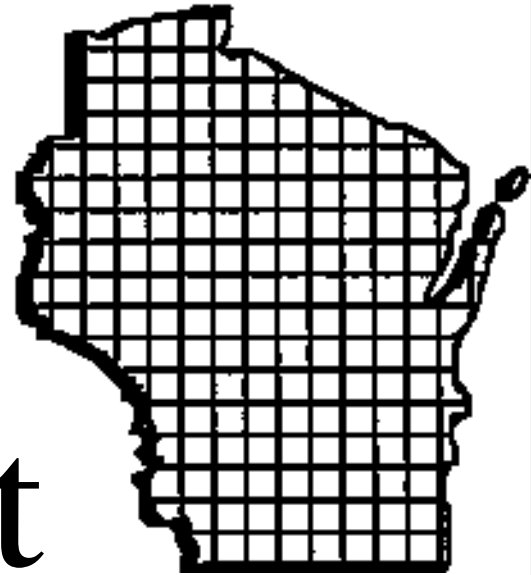


Wisconsin

Policy
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Institute
Report



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**Moving the
Milwaukee Economy
Forward**

*The Five Steps Necessary for
Success*

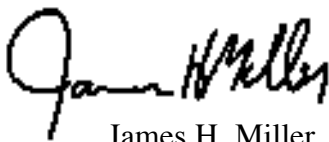
REPORT FROM THE PRESIDENT:

Economic development. It seems to be the one issue that is continually debated with very few accomplishments. WPRI decided to examine the issue of economic development in Milwaukee and its impact on Wisconsin. We strongly believe that the key to Wisconsin's future is to transform Milwaukee back to its historical position as the economic engine that drives the state of Wisconsin. Today that isn't true, but there are signs that Milwaukee is moving in the right direction.

For this study we went to two researchers with unique talents. Professor Sammis White has spent thirty years researching economic development and is considered the best academic in Wisconsin on this topic. George Lightbourn has spent twenty two years in state government including serving as Secretary of Administration to two Republican governors. Between them there are over fifty years of practical and academic experience on this very complicated issue.

This study is unfettered by the pressures of advocacy groups or ideological rhetoric. The authors identify five important steps that must be implemented for Milwaukee to develop a twenty-first century economy. Some of their findings may prove to be controversial. For example, they make a very powerful case that developing downtown Milwaukee is a must, and a centerpiece of future policies. Obviously this would mean attracting younger college graduates and businesses who would create jobs. To accomplish this they introduce a factor that is seldom discussed in the context of economic development—crime. Some will not want to consider this controversial topic, but it is simply common sense. If we want younger, successful college graduates to settle in downtown Milwaukee and have jobs created for them, everyone involved must feel safe. It is almost as important to control crime as it is to reform our K-12 educational system.

The point of this study is to detail practical solutions and guidelines that can transform Milwaukee's future. Hopefully, when people read this report, whether they agree or disagree, they will at least come away with one important conclusion. This is not a study based on rhetoric, but on factual data, interpreted by professionals. Their main goal is to influence decision makers with ideas about economic development that might actually work.



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MOVING THE MILWAUKEE ECONOMY FORWARD

The Five Steps Necessary for Success

GEORGE LIGHTBOURN
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EXECUTIVE SUMMARY

The authors of this report have studied and written about Milwaukee's economy for a number of years. In this analysis you will find encouragement from many positive steps that already have been taken by business and political leaders to rejuvenate the economy. However, the report also lays bare the deficiencies that still present challenges for the Milwaukee economy.

Milwaukee's economy is definitely moving in the right direction. However, the region needs to pick up the pace. Efforts to grow Milwaukee's economy can be likened to a foot race in which Milwaukee entered the race well behind other entrants; it is in the race, but it is still not moving as fast as other contestants. Milwaukee is behind, and each day it is falling further behind in the race toward prosperity.

There has simply not been enough action. To date, the revitalization of Milwaukee's economy has been marked by caution on a massive scale. Other urban areas have been willing to adopt an economic development strategy, lock arms, and drive through an action plan. Milwaukee has been unwilling to place a bet on a particular strategic direction.

This report applies a broad range of academic research to the Milwaukee economy. It details the bright spots on Milwaukee's economic landscape including:

- The region has been transitioning to an economic base more in line with national trends: the manufacturing portion has been declining while service industries have been increasing.
- The region's manufacturing sector might be shrinking in terms of employment, but the prospects for growth in the value of manufacturing are strong.
- After many years of contentiousness, the business and government leaders in the seven counties of Southeast Wisconsin came together in 2005 to form the regional economic development organization known as the Milwaukee 7.
- The region is home to one of the largest and most active young professional organizations in the U.S.
- More people are opting to live in downtown Milwaukee, emulating the most prosperous U.S. cities, which have thriving downtowns.

However, the region also faces some daunting challenges including:

- There are *too many under-educated people in the labor force*. This population will be unable to fill upcoming vacancies in high-end manufacturing. Rather, these people will only be able to fill low-wage, low-value jobs.
- Milwaukee has an *under-supply of college-educated workers*. One glaring deficiency is the region's inability to attract its share of graduates from the UW system.
- There is an *under-supply of college-educated immigrants* attracted to the region.
- The recent *spike in violent crimes in Milwaukee* will deter people from moving to the city.
- *A culture in which businesses fail to routinely work cooperatively* is keeping the region from maximizing its potential.
- *Milwaukee has an undersized entertainment sector*. This is working against the region, as people increasingly choose to live in cities based on the amenities offered.

Based on an assessment of the region's strengths and weaknesses, this report offers five practical recommendations for action. If the region can set aside its historical inclination to move cautiously, a concerted effort to implement these recommendations will result in a new Milwaukee, one that will one day allow Milwaukee to rejoin the ranks of America's most successful cities:

1. Increase the Flow of Capable Workers Into High-End Manufacturing.

While not the dominant factor it once was, manufacturing will continue to be a significant factor in the regional economy. With the prospect of a large number of retirements from well-paying manufacturing jobs, it will be prudent to reconnect young workers with the need for highly-skilled workers. Young workers need to understand that the type of work and remuneration offered by the region's manufacturers bear little likeness to Milwaukee's historical manu-

facturing industries. Several specific ideas are presented that would connect talent with the region's manufacturing businesses.

2. Increase the Number of High School Graduates

Milwaukee's economy will need high school graduates to fill the jobs of retiring baby boomers as well as new jobs in new industries. In addition, a larger number of high school graduates will increase the number of the city's young people going on to college, many of which will be naturally drawn back to metro Milwaukee after college. However, given the challenging state of urban education, increasing the number of high school graduates is a daunting task. It will require a commitment throughout the community to completely restructure education. Every aspect of education must be challenged including: the role of the school board, the way teachers are trained, and the expectation placed on parents.

3. Increase the Number of College Graduates

Link the Milwaukee region with UW students

Metro Milwaukee is Wisconsin's primary economic engine, and that engine is deficient in the number of college-educated workers. It seems natural that University of Wisconsin system (UW) graduates would be drawn to the Milwaukee region. A concerted, region-wide effort should be initiated to link UW students with the metro Milwaukee region. The components of such an initiative could include: scholarships, internships, advertising, and active recruitment. *FUEL Milwaukee*, the region's active group of young professionals, should play an important role in designing and implementing this initiative.

Increase the number of foreign-born, college-educated workers

While foreign-born college graduates are a prominent element in the economies of successful cities, a 2006 Census Bureau survey showed less than 1% of the college educated workers attracted to metro Milwaukee fit this description. The surest way to attract more foreign-born college graduates is to increase the number of foreign students attending Wisconsin universities. Not only do these foreign students tend to acquire majors that are critical to a knowledge-based economy, they are less likely than native-born students to return home after graduation. Somewhere between 37% and 53% of foreign-born UW graduates do not return home. This is a talent pool that could provide a critical ingredient to Milwaukee's future growth.

Attract boomerangs back to Milwaukee

While Milwaukee, and Wisconsin in general, loses college graduates to other states, recent analysis shows that, when they reach their 30s and beyond, many Wisconsin natives will return under the proper circumstances. Of those who return, 46% return within three years and almost three-quarters return within six years. Targeting these individuals soon after they leave to plant the seeds for their return would benefit the future Milwaukee economy. This contacting would also benefit by being designed and promoted by *FUEL Milwaukee*.

4. Lower the Crime Rate in Milwaukee

Unless Milwaukee is able to reduce its violent crime rate, all other economic development strategies will prove fruitless. The future economic well being of metro Milwaukee is dependent on an inflow of smart, industrious workers. They are unlikely to relocate to a city they perceive as dangerous. Two things reduce violent crime in the near-term. First is an increase in uniformed police. Milwaukee has only recently begun adding uniformed police officers, reversing a ten-year reduction in total strength. Even greater increases should be encouraged. Second, increased incarcerations lower crime rates. As state and county governments grapple with tightening budgets, it will be tempting for them to consider reducing budgets for prisons. However, for the sake of developing the economy of Wisconsin's largest economic center, any strategy that would lower incarceration rates should be discouraged.

5. Increase the Downtown Milwaukee Population

While Milwaukee has begun to see an increase in the population living downtown, on this key indicator of economic success, Milwaukee continues to lag other cities. To the city's credit, a good deal of attention has been given to developing Milwaukee's downtown. This report suggests that metro Milwaukee set a goal of attracting 2% of the metropolitan area's population to live in the downtown of the major city, resulting in a doubling of the number of people living downtown. Encapsulated in this simple strategy is an understanding that:

- A healthy region needs a healthy city core.
- City after city has discovered that a reclaimed downtown is attractive to the young, educated workers.
- A thriving downtown will generate demand for entertainment and cultural events and facilities — the mark of the new consumer city. As we have shown, metro Milwaukee is somewhat deficient in spending on consumer amenities.

SECTION 1 — INTRODUCTION

Cities never stand still. They are constantly in motion, constantly evolving. From generation-to-generation the people are different, the industries are different. The street grid might be the same, parks and public buildings might be in the same location, but everything else is undergoing slow, steady change.

So too the very definition of what it means to be a city is changing. Cities sprang up at key geographic locations and were populated by workers capable of producing tangible products to market externally. Like Milwaukee, cities prospered because they were well located and capable of producing what the world of commerce needed. Now that is changing. Today, prosperous cities have economies built on providing services and grow wealthy producing things that cannot be seen or touched. More significantly, cities are becoming places dominated not by producers, but by consumers.

This report is an analysis of Milwaukee, and, as any such analysis, it requires perspective. We will provide that perspective. How does the Milwaukee of today compare to the historical Milwaukee? How does it compare to other large cities? How does it relate to the suburban communities that have grown up in its shadow, and how does it relate to the state of Wisconsin?

More important, we will examine the factors underlying the economic success of any city; how well does each add value to the national and global market? After all, only by adding value does a city distinguish itself. Cities that add value to the economy grow and prosper.

And that is where the change in the nature of cities has been most pronounced. Modern cities that add value are marked, not so much by the products and services they sell, but by the nature of the people who live there. The relentless force that is reshaping cities across America is human capital. Those cities that have an abundance of industrious, educated citizens are prosperous. Every other city is looking for ways to elevate their own stock of human capital. Milwaukee is in this latter category.

However, Milwaukee is also a city that is making progress in adopting a new economic model. The past decade has seen a dramatic shift from manufacturing to services and technology-based industry. Biomedical now has over 1,500 employees. The financial services industry has grown several national leaders such as Fiserv and Metavante, which are linked to almost half the ATMs in the nation. Northwestern Mutual has grown to be the most respected company in its industry and has over \$1 trillion dollars of insurance in force. The Medical College of Wisconsin has become a major health researcher, generating over \$120 million annually in research. Aurora has become a huge health care system that attracts patients from outside the region. Even in manufacturing the evolution has been dramatic: Johnson Controls now has close to \$35 billion in annual sales and yet does no manufacturing in Wisconsin — it runs the entire operation and develops new products here. The Milwaukee Art Museum draws attention from across the world. Change has affected almost every industry.

But exactly where is Milwaukee in its economic cycle? Is it in decline or is it on the way up? That depends again on perspective. When measured against other large American cities, Milwaukee is in descent: it was losing population for decades (although it appears to have stabilized in the last few years), it is falling behind in per capita income, and it has been losing jobs. All of these factors have significant implications for residents of the city, the region, and the state.

Where is Milwaukee in its economic cycle? If compared to its own history, the city is making some headway, slowly adding more college-educated workers, reinventing its economy, and beginning new efforts to upgrade the training and capabilities of its workforce.

This study will examine the Milwaukee economic condition from a very broad perspective. Section 2 will examine the role that American cities play in the current economy and discuss how that role has changed in recent decades. Also in this section we will discuss what differentiates cities on the economic ladder and what the economic success of a city means to the economy of a region and state.

Section 3 will take a closer look at the Milwaukee economy and will identify what Milwaukee has done right and where it comes up short when compared to more successful cities. Of particular note is the discussion of Milwaukee's workforce. We identify examples where the potential of the existing workforce has not been maximized. Also, we specify the extent to which Milwaukee has come up short in attracting more of the better-educated workers that will fuel future economic growth.

In Section 4 we will glean from the assessment of Section 3 and include a set of tangible, practical recommendations intended to accelerate the region's economic growth. It is a set of recommendations that should look familiar to students of urban economic growth in contemporary America. It is also a set of recommendations that will test the will of those in the business community as well as those in government. How committed is the region to building on strengths and shoring up weaknesses that have hindered efforts to recapture Milwaukee's place among America's top urban centers?

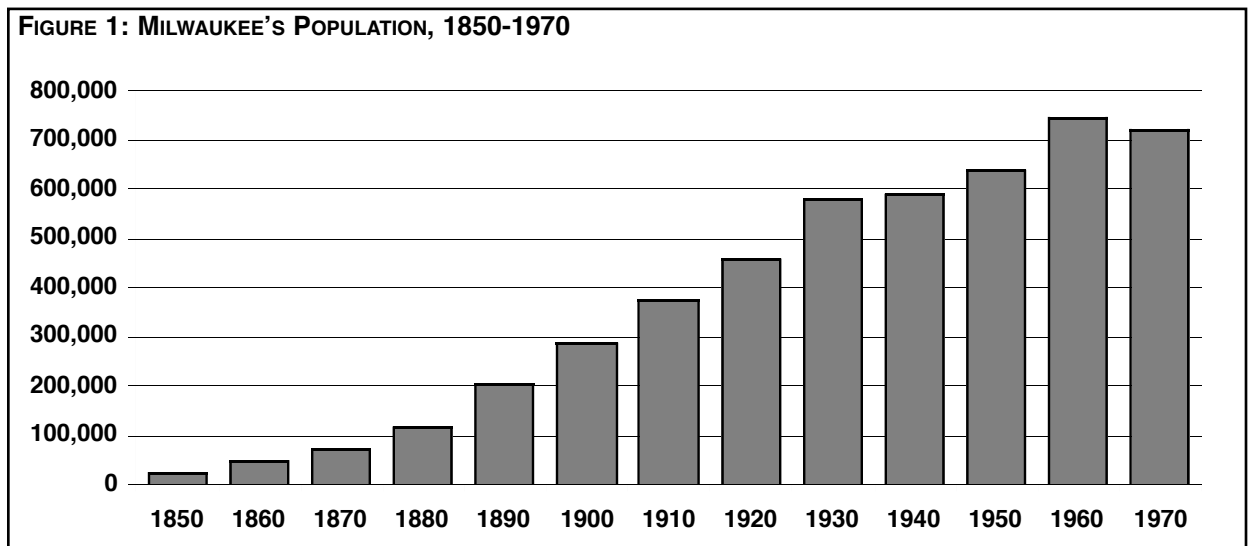
SECTION 2 — MILWAUKEE AND THE CHANGED AMERICAN CITY

No city is willing to stand pat. Every city is constantly looking to improve its economy, looking for more, higher-paying jobs. For this reason, every city has to grapple with the competing pull of two conflicting forces, history and change. On the one hand, cities understand and celebrate their own histories. Residents like the city in which they have chosen to live and are often reluctant to impassively watch unsettling modifications to the nature of their city. That is why citizens carefully oversee modifications to old buildings and why there is a sadness that surrounds the closing of a long-time business.

On the other hand, cities understand the need to update the economy, the workforce, and the very nature of the city. Every city must deal with the forces against change.

In the sweep of history, U.S. cities have sprung up, prospered, and fallen into disrepair in the relative blink of an eye. In that sense, Milwaukee is a typical American city. From its origins as a fur trading center it quickly grew, due largely to its location on Lake Michigan. In the 1830s and 1840s it attracted an immigrant population from Europe fleeing religious persecution, crop failures, and economic distress.¹ These immigrants came equipped with the skills and ingenuity needed to transition Milwaukee from its position as the leading shipper of wheat to a manufacturing center. Describing the 1860s and 1870s, historian John Gurda put it like this, "With a growing population, a growing corps of skilled workers and a growing market for finished products, Milwaukee was ready to do more than buy, sell and trade the farm products of its hinterland."²

Between 1859 and 1889 the number of manufacturers in Milwaukee mushroomed from 558 to 2,879. As Milwaukee became more successful at meeting America's increasing need for manufactured goods, the city prospered, attracting an increasing population. As has been the case throughout history, population followed money. People pulled up stakes and moved to Milwaukee from the farms and rural towns throughout the Midwest as well as from distant points on the globe. Figure 1 shows the steady growth of Milwaukee from 1850 (20,000 pop.) through 1960 (741,000 pop.). Milwaukee was an American success story. And when the confines of the city could no longer hold them, many of them expanded into the suburbs. Milwaukee's manufacturing economy was good for people, and the people were good for Milwaukee's economy.



However, in the post WWII years, as Milwaukee continued growing, the equation that yielded urban success was beginning to change. The specifics of the changes in the U.S. economy were not fully understood at the time, but it was evident that a significant transformation was underway. Anthony Orum's analysis in his book, *City-Building in America*, was that Milwaukee was victim of "a massive restructuring of the national economy" that "took manufacturing jobs away from central cities of major northern metropolises and relocated many of them either in cities of the South and West . . . or abroad, in foreign countries."³ In the 1960s and 1970s, cities began to see their population level off and then decline. In the brief period between 1960 and 1973 the city lost 42,000 jobs. The reality of the economic restructuring took hold. Between 1960 and 1990, Milwaukee lost 150,000 residents.⁴ The city also lost tens of thousands more manufacturing jobs.⁵

Milwaukee was hardly alone. Nearly every older, large city lost population in the 1970s, and few of those old-line cities regained their lost population by the end of the century. There has been a great deal of analysis of the decline of the American city in this period. Among the factors cited for the decline are:

- Cities lost the economic advantage they had enjoyed. Density, location, and the related logistical advantage had made cities efficient producers. However, the real cost of moving goods declined by 90% through the twentieth century.⁶ The need to have workers and suppliers in close proximity to factories waned.
- America became a truly mobile society. Cities saw some of their population base moving to the suburbs. In addition, businesses and workers began the migration away from the port cities of the north for the milder climates of the south.
- The service economy that had once existed primarily to support manufacturing began saturating all aspects of the U.S. economy to the point that services became the economic muscle of the U.S. economy. Compared to manufacturing, service businesses are relatively indifferent to location.⁷ Service businesses tended not to locate in the central city.
- As the service sector was on the rise, the manufacturing sector was in relative decline. Among the key factors causing the decline were less expensive labor initially in the south and then in foreign countries and the increasing efficiency of the manufacturing industry. Successful manufacturers no longer needed to employ as many workers to produce goods.

Cities differed in the extent to which they were impacted by these external forces and in the way they responded. In large part, the degree to which a city was adversely affected was in part due to geographic location (cold weather cities fared worse). However, the dominant factor that determined how well a city was able to recover from the economic blow was the nature of the population. Cities that were home to a higher proportion of skilled (educated) residents were better equipped to respond to the changing economic dynamics.

Stated differently, as the U.S. economy tilted toward services and high-end manufacturing, the ability of a city to provide the human capital needed to meet the demands of the new economy held the key to how much the city would grow or contract. Glaeser and Saiz, two economists who analyzed the changing nature of American cities, noted that having a more educated population was more significant in the recovery of declining cities than it was in the rise of warm weather cities.⁸ High levels of skilled people can accelerate a city's shift away from manufacturing and toward services. The lack of that population made the shift more difficult for cities like Milwaukee.

Glaeser and Saiz' finding supported a 2004 Wisconsin Policy Research Institute (WPRI) study authored by Steven Agostini and George Lightbourn.⁹ They examined the manner in which the fifty largest U.S. cities coped with the changing economic circumstances in the 1970–2000 period. They found a strong relationship between the percent of college graduates among a city's residents and the wealth of the city (per-capita personal income). Further, they found that the relationship between education and wealth has become stronger over time. Rich cities are becoming even richer cities.

Agostini and Lightbourn's research also documented that Milwaukee has not been standing still. The percent of Milwaukee's population holding a college degree rose from 7.4% in 1970 to 18.3% in 2000. However, even with this increase, Milwaukee lagged behind the growth of the other fifty large cities. The average city in that group saw the percent of college-educated residents rise from 8% in 1970 to 27% in 2000. Further, Milwaukee saw growth in its per-capita income (adjusted for inflation), but the growth was far less than other cities. In that thirty-year period Milwaukee per-capita incomes rose by 37%, which fell far short of the 73% growth experienced in average, large U.S. city. Thus, Milwaukee's per capita personal income ranking fell from 29th to 44th among the fifty largest cities.

The New American City

Before delving more specifically into Milwaukee's economic prospects, it might be useful to understand how the very nature and purpose of cities has changed. Cities have always served multiple purposes, including the production of goods and services, as well as being centers of consumption and entertainment. Prior to the 1970s, the production of goods and services was the principle factor drawing people to the city and gave the city its economic character. Economists now understand that that changed in the latter part of the century. Now consumption and entertainment have become a much more important draw and a significant dimension, defining the economic well-being of a city.

Richard Florida is among the widest-read authors on this topic. In his book, *The Rise of the Creative Class*, he spoke of the need for cities to be considered "cool" in order to attract the young, educated worker that will fuel a city's economy.¹⁰ His study included a ranking of cities in their ability to attract the creative class. He maintains that cities attractive to the creative class will be more prosperous. His creative class ranking does have a strong positive correlation with per capita personal income.¹¹ Whether it is causative or not is debatable, but it is true that cities with a higher creative-class ranking are more prosperous.

In a 2006 study, *Urban Resurgence and the Consumer City*, Glaeser and Gottlieb approached the same subject from a slightly different angle.¹² They noted the resurgence of a number of large cities in the 1990s was attributable to lowered crime rates. However, a significant factor discovered by Glaeser and Gottlieb was an increased value placed on the amenities that had historically been more abundant in cities. The more educated, better paid city dwellers of the 1980s and 1990s placed a premium on accessibility to theatres, restaurants, museums, bars, and sports arenas.

Richard Lloyd and Terry Nichols Clark from the University of Chicago authored a paper, *The City as an Entertainment Machine*.¹³ Their analysis demonstrates the importance placed on amenities by young professionals: "[T]hey value a city . . . because it can become a cultural center offering a diverse, sophisticated and cosmopolitan entertainment lacking elsewhere." Based in Chicago, Lloyd and Clark also write about how Chicago Mayor Richard Daley is facing a new economic reality (the entertainment economy) that never faced his father when he was mayor. Daley's strategies for "building post-industrial Chicago" are quite different from his father's public works agenda, with a new emphasis on aesthetic improvements and encouragement of neighborhood redevelopment (i.e., gentrification) through liberal use of Tax Incremental Financing.

Unfortunately, the reality for cities like Milwaukee is that economic forces will tend to widen the gap between prosperous cities and other cities. The benefit of the human capital advantage enjoyed by some cities in the 1980s and 1990s is even more significant today. Berry and Glaeser found that the number of entrepreneurs in a city is a function of the number of educated people in that city.¹⁴ Also educated entrepreneurs, those people who start and grow businesses, tend to hire more educated workers, a trend that has been increasing over time. Cities increasingly differ from one another on the basis of their human capital levels.

Agostini and Lightbourn found that to overcome the human capital deficiency facing Milwaukee, it will have to substantially increase the number of college-educated it adds to its population base every year — for at least twenty years.¹⁵

Contemporary Milwaukee

So what picture of Milwaukee emerges when viewed against this backdrop of the changing American city? It would be wrong to paint Milwaukee as either a rusting vestige of once greatness or as a city that has captured the essence of the new economy. Rather, from our review a mixed picture emerges. On one hand, Milwaukee is evolving into a city that is increasingly home to a skilled, college-educated workforce. Its manufacturing sector, while still a significant element of the city's economy, is only one-third of what it was in 1970. Further, the very nature of manufacturing in Milwaukee has changed. Manufacturing is increasingly high-end and high-tech. DRS, for example, consists largely of engineers with a few assembly workers, and the Falk Corporation that in the 1970s employed almost 3,000 workers in the Menomonee Valley is now operating with about 500 workers and is producing near-record output.

On the other hand, Milwaukee's evolution has been progressing at a slower pace than the average American city. The percent of college-educated residents significantly lags behind the average large city. And the relative lethargy

of the economy in the city of Milwaukee has acted to constrain the extent to which the region has participated in the growth of the national economy. Milwaukee, while improving, continues to fall behind its peers among large American cities.

The encouraging news is that business and political leadership in Milwaukee has made a commitment to upgrade the economy of the city and the region. This commitment is essential, since the information presented in this section shows that there is a good deal of change required. However, the key question is what will it take for Milwaukee to accelerate the pace with which it transforms its economy? Should it continue to grow and evolve at its current pace or should it aim to regain its place as an average American large city?

History tells us that urban economies do not turn on a dime. Decades are required to change the fundamental economic structure of a city, even under the best of circumstances. But an urban economy can be reconstituted. Current economic powerhouses like Austin, Charlotte, Portland, and Seattle have attained economic success because they have followed the current formula for urban success; they have significantly increased the quality and the output of their human capital. In 1980 none of these cities (all with populations under one million) resembled the city that exists today.

As the U.S. entered the decade of the 1970s, the country was undergoing a number of profound social and political changes. What was not clear at the time was that the nation was also undertaking a profound economic change. Some urban centers were better positioned than others to take advantage of the new economic reality.

Milwaukee, like nearly every large American city, saw its population decline in the 1970s. However, Milwaukee's decline was steeper than most. Whereas the average decline for the fifty largest cities was 2%, Milwaukee lost 11% of its population. It fell from 717,000 in 1970 to 636,000 in 1980. Since 1980 the other forty-nine large cities have gained an average of 130,000. Milwaukee lost another 30,000.

It is now clear that Milwaukee was not positioned well: its economy was heavily based on manufacturing, and relatively few of its residents held college degrees. Milwaukee might have been able to overcome its heavy reliance on manufacturing, as Charlotte did. In 1970 Charlotte was as heavily dependent on manufacturing as Milwaukee. (Charlotte industries mostly produced nondurable goods whereas Milwaukee produced durable goods.) Yet in 1970 Charlotte, 14% of the population held college degrees. When banking laws and economic forces proved advantageous to Charlotte, they had the beginning of a workforce to accommodate the change. By contrast, Milwaukee entered the 1970s with only 7.4% of its population holding a college degree. Again, a more-educated population not only is better at producing the goods and services of the new economy, it is able to adapt to economic swings.

A more-educated population seems to have the capacity to mitigate the impact of an economic downturn, even when the downturn directly affects a key industry. For example, in the early part of the 2000 decade, the technology industry contracted. The investment capital that had fueled the industry in the 1990s dried up. The market for technology workers softened and city leaders at the economic "hot spots" around the country such as Seattle and Austin wondered if the golden goose was out of eggs. However, those economies have rebounded nicely, in part due to the resurgence of the technology sector, but also because of the population living there. Educated people didn't queue up for unemployment insurance; they turned their attention to other inventive ways to make a living.

The average city seemed to adapt to the changing economic reality better than Milwaukee. The divergence of Milwaukee from the profile of more successful cities has been the result of the factors identified by urban economists: the market for Milwaukee products did not grow, the manufacturing sector increased its productivity yielding fewer jobs and slimmer margins, and the city has been slower than other places in the transition from a producer city to a consumer city.

Do the economics of the central city impact the prosperity of the region and the state? Or, stated differently, can a healthy regional economy overcome a mediocre central-city economy? In their 2004 study for the WPRI, Agostini and Lightbourn examined this question and discovered there are two answers relevant to Milwaukee. They noted that, since 1970 the communities surrounding Milwaukee have experienced significant growth, largely offsetting the loss of population in the central city. In addition, in 2000, the per capita income of the metro region was actually 1.8% above the average for the fifty metro areas encompassing the largest cities. However, the overall economic output of the Milwaukee metro area was significantly depressed by an unproductive core city. In the period between 1970 and 2000, due to the lack of vitality of the city of Milwaukee, metro Milwaukee's share of the U.S. economy declined by nearly 25%. In 1970 metro Milwaukee accounted for .77% of the nation's personal income. By 2000 the share had declined to .59% of total U.S. personal income.

Not surprisingly, the study also found that a healthier economy in the city of Milwaukee would have benefited all of Wisconsin. They estimated Wisconsin's per capita personal income (PCPI) in 2000 was 1.8% lower than it would have been had the Milwaukee PCPI maintained pace with that for the average large city.

We return to the unmistakable theme that the success of a city and the success of the metro area surrounding the city are largely dependent on the nature of the people who live there, the human capital. In examining Milwaukee's human capital, we note two deficiencies:

- There is a shortage of workers to supply the needs of high-end manufacturing where there is significant growth and income potential.
- Milwaukee has a shortage of college-educated residents, and it continues to fall farther behind other cities in attracting college-educated people.

The final section of this report will present a series of recommendations as to measures that should be taken to address these deficiencies. However, before we consider changes, it is necessary to take inventory of the advantages and disadvantages facing the Milwaukee economy. In this regard, we need to take stock of what Milwaukee is doing well and where Milwaukee needs improvement.

SECTION 3 — AN EVALUATION OF METRO MILWAUKEE'S STRENGTHS AND WEAKNESSES

It might be tempting to analyze the Milwaukee regional economy by focusing exclusively on the region's shortcomings. After all, the traditional focus of economic analysis is principally on market imperfections and deficiencies. However, to ignore the region's history and the context within which the economy must function would almost certainly yield findings and recommendations that are unrealistic and ill-suited to the region. Therefore, we will take a different tact here. In this section we will identify and analyze some of the positive elements of the current economy as well as the deficiencies. We will begin with the positive.

Milwaukee's Regional Economy: Things Done Right

Staffing Next Generation Manufacturing (NGM)

The Milwaukee metro area still has a strong manufacturing base. The base is not the scale it once was, but it still contributes just shy of 16% of all jobs in the area and directly and indirectly more than one-third of the income for the area economy. These figures alone make it very important to the area. In fact, it is the most important single industry still. That is a strength. It will, however, not remain a prime contributor unless it changes and changes faster than it has been.

Next Generation Manufacturing (NGM) is the term given to the evolution of manufacturing from a labor-intensive to a capital- and knowledge-intensive industrial sector. The emphasis envisioned for the Milwaukee 7 region is one of manufacturing research, engineering, design, and production center to the world. The phrases used to describe NGM are: technology-driven, innovative, lean, agile, and skilled. All must be part of the equation for manufacturing to continue to be successful here.

The prospects for net employment growth in manufacturing in the next decade are exceedingly modest. This is partially due to international competition and the loss of markets. Much more important, though, has been and will continue to be the impact of productivity increases. More can be produced by fewer workers. This trend is critical for manufacturing to remain a viable enterprise in Milwaukee, Wisconsin, or any place with higher labor prices relative to the rest of the world.

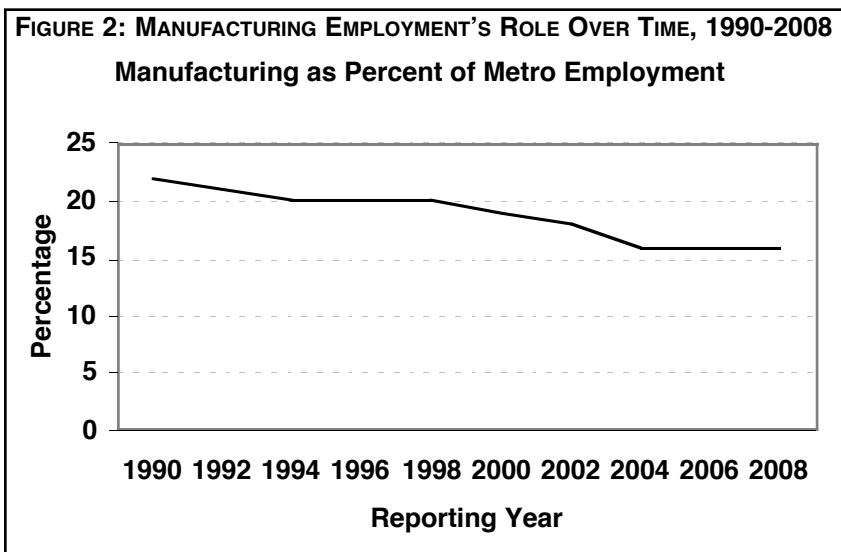
That said there will still be numerous employment opportunities in manufacturing for two other reasons. The first is that manufacturing is currently staffed by many from the baby boom generation. They will soon be retiring. That trend will grow dramatically. One local manufacturer revealed recently that he expected 85% of his staff to retire between 2009 and 2015. Other firms may not be quite as dramatic, but the impact will be large regardless. Even in manufacturing occupations that are experiencing declining employment, replacements will be needed to such a degree that workers will continue to be hired. For example, cutting, punching and press machine setters, operators, and tenders are expected to lose five net jobs per year in the metropolitan area, but some ninety replacements will be needed annually. Similarly, the metro area will need fewer electrical and electronic equipment assemblers, but will still require seventy replacements per year.¹⁶

Overall in the four-county metropolitan area, the Wisconsin Department of Workforce Development projects that between 2004 and 2014 “Production Occupations” (basically manufacturing) will grow by a total of only 3.8%. That is a mere 3,700 jobs over the decade. But there will be an estimated average of 2,720 job openings in production occupations per year over the decade, 86% of which will be replacements for individuals who permanently leave an occupation due to death, retirement, or abandonment of the labor force.

The fact that there is any net growth projected is due to the fact that there is greater realization that Milwaukee and Wisconsin can globally compete in manufacturing, if they are smart about what and how they manufacture. Despite a national recession early in the twenty-first century that cost Wisconsin and the Milwaukee 7 tens of thousands of manufacturing jobs, the value of goods produced in the state and region and the value of exports to other nations increased. For example, the value of Wisconsin exported goods rose 15% from 2003 to 2006,¹⁷ and the value of Wisconsin’s gross domestic product (GDP) grew by 25% between 2001 and 2006.¹⁸ During the 2000-2006 period, employment in the city of Milwaukee declined by 5.3%, with manufacturing losses accounting for about two-thirds of the losses.¹⁹

The increases in GDP and exports are partially attributable to the declining value of the dollar, making U.S. goods more price competitive, but it is also due to smarter businesses that have been concentrating on more sophisticated goods or better and faster services as well as better prices achieved through leaner (less wasteful) production. The net result is that manufacturing overall can compete. Yes, some firms will continue to falter, but the chances of success have been growing, especially for those that are increasingly becoming Next Generation Manufacturers.

The decline in manufacturing employment has virtually halted, starting in 2006 (see Figure 2). With churn in the labor market, in part because of increasing retirements, there are finally more job openings. As explained, the majority in manufacturing are replacements. Often, however, the replacements are not just replacement; in NGM the workers being sought need some higher skills than those they replace.



Thus, not all of these openings can be filled by those with just a high school degree. In fact, it is expected that because of greater application of technology, the education and skill levels required for NGM jobs will be rising. High-school diplomas will increasingly be a minimum entry requirement. In addition, on-the-job training (OJT) will be required, as often will be classroom education. The top two occupations with the most replacements and most job openings projected to be needed among production workers (team assemblers and inspectors and testers, sorters, samplers, and weighers) increasingly require moderate-term

OJT as well as high school diplomas. Others, like machinists, require long-term OJT and a high school degree.

The key point is that manufacturing, to be successful here, needs workers, thousands of workers annually, well into the future. Those workers are less and less likely to be hired for their brawn; they increasingly will need education and training. NGM will succeed in the city and region, if this workforce can be developed and engaged on the scale that is forecast. In the Milwaukee 7 survey of manufacturing CEOs in 2006, the number one concern expressed was the need for workers. This included both skilled and unskilled. There was great concern expressed about the looming shortages and the problems finding and keeping both. Many employers realized that their skilled workforce was especially close to retirement age and that the pipeline of replacements was very small.

The city of Milwaukee is home to about 40% of the four-county manufacturing employment. Since the city is largely served by public transportation, that is a reasonable area for which to discuss this industry. As of January 2008, the four counties had 131,200 manufacturing employees. If we estimate Milwaukee had 40% of these, then

there were about 52,500 manufacturing jobs. It also means that 40% or 1,088 production jobs are projected to be opening annually in the city.

The key point here is that more high school graduates are needed and could be employed in Milwaukee and the larger region in NGM. If this issue of city graduation rates is not much more adequately addressed, the economy and the city will both stumble and a great opportunity will be missed. That the opportunity is present is the good news. The bad news is that the city and region are struggling to produce enough individuals with interest and aptitude to meet what will be continuing needs for more manufacturing workers.

Transition of the economy

There is little question but that the Milwaukee metropolitan economy and the Milwaukee 7 economy have been “slow-growth” economies for decades. The major problems began in the 1979-83 recessions. But even in the 1970s employment growth in these geographic areas did not match the national average. Since 1990 the gap has grown even wider. The metro Milwaukee economy, the bulk of the Milwaukee 7 economy, grew just 13.2% in terms of employment between January 1990 and January 2008. That compares with 26.1% for the U.S. economy over the same period. The city of Milwaukee economy added about 4,000 jobs in the 1990s, lost about 17,000 jobs 2000-05 and finally added several thousand in 2006 and 2007.

One of the main reasons for the slow growth in the region has been slow population growth. The city’s population declined by about 20,000 persons between 1990 and the population estimated for 2005. The Milwaukee area as a whole has grown but at a pace far below that of the nation (5.4% versus the U.S. rate of 20.4%). One result is that the size of the labor force has grown slowly as well, limiting employment growth.

A second factor that has limited labor demand and subsequent supply (jobs do attract workers) has been the slow transition of the local economy from a manufacturing economy to a service economy. For example, in 1990 the Milwaukee metropolitan area had 21.9% of its employment in manufacturing. In January 2008 that figure had declined to 15.6%, as the region lost 20% of its manufacturing employment. While a dramatic reduction, the region was still far above the national average of 10% of employment in manufacturing.

Services employment in metro Milwaukee has grown from 74.6% of employment in 1990 to 80.6% in 2008 by adding over 124,000 jobs. The growth has come in such sectors as Education and Health Services (+51,000 jobs); Professional, Scientific and Technical jobs (+12,500 jobs); and Leisure and Hospitality (+13,800 jobs), to name the largest gainers. The economy is making the transition to services, but the pace of change has not matched that of the country as a whole. Table 1 reveals the distribution of employment in the metro and U.S. economies to illustrate the differences. The region need not match the U.S.; it can continue to specialize in manufacturing. But the region cannot afford to be too large an outlier because the forces leading to further downsizing in manufacturing are too strong to permanently resist.

TABLE 1 MILWAUKEE AND U.S. DISTRIBUTIONS OF EMPLOYMENT BY MAJOR INDUSTRIES, 2008

Major Industries	% Employment U.S.	% Employment Milwaukee
Construction	5.4	3.8
Manufacturing	10.0	15.6
Wholesale Trade	4.4	4.8
Retail Trade	11.2	9.7
Information	2.2	2.0
Financial Activities	6.0	6.8
Professional, Scientific & Tech	13.1	4.6
Management of Companies	NA	2.5
Education & Health Services	13.5	16.6
Leisure and Hospitality	9.9	8.2
Government	16.2	10.9

Obviously, service sector jobs are not all “knowledge” economy jobs. One only need look at Leisure and Hospitality to recognize that. But clearly Professional, Scientific and Technical and a fair portion of Education and Health Care involve those with college educations. Even Manufacturing is moving to a greater proportion of workers with at least some post-secondary education. It is the link to higher levels of education and higher-paying jobs that makes the switch to Services and NGM important to the region’s economic health. But as Table 1 illustrates, Milwaukee is far behind the rest of the nation and dropping further behind in the transition of its economy.

Commitment to regional economic growth

After many years of bickering the business and government leaders in the seven counties of Southeast Wisconsin came together in 2005 to form the regional economic development organization known as the Milwaukee 7. This effort developed because of the realization that others outside the region do not know or care about some historic accidents of municipal boundaries or names; they care about how well the market works to meet business needs. Local communities finally realized that jobs in the region benefit the region and are not worth fighting over where specifically in the region jobs are located. The issue is creating a larger pie for all to share.

The Milwaukee 7 organization has been attracting commitments of \$6.4 million dollars to fund its activities for the first five years. These dollars have largely come from local businesses that have realized the importance of cooperation on a larger scale to make the region more economically viable. Municipalities have gotten on board as well. Mayor Tom Barrett of Milwaukee is continually touting the need for a regional approach. He and others are also talking of the even larger region, the Milwaukee-Chicago megalopolis of more than 12 million persons that is recognized by the United Nations as one of the 25 largest urban areas in the world.

The seven counties in the region have signed and are honoring non-compete agreements among themselves in terms of recruiting firms. The Milwaukee 7 organization works to bring jobs to or expand employment in the region. The organization helps firms to best meet their needs, wherever in the region that might be. Numerous examples already exist where the Milwaukee 7 has worked with firms that were possibly looking to locate in the region as well as those seeking to expand and even those preparing to leave. The result to date has been a net employment gain of over 3,800 jobs for the region with expansions committed to be done here and attractions.

The region has also agreed to work together on workforce issues. It has formed the Regional Workforce Alliance (RWA) that is attempting to coordinate activities across the three workforce districts in the region. Because of this cooperation across boundaries, the RWA was able to win a \$5.1 million, three-year WIRED grant from the U.S. Department of Labor to further “transform” the workforce development system in the region. Those dollars are just beginning to be dispersed.

One of the topics that the Milwaukee 7 has begun to address is transportation. The members have realized the key role of transportation in making an economy efficient and appealing. This is a critical issue and one that is controversial. But having the larger picture of the region helps many to see that this is the scale at which such issues should be addressed. That is one of the key contributions of the formation of this organization.

A good start at revitalizing downtown

The map was mostly red. Red was the color used to denote commercial space on the 1999 map of downtown Milwaukee, and it was everywhere. Red even dominated the landscape south of the I 794 expressway, the area of the Third Ward. What was noticeably missing from that map was light brown, the color used to denote residential buildings. Downtown Milwaukee was not a place where many people lived.

For decades, cities throughout America saw people packing up and moving either to southern states or to the suburbs. Downtowns were particularly hard hit. Milwaukee typified this trend, and that 1999 map of downtown Milwaukee showed it. The 2000 Census showed that, out of the 596,000 residents in the city, only 13,829 lived in Milwaukee’s downtown.²⁰

Why is the number of residents living in the downtown important? The downtown in every large city is a complex stew of businesses — some of which have been there for decades, some of which are brand new — theatres, restaurants, bars, etc. But at the core of every city’s downtown are the people; not just the people who work downtown or who enjoy the entertainment, but the people who live there. In many ways the choice to live downtown is the ultimate commitment to a city.

Nationwide, the downtown population in a number of cities began to rebound during the 1990s.²¹ This was in stark contrast to twenty years of decline. The movement back into the downtown that began in the 1990s picked up speed, as the nation entered the new millennium. This trend was partly fueled by the general housing boom, by an

ample supply of housing options and the availability of advantageous financing. But beyond those practical considerations, people were drawn to the downtown by “cityness,” a term concocted by researchers with the Brookings Institution trying to describe the new attraction to the downtown.²² People were drawn to the closeness of amenities, the walk to work, the waterfront and the diversity that many downtowns offered.

So too Milwaukee has begun to draw residents back to the downtown, albeit a bit later than other cities. Since 2000, an additional 1,100 people have chosen to live there.²³ That estimate might be overly conservative given that, since 2000, an additional 2,435 housing units have been added in downtown Milwaukee.²⁴ Therefore, that color-coded map of downtown Milwaukee looks very different today. Where once stood underutilized commercial property, now stand hundreds of new condos and apartments. Downtown Milwaukee is joining the renaissance taking place in many central cities.

Other cities, further on in the redevelopment cycle, have shown that the attraction of residents to the downtown is of critical importance for the economic well being of the city as well as the surrounding regions. Prosperous regional economies have vibrant cities at the core, and those cities all have been able to reverse the residential trend away from the downtown. As shown in a 2004 WPRI study, there is a direct link between higher wealth in the core city and higher wealth in the entire region.²⁵ There are few surer signs of economic resurgence than the regeneration of the central city.

Further, the population moving downtown has a similar demographic profile to that which has fueled the development of downtowns in other cities: young, educated, and ethnically diverse.²⁶ This positive development has yet to show up as a positive economic effect on the broader metro Milwaukee economy. However, a continued emphasis on the attraction of residents to downtown Milwaukee will eventually pay off for the broader economy, just as it has in other cities that are ahead of Milwaukee in the redevelopment of its economy.

FUEL Milwaukee: Participation by young professionals

Given Milwaukee’s reputation as a manufacturing center, one might think that the city and region is stuck in an economic development model better suited to another era. That would be a mistake. The region is changing in many ways, one of the most important of which is the manner in which it has engaged young professionals in recasting the economy. Most often, the development of a new economic model is led by elected officials and recognized business leaders. While both of these groups are active, a key player in developing Milwaukee’s economic development plan is an active group of young professionals, the most prominent element of which is *FUEL Milwaukee* (formerly the Young Professionals of Milwaukee). Housed in the Metropolitan Milwaukee Association of Commerce and funded by corporate members, *FUEL Milwaukee* has an active constituency that finds the status quo to be anathema.

Several cities are home to organizations targeted to young professionals. *FUEL Milwaukee* is one of the largest, and perhaps the largest (there are no national statistics kept) in the country and perhaps the most active. As of 2007, *FUEL Milwaukee*’s membership stood at 4,961 and has been growing at an astonishing rate, experiencing a membership increase of twenty nine percent in the most recent year.²⁷ The membership of *FUEL Milwaukee* typifies the group of people that urban centers throughout the U.S. are trying to recruit: eighty-three percent have college degrees and seventy-seven percent have chosen to live in the most urbanized area of the region.²⁸

Whereas many young professional organizations in other cities have a purely social purpose, *FUEL Milwaukee* is anchored in the heavy lifting of redeveloping Milwaukee’s regional economy. The organization is committed to making Milwaukee a destination for Milwaukee’s world-class talent. *FUEL Milwaukee* adds a fresh, different element to the more traditional economic development effort. Richard Florida noted that members of the creative class balance several factors in deciding where to locate. “What they want today is different from what our parents wanted, and even from what many of us once thought we wanted.”²⁹

The young professionals involved with *FUEL Milwaukee* have a noticeably different set of priorities for the Milwaukee economy, including: cultural diversity, lifelong learning, a green way of life, and a vibrant entertainment sector. These values as espoused by *FUEL Milwaukee* are values found in some of the top companies in the country as described by the Great Places to Work Institute.³⁰

FUEL Milwaukee is unique, not only because of its role in shaping the economic development plans for the region — it is involved in shaping the Milwaukee 7 agenda and promoting the entire region to prospective young professionals — but also because of its businesslike approach to the task. While young professional organizations in other cities are largely social groups, *FUEL Milwaukee* has a serious, data-driven purpose. For example, *FUEL Milwaukee* has identified the Milwaukee region as being home to “the highest concentration of recognized ‘great places to work’

per capita in the country.”³¹ *FUEL Milwaukee* is leading the campaign to get more Milwaukee 7 firms to become “great places to work.” In addition, data collected from members are useful in developing a targeted approach to attracting young professionals to the metro Milwaukee region.

Milwaukee Regional Economy: Things Needing Attention

Milwaukee has a large pool of under-educated

Much has been written about the financial returns to those with college degrees. Indeed, the returns to those with degrees have been growing relative to those without college degrees. But the growing gap is due more to the decline in earnings among those without degrees, especially those without even a high school degree.³² As most are aware, several factors have contributed to the increasing difference between the two. One of the largest is the rapid diminution in the number of jobs in manufacturing, especially jobs that do not require a high school education. These once high-paying jobs have diminished in both number and wage levels. The latter has happened because of the globalization of trade and competition from several low-wage countries. The result is a much larger gap between the average earnings of those with and without college degrees.

The return to a college education has been growing slowly and intermittently over the last two decades. And the need for college-educated individuals has also been growing very slowly. The jobs that require post-secondary education credentials (associate degree or higher, not necessarily a BA/BS) are projected by the Bureau of Labor Statistics (BLS) to increase from 29% of all jobs in 2004 to 31% of all jobs in 2014.³³ This matches the very gradual increase in educational requirements experienced over the last six decades.³⁴ The communities that have attracted more college-educated workers do better as economies. But that has more to do with the concentration of activity than the overall need. The vast majority of jobs require less than a college degree. And, in fact, the majority of jobs require only a high school degree.

What do these education numbers mean for Milwaukee, a city that has less than 20% of adults with at least a BA? The numbers strongly suggest that the Milwaukee economy does not reflect the national economy. Milwaukee has not caught up with the national average. This, in turn, means that incomes will be lower, as they are. It also means, as has been argued above, that the economy will not be as vibrant. We have more than ample proof. Milwaukee must absolutely work on raising and attracting more college-educated workers.

But Milwaukee must also pay attention to those with less than college degrees. Most fundamental to raising incomes would be to increase the number of high school graduates. As of 2006, Milwaukee had 79.0% of its adults with at least a high school degree. The national average was 84.1% and the city of Madison was 94.2%. If Milwaukee were to match the national average, that would mean the city would have 17,574 more adults with a high school degree. To match Madison would require 51,848 additional high school degrees.

The average annual income for those without a high school degree was \$18,734 in 2004, the latest available. For those with a high school degree, the comparable number was \$25,995 or a difference of \$7,181. Were Milwaukee to have the national average of high school grads, there would be an increase in incomes in the city of \$126 million (\$7,181 X 17,574) annually. While very significant for those involved, this amounts to an estimated 1.3% increase in total household income in the city. But it would be a start, especially since some of those individuals could go on for some form of post-secondary education that would likely further help to increase incomes.

Another way to put this in perspective is to estimate the payoff to the city were it to be home to the national average number of individuals with college degrees and with average incomes related to having a college degree. To reach the national average, Milwaukee needs to add 25,043 more persons with a BA or BS. Such persons earn an average of \$25,182 more per year. If present, that would increase city total income by over \$630 million annually or 6.3%. The payoff is definitely greater.

How hard would it be to move Milwaukee to the national average in terms of adults with high school degrees? It would be a challenge and take many years, especially if the city relied only on increasing its high school graduation rates. The Wisconsin average high school graduation rate was 89% in 2004-05. There is considerable debate about the Milwaukee rate, but if we use the MPS stated rate of 65%, there is a large gap. (More current numbers suggest the actual rate is 46%, but the “official” rate will be used for illustration.)

If Milwaukee were to graduate 89% of its students, it would graduate an estimated 1,535 more students per year, assuming a base year graduation rate of 65% and enrollments similar to 2004-05. Were this to happen immediately and consistently, it would take 11.5 years for the city to increase the number of high school grads to the national aver-

age, assuming that all such graduates remain as citizens of the city and existing graduates do not die or leave (somewhat unreasonable assumptions). We know that MPS enrollments are declining and that the cohort that is working its way through the K-12 school system is smaller, so it is unlikely that parity can be achieved in even 12 years. This is especially true since the system has only slowly been making headway on increased graduation rates.

To look at the challenge of increasing high school graduation rates and of those graduates being able to earn higher incomes, a way to look at this is to focus on current levels of proficiency among MPS students. Two of the fields in which there is employment opportunity are manufacturing and construction (more details on this below). A skill that is increasingly needed for full participation in these industries is math proficiency. Tenth grade proficiency is preferred, but eighth grade is the minimum.

In recent MPS results, some 29% of MPS tenth graders were proficient in math compared to 70% statewide. For MPS students to match the state rate, some 2,749 more students annually would have to test at proficient or above. That is a 126% increase. Any increase in the proportion proficient would contribute to average incomes in the city.

To help paint a picture of what an increase in the number of high school graduates would do for Milwaukee, we'll list several potential outcomes that go beyond more income in the city. That income would, in turn, create more jobs, as it is spent on a variety of consumer needs. It would also bolster the housing market, as more households would have the financial resources to procure better quality housing. Having more persons with high school degrees would help meet the increasing demand for workers to replace the retiring baby-boom generation workers who are just beginning to leave the labor force. That would help keep the jobs in the city and region. On a different note, success in graduating significantly more students would not only attract more good teachers to MPS, it would also attract more outside dollars to better understand what would have been done to create the higher level of academic success.

Increasing the high school graduation rate substantially is a critical part of the equation for Milwaukee. Adding college graduates is also critical. And, as the next section will argue, adding more individuals in the middle, those with some college and possibly associate degrees, is a third essential element.

Metro Milwaukee's attraction of college-educated workers

Every top-tier American city has demonstrated an ability to attract and retain college-educated workers. Study upon study has documented the impact a college-educated population can have on an urban economy. City governments and regional alliances, while continuing to focus on attracting jobs, have begun to focus on attracting a more educated population.

A 2004 WPRI Report identified the educational profile of a city as the number one predictor of prosperity.³⁵ The study documented that the percentage of the population in Milwaukee holding a college degree (18%) is significantly lower than average for the fifty largest American cities (27%). Further, the study noted that Milwaukee had been falling further behind the average city. In order for Milwaukee to increase its per capita income level to the average of the fifty largest cities, it must add approximately 5,300 college graduates to its population every year for twenty years.

The base year for that analysis was 2000. Six years later, the U.S. Census Bureau estimated the college-educated population in Milwaukee. Whereas the WPRI study estimated Milwaukee should have added 31,800 college-educated residents in the intervening years, the Census Bureau estimate placed the addition at just 2,100. While the 2006 estimate is subject to variation due to the fact it is derived from survey data, the estimate is so far short of the goal it is clear that much work remains to be done to attract more college graduates to the city of Milwaukee.

Many cities and regions have placed a particular emphasis on recruiting young, college-educated workers. This slice of the population is extremely mobile, much more willing to relocate than their older counterparts. Further, while this young, college-educated group constitutes just seven percent of the workforce,³⁶ the positive economic benefit this group brings to local economies eclipses the size of the group. Cities that attract the young, educated workers are prosperous. For example, among large cities, Atlanta, Portland (Ore.), Denver and Seattle all rank among the leaders in attracting this population. All rank among the top ten in per capita incomes among large cities.³⁷

How mobile is this group? In a special 2003 report, the Census Bureau calculated that 75% of young, single, college-educated people relocated in the period between 1995 and 2000.³⁸ The number declines only slightly to 72% for the same population that are married. While there are few definitive, broad-based data available since that time, there is little likelihood that this population has become less mobile.

Therefore, we know that this population is good for a local economy and that it moves. However, it is important to understand the likelihood that this group of people will stay in a locale once they have relocated. It turns out that

the answer is different, depending on where the people are raised and where they attend college. Cornell University Professor Jeffery A. Goren examined the long-term prospects of a person remaining in an area. His study differentiated between people on the basis of where they were raised and where they attended college.³⁹ He discovered a substantial difference among the population of college-educated.

Goren examined the likelihood that a person would remain in a place (not a specific job) for fifteen years based on where they were raised and where they attended college. Of those that attended college in their home state, fifty-four percent were still employed in that state fifteen years later. The number slips to thirty-five percent for those who returned to their home state after attending college in another state.

However, the numbers drop dramatically for those who were raised in another state. Only eleven percent are likely to remain in a location for fifteen years, if they are working in a state where they attended college but different from the place where they grew up. Only two percent remain working in a location where they neither grew up nor attended college.

This finding is consistent with the finding from the University of Wisconsin Office of Policy Analysis and Research that eighty percent of Wisconsin residents remain in Wisconsin after receiving a Bachelor's degree.⁴⁰ Clearly, home-raised and home-educated people are more likely to stay in their home state after college. It appears that a person's mobility that is manifested in a higher education choice carries over into the workplace.

It might be tempting for economic development planners to focus exclusively on recruiting home-grown talent, knowing that they tend to sink roots and stay in a place. However, it is important to keep in mind the fact that successful cities and metro areas are those that are able to attract these latter-day nomads to live in their midst if even for just a short while. It could be that the more mobile workers are those that add considerable value to a local economy. They are in demand.

Elsewhere in this report we have described the overall need for metro Milwaukee to add to its population of college graduates. This is the basic underpinning of the mobility discussion. But how significant is the mobility issue to the future health of metro Milwaukee? How close is metro Milwaukee to where it needs to be in its ability to attract educated workers?

To help determine the importance of mobility, let's look at the city and the region in relation to other places. In this section we will compare Milwaukee to five other cities and their surrounding metro areas. Two — Chicago and Minneapolis/St. Paul — are Midwestern cities that have better adapted to the new economy. They represent two examples of where Milwaukee is heading. We have also included Detroit, a city and region that epitomize the old economy. Finally, we have included Austin and Seattle, two cities and regions that exemplify the new economy. Comparing Milwaukee to this group is not intended to statistically show where Milwaukee should be in attracting educated workers. Rather, this information provides a reasonable yardstick to measure how important it is for Milwaukee to attract college-educated residents.

In 2006 it is estimated that 29.4% of metro Milwaukee's residents hold a college degree.⁴¹ This exceeds the national average of twenty-seven percent. It is not surprising that metro Milwaukee is above the national average, since the college-educated population is disproportionately represented in urban settings. Table 2 shows metro

TABLE 2 PERCENT OF POPULATION HOLDING COLLEGE DEGREE 2006 U.S. CENSUS BUREAU

City/Metro	Metro Percent College	City Percent College	Metro/City Difference
Milwaukee	29.4%	19.7%	-9.7
Chicago	31.6%	29.4%	-2.2
Minn./St. Paul	36.3%	40.4%	4.1
Detroit	26.3%	11.3%	-15.0
Austin	38.3%	42.9%	4.6
Seattle	36.1%	53.4%	17.3

Source: U.S. Census Bureau, 2006 American Community Survey

Milwaukee is slightly behind metro Chicago and somewhat further behind metro Minneapolis. Each of these Midwest metro areas is well behind the economic superstars of metro Austin and metro Seattle.

The picture is different when looking at the percent of college-educated people living in the central city. Here we see that Milwaukee is significantly behind other cities. In Milwaukee, like Detroit, the share of the population with college degrees is significantly lower than it is for the metro area as a whole. In Chicago a negative gap exists between metro and city, but the gap is smaller. In all three of these metro areas, the college-educated population is underrepresented in the central city. The other cities in our sample have college-educated populations well above the overall metro areas. This seems to be the new economic model in which college-educated people are increasingly choosing to locate in central cities.

One possible interpretation of these data is that the economic boost provided by a college-educated population, while not exclusively a city phenomenon, is in the city where the principle benefits have accrued. For metro Milwaukee to emulate other successful metro areas, it is essential to significantly increase the college-educated population in the city of Milwaukee. The Metropolitan Studies Program with Brookings Institution has noted the importance of having a vibrant workforce living in the central city. Their research has shown that, “the physical clustering of talented people is critical for economic growth.”⁴²

So what is the migratory pull of metro Milwaukee? How well does it attract college-educated people from other areas of Wisconsin, from other states and from foreign countries? In 2006, the Census Bureau’s American Community Survey asked college graduates where they lived in the previous year.⁴³ The results showed that 5.5% of metro Milwaukee’s college-educated population relocated from other areas of Wisconsin (Table 3). (This is approximately 16,000 people who relocated to metro Milwaukee.) This is not notably different from other metro areas we examined with the exception of Austin, which drew 9.2% of its college-educated population from other Texas communities during the previous year.

TABLE 3 GEOGRAPHIC MOBILITY IN 2006 PERCENT COLLEGE EDUCATED MOVING INTO REGION LAST YEAR

Metro Area	Moved From Same State	Moved From Different State	Moved From Different County/Abroad
Milwaukee	5.5%	4.9%	.7%
Chicago	4.7%	4.9%	1.4%
Minn./St.P	6.4%	5.1%	1.2%
Detroit	4.7%	2.6%	1.8%
Austin	9.2%	10.3%	2.6%
Seattle	4.1%	9.2%	2.5%

Source: U.S. Census Bureau, 2006 American Community Survey

In addition, the survey found that 4.9% of metro Milwaukee’s college-educated population relocated from out-of-state in the previous year. (This is approximately 14,000 people.) This attraction rate is very similar to the inter-state draw of both metro Chicago and metro Minneapolis, and well ahead of metro Detroit. Of course, it is well behind the draw of Seattle and Austin, which drew 9.2% and 10.3% of their college graduate population from other states. This shows the foundation of these two economies is the ability to attract talent from beyond the borders of the state.

The survey data did reveal one weakness of metro Milwaukee, the ability to attract college-educated workers from other countries. Only .7% of metro Milwaukee’s college-educated population moved from abroad. This is approximately one half of the attraction rate of Chicago (1.4%) and Minneapolis (1.2%) and less than 1/3 of the attraction rate of Austin and Seattle. Metro Milwaukee’s attraction rate for foreign college graduates even lagged Detroit (1.8%). Further, the deficiency of college-educated, foreign-born extends beyond metro Milwaukee. In 2000, fully 13% of college graduates in the U.S. labor force were foreign born.⁴⁴ Forty-four percent of that population were Asian and more likely to be found working in science, engineering or computer-related occupations. As is the case with the young, single, and college-educated, this is a population that has fueled significant economic growth in many metro areas.

The above analysis applied to college-educated workers across all age cohorts. But how well does metro Milwaukee do in attracting the subset for which seemingly every city competes, the young, single, college-educated? To answer this question, the Census Bureau issued a special report in 2003. The 2000 census data used in the report are a bit dated, but they do provide a unique insight into metro Milwaukee's ability to draw young, single college-educated residents. The results are shown in Table 4.

TABLE 4 MIGRATION OF YOUNG, SINGLE COLLEGE EDUCATED PEOPLE 1995-2000

Metro Area	Percent from Outside Area	Rate of Net Migration*
Milwaukee	31.0%	15.6
Chicago	29.6%	73.1
Minneapolis	33%	123.5
Detroit	28.2%	-10.2
Seattle	40.9%	44.1

* Net Migration is the difference between immigration and outmigration.

Source: U.S. Census Bureau, Migration for Young, Single and College Educated for the United States 2000

The data in this table show the percent of the young, single, college-educated population that migrated from outside of the area. It shows that 31% of this group in metro Milwaukee came from beyond metro Milwaukee. This rate is not dissimilar from the attraction rate found in the metro areas of Chicago, Minneapolis and Detroit, and it is well below the outside migration rate for Austin and Seattle.

Equally interesting are the data in the last column of Table 4. That column includes the net migration rate of young, single, college-edu-

cated; the net of both in-migration and out-migration. Metro Milwaukee's rate of 15.6 indicates that the region experienced more immigration than outmigration. Detroit is the only metro area in the table that experienced a net loss of young, single, college-educated population. However, it is notable that Milwaukee's rate is significantly lower than metro Chicago's rate of 73.1 and Minneapolis' rate of 123.5. This can be explained by the fact that a greater proportion of young, single, college-educated people moved away from metro Milwaukee than these other places. This suggests that metro Milwaukee's challenge is not simply attracting new residents in this category but also retaining a greater number of them.

Attraction of University of Wisconsin Grads

We were also interested in learning the pull that metro Milwaukee has on graduates of Wisconsin's public universities. The analysis in this section is based on data prepared by the University of Wisconsin System Office of Policy Analysis and Research. It is based on an analysis of alumni who received a UW bachelor's degree from any of the systems' universities over the two-year period of 2003-04 and 2004-05.

How many UW system grads find their way to metro Milwaukee and from which campuses do they come? Table 5 shows that 20% of UW system grads live in metro Milwaukee. Is this an appropriate share? It is probably low, based on the observation that metro Milwaukee is home to 25.7% of Wisconsin jobs⁴⁵ and 33% of Wisconsin wages.⁴⁶ The share of UW system grads locating in metro Milwaukee is less than the metro share of either jobs or wages in that region. Combined with the propensity of young, educated people to locate in metro areas, this would suggest that metro Milwaukee could improve on attracting graduates from Wisconsin's public universities.

However advantageous it would be for the metro Milwaukee economy to attract additional UW system graduates, the task appears to be a challenging one. Fully 60% of UW system graduates who are from Wisconsin return to their home region of Wisconsin after graduation. The attraction of home is powerful. It is especially powerful in the Milwaukee region where fully 72% of students remain in metro Milwaukee after graduation. In other regions, between 52% and 64% stay in their home region. To successfully recruit graduates to the Milwaukee region will entail overriding the tendency for graduates to return to their home region. They need to know about the advantages of living and working in metro Milwaukee. They will need a reason to move.

Of course, the other avenue is to recruit to Milwaukee UW system graduates who are leaving Wisconsin. The last column in Table 5 shows that, system-wide, 28% of UW grads leave Wisconsin. Students who come to Wisconsin from other states including the border states of Minnesota or Illinois overwhelmingly return to their home state; between 70% and 75% of these students return to their home state. While the tendency to return home is strong, the urban experience offered by metro Milwaukee should persuade more of them to remain in Wisconsin. However, they have to explicitly be made aware of the advantage of locating to metro Milwaukee.

**TABLE 5 CAMPUSES PRODUCING UW GRADS LIVING IN METRO MILWAUKEE
BACHELOR GRADUATES IN THE CLASS OF 2004 AND 2005**

UW Campus	Total Grads in Metro Milwaukee*	Percent of Grads in Metro Milwaukee Wisconsin	Percent Leaving
Milwaukee	4,737	51	10
Madison	1,535	16	43
Whitewater	982	29	14
Oshkosh	477	15	10
Lacrosse	416	13	25
Eau Claire	253	7	40
Stevens Point	240	8	16
Parkside	173	14	21
Stout	151	6	36
Green Bay	151	8	11
Platteville	140	8	17
River Falls	25	1	47
Superior	2	<1	49
Total	9,282	20	28

* Metro Milwaukee includes Milwaukee, Ozaukee, Washington and Waukesha counties.

Data were prepared by UW System Office of Policy Analysis and Research

Special mention should be made of foreign students. They are less inclined than the native born student to return home. Only 47% of them return home. Of the other 53%, the majority remain in the U.S. This could prove to be a talent pool that Milwaukee employers might want to pursue.

TABLE 6 DEGREE MAJOR AREA — BACHELOR DEGREE GRADUATES IN THE CLASS OF 2004 AND 2005

Degree Major	Percent of Grads Attracted to Metro Milwaukee	Percent of Grads Leaving Wisconsin	Difference Between Columns
Health Related	25%	21%	4
Business/Mgmt.	23%	27%	-4
Education	20%	19%	1
Visual/Performing Arts	19%	28%	-9
English	19%	30%	-11
Engineering	18%	37%	-19
Psychology	18%	26%	-8
Social Science	18%	33%	-15
Biological/Biomedical	15%	27%	-12
Communication, Journalism	14%	32%	-18
All Other Degrees	23%	18%	5

Data prepared by UW System Office of Policy Analysis and Research

Table 6 presents a different slice of the data examining where UW system graduates move. It shows which degree majors are attracted to metro Milwaukee. Health-related and business/management majors lead the way. Least attracted to metro Milwaukee are students receiving degrees in communication/journalism and biological/biomedical sciences.

Table 6 also shows the percent of the same degree classifications from the UW system institutions that move away from Wisconsin. Of course, students leave for a variety of reasons, including returning to their home states and relocating to where jobs exist in their field. Wisconsin loses a higher percentage of engineering graduates as well as social science and communication majors. Less apt to leave Wisconsin are graduates in education and health-related fields.

We should think of metro Milwaukee as a competitor to out-of-state cities in vying to have UW system graduates locate there. If we think in terms of competition, it is interesting to compare what share of UW system grads locate in metro Milwaukee versus locating in another state. The last column in Table 6 compares metro Milwaukee with other states in their ability to draw UW system grads. Milwaukee seems to compete poorest for engineering grads as well as grads in journalism, social sciences, and biological sciences. Any effort to increase the college-educated population in metro Milwaukee would capture more of those graduates who are educated in Wisconsin and are moving away. The information in Table 6 allows us to attach some specificity to what is loosely termed the brain drain.

In summary, a logical place from which to recruit more educated people to metro Milwaukee is Wisconsin's public university system. To attract more UW system grads to metro Milwaukee will entail a proactive recruitment initiative. Such an initiative would have to overcome the propensity of students to move back to the area of the state in which they lived prior to college. It would also entail actively recruiting a higher proportion of students who move away from Wisconsin, especially those with degrees in engineering. Finally, such an initiative would also target foreign students, relatively few of whom currently move to metro Milwaukee.

We acknowledge that this recruitment involves not only asking such candidates to consider jobs in Milwaukee but also requires the creation and offering of appropriate jobs to such candidates. Increasing the percentage of jobs filled by UW system graduates is dependent upon having appealing (salary and responsibility) job openings as well as active recruitment. As a start, attempting to fill existing jobs with UW system graduates should result in a decrease in the exodus of Wisconsin-educated adults. But to really have an impact, Milwaukee must create more and more appealing jobs.

Business Cooperation

One of the factors that is increasingly needed for success is cooperation among businesses, just as it is across municipal boundaries and state boundaries. Businesses need to talk with and work with other businesses to jointly solve common problems. The old economy model of a whole series of "Lone Ranger" firms that provide everything for themselves is no longer viable. One need only look at GM and Ford to realize that the vertically integrated attempt to be self sufficient is no longer a viable model. The model that works today and tomorrow involves networking, getting information and help from a variety of other sources. Toyota is used as a prime example of the new economy model.

Milwaukee to date has seen little of this cooperation in business or civic affairs. Businesses fear that cooperation might lead to the stealing of ideas or workers. Attempts to get firms to share training or to work on common solutions have been rebuffed because of such fears. The result is that firms do not learn as quickly, as efficiently, or as inexpensively as is possible through networking and cooperation. True, there may be some valid concerns about becoming overly entangled to the point of collusion. But there appears to be considerable leeway these days, as high profile cooperative ventures, such as Sematech for computer chip development, are thought to be perfectly acceptable. Such endeavors have gone so far as to share resources, share findings, generate efficiencies and synergies, promote cross-pollination, and lead to longer-term success in world markets.

An example from a nearby state that has implications for Milwaukee comes from the North Central region of Indiana, the area around West Lafayette. Indiana is the only state that has a higher concentration of manufacturing than Wisconsin. Firms in Indiana have come to realize they can benefit from working together. In the last couple of years several metal fabrication firms got together to support some common research at Purdue. The result was the creation of a nano-scale coating that can be applied to tool surfaces used to cut steel. The nano-coating is now widely used in the region because it has transformed metal cutting. Tools cut the metal more quickly and last six-to-eight times longer than previously was the case. All firms that have adopted the new technology have benefited. It did not give just one an advantage; it gave them all an advantage.

A second example comes from a far larger company, also located in a Midwest state. The firm is Procter & Gamble (P&G), a \$70 billion-a-year enterprise. It created a model of seeking innovation from outside, from other firms. Two of its executives report: “For most companies, the alternative invent-it-ourselves model is a sure path to diminishing returns.”⁴⁷ In other words, P&G is cooperating with many other firms, often buying them in the process. But the look to a different source of innovation is revolutionary. It requires firms to work together.

There may well be examples in Milwaukee of such cooperation. In fact, one firm indicated that it had created a group to work together to come up with better designs to counter some federal efforts to more closely regulate their industry. The firms were able to agree on what standards should be set to create better products from all of the firms. They were able to influence the regulators. That is one example. Many more are needed. Few are visible locally, and they need to be. The mindset must change. Not all good ideas are those generated internally.

The largest concern Milwaukee firms should have are those of the world competitors, not their neighbor down the block. The challenges are much larger than those next door. The world market for products and services is growing. If firms can more quickly and smartly develop products and services to capture more of that growth, the firms and region will benefit. Working with other firms to speed development will increase the pie and chances for success. This lesson must be absorbed on a much greater scale than it has to date.

Fortunately, there is one local example of this, brought to the fore by *FUEL Milwaukee*. Starting last fall, eight of the area’s largest employers agreed to attend employee recruitment fairs, such as the National Black MBA Fair, as a team. They bought space together and acted as a much larger player than they could on their own. They also referred candidates to one another, when the candidates did not meet their needs but might meet another member’s needs. They were very pleased with the experience. Similar joint activities, such as attempts to recruit more graduates of UW system colleges and universities, should be undertaken on a regular basis (more on this idea below).

Milwaukee’s Transformation to a Consumer City

Much of this report concerns the new metropolitan economy that has emerged beginning in the last quarter of the twentieth century. One of the most radical changes in the new economic model is the emergence of the concept of the consumer city. While cities have always served as centers for both production and consumption, under the new model, the young, educated workers view cities primarily as centers of consumption. As such, the amenities a city has to offer have attained elevated status in the new model. Economists are coming to understand the power of amenities and lifestyle in attracting potential residents. This is especially true among the college-educated who place especially high importance on amenities and consumption opportunities. This includes consumption of amenities that are unique to the area including: restaurants, live music, theatre, and sporting events.

In the offering of amenities, cities have always had an advantage of density. Cities can provide adequate patronage to support live performances and the arts. However, as the college-educated population has become more mobile and as Americans in general have more disposable income,⁴⁸ cities’ role as centers of consumption has become more pronounced.

A number of students of urban economies have investigated the relationship between consumer amenities and location decisions by modern workers. Richard Florida notes that the “creative class,” mostly young, educated workers are increasingly attracted to urban settings, especially the more livable cities.⁴⁹ These cities have a wide variety of amenities, many of which are less valued by previous generations. Since the publication of his seminal work, cities throughout the country have been hanging out the welcome sign for the creative class.

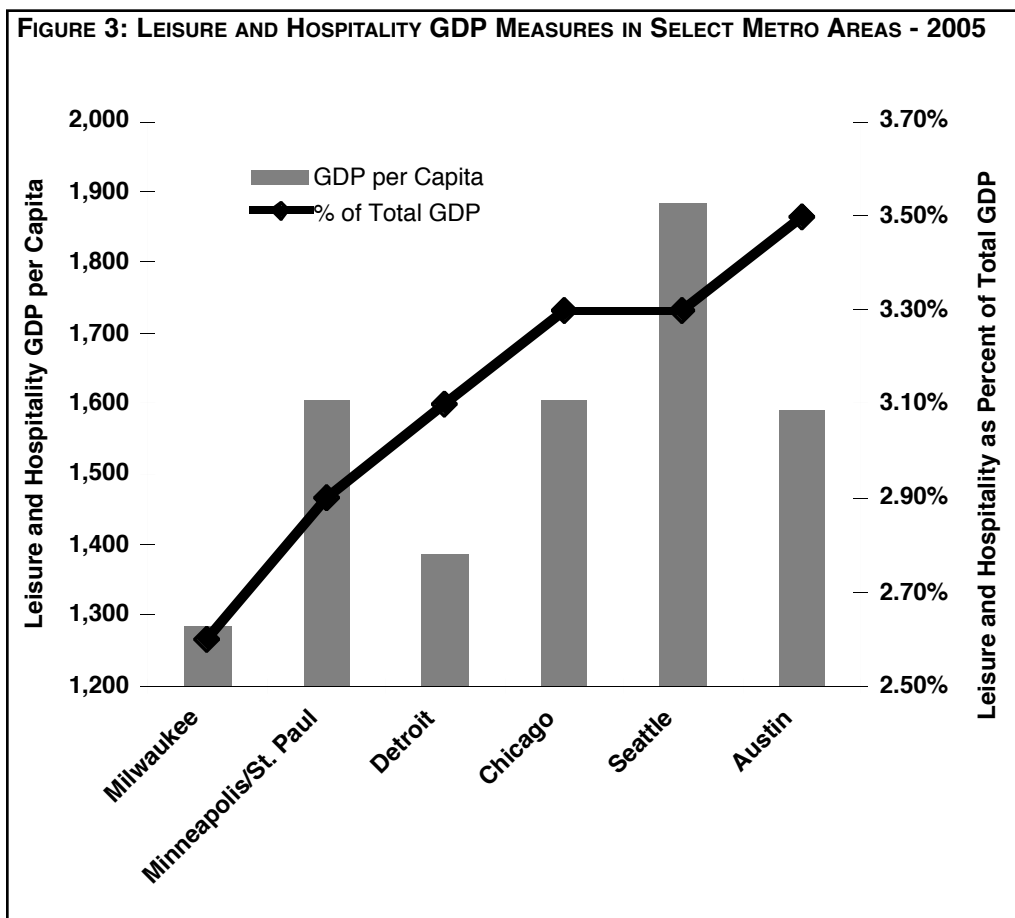
In another widely cited work, Glaeser, Kolko and Saiz have identified the factors that contribute to this new model in their research paper, *Consumer City*.⁵⁰ The authors quantified the interplay between the two basic functions of cities, as centers of production and consumption. They find that “the future of cities increasingly depends on whether cities are attractive places for consumers to live. . . . If cities are to remain strong, they must attract workers on the basis of quality of life as well as on the basis of higher wages.” They ominously predict, “It seems clear that some cities are managing to be successful consumer haven, but many will not. This suggests a widening disparity across urban areas.”

How does metro Milwaukee measure up as a consumer city? To answer this question we examined two key elements of the consumer city. First, we examined the significance of the leisure and hospitality sector of the metro Milwaukee. Second, we examined the rate of violent crime. As has been documented, one key amenity that distinguishes one city from another is crime. Therefore, in this section we will be dealing with the crime rate as an urban amenity, not unlike urban architecture or performance art.

To ascertain the degree to which metro Milwaukee has become a consumer city, we have examined the degree to which the regional economy is driven by consumption. As a reasonable representation of that sector, we have used the leisure and hospitality designation employed by the Bureau of Economic Analysis (BEA), a category that includes the arts, entertainment, recreation, hospitality and food service industries.

Looking at all metropolitan areas as distinct from the non-metropolitan portion of the U.S. economy, GDP from the leisure and hospitality industries represents a tiny fraction of total GDP. For the average metro area, leisure and hospitality accounts for only 3.6% of the total, although for some outliers like Las Vegas (19%) and Myrtle Beach (12%), it represents a much larger portion of the economy.⁵¹ Yet the literature on the importance of the consumer city suggests that the relative diminutive nature of this sector belies its significance in differentiating one metro economy from another.

To estimate metro Milwaukee’s transformation to a consumer economy, we compared the leisure and hospitality sector with the other metro areas, the two Midwestern heavyweights, Chicago and Minneapolis/St. Paul, as well as Detroit. For a broader perspective we have again included data on Seattle and Austin. This comparison is not intended to be definitive. Including different metro areas would yield a different picture. However, it is useful in demonstrating how Milwaukee measures up to some other metro areas.



The data seem to indicate that Milwaukee’s reputation as hard working is well earned. Figure 3 shows that in metro Milwaukee, the \$1,285 per capita that is generated from the leisure and hospitality sector is the lowest among the metro areas in our sample. Metro Milwaukee is \$100 per capita behind the leisure and hospitality sector for Detroit and even further behind the other areas in our sample. On a per capita basis metro Milwaukee’s leisure and hospitality sector is 23% lower than Austin and 46% lower than Seattle.

Figure 3 also shows the percent of total GDP generated in the hospitality sector. Metro Milwaukee again is lower than other metro areas. Whereas Milwaukee’s leisure and hospitality sector yields 2.6% of the total GDP, in Minneapolis/St. Paul the share is 2.9%. For the other metro areas the leisure and hospitality sector accounted for 3.1% to 3.5% of total GDP. For perspective, if metro Milwaukee were to increase its leisure and hospitality share to 3.3 % of total GDP (similar to Chicago), an additional \$500 million of economic activity would be realized in that sector.

It should be noted that a more comprehensive analysis would control for other factors that could influence the disparities between metro areas. However, this simplified analysis does show that, to the extent that the industries

represented in this sector are attractive amenities to young, college-educated workers, metro Milwaukee has some catching up to do.

Has spending for leisure activities in metro Milwaukee been increasing or decreasing? To answer this question we examined spending over the ten years between 1993-4 and 2003-4 for dining out and entertainment.⁵² While it is not dramatic, the percent of total post-tax spending devoted to dining out and entertainment has increased from 9.4% to 10.9% of total. This is a general indication that metro Milwaukee is increasing its spending on the most discretionary of items. It also suggests that Milwaukee is moving in the right direction but has a way to go to match nearby competitors.

Safety

Metro Milwaukee's drive to attract more college-educated people to the region will be particularly disadvantaged by any negative factors. We have shown that Milwaukee has work to do to become the consumer city that young, college-educated people find attractive places to live and work. Now we will turn our attention to an amenity that is often overlooked in discussions of economic development and the attraction of human capital — safety. Economists have increasingly begun including safety, usually expressed in terms of crime rates, as a key public amenity that will affect the growth or the decline of a city.

Of course, crime has the most direct impact on the existing population. It inflicts a personal cost on a city's residents as well as increasing the cost of doing business for the business sector. Ratings of metro business climates, such as the annual *Forbes* magazine ranking, factor the crime rate into their analysis. But beyond the cost of crime, it has an impact on the decision people make on where to live. It is this impact that is central to our examination of Milwaukee's ability to attract an increasingly educated workforce.

It turns out that crime has a strong influence over where we decide to live. In their 1999 study, Berry, Cullen and Levitt found that every ten percent increase in the crime rate yields a one percent decline in the population.⁵³ While most of the effect is on people opting to move away from cities, there is also an impact on immigration as well. Most troubling is that highly-educated households are those that are most responsive to the crime rate.

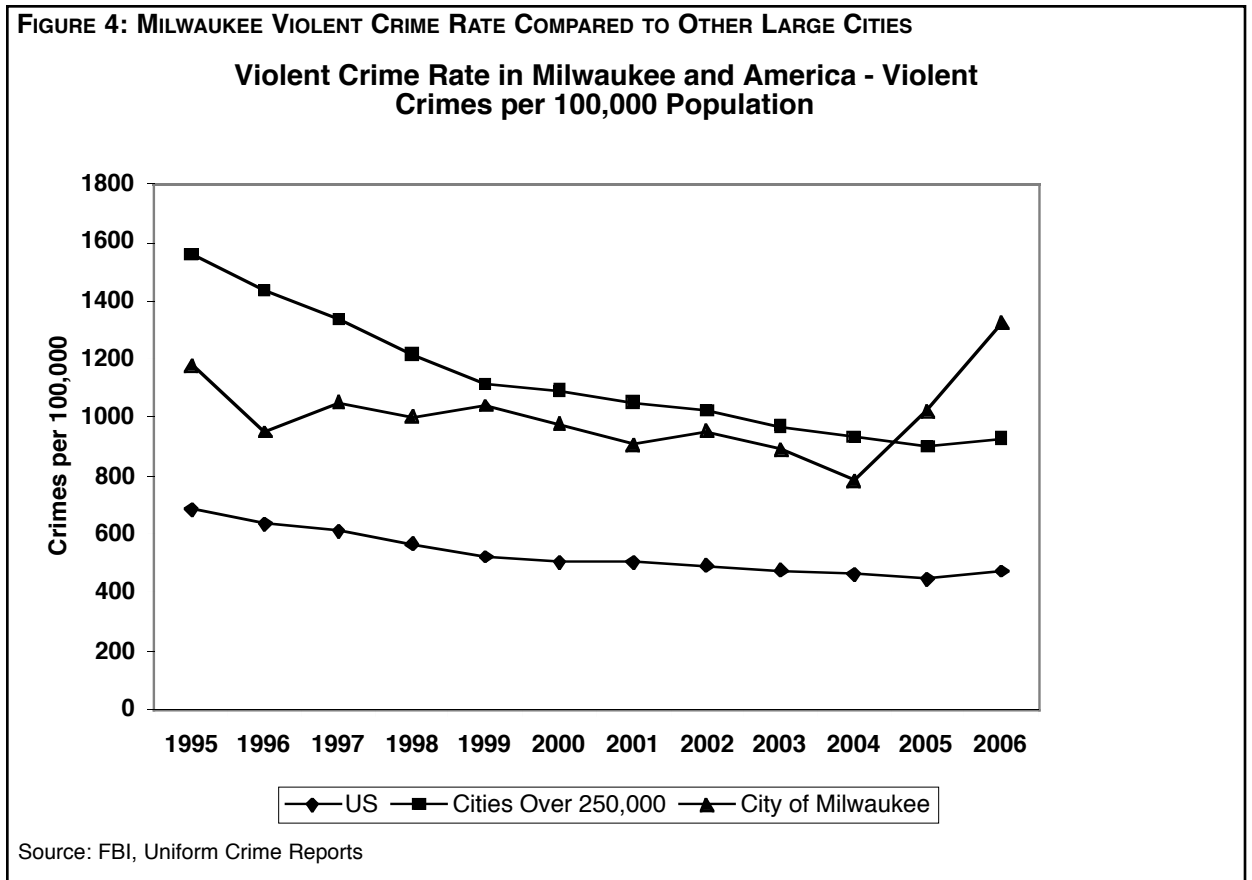
The picture that emerges is one that shows young, educated workers who are drawn to the central city are less willing to accept the risk associated with crime, especially violent crime. Safety is an essential urban amenity. In the escalating competition for an educated workforce, cities must be able to demonstrate that they can provide a safe environment.

We think it is more than a coincidence that the renaissance of the central American city occurred at approximately the same time the violent crime rate in America, especially urban America, fell precipitously. The zenith of violent crime in America occurred in 1991 when the country experienced 758 crimes per 100,000 people.⁵⁴ By 2006 the rate had declined to 473 per 100,000 people, a drop of 38%. As shown in Figure 4, while the violent crime rate fell nationwide, there was a particular decline experienced in urban America. The city of Milwaukee also experienced a declining crime rate from 1991 to 2004, although the decline was not quite as dramatic as that experienced in the average large city.

Across the country, there has been no shortage of credit taken or explanations given for the cause of the dramatic reduction. Politicians, sociologists, police chiefs and others were quick to ascribe the reduction on their favorite initiatives. However, research suggests that the reduction in the violent crime rate is due to a couple of factors that are almost self-evident. An increased police presence, especially in American cities, made a significant difference. In the 1990s; fifty thousand additional uniformed police were added to fight crime. According to Corman and Mocan as well as other research, the presence of additional police worked.⁵⁵ In city after city, additional police were added in response to rising crime rates and shortly thereafter, the crime rate was reduced.⁵⁶

Another significant contributor to the decline in crime was the increase in incarcerations in the 1990s. During the 1990s, Wisconsin tripled its prison population, increasing from 6,533 in 1990 to 19,805 in 2000.⁵⁷ Analysis by Levitt and others found incarceration rates both before and after 1991 to be the single most significant factor affecting crime rates.⁵⁸ Not only does incarceration prevent criminals from committing further crimes, other potential criminals were deterred by the likelihood of incarceration.

The FBI's Uniform Crime Reports hold some good news and some troubling news for Milwaukee. Figure 4 tracks the violent crime rate for the twelve -year period 1995-2006. Nationally, the crime rate declined in the period 1995 to 2004 and has flattened out in the most recent two years. Large cities, those with populations of at least 250,000, have a violent crime rate more than double the rate for the country as a whole. However, those large cities



experienced a decline in the violent crime rate that was actually more precipitous. In those large cities, the violent crime rate in 2006 was forty percent below the 1995 level.

The good news for Milwaukee is that, from 1995 to 2004 the rate of violent crimes was significantly below the rate experienced by large cities as a group. However, in the most recent two years Milwaukee has experienced a considerable spike in violent crime. A review of detailed crime statistics shows that, with the exception of rape, the spike in violent crime is across all categories: murder, robbery and aggravated assault.

Milwaukee's hyperactive crime rate has not escaped the notice of the national media. *Time Magazine*, under the headline, "Middle America's Crime Wave," noted, "It's as if Milwaukee Wis. had reverted to a state of lethal chaos."⁵⁹ Earlier the *New York Times* featured Milwaukee prominently in a story headline, "Violent Crime Rising Sharply in Some Cities."⁶⁰ So, while Milwaukeeans have been exposed to a steady stream of stories regarding Milwaukee's jump in violent crimes and societal crisis, so too has the rest of America.

Doubly damaging is the gruesome newsworthiness of individual crimes: a special Olympian killed waiting for a bus, an eleven-year-old girl gang raped, a seventy-five year old female pastor asphyxiated on the floor of her townhouse.

Unfortunately, Milwaukee might be on the verge of being labeled a dangerous city. This cannot help but shade the perceptions of people considering moving to Milwaukee. There are several web sites, each of which highlights the crime rate, that compare American cities. With a few keyboard clicks, without knowing anything else about the city, prospective workers can learn about the elevated crime rate in Milwaukee.

The FBI data on violent crimes are the sober indicator of safety, an amenity that economists have interpreted as a key factor in attracting and retaining the workforce of tomorrow. This blemish on the face that Milwaukee presents to outsiders holds the potential of undermining many other positive economic development initiatives.

Milwaukee Does Not Like to Place Bets

One of the characteristics of the cities that have done well economically in recent years is that they have been willing to commit to a particular action or actions. The cities may have taken some small steps, but what really helped move them forward is a commitment to some larger action. That action may not have had immediate payoffs, but it helped to enlist support, moved individuals and institutions away from doing nothing to doing something, and in

many cases paid dividends. The actions taken may not always have led to what were the envisioned consequences. But by taking action the community invested in forward movement and the results were more positive than in communities like Milwaukee that cannot agree on an approach to transportation much less a fix for K-12 education or an approach to economic development beyond more real estate deals.

This reluctance to place bets is a long-term condition. Milwaukee businesses and its municipal representatives have been unwilling to place bets on solutions. This is caution on a massive scale. It has resulted in very slow growth. There are examples of this reluctance to place bets: several Milwaukee businesses in the 1980s were sold for close to or even less than the cash the firms had in the banks.⁶¹ These firms at the time were not willing to invest in R&D, innovation, or the development of new products and services. The result was massive job loss.

Since the double recessions of the early 1980s and then the advent of globalization of trade, many manufacturers have been unwilling to place bets on markets or on their own futures. Many private owners have been waiting for stronger signs that their firms have a future, and in the meantime let their market shares decline because they have under-invested in both production process and in product innovation. Fortunately, more firms today are placing bets and winning. But hundreds in the city and thousands in the region are still not willing to put their money on the table.

A similar unwillingness to act has plagued the communities of the region. Possible solutions are discussed, but few concrete actions are taken. The result is that the forces of globalization, southern and western movement of the U.S. population and economic activity, and the aging of the local population have been met by concern but little concerted action until very recently. This inactivity has occurred when other areas of the country have taken steps and distanced themselves from places like Milwaukee.

There are several communities that have been challenged by economic forces and taken visible actions. One of the best known is Austin, Texas. Two decades ago the powers of Austin decided that it needed a new economic base. The state government and the University of Texas were not sufficient by themselves to make Austin the type of economy that was ready for the twenty-first century. After some debate the decision was made that it should be involved in the bidding for a new computer chip alliance called Sematech. Sematech was a consortium of 14 of the country's chip makers that wanted to pool together to research and build the next generation computer chip. Austin had University of Texas (UT) and its brain power, but Austin did not have a history of computer chip development and manufacturing. The city and local business leaders thought, however, that chips were the wave of the future, the personal computer just recently having come on the market. So, the city and its business people banded together to create what proved to be the winning bid.

Since that time all sorts of IT companies have moved to Austin or developed there because of the original commitment. Austin may have had some slight advantages because of UT, but it was the community's pitch that really brought home the new industry.

More recently, Chicago has said it is going "green," and the city government is committed to leading the way. Will this really be America's greenest city? It may well not matter. The city is getting great press and attracting young professionals who are concerned with global warming and want to do something about it. The fact that the talented workforce is there will help build its already strong economy. This bet on "green" is a relatively big one, and the exact outcome is not clearly known. But the bet is attracting attention, positive press, and thousands more young, talented professionals to build whatever economy is there.

The Research Triangle in North Carolina did not exist as such fifty years ago. It was a construct to attempt to draw attention and interest to the area. It took decades before that attention and interest really developed, but it was the early actions that helped make it all possible today. What has developed is far different and far more successful than almost all early supporters could have hoped. Again, it was the vision and action that took the region forward. One action led to another. The snowball began to develop. Today, it is a thriving economy, full of high-tech new ventures and old ventures, growing rapidly, and attracting new investments and new workforce members, including many college-educated young adults.

The main lesson for Milwaukee is that it cannot just sit back and endlessly debate what needs to be done. It must move to the action stage. It may be wrong, but even if it is wrong on certain investments, those investments will yield some positive results. It is the actions that most need to be taken. Investing in the right things would be best, but that is not as important as getting off the dime and making informed investments.

We know that education is a pretty safe bet. It may not be the absolute top priority for some. But we have more than enough evidence to know that this must be up near, if not at, the top of the list. Educating more students better can only help the region. That is a step that absolutely must be taken. Residents know this, but they refuse to make

the alliances that are needed to move to action. A recently viewed bumper sticker reads: “If you think education is expensive, try ignorance.” Milwaukee and the region need to heed this call and absolutely commit to better and more successful education.

Another step that must be a high priority is deciding how to better handle transportation needs. The city and region have reached impasse after impasse for two decades. That has dropped us further and further behind other metropolitan areas in moving people, especially those with limited options. Since there are numerous suburban employers who will increasingly need to attract workers from the central city, it is imperative that some decisions be made on how we collectively are going to aid in making this connection. The critical component again is a commitment to some action; no action is totally unacceptable and self-defeating.

We also need more and better connections with the city of Chicago, its international airport, and the suburbs. Milwaukee’s future lies in stronger connections to that huge economy, its global airport and solutions to faster movement of people and goods along the Chicago-Milwaukee corridor.

Milwaukee employers also need to learn to utilize a much greater portion of the adult population that lives in the city. This task is daunting, but the potential is great. Little steps are fine to gain insight, but soon major commitments must be made to not only add to the well-educated but also upgrade the skills and motivation of those with limited skills and experience. Our collective reluctance to hire ex-convicts, for example, must change as must our definitions of felonies. And we must more purposefully commit to training and hiring a diverse workforce. Without the diversity the economy will only dwindle.

The key is action. The city and region must place bets and seek the rewards. Not addressing these many issues assures us that we will not succeed.

Higher education here is not catalytic

Higher education in the region has not, to date, been catalytic in terms of its impact on the region’s economy. It is sad to make this concession, but the assessment is very accurate across the Midwest, even in Madison. Fortunately, in Madison at least this is beginning to change, but it is only a beginning. Much more needs to be done to build the university capacity needed to truly become an engine of change in the economy.

UWM’s Chancellor Santiago is leading the charge in the Milwaukee 7 region. He is being supported by the MSOE president and the engineering school dean at Marquette University. To date MSOE has been more responsive to industry needs, but it has not been very involved in funded research. UWM has more research activities, but there has been a long-term misalignment of faculty interests with local business needs. This too has been slowly changing for the better. The speed is picking up, as Chancellor Santiago makes his case to the community and state that UWM needs to be better funded to assume its role as economic engine for the region. Fortunately, Santiago has had initial success, having recently procured \$10 million from the Regents that are being targeted at new faculty in research areas that should have greater impact on the local economy. But this \$10 million should only be a beginning. If UWM is to play a catalytic as opposed to a passive role, it must have many more faculty members who are attempting to help solve problems that can be commercialized by local industry.

The funds for such efforts must come from the state in order to permanently put the faculty positions in place. But then what will be needed are local businesses committing to supporting research by these faculty and their research teams. Such individuals will need to interact with the new Milwaukee Institute and their interest in supporting combined corporate-university efforts to coordinate and expand research. This is just the type of joint effort that can build on the intellectual property production in the private sector and have it amplified by those in academia.

SECTION 4 — PRACTICAL RECOMMENDATIONS TO DEVELOP THE MILWAUKEE REGIONAL ECONOMY

Increase the Flow of Capable Workers Into High-End Manufacturing

More than 19,000 production jobs in manufacturing jobs are projected to become available between 2008 and 2014 in the four-county metropolitan area.⁶² Thousands more in related technical occupations will also need to be filled. To succeed in the area, manufacturers must be able to attract competent workers. About one-third of these needs to be skilled workers, another one-third will be unskilled workers, and at least 10% will be related technical workers. All will likely need higher and higher skills as time goes by, as employers increasingly make use of more sophisticated machinery in production.

The ability to attract such workers will depend on several factors, most of which involve the overcoming of current barriers on both the supply and the demand sides. On the demand side, employers need to take several steps to help their chances of attracting sufficient workers. Included in these steps are becoming more lean and innovative, so that they are still around in 2014 or 2020 to employ workers. Eliminating waste from their current production processes is fundamental to being able to compete. That must be an ongoing process.

The second element is innovating not only in process (e.g., lean) but also in product. It is much easier to compete if one has new products that better solve problems than relying on products that over time increasingly become commodities. Employers can charge more for innovative solutions than they can for traditional solutions. And they can differentiate themselves from other producers.

The adoption of lean techniques in the Milwaukee area has been held back by several factors. These include the state's Manufacturing Extension Partnership (WMEP) being underfunded and concentrating its funding on other parts of the state. That is changing, as WMEP has recently increased its staff in the region from 8 to 11 persons and is pushing to add more. Manufacturers, politicians, and the Milwaukee 7 need to all continue to press the Wisconsin legislature for additional funding for this important program, so that new staffing levels are further increased. Lean operations are essential for longer-term viability.

WMEP does not confine itself to the promotion of lean. In fact the fastest growing part of its programming is on the need for and techniques to employ in order to be innovative. That is the second key component of the new formula for manufacturing success. Promotion of funding for WMEP can help on both lean and innovation.

That said the employer side needs to be stimulated to take part in these activities. More visibility of the need to be lean and innovative must be created. This requires resources and resourcefulness. Certainly, more publicity for the *Manufacturing Matters!* annual conference is a start. But other actors, such as the colleges and universities in the area, must step up and create more access to programs that raise the profile of lean and innovation and offer alternative ways of learning about these topics. For example, the UWM School of Continuing Education recently had its first introductory program in lean and is starting a certificate program. MATC has recently enlarged its for-credit course offerings in lean. These programs must not only be enlarged, they must be marketed on a scale that substantially raises understanding and commitment.

On the supply of worker side, several elements are needed to ensure that there will be sufficient individuals ready, able, and interested in filling these positions in manufacturing. One key is to build interest in being involved in manufacturing. The industry is not currently appealing to young people, despite its commonly higher wages. There has been too much downsizing and too many up and down cycles. That image must be changed.

One very good way to do so is to help the region participate in the national campaign known as *Dream it! Do it!* being promoted by the National Association of Manufacturers. This is a polished marketing campaign to build young person and parent interest in manufacturing. The campaign needs funding to be adopted locally. Generating that funding is the critical first step that would then need to be followed by active involvement of manufacturers, education institutions, and intermediaries, such as the Milwaukee 7 Next Generation Manufacturing Council, to successfully convince more individuals and parents of the appeal of the industry and the need to prepare to enter it. The actions: contribute to the funding needed and help to spread the word.

A second step that needs to be expanded is to push more of the region to become involved in a second element of the national effort to build the needed manufacturing workforce. That element is the expansion of the manufacturing certificate program being promoted locally by MATC. This certificate, known as Manufacturing Skill Standards Council certificate, involves an education that certifies holders to take a number of different positions in manufacturing. It gives holders access, should they need it, to many more jobs than individuals who might have performed one task at a particular plant.

Here the issue is initially one of building interest in this program among individuals as well as employers. Employers need to realize that employing those with certificates does give them a more flexible workforce, should they hire such individuals. And those individuals looking at alternative jobs are aided in that they have many more job options, should they want or need to look for alternative employment within manufacturing. The certificate admits that there is some churn in the industry and individuals would be more likely to take a chance at entering manufacturing if the downside of manufacturing cycles could be minimized by knowing that they could more easily move to other jobs within a firm or to other jobs in different firms.

A third step that can aid manufacturing and other industries is the adoption, initially on a pilot basis, of the proposed restructuring of 12th grade. Cooperative Education Services Area #1 that serves much of the metropolitan area,

including the city of Milwaukee, has proposed a format for senior year that involves academics in the morning and internship placement in the afternoon, as well as several other components. The fundamental underlying intent is to give students a much better idea of what the world of work involves and the relationship of education to success in these settings. To succeed, this program needs opinion leaders to step up and convince the area school districts to consider and then adopt this option. And then employers must agree to accept multiple placement of students in their work places.

What this approach can do for manufacturing is give many more seniors a formal introduction to the variety of opportunities that exist in that industry, and it would help students make more informed decisions on whether and where to enter the industry.

A fourth recommendation will not have as immediate an impact. The recommendation is that more area school districts take math underperformance among students more seriously and work to adopt research proven instruction, starting at the lowest elementary grades, to raise understanding of and achievement in math. Math skills are important for several manufacturing jobs. The pool of possible workers in manufacturing is smaller because of lack of numerical knowledge. This is especially true of MPS where only 29% of tenth graders (already a smaller pool than freshmen) score as at least “proficient” on standardized tests. Better instruction and better curriculum can increase student achievement. Steps need to be taken now in elementary years to have an impact in ten years.

Increase the College-Educated Population

The most important ingredient for economic development is an ample supply of the right type of human capital; successful cities and regions are home to an increasing supply of workers possessing a college degree. Since the 1970s, Milwaukee has lagged behind other cities in the percent of its population who are college-educated.⁶³ Most disturbing is that the gap between Milwaukee and more prosperous cities is growing. Unless Milwaukee reverses this trend and begins to significantly increase its college-educated population, its economy will experience sluggish growth.

There are a finite number of places metro Milwaukee can look to as a source of college-educated workers. The first is the homegrown population. This is potentially fertile ground to plow, since there is a strong tendency of college graduates to remain close to the area where they grew up. The pull is especially strong in the Milwaukee region where 72% of the students return to the region upon graduation. However, the city of Milwaukee is producing far too few students who qualify for college. A history of high dropout rates has yielded a city in which 21% of the adult population doesn't have a high school diploma. This is actually greater than the portion of the population that holds a college degree. All effort must be focused on generating more graduates from Milwaukee schools. If the graduation rates do not improve, the region will be forced to continue to work around this deficiency in its drive to move to a knowledge-based economy.

A second source of college-educated workers is Wisconsin universities. While both public and private universities are sources of talent, this study examined data from the largest potential source: the University of Wisconsin system. We found that the Milwaukee region attracted only 20% of the graduates of the system's 13 degree-granting institutions. The deficiency in attracting graduates cuts across several degrees, including: engineering, English and journalism.

Currently, the connection between UW graduates and the metro Milwaukee region occurs with individual employers. While this historical linkage is important, it is clearly not enough. To ignore a broader linkage seems ludicrous: Wisconsin's chief economic engine, Southeast Milwaukee, is suffering a deficiency of college graduates while the taxpayers are supporting one of the most prodigious, higher-education systems in the country. Of course, these publicly-funded students cannot be required to work in metro Milwaukee, but every effort should be made to see that they do. A concerted, region-wide effort should be initiated to link UW students system-wide with the metro Milwaukee region. The components of such an initiative could include: scholarships, internships, advertising and active recruitment. *FUEL Milwaukee*, the region's most active group of young professionals, should play an important role in designing this initiative.

Another group that is underrepresented in the region is foreign-born college graduates. Richard Longworth who has studied the impact of globalization on the Midwest observes:

Cities that are booming — New York, Chicago, Boston, Toronto, Denver, Portland, San Francisco, Atlanta — all have big and growing foreign-born populations. Cities in trouble — Detroit, Cleveland, Pittsburgh, Baltimore — do not. Successful cities draw immigrants, which make them more successful yet.⁶⁴

We found the metro Milwaukee region lagging in its ability to attract foreign-born college graduates. It is attracting the population at about 50% of the rate of Chicago and is even behind Detroit. This is a notable deficiency, since fully 13% of college-educated workers nationally are foreign-born. In only the Milwaukee region less than one percent of the college-educated workers are foreign-born.

A drive to recruit more college-educated, foreign-born workers to the region will surely require a culture shift. However, the region will be harming its economic prospects, if it chooses to passively exclude this population. While foreign-born college graduates will never predominate in the region, in other cities they have been a critical component of the workforce.

The easiest way to attract more foreign-born college graduates is through the universities. Not only do these foreign students tend to acquire majors that are critical to a knowledge-based economy, they are less likely than native-born students to return home after graduation. Between 37% and 53% of foreign-born UW graduates do not return home. This is a talent pool that could provide a critical ingredient to Milwaukee's future growth.

The Milwaukee of tomorrow will bear little resemblance to the Milwaukee of today. According to a 2004 estimate, the city of Milwaukee will have to double its percentage of college graduates within twenty years — if it hopes to be just an average American city. Unfortunately, in this study we found the city already falling behind in meeting this goal. If the steps to increase the college-educated workforce recommended here are not pursued, we should expect the city and the region to fall further and further behind other metro economies.

Encourage the relocation of boomerangs

In a December 2006 report Lopez and Scholz (La Follette) examined migration to and from Wisconsin by age cohort.⁶⁵ They used the U.S. Census data for three time periods, the latest being 1995-2000 to particularly focus on those with college degrees. As with other researchers, the data were very clear: Wisconsin loses college graduates who are 22 to 29 years old. But the good news is that the reverse is true for 30- to 39-year-olds and 40- to 49-year-olds. In the 1995 to 2000 period, they found that the net loss among all age groups of those with college degrees was about 7,000 persons. The authors say that the offsetting inflow that counters the losses of younger college graduates is “consistent with Wisconsin’s image as a family-friendly state with good services and a high quality of life.”⁶⁶

The authors go on to examine Milwaukee in particular and how it fares with Chicago and Minneapolis/St. Paul. They conclude that “Wisconsin loses far more educated people to Minneapolis/St. Paul and Chicago than Milwaukee gains from Minnesota and Illinois.” The rest of Wisconsin does better. The challenge is for Milwaukee to become much more competitive. They encourage efforts to have Milwaukee learn lessons directly from the Twin Cities that would help to make Milwaukee more competitive.

A data source that helps to indicate what it is that should be done to help make Milwaukee appealing is revealed by a study of UW Alumni.⁶⁷ The study reveals, among other things, that certain forces might pull those who moved away back to Wisconsin. The forces vary with age. Of all Wisconsin residents who at one point left Wisconsin but later returned, some 46% returned within three years and almost three quarters returned within six years. The report suggests that targeting these individuals soon after they leave to plant the seeds for their return would be a good thing to do.

The report also reveals that the main reason why UW graduates choose to live in Wisconsin are to enjoy the quality of life (74%), to be closer to their parents (66%) and for a job (55%). Of those who have moved from Wisconsin, some 59% say they would consider moving back to Wisconsin. The open-ended reasons for more than half of these respondents included “great place to live,” “affordable cost of housing,” “better quality of life” and “good people in the state.” When asked to rank specifics of what would be the most influential reasons for returning to Wisconsin, the top responses were: opportunities for a better paying job (46%), higher quality/style of life (43%), and opportunity for a similar job (40%).

The city, region, and state need to maintain the highly regarded quality of life. But the key to drawing more of these individuals back to the state is job opportunities, so that they may enjoy the quality of life. In fact, many respondents said directly that they would return if they had more job opportunities. We have the chicken and egg syndrome. But clearly the issue is job opportunities. If we can solve that one, even more college-educated will return to the state and quite possibly to Milwaukee.

Given these findings Milwaukee should do the following:

- Work with the HR departments of all employers in the city/region that are seeking college-educated workers to keep the employers apprised of the email addresses of potential applicants who are graduates of UW system colleges and universities as well as Marquette, MSOE, and any other institution that would like to participate. This would require greater efforts on the part of most of these educational institutions to continuously track their alumni.
- Bolster *FUEL Milwaukee* efforts to build a reputation for having “employers of choice” in the region. This is to become a major effort of *FUEL* to make Milwaukee more attractive to those with mobility. If really successful, that campaign will garner national media attention, bringing the region to the attention of current and former Badger-state residents.
- Continue to support public education in the region, improving school districts, and improving student outcomes. This is a key ingredient in the return of many boomerangs. A second piece is making the region attractive for all ages, so that the parents of these potential boomerangs do not move away from Wisconsin out of disgust for the decisions being made in the region’s and state’s governments.
- Work with local private equity firms that are selling Milwaukee businesses to target former Wisconsin residents as purchasers; the former residents are likely to respond more positively, if they are regularly informed of the options available.
- Help make a major sales point on the Choose Milwaukee.com website the ease of movement around the area, the fact that the commutes are short relative to most other major cities and that residents have more discretionary time in their lives because they are not spending those minutes and hours in traffic delays.

Increase the number of high school graduates

The case is made above of the less-than-average proportion of adults with at least a high school degree in Milwaukee and the importance to the economy of reaching at least the national average, if not the state average, for high school graduation. There are many benefits. The big question is what can be done to achieve at least one, if not both averages. What steps should be taken now to ensure that in the near future, more high school educated will live in Milwaukee?

There are three overarching options that the city has; the nation has but one of these. The city can: (1) attempt to hold onto those with high school degrees by making the city more appealing in terms of life and work options in the city, (2) attract more individuals with high school degrees with better-paying jobs and more appealing neighborhoods, or (3) produce more graduates among those who currently live in the city. The third is virtually the only option for the nation, other than increasing immigration among those with at least high school educations.

The city can elect all three options. If it is able to attract or retain more individuals with college degrees, as is recommended, the number with high school degrees will also rise. The alternative that could have the largest impact numerically, though, is success in raising the graduation rate in its many public, private, and charter schools. If that conundrum can be solved, then real progress in terms of employment and income can be made.

The answer to that question has proven to be very elusive. Report after report and group after group have tried to come to grips with the issue of how to increase student achievement in inner-city schools. The issue is not unique to Milwaukee; it is an issue nationwide. And finding and implementing the answer is incredibly important to both the city and the nation.

Part of the answer lies in changes within the education system; part lies with the parents, and part lies with employers and their efforts to clearly show that the youth of the city have good, legitimate employment options open to all who graduate from high school.

There are no easy answers. Many K-12 alternatives have been proposed; some have been implemented, but few have worked. The city does contain some very successful schools. But it has been very difficult to take lessons learned and apply them across all schools. This suggests institutional reform is needed, be it the installation of a greatly expanded and improved pre-school program, elimination of the school board, a dramatically different relationship between teachers and the school district, a different form and size of school district, or several other alternatives, none of which is easy to accomplish.

Some recent research has found that to achieve higher levels of reading achievement nurturing parents are not sufficient; what is needed is oral stimulation with larger vocabularies.⁶⁸ If this cannot be done in the home, it must be done outside the home in pre-school programs taught by well-educated care givers. And it must be done in a child's early years; late intervention is much less likely to be successful. That suggests what is needed is a substantially expanded and upgraded pre-school program, especially for low-income children. This option has been increasingly recommended in recent years, but it has not generated the political traction to be implemented.

The one concession to this line of thinking in Wisconsin is the law that now requires those who operate day care centers to have at least a college degree. What the research suggests is that many of the teaching staff should as well. And the use of such pre-schools must be greatly expanded to give more children the opportunity to succeed. Low-income children often enter the K-12 school system behind those with higher incomes and seldom catch up.

A very recent WPRI report suggests that no teacher's college in Wisconsin has any larger impact on raising student achievement levels except one, the University of Wisconsin-Madison.⁶⁹ The distinguishing characteristic of those students is that they themselves achieve at higher levels and they help their students achieve at higher levels. Since more than 20% of MPS teachers come from UWM, an immediate step that could be taken is to urge UWM to raise its bar on entry to the School of Education. What would be needed to make this more effective would be for MPS to concurrently raise its salary level for new teachers, so that better students might be attracted to the profession, especially the profession as practiced in the city of Milwaukee. The emphasis needs to be placed on elementary school teachers, after greater effort has been made at the pre-school level.

MPS and city pre-schools should also create some experiments with UWM or Marquette to learn if the application elsewhere of Singapore math and of video-game taught math at the elementary level raises and maintains understanding of math in its students. Singapore math has helped to make Singapore students the best in math in the world. Perhaps it can work in American inner cities. We cannot afford to waste any more generations of students; more active searches need to be made for solutions to raise achievement levels. These two have promise, but they need further research support. That could and should happen in Milwaukee, where the findings could be applied immediately.

In the middle and upper schools more project-based learning is in order. One of the current favorites is Project Lead the Way, a curriculum to help promote learning and understanding of math, science, and engineering. Again the research is not complete enough to know how well it will work in city schools, but the early evidence in a few middle schools in Milwaukee is that it has raised interest in these subjects and school, but it is too soon to know if it has an impact on educational outcomes (Heywood and White 2007). One of the reasons it is now being tried in middle schools is that it was found that low-income students often did not have the math achievement needed to really benefit from this curriculum. The thought was that if students could be reached sooner, they might be inspired to work harder to obtain the needed academic skills. That could lead to higher graduation rates and greater opportunities for post-secondary education.

Of these alternatives and others by far the most research support is behind early childhood education. The challenge is how to make this available to all who would benefit from it. An answer must be found, be it publicly or privately funded. That is what Milwaukee must do to increase the possibility of higher high school graduation rates.

In addition employers must step up and demonstrate — through their willingness to hire those with high school educations or their equivalents — that if one has a degree, one can find employment at a decent wage in Milwaukee. The retirement of the baby boomers will put greater pressure on employers to find workers and be more open to those with criminal records, disabilities, inability to work 40 hour weeks, and so forth. Employers will have to become markedly more flexible than they are today. And their flexibility must be demonstrated, so that K-12 students see that there is opportunity and reason to study, learn, and complete at least a high school degree.

Increase Downtown Milwaukee Population

As noted in a previous section, Milwaukee has reversed the outflow of people living downtown. Since 2000, at least an additional 1,100 people have opted to live downtown. As with other elements of the redevelopment of metro Milwaukee, this is a positive development. However, in attracting residents to live downtown — a key indicator of economic regeneration — Milwaukee continues to lag other cities.

To the city's credit, a good deal of attention has been given to developing Milwaukee's downtown, including the attraction of additional residents. A recently released report noted that, since 2000, an additional 2,435 housing units

have been added in the downtown area. It is expected that the next full census in 2010 will show even more growth in downtown residents.

A growing downtown population is a healthy sign for the metro Milwaukee economy. To be sure, a growing downtown population benefits businesses located downtown. However, the benefits spill well beyond the downtown to the city as a whole and even to the entire metro area. In city after city, the transition from a manufacturing-based economy to one based more on knowledge-based businesses, is marked by a migration back into the downtown.

The Brookings Institution examined 302 U.S cities and found that, “broad demographic and market forces are repositioning the economies of urban areas and revaluing their assets for a wide range of consumers.”⁷⁰ A key element in the attraction of workers and businesses is a vital, growing downtown. Young, educated workers are particularly attracted to the amenities offered in the downtown as well as an attribute Brookings dubs, “cityness.” Without a doubt, cities can survive without a vibrant downtown, but they cannot thrive.

The Brookings Institution, has studied a number of cities grappling with reinventing their economic bases in a post-industrial economy. From this analysis a strategy has emerged that would be entirely germane for Milwaukee. The simple strategy they suggested is for cities to set a goal of attracting 2% of the metropolitan area’s population to live in the downtown of the major city. Current estimates place Milwaukee’s downtown population at 14,898 which is just under 1% of the estimated population of the Milwaukee metro area.⁷¹

The simplicity of this 2% goal belies its power as an economic development strategy, especially if it is adopted as a strategy pursued by the Milwaukee 7 group. Encapsulated in this simple strategy is an understanding that:

- A healthy region needs a healthy city core,
- City after city has discovered that a reclaimed downtown is attractive to the young, educated workers,
- A thriving downtown will generate demand for entertainment and cultural events and facilities — the mark of the new consumer city. As we have shown, metro Milwaukee is somewhat deficient in spending on consumer amenities.

There are a number of strategies suggested by Brookings that would help boost the downtown population, e.g. financial assistance such as low interest loans or TIF assistance, accentuation of waterfront access and activities as well as locating an expanded University presence in the downtown (UW-Milwaukee already has a presence in the Grand Avenue Mall facility). While the strategic components are important, it is more important at this stage for the Milwaukee 7 group to adopt the population of downtown Milwaukee as a key development goal for the region. From that regional commitment will emerge a specific set of strategies to encourage downtown Milwaukee residential development.

Lower Crime Rate in Milwaukee

Unless Milwaukee is able to reduce its violent crime rate, all other economic development strategies will prove fruitless. As we have shown, the future economic well being of metro Milwaukee is dependent on an inflow of smart, industrious workers. They are unlikely to choose to live in a city that they feel is unsafe. Regardless of the quality of the opera or the availability of a bohemian lifestyle or even the nature of the job, they will insist on safety.

Unfortunately, with a few mouse clicks, several web sites will show any prospective resident that Milwaukee’s violent crime rate has spiked in recent years. Specifically, they will find that, unlike most large cities that have seen a steady reduction in crime, Milwaukee is becoming more, not less, violent.

In reality, most violent crime in Milwaukee is not occurring downtown but rather in poor neighborhoods. A review of police statistics shows that, since 2006, Milwaukee’s downtown has seen no murders, few sex offenses, and several assaults.⁷² However, to the outsider Milwaukee’s downtown will not be seen as a sanctuary from crime. The rising violent crime rate stains the entire city, including the downtown.

There is no question that urban crime is a long-standing, complex issue. Simple solutions do not exist. Violent urban crime is rooted in social and economic issues. However, the harsh reality is that Milwaukee does not have the luxury of waiting for long-term, systemic strategies to yield lowered crime rates. The economy of the city and the region demands action now before Milwaukee is labeled as a dangerous city. National publications, including the *New York Times*, the *Chicago Tribune* and *Time Magazine*, have already reported about Milwaukee’s rising crime rate. Reducing crime is the single-most important thing to do to improve the region’s outlook.

What should be done? We offer no original research or thought here, but rather we echo the research on crime reduction. There are two things that have been shown to reduce violent crime. First, an increase in uniformed police has consistently been shown to lower violent crime. University of Chicago economist Steven Levitt has linked an increased uniformed police presence with a 10%-20% reduction in violent crime.⁷³ Over the past two years, fifty additional officers have been added to the Milwaukee police force, reversing a ten-year reduction in total strength. While some have criticized the additional officers,⁷⁴ such additions are likely to yield a lower crime rate and a healthier economy.

Second, economists have shown that increased incarcerations will lower crime rates. “The evidence linking increased punishment to lower crime rates is very strong,” says Levitt. In studying the reduction of crime in the 1990s, he found that 12% of the drop was attributable to increasing prison populations. Not only did it keep criminals off of the street, it actually did deter other potential criminal acts. In a similar vein, Heritage Senior Policy Analyst David Muhlhausen documented several studies showing how increased incarcerations yield lower crime rates.⁷⁵ As state and county governments grapple with tightening budgets, it will be tempting to look suspiciously at the rising cost of prisons. However, for the sake of developing the economy of Wisconsin’s largest economic center, any strategy that would lower incarceration rates should be discouraged.

This is not to minimize the effectiveness or importance of initiatives aimed toward the underlying causes of crime. Each such initiative should be evaluated on its own merits. However, for purposes of economic development, none should be funded at the expense of either increasing uniformed police or incarceration.

NOTES

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3. Anthony M. Orum, *City Building in America*, Westview Press, 1995, p. 117.
4. Ibid.
5. The city of Milwaukee lost over 14,000 net jobs between 1979 and 1994. This included over 31,000 jobs in manufacturing. For all of the 1990s Milwaukee actually gained 4,000 net jobs despite the loss of over 10,000 manufacturing jobs. Sammis B. White, M. Marc Thomas, and Nicholas A. Thompson, "Changing Spatial Patterns of Employment Location: Milwaukee, Wisconsin, 1979-1994, UWM Urban Research Center, 1995 and Sammis B. White, "The Roaring Nineties: Wisconsin's Regional Employment Growth," in *Wisconsin Policy Research Institute Report*, August 2000, Volume 13, Number 5.
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7. A number of service business located in the suburbs near the supply of female workers who did not want to commute to the central city to work.
8. Edward Glaeser and Albert Saiz, *The Rise of the Skilled City*, Harvard Institute of Economic Research Discussion Paper Number 2025, December 2003.
9. George Lightbourn and Stephen Agostini, *Wisconsin's Quiet Crisis Why Building a new Milwaukee Economy Matters to Wisconsin*. Wisconsin Policy Research Institute, January 2004.
10. Richard Florida, *The Rise of the Creative Class*, Basic Books, 2002.
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18. U.S. Bureau of Economic Analysis, Gross Domestic Product by State, June 2007.
19. Private memos from DWD state economist on October 16, 2006, and June 20, 2007.
20. Definition of downtown Milwaukee taken from 2007 Downtown Milwaukee Market Analysis prepared for the Center for Community and Economic Development.
21. Eugenie Birch, *Who Lives Downtown*, The Brookings Institution, Nov 2005.
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23. Downtown data taken from a 2007 Downtown Milwaukee Market Analysis prepared by the Center for Community and Economic Development.
24. Milwaukee Department of Community Development, Downtown Plan Update Report, January 2008.
25. George Lightbourn and Steve Agostini, *Wisconsin's Quiet Crisis*, Wisconsin Policy Research Institute, 2004.
26. Ibid.
27. Information from FUEL Milwaukee 2007 Annual Survey Report, August 1, 2007.
28. Ibid.

29. Richard Florida, *The Rise of the Creative Class*, Basic Books, 2002.
30. An example is found in Google which, for two years running has been identified as the best company to work for in America. Among the factors elevating Google to the top ranking are: a focus on employee development, innovation and creativity and a corporate philosophy of social responsibility.
31. FUEL Milwaukee 2007 Annual Survey Report, August 1, 2007.
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42. Bruce Katz and Jennifer Vey articulated this finding in *The Goal for Ohio Metros: 43,000 residents*, Brookings, June 2007.
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Under the new federalism, government policy increasingly is made at the state and local levels. These public-policy decisions affect the life of every citizen in the state. Our goal is to provide nonpartisan research on key issues affecting Wisconsinites, so that their elected representatives can make informed decisions to improve the quality of life and future of the state.

Our major priority is to increase the accountability of Wisconsin's government. State and local governments must be responsive to the citizenry, both in terms of the programs they devise and the tax money they spend. Accountability should apply in every area to which the state devotes the public's funds.

The Institute's agenda encompasses the following issues: education, welfare and social services, criminal justice, taxes and spending, and economic development.

We believe that the views of the citizens of Wisconsin should guide the decisions of government officials. To help accomplish this, we also conduct regular public-opinion polls that are designed to inform public officials about how the citizenry views major statewide issues. These polls are disseminated through the media and are made available to the general public and the legislative and executive branches of state government. It is essential that elected officials remember that all of the programs they create and all of the money they spend comes from the citizens of Wisconsin and is made available through their taxes. Public policy should reflect the real needs and concerns of all of the citizens of the state and not those of specific special-interest groups.