

WISCONSIN'S WORKFORCE

THE FOUNDATION OF THE ECONOMY

Dr. Richard Gartner, Administrator, Division of Workforce Excellence,
Wisconsin Department of Workforce Development
Special Assistant to the Governor on Building Tomorrow's Workforce

UW Economic Summit
November 2000

More than ever, Wisconsin's workforce is the foundation of our economy. In the seventies and eighties this was not the case. There were more people than jobs, the workforce made a difference but it could be argued that businesses were the foundation of the economy and provided the needed fuel to fire the economy. Every time a business opened, there were long lines of people applying for a limited number of jobs. Those with the highest training and the best work record received the jobs. People upgraded their skills voluntarily. Recruitment of workers from other states and other countries was not needed. Businesses drove the economy.

Today the story is quite different. There is a shortage of workers. The workforce is the foundation of the economy. Businesses are dependent on the workforce; the limited number of available workers, their training, and the upgrading of skills. There is a competition for talent within communities, within states, between states and between developed and developing countries.

The effectiveness of solutions to the workforce shortage will determine if communities, states, and countries progress and continue to develop their economies, or if they falter and spiral into depressed states. The emerging new economy will change the way some businesses do business and react to and recruit their workforce. Building the workforce has two key components: 1) Expanding and retaining the workforce, and 2) increased productivity of the workforce.

The Governor's Think Tank Project on workforce solutions, the legislative council workforce study committee, this Economic Summit and many other initiatives studying the workforce shortage problem will all contribute to solutions. To understand the probability of success of any solution one must analyze the emerging new economy, study demographics, and then focus on solutions. That will be the three sections of this paper.

EDUCATING THE PUBLIC - THE EMERGING NEW ECONOMY

It is important to remember where we came from and where we are as well as where we are going. Our Wisconsin heritage cannot and should not be ignored. Wisconsin's heritage is a great state to work, live and play in. Work was based on agriculture, and manufacturing. The image of Wisconsin for living and playing was in the north woods, with a calm peaceful serene natural, clean environment. The state was filled with an aura of Green Bay Packers, the dairy state, cheese, beer and brats as well as excellence in education. Fish fries and the Dells with Tommy Bartlett, hunting, fishing and cabins for vacations were the attraction. Wisconsin was and is a great place to work, live and play!

Wisconsin is transitioning to the emerging New Economy. The quality of life and educational excellence remains one of the best. Everyone's talking about the New Economy and its effect but few agree on the definition, components and what it will mean for Wisconsin and the country. Wisconsin is no longer the most productive dairy state, manufacturing is changing, high tech and biotech are emerging and our economy is transitioning. The old, our valued heritage, will continue to play a key role in the economy. But the emerging New Economy will be valuable and needs to be defined.

The New Economy and its components:

- **High-tech/Bio-tech Business:** A strong focus on developing what many call “value inflow” companies. These are companies with superior economic designs which generate rapid increases in value, which helps them purchase other firms and businesses. They also spend an above-average amount of revenue on research and development and employ an above-industry average number of technology-using occupations.
- **Globalization of the economy:** Wisconsin is now in a global economy which requires creation of high-skilled jobs to remain competitive with national and international competitors.
- **Diversification:** Growing demand for new workers will bring more and more minorities and immigrants into the workforce. Wisconsin needs to embrace this trend and find ways to use it in making the state’s economy stronger.
- **Technology:** Rapidly changing workplace technology will demand that workers continually upgrade their skills to keep up with the information-based, skills-intensive ‘New Economy’ and that employers reorganize the way they do work to keep up with national and international competitors.
- **Venture capital:** Wisconsin needs to provide or leverage more venture capital funds to help entrepreneurs establish or grow ‘New Economy’ business.
- **Import/Exports:** More and more of Wisconsin’s goods and services will be competing in the international marketplace of the New Economy. More attention will have to be paid to opening new markets for Wisconsin products.

Numerous papers and great attention is given to the New Economy and what is needed in Wisconsin. Growing the economy, teaching, training, and upgrading the workforce is important but if we do not have the workers to fill the position vacated, our economy cannot advance and will decline. The greatest concern is that the public is not educated about the future needs or hasn’t accepted the reality of the declining workforce over the next five, ten and fifteen years.

EDUCATING THE PUBLIC - WORKFORCE DEMOGRAPHICS

The Past, Present and Future Workforce.

The Past.

In the past 14 years, over 42,000 companies came to Wisconsin. Forward Wisconsin actively recruited business. Over 700,000 jobs were created and the annual average salary was increased by over 12,000. The state transitioned from high unemployment to very low unemployment. The state’s economy is strong. Wisconsin is a good place to work, live and play!

Now there is a workforce shortage. A review of the employment data shows that in the seventies and eighties higher levels of unemployment existed. There was an over supply of workers. Now,

and into the future, Wisconsin and the United States will have an under supply of workers. Knowing what caused this change and analysis of trends is required to evaluate solutions.

The next section was prepared and written by Terry Ludeman of the Labor Market Information Section of the Department of Workforce Development, Division of Workforce Excellence

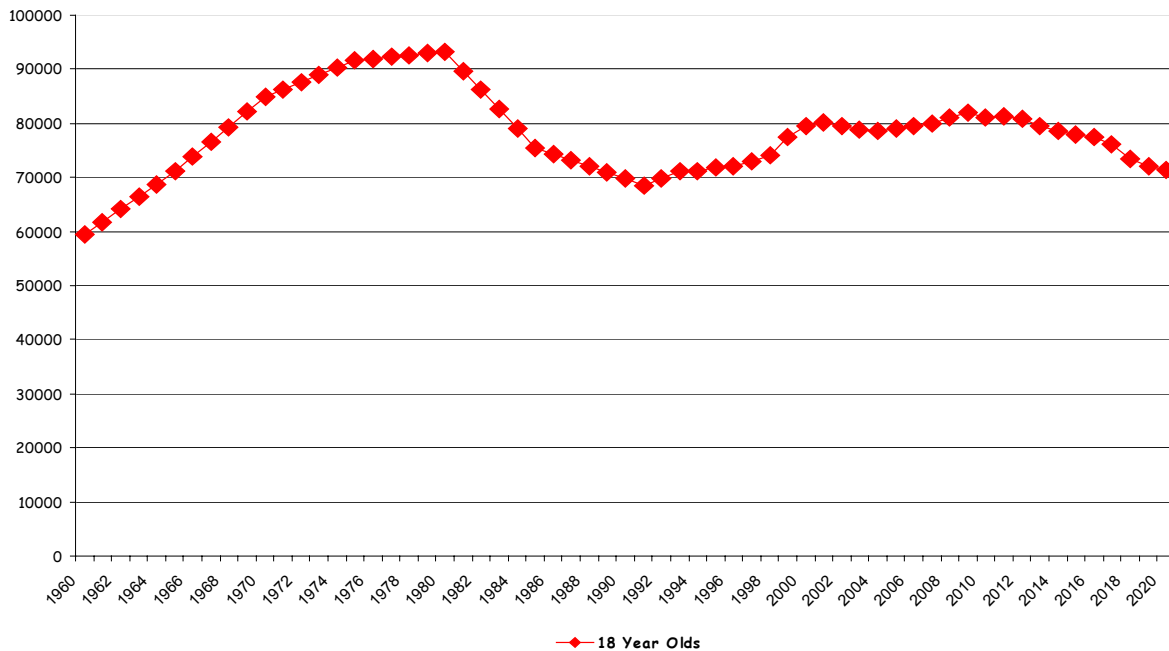
Wisconsin's Workforce

It is impossible to look at Wisconsin's workforce over the past, present, and future without realizing that the dominant issue in labor market behavior is the supply of workers.

From 1975 through 1987, the Wisconsin workforce was characterized by higher unemployment rates. The average monthly unemployment rate for that thirteen-year period was 6.9 percent, reaching a high of 10.7 percent in 1982. The period from 1988 through 2000, also a thirteen-year period, had an average monthly unemployment rate of 4.2 percent, dropping to an unprecedented 3.0 percent in 1999. Comparing those two thirteen-year periods reveals a substantial 39 percent decrease in unemployment rates.

The single, most important change between those two periods was a very dramatic decrease in the number of potential entrants into the labor market. From 1975 through 1987 Wisconsin averaged 85,800 annual 18-year-olds. From 1988 through 2000, the state averaged 75,500 18-year-olds. That's a 12 percent decrease in potential labor force entrants.

Number of 18 year-olds entering the Wisconsin labor force is declining

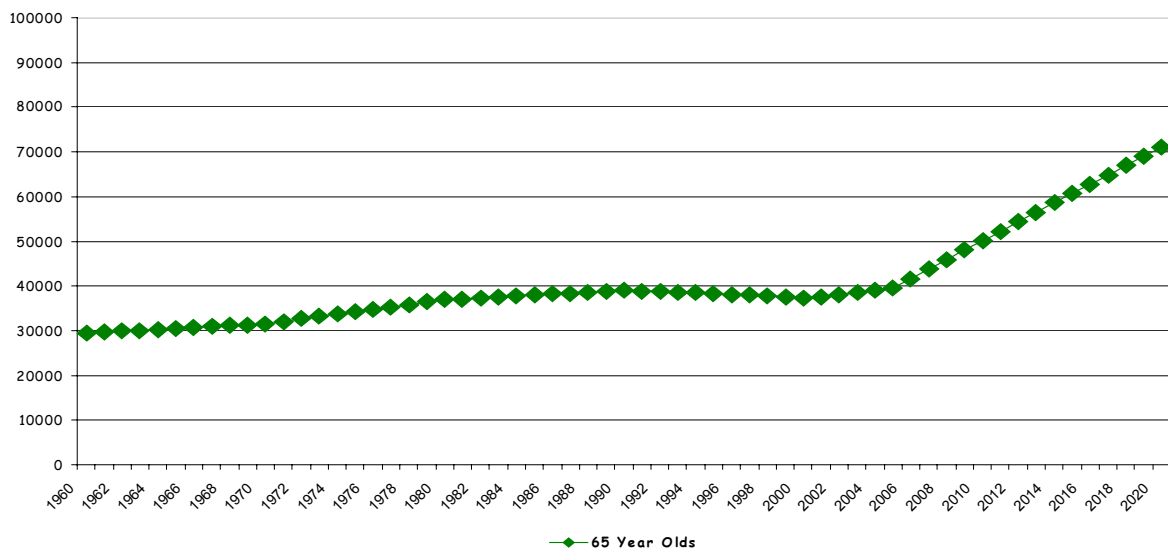


Using those same two time periods, the other significant supply issue is the number of exiters. There were an annual average 36,800 65-year-olds from 1975 through 1987. From 1988 through 2000, there have been an annual average 38,300 65-year-olds. That's a very small change, but this portion of supply will take much more analysis in the next twenty years.

There are two important labor force statistics of which we are quite certain for the future. The number of 18-year-olds in the state will show a slight increase between 2000 and 2010, but then will drop quite steeply, and the number of 65-year-olds will continue to increase. There will be an average of about 80,000 18-year-olds in Wisconsin between now and 2010. In the fifteen years after 2010, however, that number will drop to about 74,500. The number of 65-year-olds, however, will actually not begin its increase until about 2010. From a fairly flat 42,000 per year, the number of 65-year-olds will suddenly and very dramatically increase to about 70,000 in 2015 and 80,000 after 2020.

There are really two sides of the labor shortage. There is a demand side and, of course, there is a supply side. The demand side issues are important, but most of any discussion of labor shortage must concentrate on the supply side issues. Why? **IT'S A SUPPLY PROBLEM.** Even part of the demand side issue is a supply problem.

Annual number of Wisconsin workers reaching retirement age is increasing



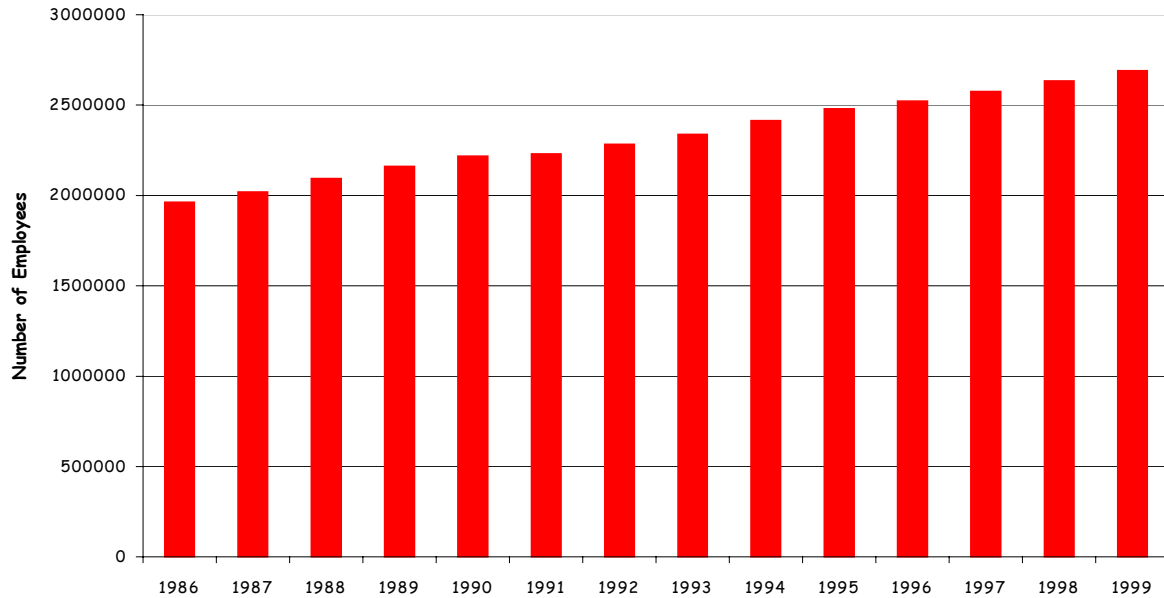
DEMAND ISSUES:

A Strong Economy

In a discussion of the demand side, three items are particularly important. The first item is that Wisconsin is enjoying a very strong economy. One of the primary reasons the economy continues to be so strong is that consumer confidence continues to be strong. The job market is very strong and the consumer's confidence is strongly tied to the job outlook. In spite of some

large layoffs, the turn-around time for people to find new jobs is very short. Many businesses up and down Main Street have “help-wanted signs” in their windows. The signs alone add considerably to the confidence of the consumer.

Employment in Wisconsin has continued to grow

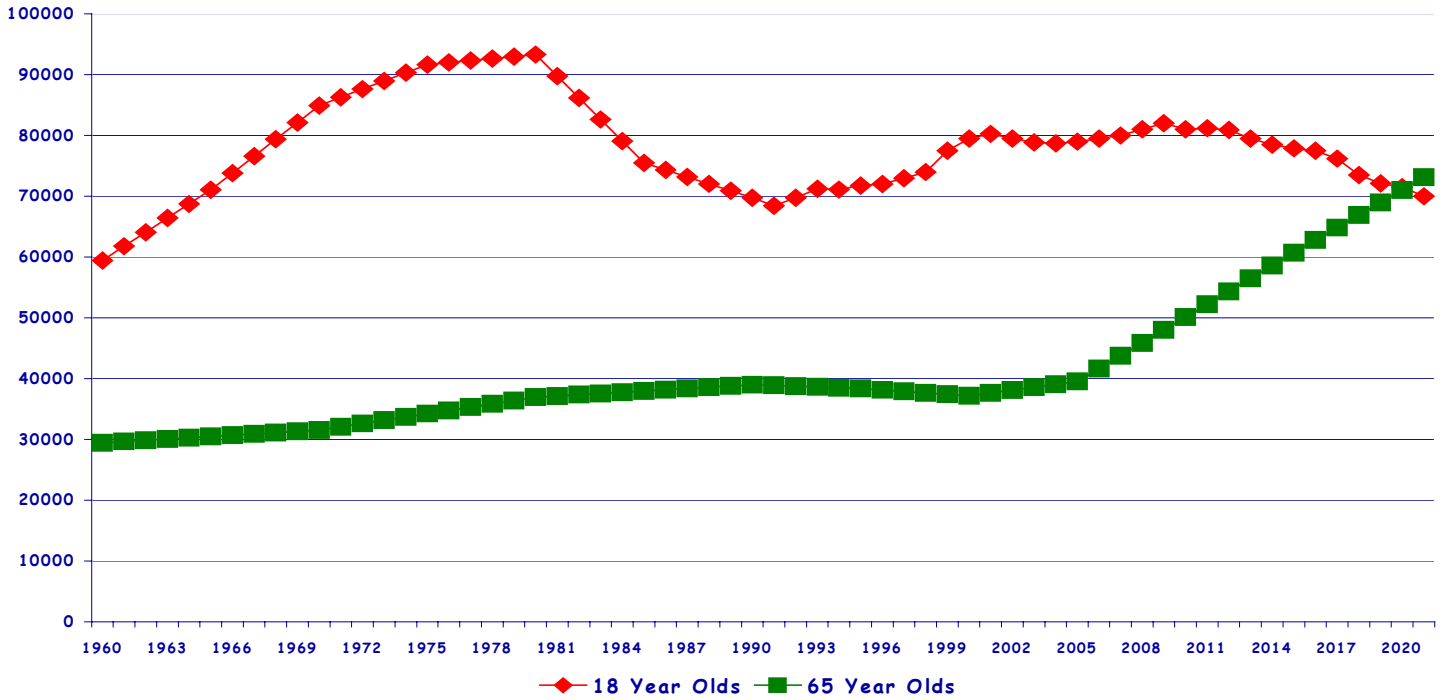


Worker Retirements are Increasing

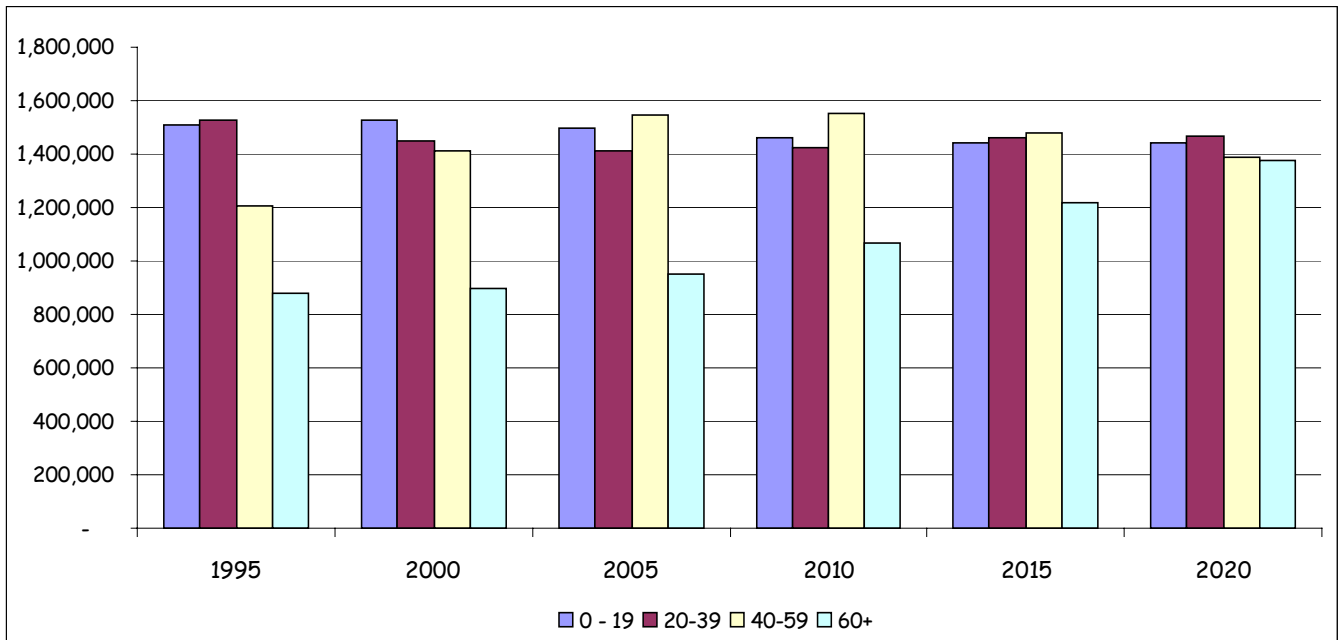
The second item in the demand side of the workforce equation is the increasing demand for workers brought about by an increase in retirements. Presently, there are some 900,000 people in Wisconsin 60-years-old and older. By 2020, that group will increase to about 1,400,000. That’s a very short twenty-year period. That translates into an average annual retirement number of about 55,000 per year between now and 2020. Right now, the number would be about 38,000 per year, but beginning in 2017, that number will be about 72,000 per year, and it will grow.

Thus, between now and the year 2020, demand for entry level workers is likely to be anywhere from 85,000 to 110,000 per year.

Those leaving the Wisconsin workforce will exceed new entrants within 20 years



The number of people age 60 and older is increasing,
the number of working age people is steady or declining



	1995	2000	2005	2010	2015	2020
0 - 19	1,510,470	1,529,034	1,496,802	1,462,932	1,440,485	1,443,687
20-39	1,529,972	1,447,945	1,411,886	1,426,524	1,463,518	1,466,313
40-59	1,207,427	1,412,455	1,547,681	1,554,104	1,481,487	1,388,427
60+	877,102	898,391	952,167	1,068,743	1,218,018	1,378,366

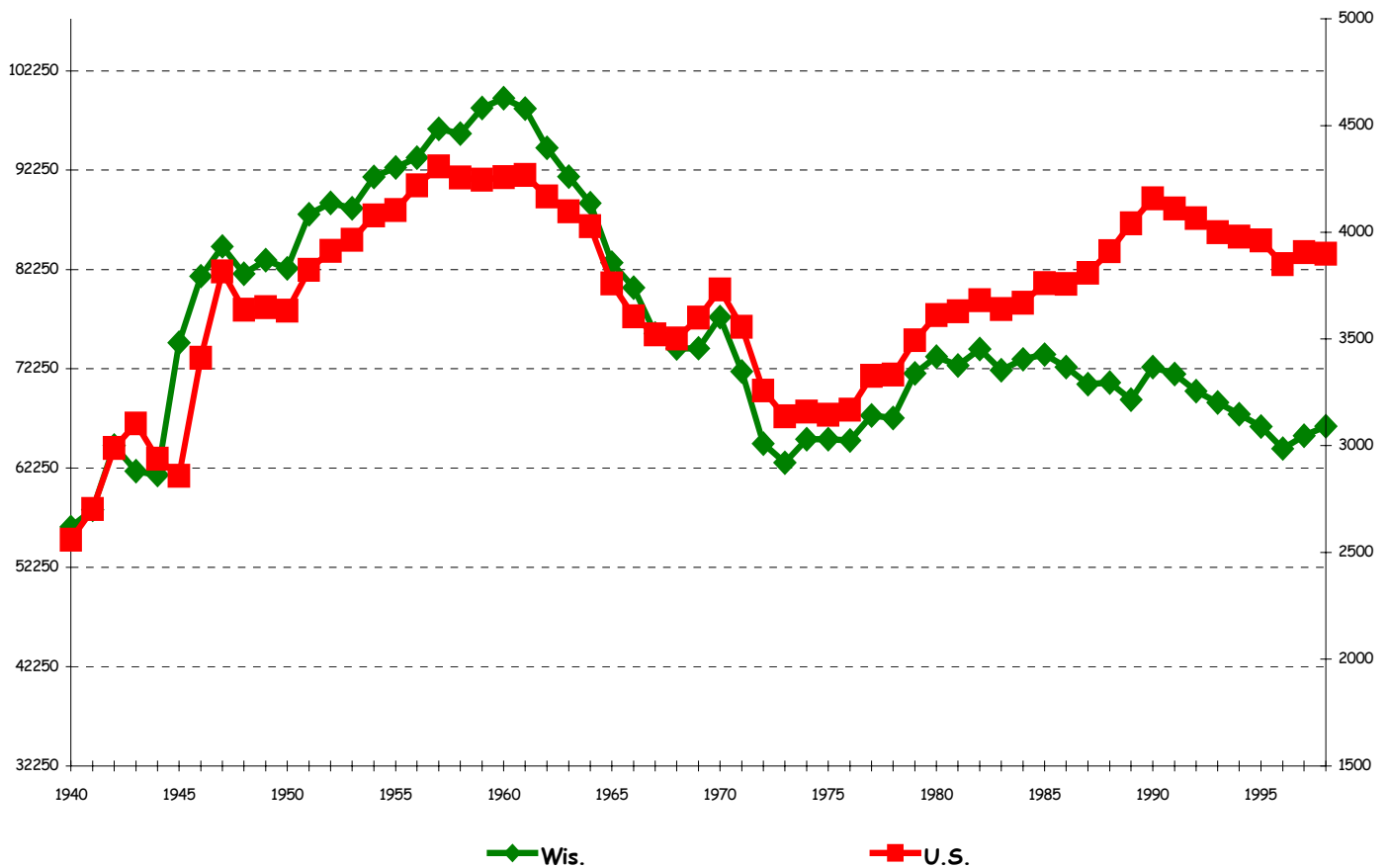
SUPPLY SIDE ISSUES:

There are two great issues facing Wisconsin regarding the supply of workers.

Low Number of Births

The first has to do with a tremendous change in the annual number of births. From 1946 to 1965, Wisconsin experienced 90,100 births per year. In the time span from 1965 through 2000, Wisconsin has averaged 70,200 births per year. That is a 22 percent decrease. The magnitude of that change is difficult to exaggerate. Wisconsin is very much different than the United States in that change. The United States experienced an annual average of 3,982,000 births between 1946 and 1965. Since 1965, it has averaged 3,679,000 births, a fairly small eight percent decrease. The big reason for that disparity in births is based on Wisconsin's lack of diversity compared to the United States.

**Birth Rate for Wisconsin is below the US rate
The Trend is declining Birthrate**



Decrease in Availability of New Female Workers

During that same time period, another great demographic change was altering the labor force. From 1945 to 1995, the labor force participation rate for females went from approximately 25 percent to the 69 percent it is today. Females moved en masse into the labor market. Today, females make up about 48 percent of the total labor force. The problem, of course, is that females have very nearly reached their limits in labor force participation. As the female labor force participation rate approaches the male labor force participation rate, it is not likely to increase much more.

Once again, Wisconsin's change is more dramatic than the national change. Wisconsin's female labor force participation rate leads the nation. Thus, for Wisconsin, it is not likely that females increasing their labor force participation will give much relief to a very tight labor market.

In addition to these two great issues, there are several smaller issues that also need to be addressed.

Commuting losses

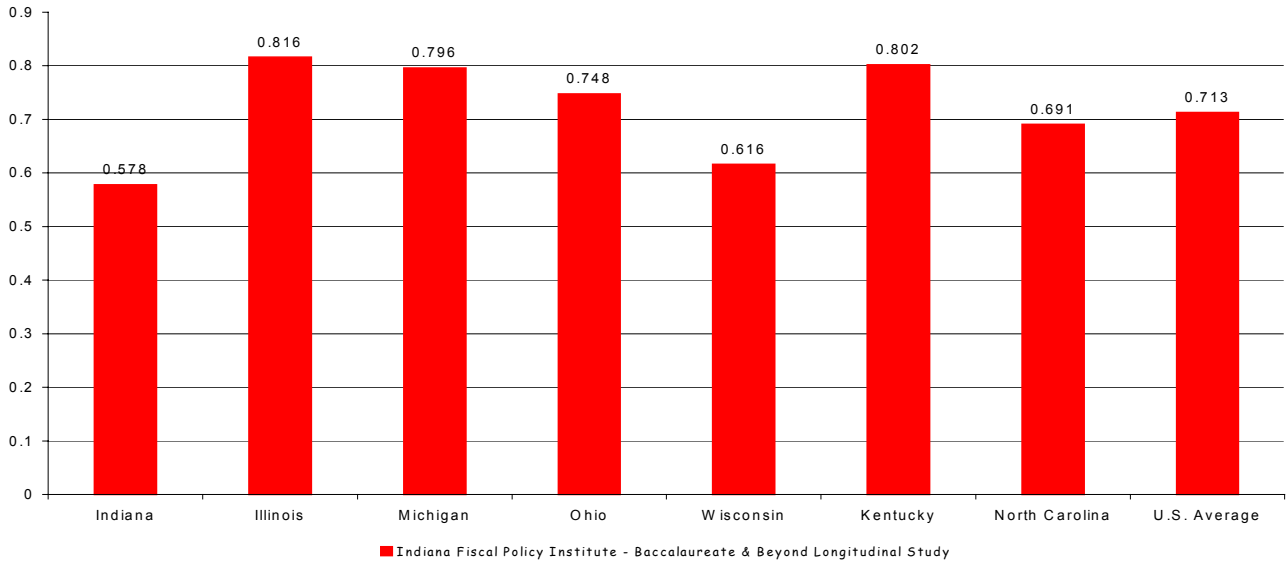
First, there are the workers commuting between states. Wisconsin is losing in the battle for commuter workers. There are some 100,000 people who travel across state lines between Wisconsin and its four neighboring states of Iowa, Illinois, Minnesota, and Michigan. Unfortunately, some 82 percent travel from their residency in Wisconsin to work in neighboring states and only 18 percent travel from their residency in those neighboring states to work in Wisconsin. The actual cause of the imbalance is open to debate, but the one irrefutable variable seems to be wages. The only state we beat in commuting – Iowa, is also the only state that we better in average wages. The other three states - Illinois, Minnesota, and Michigan - are clear winners in the commuter battle and clear winners in the wages paid to workers.

Brain Drain

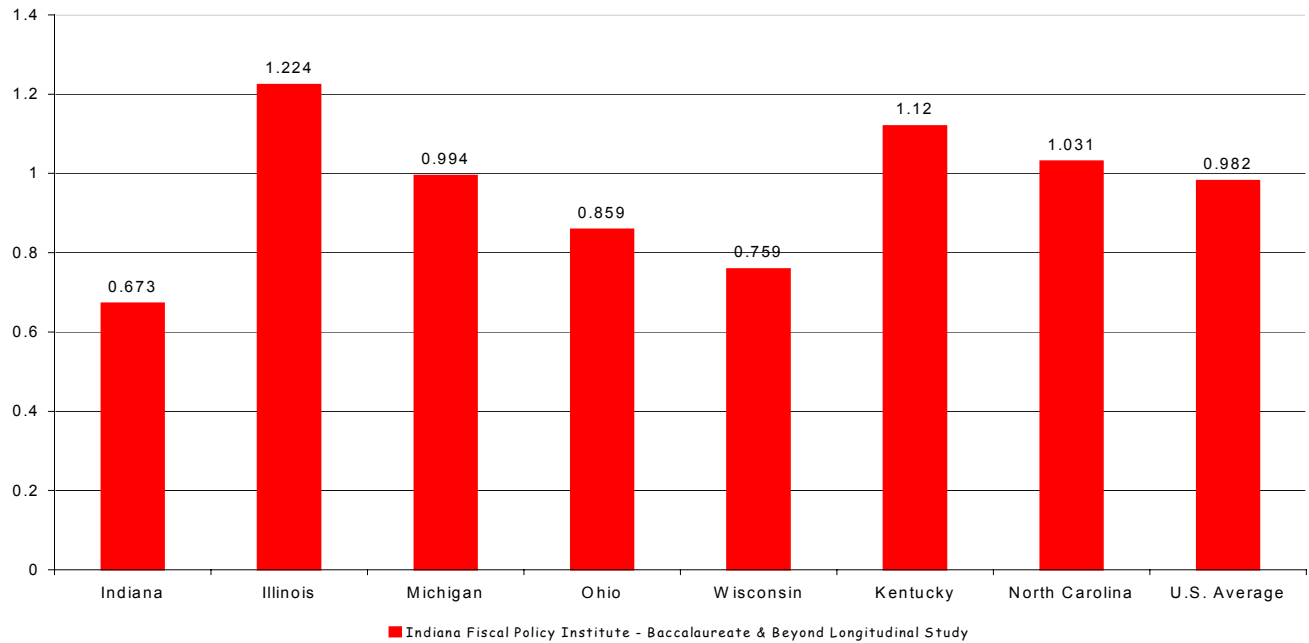
Second, there is a phenomenon called the brain drain. Wisconsin also happens to be on the negative side of the brain drain issue with our neighbor states. We send a higher percentage of our high school graduates on to four-year colleges and universities than do any of our neighbor states. But we end up behind both Minnesota and Illinois in the percentage of our 25-year-old and older population with baccalaureate degrees.

A recent Indiana study pointed out that Wisconsin is 14-percentage points behind the national figure in net migration of college graduates. Michigan and Illinois are both ahead of the national figure. The Minnesota rate was not published but the percentage of Minnesota residents with college degrees points out that they are quite probably higher than the national figure as well. A second statistic used in the Indiana report was a retention rate for college graduates. Once again, Wisconsin trailed the nation by some 9.7 percentage points. Michigan and Illinois were both reported at considerably higher than the national average.

Fewer College Graduates Move to Wisconsin Than Most Other States



Wisconsin Retains a Smaller Percentage of College Graduates Than Most Other States



Low In-Migration

A third vital statistic in the effort to gain new entrants into the labor force is the rate of in-migration versus the rate of out-migration. For Wisconsin, our net until very recently has very nearly been zero and the U.S. Census Bureau expects it to remain low. A very sizeable portion of the nation's population increase between 1975 and the year 2050 have and will continue to come from newly arriving immigrants and their offspring. In a total national increase of 130,800,000 that is anticipated between now and the year 2050, 63 percent of the total will be due to an increase in Hispanic and Asian populations. A very large part of that increase will be immigration into the United States. That 130,800,00 increase is a 48 percent gain for the United States. Wisconsin, on the other hand, is expected to gain about 899,900 residents in that same time frame, a 17 percent increase. In Wisconsin, a large part of that increase will also come from an increasing presence of Hispanic and Asian populations. But, it will be a much smaller 39 percent of our total increase, not 63 percent, as the United States will experience.

Other issues:

- A geographic mismatch in Wisconsin between where supplies of workers live and where those workers are needed;
- A lack of willingness on the part of employers to use underutilized segments of Wisconsin's population – minorities, disabled population, non-traditional workers.

Post Script

Although Wisconsin employers can and should do a much better job of utilizing the underutilized potential workers in the state, there is a limit to the number of workers that can be gained by that strategy. We could most certainly include an additional 50,000 to 75,000 additional workers by making extraordinary efforts aimed at our disabled population. We most certainly would be able to gain an additional 75,000 workers by increasing our recruiting efforts and economic development efforts in the minority communities of Beloit, Milwaukee, Racine, Madison, and elsewhere. And although this will greatly alleviate our immediate overly tight labor markets, in the long run, the Wisconsin will still be short of entrants and long on exiters.

There is one more issue that should be addressed regarding the Wisconsin labor market. There is considerable discussion among economists about the "New Economy" and in particular how the economic world of the future will be dominated and transformed by the New Economy. New Economy, seems to be a description for a process of how we will not only distribute goods and services and information, but also how we will actually create the goods and services we will distribute and consume.

That is an over-simplification. Manufacturing, as we know it today, will change. Manufacturing processes will be streamlined and computerized. But that change will not take place overnight. There will continue to be people employed in the United States who primarily perform manual work, who operate production machines, who package products bound for market, who measure and maintain tolerances in production procedures, who drive trucks and deliver products. They might use computers for some, even many of those processes, but it will not require a college degree to operate the computer aided manufacturing processes. And it will not require a college degree to operate the computer-aided design techniques. It might take technical-school training, but even in that area the length of the educational process need not be several years.

Wisconsin, with nearly 25 percent of its employment in the manufacturing industries compared to 16 percent for the country, will leave that manufacturing process behind even more slowly than the rest of the country.

In 2008, it is estimated that of the thirty largest industries in Wisconsin, six will be manufacturing industries. Eight will be retail trade industries. Technological processes may change in those industries, but they will still require workers with a minimum of training.

In summary, ***IT'S A SUPPLY PROBLEM***. Even part of the demand side issue is a supply problem.

Demand Issues:

- A Strong Economy – Job growth of 55,000 per year.
- Increased number of workers leaving the labor force – Between 40,000 and 80,000 retiring workers.

Supply Side Issues:

- Low Number of Births – Decrease of 22 percent since baby boom.
- Decrease in Availability of Females – Female participation is near maximum.
- Commuting Losses – 82,000 workers out, 19,000 in.
- Brain Drain – Behind nation and neighbor states in migration and retention of college graduates.
- Low In-Migration – Behind the country in in-migration.
- Geographic Mismatch – Young workers live in areas where minorities live, jobs are elsewhere.
- Underutilized Segments of Wisconsin's population – minorities, disabled population, non-traditional workers.

This completes the demographic analysis by Terry Ludeman.

EDUCATING THE PUBLIC - THE SOLUTIONS

Workforce shortage solutions include expanding and retaining the workforce, and increased productivity in that workforce. The workforce is the foundation for the emerging economy; it is the foundation for continued development of the economy. The workforce will determine the direction and strength of the economy. Cost benefit analysis will help determine which solutions are viable.

Expanding and Retaining the Workforce.

These solutions are symbiotic. All are important and are required to contribute to a total, multifaceted approach to workforce solutions. As was demonstrated in the demographics section, expansion of the workforce will be required. An office to recruit people to Wisconsin is needed, much like Forward Wisconsin recruits businesses. This office could also be responsible for developing the external public image of Wisconsin (branding), providing communities with diversity training opportunities, attracting workforce federal dollars, etc.

Expanding and retaining our current workforce can be accomplished by the following:

- Fuller utilization of the population (including relocation and retaining)
- In-migration (people from other states) and immigration.

There are no other realistic ways to expand the workforce. Each of the solutions presents challenges and opportunities.

Fuller utilization requires concentrating efforts on groups and in ways that have not heretofore been employed fully. The different groups have great potential but cannot meet all of the needs of the workforce even if we maximized utilization potential.

Corrections population. - About 7,000 prisoners and offenders are released each year. About 7,000 also enter the prison system every year for no net gain for the workforce. A solution is to reduce the number new people who enter prison and to minimize recidivism (return to prison). The prison system can be used in two ways -- a source of workers and a place to work.

Jobs can be taken within the walls of the prisons or programs can be developed to allow some prisoners to go out to worksites. A taskforce has been developed to study the possibilities. The objective is to transition the prisoners who will be leaving the prison system and entering into society. They should be workforce trained so that their basic survival skills are developed and they can find and keep jobs once they are released. To minimize recidivism, four key areas need to be addressed. Residence must be established, employment must support their financial needs, support systems for counseling and mentoring must be in place, and finally treatment must be available for alcohol and drug addiction.

People with disabilities represent a large population that is either underemployed or unemployed by no desire of their own. There are about 100,000 people with disabilities in Wisconsin; their unemployment rate is about 70%. Yet 80% to 90% indicate that they would like to work or work more.

Older workers will be a key group of people. It is estimated that 45% of management will be retirement age in the next 10 years. If Wisconsin can encourage, motivate, or meet the needs of this group, there is potential for 50,000 workers per year.

Wisconsin veterans serving overseas are another potential work group, if they can be convinced to return home to live and work.

Other underutilized groups include minorities, women, and pockets of unemployed in Milwaukee and other urban areas. By fully utilizing the people resources that are underutilized in Wisconsin, we can help to reduce the worker shortage, but this will make only a marginal dent in the overall problem.

In-migration - the recruitment of people from other states to Wisconsin. Retention will be a complimentary issue, since, as we are recruiting, we also are competing to keep our own people. The problem is that all states are competing for the same talent. Trends show people moving to warm climates, oceans and larger, urban areas. Wisconsin usually isn't in the top five. The Hudson Institute's response to the question, "What can Wisconsin do to compete?" Answer: "Move oceans, the sun and mountains to Wisconsin."

Short of that, what can Wisconsin do?

- Attention getting, bold moves will attract workers. Cost-benefit analysis needs to be completed. The cost not to compete may be more relevant.
- We must be bold and attention getting to compete with warm climates, mountains and oceans.
- Immigration - recruit people from other countries with college degrees or skills critically needed in Wisconsin.

Even if we have full utilization of underutilized populations and increase in-migration, Wisconsin will not have enough workers to meet the needs of businesses. An estimated 80,000 workers per year will be needed beginning in 2008. At best, we could add 5,000 prisoners, 10,000 people with disabilities, 20,000 retirees staying on the job, utilizing 5,000 unemployed from Milwaukee and other higher than average unemployment areas. This would yield 40,000 workers -- and we are still 40,000 people short per year! What about in-migration? To hold even with other states would be good, based on current demographic information. We need another solution.

The only remaining solution to build the workforce is immigration. Like smart growth we need smart immigration. We need people with bachelor's degrees and with skills in critical need areas, smart growth. How do we accomplish immigration of needed workers and transition immigrants into the existing community while maintaining their identity? How do educate the people of Wisconsin to embrace diversity and alternate approaches to meeting the workforce challenge?

These are the issues that the different workforce and economic development partners need to address. The Governor's Office of Building Tomorrow's Workforce is the lead agency trying to coordinate the state agencies and their efforts. Building Tomorrow's Workforce needs to take the next step to begin coordinating recruitment in the state, in the country and in the world to assure first class world workforce in available for the industry of today and tomorrow.

Increased Productivity

Increased productivity of the current workforce through training and upgrading of skills and application of new technology is another solution.

A cooperative effort is needed between private industry both employers and labor, the 11 regional Workforce Development Boards, the 16 regional Technical Colleges, the Work-based Learning Board, the University of Wisconsin system and the Department of Workforce Development, particularly within the Division of Workforce Excellence. The division is responsible for the labor exchange; 79 Job Centers, the Workforce Development Boards, the job service labor market information and unemployment statistics, JobNet, migrant workers, apprenticeship programs and other labor related programs.

This team needs to identify the training and upgrading educational skills that are needed and then implement programs to provide those skills. As new ideas, technology and educational delivery systems become available we need to make them available. We need to provide solutions for the needs identified by private industry and labor. These agencies are here to support the people of the state engage in a system of programs which allows them to fully participate in Wisconsin's economy.

Training the workforce is a challenge. Employers should be provided tax credits if they train the workforce. Greater cooperation is also needed from the educational community. Getting the cooperation and focusing all of the educational constituencies will be a key ingredient.

Our students need career counseling from an early age. Assessment of skills beginning at the eighth grade and relating the skill development level to probable careers could assist students in career decisions. This would provide an early and realistic consideration of future careers. Time would still be adequate to change direction if so desired.

To assure that the students are counseled for the real world, we need teachers and counselors who have work experience other than teaching or counseling. Each new teacher and counselor should be required to have real world work experience related to their teaching assignment incorporated into their improvement program. Teachers who have their teaching certification should be required to incorporate work experience into their recertification and educational training plans.

These are a few of the questions that have been raised and the framework in which solutions may be considered. This Economic Summit, the Legislative Council Workforce Study Committee, the Council on Workforce Investment and the Governor's Initiative to Build Tomorrow's Workforce are some groups working on these issues. The answers need Wisconsin team support.

The future economy of Wisconsin depends on it.