



The Job Shortage

Tens of thousands of Milwaukee's adult workers cannot find work because they are part of a pool of job seekers that greatly exceeds the supply of job vacancies. Thus, large numbers of the state's low-income unemployed remain out of work not because of personal shortcomings, lack of education and training, or the remoteness of jobs, but simply because there aren't enough jobs to go around.

In short, in Milwaukee, across Wisconsin, and throughout the U.S., there is typically a job shortage.

How long have we known about the job shortage? How big is it? Do we have good data for Milwaukee as well as the nation as a whole? The answer is: Experts have known about the job shortage for decades, it's a huge problem, we now regularly collect data that lets us measure it on a national basis, and we used to measure it periodically in Milwaukee but stopped doing so in 2006.

The National Picture Prior to 2000: Limited Data—But All Confirming an Overall Job Shortage in the United States¹

On and off during the last four decades of the 20th century, national studies pointed to a national job shortage. The picture was blurry, however, because, amazingly, the federal government did not collect job vacancy data until 2000, and both the federal government and the academic community largely ignored the national job shortage question both before and since the availability of national of job vacancy information.

Although many countries regularly collect data on job vacancies, Katharine G. Abraham concluded in 1987 that “there exists no comprehensive, consistent U.S. job vacancy series” of data.² The Bureau of Labor Statistics (BLS) conducted “pilot job vacancy projects” from 1964 to 1966, and on the basis of this experience, collected vacancy information for the U.S. manufacturing sector from 1969 through 1973. After BLS discontinued this effort, the states of Minnesota and Wisconsin continued to collect vacancy data on their own for the periods 1972-81 and 1976-81, and BLS briefly revived its vacancy-data collection for the period 1979-80.³ But according to Abraham in

¹ Most of the information on the national picture is taken from David R. Riemer, *The Prisoners of Welfare: Liberating America's Poor from Unemployment and Low Wages* (Praeger, 1988), pp. 30-34. Note that the numbering of the footnote in this Appendix differs from the numbering that appears in the book itself, but the text of the footnotes is generally the same as in the book.

² Katharine G. Abraham, “Help-Wanted Advertising, Job Vacancies, and Unemployment,” *Brookings Papers on Economic Activity*, Washington, DC, 1987, p. 207. Only in 2000, when Abraham was serving as Commissioner of Labor Statistics, did the U.S. resume conducting systematic job vacancy surveys.

³ Katharine G. Abraham, “Structural/Friction vs. Deficient Demand Unemployment: Some New Evidence,” *American Economic Review* 73, No. 4 (September 1983): 709-10; and idem, “Help-Wanted Advertising” pp. 212-13.



1987, “there have in fact been no new job vacancy data collected in the United States since 1981.”⁴ Neither the federal government nor private sources collected job vacancy data until 2000.

Perhaps because of the dearth of data, only a handful of scholars appear to have paid serious attention to the ratio between jobseekers and jobs in this country. The best work has been carried out by Abraham. As a graduate student at Harvard University, she prepared a doctoral dissertation on the subject. Subsequently, as assistant professor at the Massachusetts Institute of Technology and research associate at the Brookings Institution, she synthesized her work in articles published in the academic and popular press.⁵

Abraham’s approach in her seminal article in the *American Economic Review* was a methodologically conservative one. She excluded from the unemployment rate not only so-called discouraged workers (i.e., persons convinced that no work is available and who have therefore given up active job search) but persons already attached to an employer (i.e., those on temporary layoff and those due to start a job within 30 days), and made “very generous allowances” to correct downward bias in the BLS, Minnesota, and Wisconsin job-vacancy rates she used.⁶ Nonetheless, “comparison of the two rates suggests that the number of persons seeking work has typically been much larger than the number of vacant jobs.”⁷ Abraham’s central conclusion is as unequivocal as it is disturbing:

If it could be assumed that the vacancy rate/unemployment rate relationships observed in the available survey data mirrored the vacancy rate/unemployment rate relationship prevailing in the United States over the same time period, reasonable estimates would be that there were roughly 2.5 unemployed persons for every vacant job during the middle 1960s, an average of close to 4.0 unemployed persons per vacant job during the 1970s, and an average of 5.0 or more unemployed persons for every vacant job during the latter part of the 1970s. The number of persons counted as actively seeking work is somewhat smaller than the total number of unemployed persons, so that the comparable average job seeker-to-vacancy ratios would be 15 to 20 percent smaller.⁸

In the article she wrote for the *Washington Post* in 1982, Abraham projected her estimates of unemployed persons-to-vacancy ratios backward into the 1960s and forward into the early 1980s:

⁴ Letter from Katharine G. Abraham, Research Associate, Brookings Institution, to Dan Willett, Congress For a Working America, July 14, 1987.

⁵ See Katharine G. Abraham, “Vacancies, Unemployment and Wage Growth.” H.D. dissertation, Harvard University, 1982; “Too Few Jobs,” *Washington Post*, May 25, 1982, p. A-17; “Structural/Frictional Unemployment” and “Help-wanted Advertising.”

⁶ Abraham, “Structural/Frictional Unemployment” pp. 708, 714.

⁷ *Ibid.*, pp. 708-9.

⁸ *Ibid.*, p. 722.



During the last half of the 1960s, when the unemployment rate hovered within the 3.5 percent to 4.0 percent range, the number of job openings probably came close to equalizing the number of unemployed persons. Labor markets have been less tight during the 1970s than during the latter part of the 1960s. Between 1970 and 1980, a period that included three recessions and produced an average unemployment rate above 6.0 percent, there were probably an average of four or five unemployed persons per vacant job.

Today, with the unemployment rate at 9.0 percent, the number of unemployed persons almost certainly exceeds the number of open slots. A reasonable estimate, based on the historical relationship between the unemployment rate and the job vacancy rate, is that there are currently no more than 1 million jobs vacant in all sectors of our economy; that is, the number of unemployed persons most likely exceeds the number of vacant jobs by a factor of 10 or more. Even if every available vacant job could be filled instantaneously by an unemployed person, we would have achieved only a relatively small reduction in our unemployment count.⁹

After 1982, unemployment rates declined. “My best guess, then,” Abraham indicated in 1987, “would be that, at current unemployment rates between 6.0 and 6.5 percent, there are two to three times as many unemployed people as vacant jobs.” Because the methodology she uses both somewhat underestimates the unemployment rate and is constructed to estimate vacancy rates on the high side, Abraham suggests that, if anything, the actual ratio of unemployed people to vacant jobs could be higher.”¹⁰

Abraham was, of course, not the first academician to suggest that there are many more unemployed jobseekers than available jobs. Lester Thurow had earlier sounded the same theme: “Lack of jobs has been endemic in peace-time during the past fifty years of American history....we need to face the fact that our economy and our institutions will not provide jobs for everyone who wants to work. They have never done so, and as currently structured they never will.”¹¹ Many less illustrious critics of the U.S. economy have also made the point. Not until Abraham’s careful and methodologically conservative research, however, has it been possible to demonstrate empirically and incontestably that in this country there are more unemployed looking for jobs than there are jobs to be filled.

Strangely, Abraham’s findings appear to have been largely overlooked by her fellow academicians. Her research has been equally ignored by the popular press and government policymakers. Why this is so is unclear. It may be due in part to the highly technical nature of most of her work, though she spells out her conclusions in quite plain English. It may be due in part to the journals in which her research has been published, although the *American Economic Review* is hardly an obscure periodical, and she provided an excellent summary of her

⁹ Abraham, “Too Few Jobs.”

¹⁰ Abraham, letter to Dan Willett.

¹¹ Lester C. Thurow, *The Zero-Sum Society* (New York: Penguin, 1984), p. 203. Reprint of 1980 edition.



basic finding in nothing less than the *Washington Post*. The neglect of Abraham's research is particularly puzzling because, as pointed out at the beginning of this chapter, the issue she resolves is such a crucial one: that is, whether the poor who are unemployed do not have work primarily because of laziness, inadequate education, deficit skill training, lack of transportation, discrimination, or lack of day care or health insurance, or primarily because of a shortage of jobs. Abraham's research does not entirely dispose of the issue, but it does strongly suggest that the poor who are unemployed—like others who are unemployed—are more likely than not to be unemployed because the larger group of unemployed to which they belong substantially exceeds the supply of available jobs. The direct implication of her findings is that neither changing the unemployed poor themselves by motivating them to work, nor improving their education level or giving them skills, nor reducing such barriers as inadequate transportation to work, racial and sexual discrimination, or unaffordable day care or health insurance, will do much to get them into jobs—unless, of course, nonpoor unemployed jobseekers sit idly by or current jobholders give up their positions, neither of which is likely to occur. The only way to get most of the unemployed poor into jobs (without prohibiting nonpoor jobholders from competing or displacing the incumbent jobholders), Abraham's research suggests, is to create large numbers of new jobs. In the conclusion of her article in the *American Economic Review* Abraham makes these points herself:

What does my central finding that there are typically many more unemployed persons than job openings imply for macroeconomic theory and policy? It strongly suggests that measures such as training programs or increased job service funding designed to improve the process whereby unemployed workers are matched with available jobs, while perhaps a good idea for other reasons, cannot be expected to have any dramatic effect on the aggregate unemployment rate. If, for example, there are four unemployed persons for every vacant job, the aggregate unemployment rate would be only 25 percent lower, even if every available position could be filled *instantaneously* with an unemployed individual; the unemployment rate reduction which improvements in the matching process could *in fact* be expected to produce would be considerably smaller, since one cannot realistically hope to reduce the average duration of a vacancy to anywhere near zero. In most situations, large reductions in the aggregate unemployment rate will only be achieved if more jobs can be created.¹²

In her article in the *Washington Post*, Abraham is even more direct:

The implications of these numbers for policymakers seem clear. The current situation cannot be blamed on the unemployed lacking interest in work. Gutting our social insurance programs will not lead to significant reductions in the unemployment rate. Nor is the central problem that the unemployed lack the skills required to fill available jobs, though this may explain the particular difficulties faced by certain groups. Training

¹² Abraham, "Structural Frictional Unemployment" p. 722.



programs for the hard-core unemployed may be a good idea for other reasons, but we cannot hope for them to have any substantial effect on the aggregate unemployment rate.

The real problem we face today is that there simply are not enough jobs to go around. Any policy package designed to lower the unemployment rate must recognize this important fact.¹³

In short, the poor who are unemployed—together with their nonpoor competitors—face a massive job shortage. It may not be the only reason, but it is the primary reason, why such a substantial number of poor persons, as well as the great majority of unemployed persons, cannot find work. Until we acknowledge this fact, we will have great difficulty in getting unemployed persons—both poor and nonpoor—back to work.

The National Picture Since 2000: Better Data—Again Confirming an Overall Job Shortage in the United States

Katharine Abraham became Commissioner of Labor Statistics in 1993 and served until 2001. During her last months at BLS, the agency began to systematically conduct monthly surveys of job vacancies. BLS has of course always conducted monthly surveys on the unemployed. It has thus been possible, since December 2000, to compare the number of job seekers—conservatively defined here to include the four major categories of unemployed (job losers, job leavers, reentrants, and new entrants, all of whom are 16 years and over, had no employment during the reference week, were available for work, and had made specific efforts to find employment during the four-week period ending with the reference week)¹⁴—with the number of job vacancies (or, as BLS refers to them, job openings).¹⁵

The story remains the same. **From December of 2000 through August of 2008, the number of U.S. job seekers significantly exceeded the number of U.S. job vacancies by an average of nearly 4.2 million.**¹⁶ Today, the national job shortage is over 6 million and rising. See Figure A (below).

¹³ Abraham, “Too Few Jobs.”

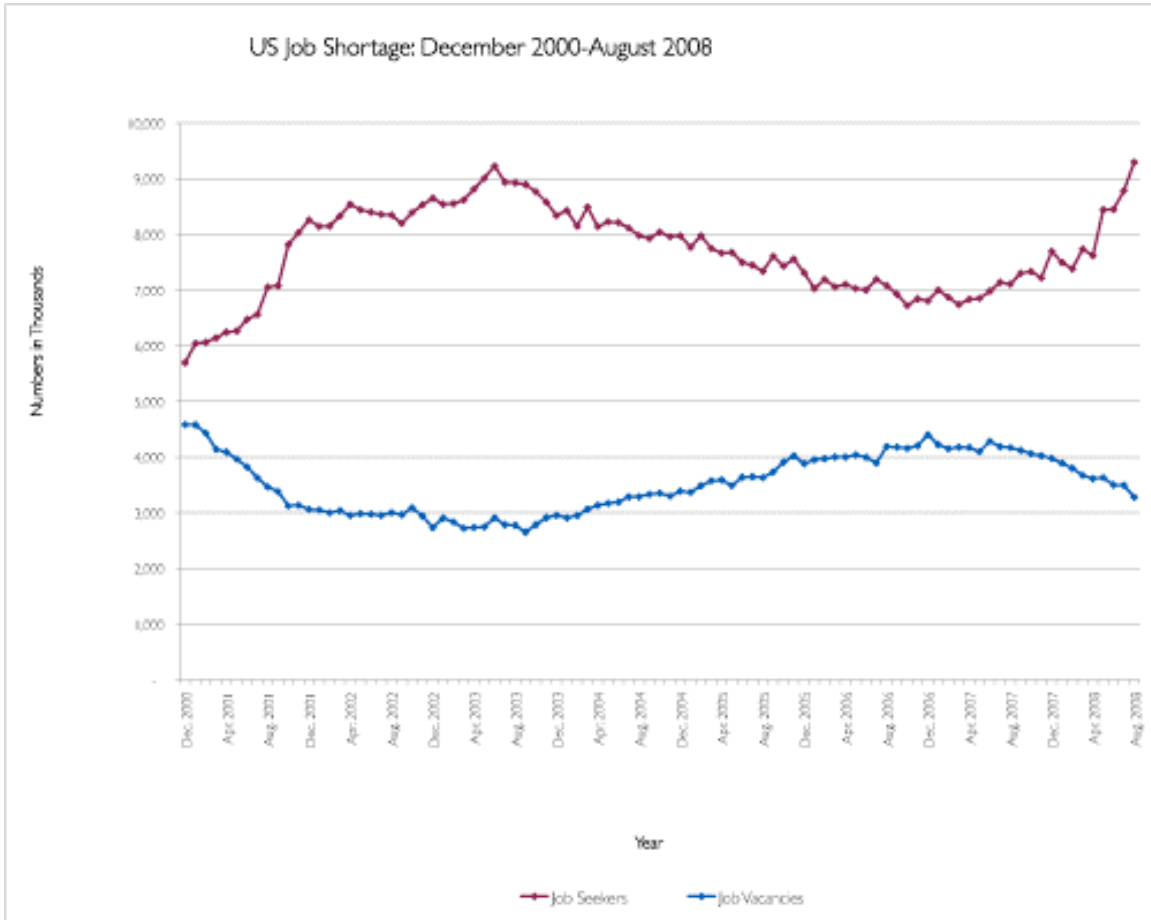
¹⁴ Bureau of Labor Statistics, US Department of Commerce, Series ID Numbers LNS13023621, LNS 13023705, LNS 13023557, and LNS 13023569. Numbers are seasonally adjusted

¹⁵ Bureau of Labor Statistics, US Department of Commerce, Series ID Number JTS00000000JOL. Numbers are seasonally adjusted.

¹⁶ Readers are again reminded that the number used for job seekers is a very conservative number, since it *excludes* all persons 16 and over who are not in the labor force but want a job now, have searched for work during the prior 12 months, and were available for working during the reference week) (which, readers are reminded, is a very conservative number, since it *excludes* all persons 16 and over who are not in the labor force but want a job now, have searched for work during the prior 12 months, and were available for working during the reference week)



Figure A





The Wisconsin Picture:

The national data, taken alone, strongly suggests that there is also a significant job shortage in Wisconsin. The overall national economy, during the last two decades in particular, roughly resembles the Wisconsin economy. It would seem reasonable to conclude that, in the Badger State, we, too, have far more job seekers than job vacancies and thus a job shortage.

Since Wisconsin is approximately 2% of the United States—roughly 2% of the US population, 2% of the nation's health care costs, etc.—it seems reasonable to conclude, as a rule of thumb, that Wisconsin also has 2% of the nation's job shortages. With the US job shortage averaging about 4.2 million since BLS began again to collect job vacancy data, this suggests that the Wisconsin job shortage between 2000 and 2008 has averaged around 83,400. With the current US job shortage (August 2008) now running at about 6 million, the current Wisconsin job shortage—using the 2% rule-of-thumb—would be about 120,340.

We need not rely solely on inference and a rule-of-thumb to estimate that, today, Wisconsin faces a job shortage of approximately 120,000. Since 1993 (over eight years *before* the BLS resumed its measurement of job vacancies on a national scale), the University of Wisconsin-Milwaukee's Employment and Training Institute (ETI) has conducted periodic surveys of job vacancies in Wisconsin's largest labor market, the metropolitan Milwaukee area. The ETI's most recent set of surveys, covering the period 2001-2006 (which overlaps the BLS data discussed earlier), indicates that the job shortage in the metropolitan Milwaukee area has averaged about 27,000. Given the ratio between Wisconsin's population and economy vs. the metro Milwaukee area's population and economy, an estimate of a 120,000 job shortage for the entire state of Wisconsin in today's troubled economy is consistent with the Milwaukee metro area having an average job shortage in the 25,000-30,000 range during the fluctuating booms and downturns of the 1993-2006 period.

The ETI surveys provide a treasure trove of information about the characteristics of the workers that Milwaukee-area employers are seeking to hire and the job openings that Milwaukee-area employers are looking to fill, i.e., educational requirements, location, wage rates, benefits, etc. For a complete set of the ETI surveys, go to the following website:

<http://www.uwm.edu/Dept/ETI/pages/surveys/jos.htm>

Since 1993, ETI has used a consistent methodology in measuring job vacancies in the metropolitan Milwaukee area. Indeed, its methodology has now been replicated in at least 15 other *local* locations in the U.S. (i.e., states, metro areas, etc.). The following extract is from the ETE website—which also contains a map showing the 15 other localities using the same approach:

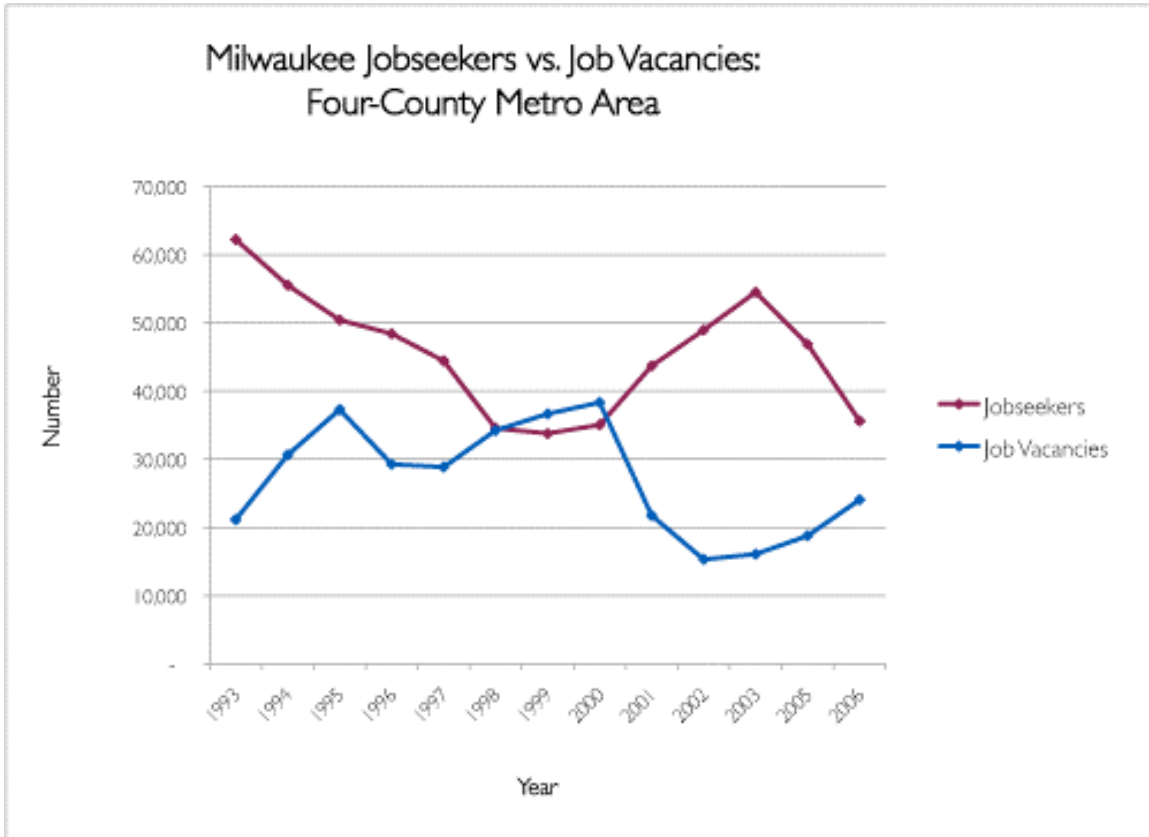


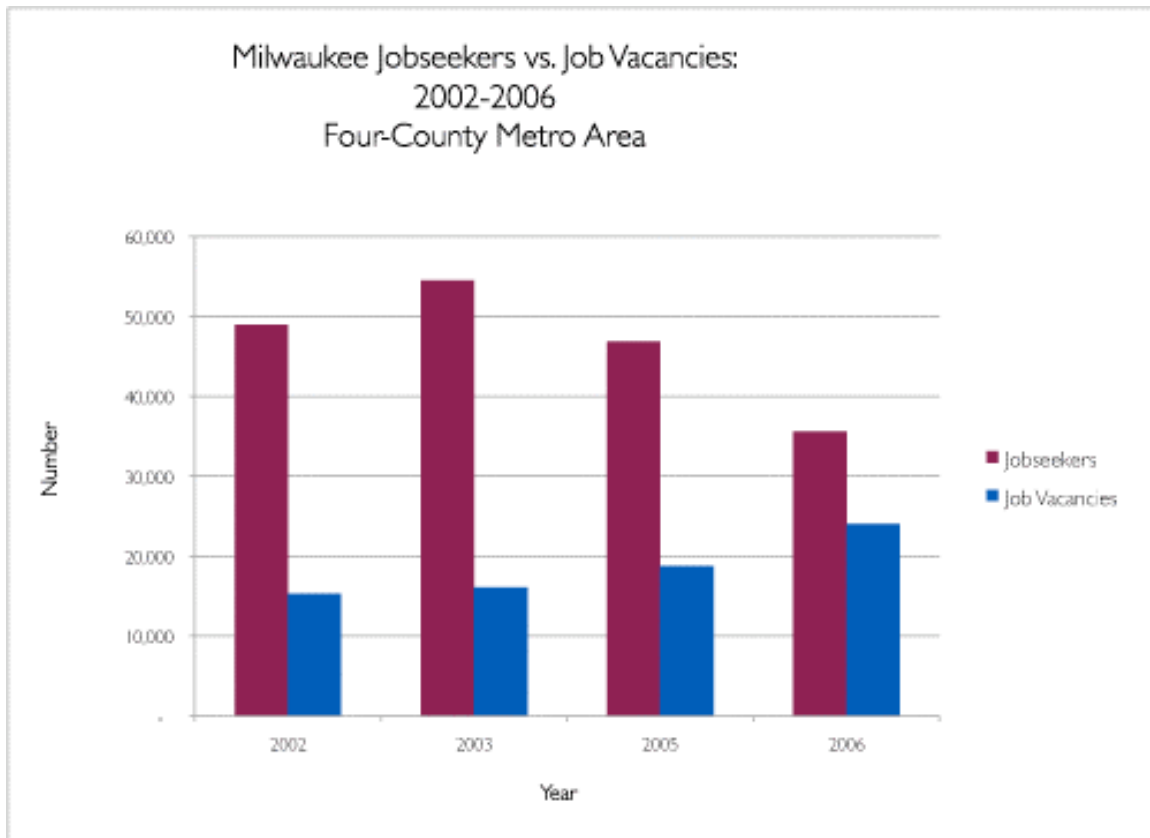
The Milwaukee job vacancy studies were initiated in 1993 at the request of the City of Milwaukee in collaboration with Milwaukee Area Technical College, the Milwaukee Public Schools, and the Private Industry Council of Milwaukee County, and with funding support from the government partners and the Helen Bader Foundation. In 2006 the survey was expanded from the four counties of the Milwaukee metropolitan area to include all seven counties of the Milwaukee Region.

The Surveys of Job Openings are based on a stratified sample of companies listed by the Wisconsin Department of Workforce Development as doing business in Milwaukee, Ozaukee, Washington, Waukesha, Racine, Kenosha and Walworth counties. In May 2006, 3,312 companies participated in the survey and 4,652 individual job title listings were analyzed for their education and training requirements. Data are collected on expected rates of pay, education and training required, jobsite location, and whether the job is considered difficult to fill. Survey results are tabulated and weighted by size and type of industry and by response rate to project the total number and type of jobs available in the metropolitan area and the region.

Job openings surveys using the UWM-ETI methodology are now used by at least 15 states, major metropolitan areas, and scores of urban and rural counties.

Each of the ETI surveys of Milwaukee area job vacancies from 1993 through 2006 (a list of dates is provided at the bottom of the website) includes some sort of comparison of job seekers vs. job vacancies for the survey year in question. Although ETI itself has not produced a formal longitudinal comparison of Milwaukee area job seekers vs. job vacancies over time, ETI has made available the complete raw data for both job seekers and job vacancies for each of the ETI surveys from 1993 through 2006. The charts on the following pages provide a visual summary—one for the entire period (1993 through 2006, with a few missing years), the other for the last four years (2002 through 2006).





Note that the BLS data presented here and the ETI data presented here are based on similar but not identical methodologies. For example, with respect to measuring the number of job seekers, the BLS data here deals only with the officially unemployed, while ETI includes not only the officially unemployed but also W-2 participants (a relatively small number beginning in 1999). BLS (in its JOLTS survey of employers) and ETI (in its survey of Milwaukee area employers) also use different techniques for measuring job vacancies. There are other differences.

But none of these methodological differences is so significant as to prevent the use of both BLS national data and ETI Milwaukee data for the purpose of reaching the broad conclusion spelled out here:

- **Both the U.S. as a whole and Wisconsin have far more job seekers than job vacancies and both are now experiencing very large job shortages.**

- **The Wisconsin job shortage can be reasonably estimated today to be in the range of 120,000, with the Milwaukee area facing an estimated job shortage of at least 35,000-40,000.**