses that would be recruited would

- Be able to re-use the site vacated by the previous business.

- Be able to employ some of the workers laid off by the previous business.

- Be in an industry that complements existing regional industries.

- Be in an industry with a competitive employment outlook at the state or national level, to guard against another dislocation event in the near future.

Of course, rarely will another business be found that can fulfill all these criteria, but it is still worthwhile to conduct the research in order to find the business(es) that would make the best fit.

The first step might be to look for other businesses in the same or similar industry as the previous one; this is most feasible if the affected site is closing because of corporate-specific factors and not broader economic trends. Take our previous example, "cut and sew apparel manufacturing." For our initial research, we look at state and/or national projections for employment in this industry (national projections are from the Bureau of Labor Statistics, Office of Occupational Statistics and Employment Projections; many states produce their own statewide and sometimes regional projections). We can see that this industry employed about 220,000 workers nationwide in 2004, but is projected to employ only 80,000 in 2014—a decline of about 140,000 jobs or 64%. Clearly, this industry does not have a promising employment outlook in the U.S.; its jobs are being offshored at a rapid rate. So unless we can find a particular business in the industry that demonstrates it can beat this trend (through product differentiation, advanced technology, increased efficiency, serving a higher-end market, etc.) then it is advisable to pursue a different industry with a more promising employment outlook.

To identify industries that employ similar workers, identify the top occupations in the business that is about to close. Then use an industry-occupation matrix to see which other industries employ workers with these same occupations. For more on this topic, see step 3 below.

Finding industries that complement current regional industries can be accomplished with an input-output model. The model represents internally the purchasing relationships of various industries, as well as an estimate of how much each industry purchases or sells in the region versus outside the region. If a group of industries has a high demand for products/services from another industry, and that industry is under-represented in the region, the model can identify the gap. By listing the largest gaps, we can identify the industries that would best supply regional industries' demand (assuming it is feasible and cost-effective for those industries to locate in the region, which varies widely from industry to industry). We can then combine this list with lists using other criteria to get a better picture of the best industries to recruit.

3. Profile workers by occupation.

In addition to investigating industry and business conditions in the region in order to replace the lost jobs, we also must provide assistance to the workers who are in immediate danger of losing their jobs. In order to do this correctly, we need to gather information from them, including their current occupation title, work history, skills/knowledge/education, preference for their next job, preference of staying in the region or not, and so on.

Just knowing the workers' occupations (by SOC code) is a good starting point. Using an industry-occupation matrix, we can generate a set of industries that would be able to employ them with minimal re-training. This list would, of course, include the same industry they are currently in. Using regional, state, and national employment data, we can identify which of these industries are present and/or growing in the region or elsewhere. Once the industries are known, we can use their NAICS code to locate specific employers using a commercial database such as infoUSA or Dun & Bradstreet.

4. Profile workers by knowledge / skill sets.

We can derive an initial idea of the workers' knowledge and skills simply by knowing their occupation by SOC-O*NET code. Using data from the O*NET initiative (www.onetcenter.org), we can get an idea of the knowledge and skills in each occupation. By comparing these levels to those in other occupations, we can even get a rough idea of skills-compatible occupations that the workers could transition into with the fewest re-training requirements. Or, given a target occupation, we can estimate the skill and knowledge areas where the largest re-training gaps are likely to be.

For a more accurate and individualized profile, workers can assess themselves using O*NET categories, or take a workplace assessment test that can link into O*NET (such as ACT WorkKeys). This information can then be used to generate a list of promising occupations that they would want to transition into.

5. Identify regional post-secondary education options.

Initial research can be performed using IPEDS (http://nces.ed.gov/ipeds), supplemented by follow-up contact with relevant institutions. Planners should find out current programs available and their capacity, as well as the feasibility of implementing new programs customized to worker and/or employer needs.

Especially in situations when the affected workers will likely not be able to find jobs with similar skill requirements, they may require more extensive post-secondary education and training, so the local community/technical college becomes even more of a key player in the response effort.

Conclusion

Rapid response is a complex activity that combines workforce investment, economic development, educational instutitions, and other public and private entities. In addition, it occurs at a time when communities, workers, and employers are under great stress.

Because of this, it is important to note that data-driven approaches do have limitations and that qualitative and customized approaches may be more or less central depending on the region and the specific situation. However, while good data are not sufficient for a rapid response strategy, they provide the foundation and validation for the strategy. In addition, comprehensive data can suggest options that may not have surfaced otherwise.

References & Further Reading

ACT WorkKeys Assessment Test. http://www.act.org/workkeys/index.html.

Code of Federal Regulations, 20CFR665.300-340. http://www.gpoaccess.gov/cfr/index.html.

O*NET Center Online. www.onetcenter.org.

U.S. Bureau of Labor Statistics. www.bls.gov.

U.S. Department of Education, National Center for Education Statistics. http://nces.ed.gov.

U.S. Department of Labor, Office of Compliance Assistance Policy. "Plant Closings and Layoffs." http://www.dol.gov/compliance/topics/plant-closings-layoffs.htm.

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