

# Beyond Brewing: An Economic Development Report for Milwaukee



By David Arbit  
On April 30<sup>th</sup>, 2009  
For Lori Lutzka and the Milwaukee DCD  
Hubert H. Humphrey Institute of Public Affairs  
University of Minnesota  
Minneapolis, USA

## Table of Contents

<b>Part I: Assessing the Situation</b> .....	<b>4</b>
Abstract .....	4
Introduction .....	4
Methodologies .....	4
A Brief Regional History .....	6
Population Dynamics, Socio-Economic Trends, and Demographic Transitions.....	6
Political Fragmentation .....	10
Economic Overview .....	10
Economic Base Analysis.....	12
Regional Economic Sub-Specializations.....	13
Industry Growth and Decline.....	14
Women in the Workforce .....	15
Anecdotal and Qualitative Approaches .....	16
Concluding Remarks .....	17
<b>Part II: Identifying Potential Development Strategies</b> .....	<b>17</b>
Abstract .....	17
Introduction .....	18
Workforce Development .....	19
Catalytic Projects.....	22
GROW Grant .....	23
PMDs, TIFs, and Brownfields .....	24
Other Economic Development Initiatives .....	26
Minority Business Empowerment.....	27
Cultural Districts and Amenities .....	29
The Role of the University.....	30
Place-Making .....	30
Concluding Remarks .....	31
Works Cited and Literature Referenced .....	32

## List of Figures

<b>Figure I: Milwaukee MSA and Suburban Rings</b> .....	<b>4</b>
<b>Figure II: Racial Profile</b> .....	<b>7</b>
<b>Figure III: City - MSA Statistical Ratios</b> .....	<b>7</b>
<b>Figure IV: Income and Population Change</b> .....	<b>8</b>
<b>Figure V: Income Ratios</b> .....	<b>9</b>
<b>Figure VI: Poverty Rates for Selected Geographic Scales</b> .....	<b>9</b>
<b>Figure VII: Governmental Fragmentation</b> .....	<b>10</b>
<b>Figure VIII: Largest Employers in 1970</b> .....	<b>10</b>
<b>Figure IX: Largest Employers in 2004</b> .....	<b>10</b>
<b>Figure X: Major Basic Job Industries</b> .....	<b>11</b>
<b>Figure XI: Major Non-Basic Job Industries</b> .....	<b>11</b>
<b>Figure XII: Regional Specialization, LQs Greater Than 1</b> .....	<b>13</b>
<b>Figure XIII: Regional Non-Specialization, LQs Less Than 1</b> .....	<b>14</b>
<b>Figure XIV: Growing Industries</b> .....	<b>15</b>



<b>Figure XV: Declining Industries.....</b>	<b>15</b>
<b>Figure XVI: Female Underrepresentation in Workforce .....</b>	<b>16</b>
<b>Figure XVII: Female Overrepresentation in Workforce.....</b>	<b>16</b>
<b>Figure XVIII: Businesses with Strong Hiring Projections for Entry-Level Workers.....</b>	<b>20</b>
<b>Figure XIX: How Milwaukee Stacks Up .....</b>	<b>21</b>
<b>Figure XX: Daily Inter-City Commuters .....</b>	<b>23</b>
<b>Figure XXI: Job Decentralization in the Milwaukee Region (1970-2000) .....</b>	<b>24</b>
<b>Figure XXII: Racial Disparities in Employment for Males, 2002.....</b>	<b>28</b>

### **Acknowledgements**

There are a number of individuals and organizations that made this undertaking possible. They are each deserving of credit. David Schultz for his seemingly endless knowledge and candidness during course sessions. Carly Waldon for the infinite number of hours she invested into lab. Edward Goetz for his oversight and editing role, as well as for his knowledge of urban morphology and growth management strategies. The UWM Department of Economics for their important research and commitment to information sharing. There are also a number of federal agencies including the US Census Bureau and the Bureau of Economic Analysis without which this would never have come to fruition. Thank you for your time, energy, commitment, and enthusiasm.

## **Part I: Assessing the Situation**

### **Abstract**

This undertaking seeks to better understand both the quantitative and qualitative (socio)-economic dynamics and underpinnings of the Milwaukee Metropolitan Statistical Area (MSA). It begins with a brief economic and demographic profile of the city and region, then transitions into more specific analyses of the social, political, and economic trends taking place in the region. Despite the fact that Milwaukee has historically been known as a manufacturing and brewing powerhouse, it has since taken steps to diversify its economic functions. With a variety of regional specializations—including electrical equipment, internet service providers, printing, and couriers—Milwaukee has been performing secondary and tertiary economic functions as well as diversifying into the service sector. Several important industries have experienced substantial growth in recent years (health care, private sector, services), while other sectors have witnessed a severe decline (logging, mining, textiles, manufacturing). The Milwaukee MSA is also heavily gender-stratified. Sectors experiencing the highest growth rates are private services, wholesale trade, and construction; while declining industries include but are not limited to military functions, state government, farming, and markedly manufacturing.

### **Introduction**

Incorporated in 1846, Milwaukee is Wisconsin's largest city. It occupies approximately 96.9 square miles of land at the confluence of the Menomonee, Kinnickinnic, and Milwaukee Rivers. Milwaukee's Primary Metropolitan Statistical Area (PMSA) is a 5-county agglomeration which includes Milwaukee, Ozaukee, Racine, Waukesha, and Washington counties. With a total population of 1,689,572 in the 5-county MSA, Milwaukee is the 22<sup>nd</sup> largest city in the United States.

Bounded on the East by Lake Michigan, Milwaukee's growth and development has been constrained to westward and northern movement—or sprawl. Along with most rust-belt cities, Milwaukee is experiencing metropolitan polarization. The city is experiencing rapid decline while its suburbs are becoming ever more prosperous. Employment and other economic opportunities are decentralizing outwards toward the periphery along with the more mobile and affluent populations to create a spatial mismatch between zones of concentrated poverty and real economic opportunities.

Milwaukee's economy is somewhat diversified—though it has historically been disproportionately concentrated in the brewing and manufacturing sectors. It has recently become more diversified into the Health Care, Retail, Banking, and Insurance sectors. Milwaukee has emerged as a regional hub for electronic equipment, health care products, and retail merchandise. Also, Milwaukee's inner urban core and even inner-ring suburbs have been experiencing both social and economic decline for some time.

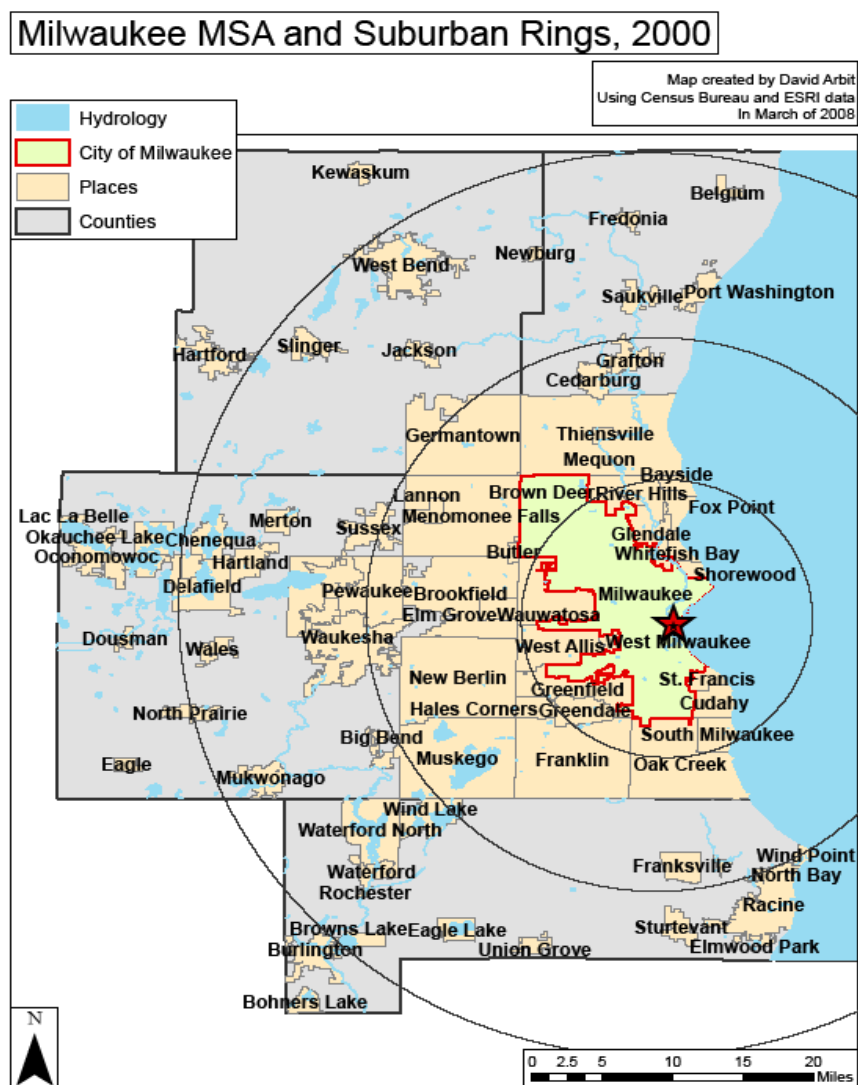
### **Methodologies**

This study utilizes an assortment of data, including time-series US Census Bureau data obtained from the US Census website as well as from the Geolytics software in the Borchert Map Library at the University of Minnesota. CBP (County Business Patterns), BLS (Bureau of Labor Statistics), and REIS (Regional Economic Information System) data sources were also consulted. First-, second-, and third-ring suburbs were distinguished from one another during a two-fold process. First, any place or CDPs (Census Designated Places) that shared a contiguous border

with the incorporated municipality of Milwaukee were designated as first-ring. Second, any additional places or suburbs that fell within a 9-mile radius (as identified in the literature<sup>1</sup>) from the CBD (Central Business District) were also classified as first-ring.

Second- and third-ring suburbs were classified based on uniformly radiating concentric rings (semi-circles due to Lake Michigan) outwards from the CBD. These concentric rings radiate outwards in an equidistant fashion beyond the 9-mile inner-ring marker (see Figure I). Additionally, incomes used are all median household incomes; dollar amounts are in unadjusted currency for that particular year. Since the time horizon is the 30 year period between 1970 and 2000 for part of this study, 1960 data was not gathered. Therefore the percent change between 1960 and 1970 was not available for any of the related analyses.

**Figure I**



<sup>1</sup> Craig, Steven & Ng, Pin. (2001). "Using Quantile Smoothing Splines to Identify Employment Subcenters in a Multicentric Urban Area." *Journal of Urban Economics*. 49(3):100-120

## A Brief Regional History

Originally occupied by the Fox, Mascouten, Potawatomi, and Ho-Chunk Native American Tribes, French missionaries and traders first landed in the Milwaukee region during the late 17<sup>th</sup> century. The word “Milwaukee” comes from the Algonquian and means “Good, Beautiful, and Pleasant Land”. The Potawatomi and Ojibwe tribes had phonetically similar words meaning “Gathering place by the water.”<sup>2</sup>

Milwaukee has three founding fathers—Solomon Juneau, Byron Kilbourn, and George Walker. Juneau, the first to arrive in the area in 1818, created Juneatown on the east side of the Milwaukee River—this was essentially Milwaukee’s first pilot project. However, Kilbourntown was Juneau’s equivalent (i.e. arch nemesis) on the west side of the river. Walker established Walker’s Point on the south side of the river.

By the mid-1800s, with tensions mounting and after substantial population growth, Juneatown and Kilbourntown rivalries culminated with the Milwaukee Bridge War in 1845. By 1846, the three towns had incorporated to form the City of Milwaukee and elected Juneau as the first mayor. In the following years, a plethora of German, Polish, Italian, and Irish immigrants had made the city their home. Also, a large number of African Americans made Milwaukee their home when they emigrated from the South and formed a community that would be known as Bronzeville. In fact, outside of New York City, Milwaukee boasted the highest percentage of foreign-born residents in the country.<sup>3</sup>

In the early 20<sup>th</sup> century, Milwaukee was the hub of the socialist movement in the United States. Milwaukeeans elected three socialist mayors—Seidel, Hoan, and Zeidler. Known for their practical approach to government, the city seemed to flourish during this socialist reign. But this prosperity came to a screeching halt with white flight and the loss of blue collar jobs in the later 20<sup>th</sup> Century. Nevertheless, due to several revitalization projects including the Historic Third Ward, the East Side, and Bay View, the city actually gained population between 2000 and 2006 for the first time since the 1960s.<sup>4</sup>

## Population Dynamics, Socio-Economic Trends, and Demographic Transitions

Milwaukee, like most Midwestern and Rust Belt cities, has been experiencing a decline in its inner-city population. However, this decentralization is coupled with substantial suburban growth. Between 1990 and 2000, the entire MSA had a 5.12% growth rate. Between 1990 and 2000, the city population decreased from 793,213 to 654,202; while the suburbs grew from 813,970 to 1,035,370 people (see Figures III and IV).

These figures suggest that not only was there an exodus from the inner city (partially attributable to white flight or job decentralization), but also that new in-migrants started off on the fringes and peripheral areas of the urban system—which is very different from the ethnic enclave effect in the urban landscape created by Polish and German migration patterns a century earlier. This is the result of the cumulative causation of a variety of push and pull factors including schooling, crime, relative densities, available amenities, proximity to economic opportunities, and striving to operationalize the American Dream myth.

It is well-known and widely documented that Milwaukee is one of the most hypersegregated metropolitan areas in the country. The Index of Dissimilarity—which represents the percentage of residents who would have to move in order to achieve spatial

---

<sup>2</sup> Milwaukee County Historical Society. (2008). <http://www.milwaukeecountyhistsoc.org>

<sup>3</sup> Ibid

<sup>4</sup> US Census Bureau. (2007). [www.census.gov](http://www.census.gov)

equilibrium with regards to race—empirically supports this fact (71 in 2000). This is changing, however. From 1990 to 2000, the African American and Asian communities experienced the most growth. Whites made up 83.15% of the population in 1990, while they only comprised 77.84% of the 2000 population. African Americans are the next largest group, comprising about 15% of the 2000 population. Figure II provides a fully-detailed racial profile of the Milwaukee MSA region.

**Figure II**  
**Racial Profile: Milwaukee, WI PMSA 1990 - 2000**

	1990		2000	
	Number	Percent	Number	Percent
<b>Total</b>	1,607,183	100%	1,689,572	100%
<b>White</b>	1,336,407	83.15%	1,315,208	77.84%
<b>Black or Afr. Amer.</b>	214,125	13.32%	252,267	14.93%
<b>Amer. Ind. &amp; Alask.</b>	8,728	0.54%	10,747	0.64%
<b>Asian</b>	19,101	1.19%	29,821	1.76%
<b>Hawaiian &amp; Pac. Isl.</b>	371	>0%	687	>0%
<b>Some other race</b>	28,451	1.77%	49,578	2.93%
<b>Two or more races</b>	-	-	31,264	1.85%

*U.S. Census Bureau 1990 & 2000*

In 1990, the City of Milwaukee contained 628,088 out of 1,607,183 persons in the entire MSA. This is equivalent to 39.1% of the MSA living in the central city in 1990. Interestingly, the average 1990 incomes for city-dwellers was \$23,627 while the entire MSA generated \$32,359 in median household income. This is equivalent to a ratio of 0.73:1 or 73%. In 2000, the city had a population of 596,956 or 35.3% of the MSA's 1,689,572 persons. The city was also worse off relative to the metro area in terms of income in 2000. The median household income for the city was \$32,216, or 69.8% of the MSA median of \$46.

Hence, not only did the city lose population between 1990 and 2000 (39% vs. 35% of the MSA), but it also declined in terms of its share of income. While the city made 73% of the MSA's income in 1990, it only generated 69% of the 2000 MSA's median income. Higher incomes translate into both greater residential and physical mobility, and thus wealthier families are more able to exercise the exit option and migrate outwards to the inner (and outer) ring suburbs, not coincidentally the same direction as job migration. See Figure III for a more complete rendering of this information

**Figure III**  
**City – MSA Statistical Ratios: Milwaukee, WI PMSA 1990 - 2000**

	1990			2000		
	City	MSA	City:MSA	City	MSA	City:MSA
<b>Population</b>	628,088	1,607,183	39.1%	596,956	1,689,572	35.3%
<b>Income</b>	\$23,627	\$32,359	73%	\$32,216	\$46,132	69.8%

*U.S. Census Bureau 1990 & 2000*

The Milwaukee-Waukesha-West Allis PMSA experienced a brief period of population loss in 1980, but had positive—and in fact increasing—growth rates throughout each subsequent

decade (-2.6% in 1980, 3.5% in 1990, and 4.8% in 2000). Incomes in the entire MSA have also been increasing but at a decreasing rate (111.7% in 1980, 27.6% in 1990, and 32.6% in 2000).

Milwaukee's inner city is unquestionably experiencing decline and decay. As Figures III and IV illustrate, the city has been experiencing ongoing population loss between 1970 and 2000. However, the rate of decline has slowed somewhat—though it continues to fluctuate. Every 10 years after 1970, the city's population decreased by 11.3%, 1.3%, and 5% decennially or from 717,099 in 1970 to 636,212 in 1980 to 628,088 in 1990 and to 596,956 in 2000. Hence, these trends offer empirical evidence that Milwaukee's inner city is experiencing substantial population loss (16.75% decrease from 1970 to 2000) while the broader MSA has only been growing (5.64% increase from 1970 to 2000). First-ring suburbs have been losing population—albeit at a decreasing rate. This means that there was substantial decentralization of the population away from the city and even the first ring of suburbs between 1970 and 2000. In 1980, the inner ring lost 4.6% of its population followed by a 1.8% decline in 1990 and a 1.6% decrease in 2000. It may therefore be reasonably deduced and proven that the primary regions of new growth are in the outer-ring suburbs and exurban peripheral zones.

**Figure IV**  
**Income and Population Change: Milwaukee, WI PMSA 1970-2000**

	1970	1980	1990	2000
<b>MSA</b>				
Population	1,406,168	1,369,578	1,417,711	1,485,423
% Change	n/a	-2.60%	3.51%	4.78%
Income	\$11,962	\$25,325	\$32,316	\$42,856
% Change	n/a	111.72%	27.61%	32.61%
<b>City</b>				
Population	717,099	636,212	628,088	596,956
% Change	n/a	-11.28%	-1.28%	-4.96%
Income	\$10,262	\$16,028	\$28,415	\$32,216
% Change	n/a	56.19%	77.28%	13.38%
<b>First-Ring Suburbs</b>				
Population	309,378	295,087	289,912	285,290
% Change	n/a	-4.62%	-1.75%	-1.59%
Income	\$13,836	\$30,271	\$45,301	\$60,596
% Change	n/a	118.78%	49.65%	33.76%
<b>Second-Ring Suburbs</b>				
Population	201,491	220,963	262,118	319,182
% Change	n/a	9.66%	18.63%	21.77%
Income	\$12,215	\$28,215	\$43,982	\$62,859
% Change	n/a	131.00%	55.88%	42.92%
<b>Third-Ring Suburbs</b>				
Population	174,799	215,041	237,593	283,995
% Change	n/a	23.02%	10.49%	19.53%
Income	\$10,090	\$27,287	\$42,201	\$63,274
% Change	n/a	170.44%	54.66%	49.94%

Source: US Census Bureau

Note: dollar amounts are unadjusted

Not surprisingly, as inner ring suburbs host a disproportionately high share of starter homes (because of the aging housing stock and their location near the bottom of the vacancy



chain), incomes should be lower. However, the North Shore of Milwaukee (Shorewood, Whitefish Bay, Fox Point, Bayside, River Hills) is an extremely prosperous inner-ring region, and thus incomes are somewhat skewed positively. Figure IV illustrates this. In 1970, 1980, and 1990, the first ring of suburbs continuously outpaced all other suburban rings as well as the city and the MSA, but this changed in 2000 when the second- and third-rings became more prosperous and became front-runners in terms of income.

Median household incomes mean very little when they stand alone. Figure V provides a table comparing city incomes to both MSA incomes as well as suburban incomes. In 1970, city-dwellers' incomes were approximately 85% of suburbanites' incomes. By 2000, that income gap had widened significantly; city incomes were only 52% of suburban incomes. Urbanites make about half of what suburbanites make, which is evidence of high income disparity. The figures are less pronounced for the city to MSA ratios since the MSA includes the city and is therefore somewhat diluted aggregate data.

**Figure V**  
**Income Ratios: Milwaukee, WI PMSA 1970-2000**

	City:MSA	City:Suburbs
<b>1970</b>	0.86	0.85
<b>1980</b>	0.63	0.56
<b>1990</b>	0.88	0.65
<b>2000</b>	0.75	0.52

*Source: US Census Bureau*

Perhaps the best evidence of inner ring suburban decline is inner ring suburban poverty. Figure VI illustrates poverty rates broken down by city, MSA, and each ring of suburbs. One apparent trend is the steady increase in first-ring poverty. The second- and third-ring trends are less alarming because they don't fluctuate much more than three-tenths of a percentage point and rise and fall between 1970 and 2000. The inner-most ring, however, had a 2.5% poverty rate in 1970, followed by 2.9% in 1980, and 3.7% and 4.8% in 1990 and 2000, respectively. In fact, this trend should be somewhat alarming since first-ring suburban poverty has indeed surpassed overall MSA poverty in 2000. Even more alarming is the 20.7% poverty rate in the inner city—a startling indicator that more than 1 in 5 people fall below the poverty line.

**Figure VI**  
**Poverty Rates for Selected Geographic Scales: Milwaukee, WI PMSA 1970-2000**

	City	MSA	First-Ring Suburbs	Second-Ring Suburbs	Third-Ring Suburbs
<b>1970</b>	7.81%	3.05%	2.52%	2.61%	3.60%
<b>1980</b>	13.41%	4.13%	2.90%	3.23%	4.71%
<b>1990</b>	21.59%	3.80%	3.70%	3.21%	3.61%
<b>2000</b>	20.72%	3.73%	4.80%	2.73%	3.28%

*Source: US Census Bureau*

Figure VI portrays the climbing first-ring suburban poverty rate. It surpassed the MSA and third-ring at some point between 1990 and 2000—symbolizing a pivotal downward turning point in the well-being of Milwaukee's inner-most ring of suburbs. Furthermore, although the third-ring was fairly poor in 1970 due to the fact that it was still primarily comprised of low-paying agricultural jobs, the poverty rate in third-ring declined the most substantially between

1980 and 2000—a time when the affluent classes continued to further decentralize themselves from the inner city. It is noteworthy that the second-ring suburbs peaked in 1980 and that the overall MSA has been experiencing a downward trend as well.

### Political Fragmentation

Also known as governmental or metropolitan fragmentation, this empirical measure refers to the number of municipal governments or other political institutions and legal entities per unit of population. Figure VII illustrates the number of governments per 100,000 people. Governmental fragmentation peaked in 1980 with an average of 4.9 governments per 100,000 residents. This occurred because of the fact that 27 new governmental entities were formed between 1970 and 1980 while the total population actually decreased by 36,590 people. This figure has dropped only modestly in subsequent years to 4.7 in 1990 and 4.6 in 2000.

Governmental fragmentation has been framed as something of an enemy to growth management policies and environmental sustainability work. It also serves as something of a hindrance to economic integration, agglomeration, and unification. With so many political entities vying for power over the direction and nature of future growth and development, the process tends to stall and political figures are notorious for playing political and partisan “games”. The ideal is something of a unified body operationalizing a unified vision for future growth as opposed to being paralyzed by fragmentation and an excessively multi-lateral political decision-making process.

**Figure VII**  
**Governmental Fragmentation, Milwaukee MSA 1970-2000**

	<b># Governments</b>	<b>Total Population</b>	<b>Governments per 100,000</b>
<b>1970</b>	40	1,406,168	2.84
<b>1980</b>	67	1,369,578	4.89
<b>1990</b>	67	1,417,711	4.73
<b>2000</b>	68	1,485,423	4.58

*Source: US Census Bureau*

### Economic Overview

It is no secret that Milwaukee was once a regional manufacturing center—it has since become something of a second-tier locale performing tertiary functions with Chicago’s rise to prominence. As such, in 1970, Milwaukee’s economy was disproportionately invested in manufacturing and brewing. In fact, as Figure VIII portrays, all of the top ten employers were either in the manufacturing or brewing sectors. Needless to say, this led to unnecessary risk exposure and essentially put all of Milwaukee’s economic eggs in two baskets.

Milwaukee’s economy has since diversified a great deal, as evidenced by Figure IX. By 2004, Milwaukee had largely transitioned to the service sector and knowledge economy. The Health Care sector represents the greatest number of jobs in 2004. Roundy’s headquarters are also located just outside of Milwaukee’s core. Interestingly, none of the top ten employers in 1970 were top employers in 2004, a factor consistent with either high corporate turnover or simply the decreasing centrality of manufacturing to Milwaukee’s economy.

Milwaukee feeds off its interior hinterland for the processing of agricultural goods such as dairy products, grain, and corn. Its strategic geographic location on the St. Lawrence – Great Lakes navigable waterway has also facilitated import and export trade. Specifically, Milwaukee

would perform secondary functions for Detroit’s automotive industry—such as transmission assembly, upholstery, and metal work.

The diversification of Milwaukee’s economy has meant a certain degree of insulation from market volatility. If Milwaukee’s economy were overly dependent on just two sectors, like it was in 1970, it would be far more susceptible to highly fickle investment cycles, product cycles, and the ebbs and flows inherent in any marketplace.

**Figure VIII**

**Largest Employers in 1970: Milwaukee, WI PMSA 1970**

<b>Company</b>	<b>Sector</b>	<b>Employees</b>
Allis-Charlmers	Manufacturing	11,500
A.O. Smith	Manufacturing	8,000
Briggs & Stratton	Manufacturing	7,400
Allen-Bradley	Manufacturing	6,500
Delco Electronics	Manufacturing	5,000
Harnischfeger	Manufacturing	4,450
American Motors	Manufacturing	4,000
Jos. Schlitz Brewing Co.	Brewing	2,800
Pabst Brewing Co.	Brewing	2,600
Miller Brewing Co.	Brewing	2,400

*Source: UWM Dept. of Econ.*

**Figure IX**

**Largest Employers in 2004: Milwaukee, WI PMSA 2004**

<b>Company</b>	<b>Sector</b>	<b>Employees</b>
Aurora Health Care	Health Care	15,500
Covenant Healthcare	Health Care	9,520
Roundy's	Grocery	7,400
Marshall & Ilsley	Banking	6,800
Wisconsin Energy	Utility	6,000
GE Healthcare	Health Care	5,800
Kohl's	Retail	5,500
Quad Graphics	Printing	5,300
Northwestern Mutual	Insurance	4,600

*Source: UWM Dept. of Econ.*

This empirical evidence tends to be consistent with the literature on deindustrialization<sup>5</sup>. Milwaukee has witnessed a fundamental transition in its revenue-generating activities. It has shifted from raw manufacturing activities that generated marginal profits through value-added, to a service sector economy. This transition, however, calls for increased investments in human capital—an area in which Milwaukee has not always excelled.

<sup>5</sup> Ip, Greg. (2005). “Moving Up: Challenges to The American Dream; Degrees of Separation: as Economy Shifts, A New Generation Fights to Keep Up; In Milwaukee, Factories Close and Skills, Not Seniority, Are Key to Advancement; An Ex-Welder’s Computer Job.” *Wall Street Journal*. June 22, 2005: pg. A.1

## Economic Base Analysis

Economic base theorists assert that any local or regional economy may be disaggregated into a binary-dichotomous classification system—basic and non-basic. The basic sector refers to those industries that are largely dependent upon external markets and dollars (exports). Instead of merely circulating local dollars, the basic sector attracts the local equivalent of FDI (Foreign Direct Investment). Manufacturing and local resource-oriented firms (i.e. logging, mining) are typically basic sector functions, even though raw manufacturing and resource extraction have their own drawbacks such as sustainability issues. By contrast, the non-basic sector is comprised of local businesses and services that generally cater to a highly localized clientele. Non-basic functions include retail outlets, grocery stores, beauty salons, and so on.

Figure X shows that many of the top basic job providers are in the manufacturing sector. Fabricated Metal Product Manufacturing creates the most basic jobs (14,275). This is something of a double-edged sword, since Milwaukee’s political and economic leaders have been weaning the city off of manufacturing in the name of diversification and modernization. However, major manufactured exports create the greatest number of jobs and also attract external dollars—as opposed to merely (re)-circulating local dollars. Perhaps the ideal is a healthy balance without overdependence. Insurance, printing, durable goods producers, and ISPs are also major basic job creators.

**Figure X**  
**Major Basic Job Industries: Milwaukee, WI PMSA 2005**

NAICS	NAICS Name	Basic Jobs
611	Educational Services	5,916
518	Internet Service Providers, Web Search Portals, and Data Processing Services	5,927
423	Merchant Wholesalers, Durable Goods	6,260
622	Hospitals	7,718
323	Printing and Related Support Activities	8,081
624	Social Assistance	8,438
335	Electrical Equipment, Appliance, and Component Manufacturing	9,521
333	Machinery Manufacturing	12,476
524	Insurance Carriers and Related Activities	12,763
332	Fabricated Metal Product Manufacturing	14,275

Source: BEA, 2004

**Figure XI**  
**Major Non-Basic Job Industries: Milwaukee, WI PMSA 2005**

NAICS	NAICS Name	Non-Basic Jobs
541	Professional, Scientific, and Technical Services	16,037
561	Administrative and Support Services	14,645
722	Food Services and Drinking Places	13,259
238	Specialty Trade Contractors	8,187
336	Transportation Equipment Manufacturing	5,996
721	Accommodation	5,604
236	Construction of Buildings	4,806
452	General Merchandise Stores	4,194
448	Clothing and Clothing Accessories Stores	3,986
237	Heavy and Civil Engineering Construction	3,954

Source: BEA, 2004

Figure XI highlights the major non-basic industries. Professional, Scientific, and Technical Services is the major non-basic job creator. These services are presumably being provided for local agencies, departments, corporations, and other legal entities. Accommodation, food services, drinking places, as well as general merchandising and clothing accessories stores are predictably dependent upon local source of capital.

Overall, the Milwaukee MSA had a base multiplier of approximately 6.78 in 2004. Base multipliers are expressed as a ratio of the total local employment to the total basic employment. This calculation rests on the simple, causal assumption that the primary driver of local economic growth is the basic sector. Depending on the presence and degree of endogenous versus exogenous economic linkages, this means that per every basic job created, there are approximately 5.78 non-basic jobs, or 6.78 total jobs.

### Regional Economic Sub-Specializations

With a transitioning economy, some emergent service sectors will take precedence over old manufacturing functions. Also, differential regional endowments, workforce skills, and historical-economic development trajectories tend to cumulatively determine regional specialization. The degree of regional specialization is most commonly determined by location quotients (LQs). An LQ is essentially a ratio of ratios—it is the ratio of local employment in an industry to total local employment to the ratio of employment in the national industry to total national employment. LQs greater than 1 indicate a disproportionately large share of that industry being represented locally, or that industry is said to have an export orientation (since goods or services are produced or provided in excess of local demand). LQs less than 1 indicate that that particular industry is underrepresented relative to national level employment trends. An LQ equal 1 indicates perfect self-sufficiency (no imports, no exports).

In a diversifying economy, one may expect Milwaukee to specialize in non-heavy manufacturing activities. Except for fabricated metals and electric equipment (Milwaukee Electric) and leather manufacturing, this holds true. Figure XII illustrates that electronics, ISPs and data processing, leather, printing, metal products, couriers, and insurance are all regional sub-specializations in the Milwaukee MSA. In essence, manufacturing is in fact declining but the sector still remains strong relative to other local and regional industries.

**Figure XII**  
**Regional Specialization, LQs Greater Than 1 (Export Orientation):**  
**Milwaukee, WI PMSA 2005**

NAICS	NAICS Name	LQ
485	Transit and Ground Passenger Transportation	1.66
524	Insurance Carriers and Related Activities	1.77
492	Couriers and Messengers	2.16
331	Primary Metal Manufacturing	2.19
332	Fabricated Metal Product Manufacturing	2.32
333	Machinery Manufacturing	2.59
323	Printing and Related Support Activities	2.73
	Internet Service Providers, Web Search Portals, and Data	
518	Processing	2.85
316	Leather and Allied Product Manufacturing	3.31
	Electrical Equipment, Appliance, and Component	
335	Manufacturing	4.14

Source: CBP, 2005

Locally underrepresented industries include forestry, logging, mining, fishing, hunting, and agro-productive activities, as shown in Figure XIII. Also apparel production, textile mills, and scenic and sightseeing transport are also underperforming industries in the local economy. This is to be expected in any built-up environment or urban landscape. There is very little opportunity to capitalize on the limited (and fleeting) inventory of arable land in a relatively heavily urbanized region. The low LQ for mining may be explained by similar logic. Mining is a highly land-consumptive activity—it is also entirely dependent on natural resource endowments. However, the apparent deficiency in transportation of people and goods may be grounds for concern. Also, clothing—being the nearly perfectly inelastic good that it is—would be beneficial to an economy when produced locally to satisfy local demand and would also minimize transportation costs thereby increasing profitability margins.

**Figure XIII**  
**Regional Non-Specialization, LQs Less Than 1 (Import Orientation):**  
**Milwaukee, WI PMSA 2005**

NAICS	NAICS Name	LQ
113	Forestry and Logging	0.01
213	Support Activities for Mining	0.03
483	Water Transportation	0.03
486	Pipeline Transportation	0.06
115	Support Activities for Agriculture and Forestry	0.11
315	Apparel Manufacturing	0.14
114	Fishing, Hunting and Trapping	0.15
519	Other Information Services	0.19
313	Textile Mills	0.25
487	Scenic and Sightseeing Transportation	0.27

Source: CBP, 2005

### Industry Growth and Decline

There have been several important changes in Milwaukee's economy over recent years. As mentioned, the majority of these transitions may be accounted for by a declining manufacturing base and an ever-increasingly significant service sector. Figure XVI shows the growing significance of services, public utilities, private sector employment, as well as construction and wholesale trade. These industries had a combined growth rate of approximately 130% over the 12 year study period.

**Figure XIV**  
**Growing Industries: Milwaukee, WI PMSA 2005**

Occupation	1988 Emp.	2000 Emp.	% Change
Wholesale Trade	46,699	55,450	18.74%
Private Employment	757,285	910,930	20.29%
Transportation and Public Utilities	38,277	47,235	23.40%
Construction	32,407	41,803	28.99%
Services	243,331	344,945	41.76%

Source: REIS, 2004

The declining industries are farming, military and state government, as well as the manufacturing sector. Since farming is experiencing quickly diminishing returns—so much so in fact that most crop production and other agro-productive activities must be federally subsidized—there is less of an incentive to participate, even though demand for farming products and other outputs is relatively inelastic.

**Figure XV**  
**Declining Industries: Milwaukee, WI PMSA 2005**

<b>Occupation</b>	<b>1988 Emp.</b>	<b>2000 Emp.</b>	<b>% Change</b>
Military	7,671	5,437	-29.12%
Farm Employment	3,915	2,999	-23.40%
Farm Proprietors Employment	2,683	2,243	-16.40%
State Government	12,604	11,680	-7.33%
Manufacturing	178,041	177,074	-0.54%

Source: REIS, 2004

### Women in the Workforce

Women have taken vast, positive strides in the national and local workforces. There are now more female CEOs than ever.<sup>6</sup> Nevertheless, at least in the Milwaukee MSA, women tend to occupy traditionally female-dominated fields such as administrative support and health care support occupations. Similarly, typically male-dominated positions tend to remain so. For example, the five occupations laid out in Figure XVI are all related to construction and extraction and are all comprised of at least a 96% male labor pool. On the other hand, health care support occupations depend on a 92% female labor pool. Figures XVI and XVII offer strong empirical support for gender stratification within the Milwaukee MSA labor force.

**Figure XVI**  
**Female Underrepresentation in Workforce:**  
**Milwaukee, WI PMSA 2005**

<b>Occupation</b>	<b>Both sexes</b>	<b>Male</b>	<b>Female</b>	<b>% of Workforce Female</b>
Extraction Workers	147	147	0	0.00%
Supervisors, Construction, and Extraction Workers	3,197	3,108	89	2.78%
Construction and Extraction Occupations	32,304	31,333	971	3.01%
Construction Trades Workers	28,960	28,078	882	3.05%
Construction, Extraction, and Maintenance Occupations	60,958	58,714	2,244	3.68%

Source: Bureau of Labor Statistics (BLS), 2005

<sup>6</sup> Jackson, Janet C. (2001). "Women Middle Managers' Perception of the Glass Ceiling." *Women in Management Review*. 16(1):30-41

**Figure XVII**  
**Female Overrepresentation in Workforce**  
**Milwaukee, WI PMSA 2005**

<b>Occupation</b>	<b>Both sexes</b>	<b>Male</b>	<b>Female</b>	<b>% of Workforce Female</b>
Office and Administrative Support Occupations	135,861	32,242	103,619	76.27%
Healthcare Practitioners and Technical Occupations	43,580	9,995	33,585	77.07%
Personal Care and Service Occupations	19,128	3,647	15,481	80.93%
Health Technologists and Technicians	12,649	1,652	10,997	86.94%
Healthcare Support Occupations	18,502	1,481	17,021	92.00%

*Source: Bureau of Labor Statistics (BLS), 2005*

### **Anecdotal and Qualitative Approaches**

Numbers and figures can only provide a partial understanding of urban-economic dynamics. Having reviewed the literature as well as carried out somewhat extensive fieldwork in the Milwaukee MSA, there a number of highly dynamic processes that warrant mention here. There are two regions—the Historic Third Ward and the downtown waterfront—that are particularly well-suited examples of successful urban regeneration and revitalization projects. The question remains, will recent redevelopment, reinvestment, and capital improvements be sufficient to counter-balance an otherwise decaying industrial city? Perhaps, but it seems unlikely absent some other profound, vigorous, and far-reaching urban renaissance.

Listed on the National Register of Historic Places, the Historic Third Ward had been an Irish ethnic enclave and then an industrial warehouse district. It is a prime example of a thriving mixed-use district near the heart of downtown. The Riverwalk also passes through the Third Ward. Built to increase riverfront accessibility and connectivity, the Riverwalk now boasts the RiverSplash festival, the RiverSculpture art display, and a variety of parks, venues, brewpubs, and water taxi landings designed to spur increased riverfront activity and commerce.

With a quickly transitioning economy, it is plain to see this shift manifested in the urban landscape. Declining industries such as manufacturing and brewing no longer demand large, centralized plots of land and real estate. This has allowed for the large-scale conversions and redevelopment projects such as the Blatz Condominiums and Pabst Village. Similarly, old warehouses and once-sleepy industrial corridors are being invigorated with new life. There are many mixed-use and new-urbanist projects—which call for compact, transit-oriented high-density developments with retail at the street level, perhaps a law office or clinic occupying the second and third levels, and finally residential uses on the upper levels. There is an increased level of public-private partnerships. The public sector has been carrying out capital and infrastructure improvements while the private sector steps in during the development phases.

Despite all of this, city-dwellers can seldom afford these trendy living opportunities. This has led to a degree of (re)gentrification—a process of economic displacement based on class invasion and succession. Average incomes in the Milwaukee MSA, as Lank (2005) notes, have consistently fallen below the national average for the past several years.<sup>7</sup> With the

<sup>7</sup> Lank, Avrum D. (2005). “Household Income Comes Up Short.” *Milwaukee Journal Sentinel*. March, 4<sup>th</sup> 2005



outsourcing of low-skilled jobs and the deindustrialization of Milwaukee, blue-collar workers have experienced severely decreased purchasing power and quality of life. But if one were to stroll along the Riverwalk, the Milwaukee Art Museum, or tour the old brewery-turned-condo development projects, they would never be able to tell.

## **Concluding Remarks**

A region's ability to remain vital and viable at least partially rests in its capacity to attract and retain a highly-educated creative class. However, a region's ability to remain "sticky" is a far more complex proposition. Social integration, crime reduction, school enhancement, diminishing the negative externalities of a transitioning economy, facilitating homeownership, offering ongoing adult literacy and education courses, political transparency, and bottom-up grassroots work are some of the many means reaching towards that end.

Milwaukee finds itself at a sort of crossroads. Urban decay has already left its mark but there are many pockets that are positively thriving and will continue to do so. The North Shore is unquestionably the favored sector. Perhaps the question shifts from "How do we target programs at the impoverished regions" to "How might we rethink wealth, inequality, mobility, and accessibility in an increasingly decentralizing and sprawling metropolitan area?" Or "How might we recast and reframe the issues of a declining manufacturing base, growing private and service sectors, and an emerging dilemma of spatial mismatch and inequality?"

It is no easy task to maintain a competitive advantage in a location just north of Chicago and southeast of the Twin Cities. There is not a single soul in Milwaukee who wishes its future would approximate that of Detroit, Pittsburgh, or St. Louis. Absent anything short of divine intervention, many alarmists fear that Milwaukee has already purchased its one-way ticket. To the contrary, it has already witnessed a partial turnaround, and it is now a matter of priorities and risk tolerance within the venture capitalist and city investor circles. Policy-makers, planners, economists, and scholars alike must ensure that the region is better-poised and better prepared for future growth.

## **Part II: Identifying Potential Development Strategies**

### **Abstract**

This report is the second piece of the examination of Milwaukee's regional economy. The first took an in depth look at Milwaukee's economy with a strong quantitative emphasis, while this second report takes a more qualitative approach regarding economic development prospects. While workforce development is a critical piece of the puzzle, there are an increasing number of other ways to infuse and reinvigorate a regional economy. Regions must capitalize on both emerging and existing growth opportunities. Public-private linkages are also of increasing importance to the competitive advantage of a region. Skills matching and minority empowerment have the potential to level the playing field. Other—perhaps softer—ways to approach economic development include place-making, encouraging cultural districts, residential development, mixed-uses, and any number of grants. Still, various hard economic development tools include TIFs, PMDs, brownfield redevelopment, targeting, and various types of incentives and tax breaks occurring at different scales.

## Introduction

When does a city become a poor investment? At what point does one deem a city—or even a region—an exercise in futility, a one-way ticket to diminishing and eventually negative returns? Are cities becoming less important as jobs and people migrate outside city limits? Many have said just that about the Milwaukees, Detroites, Clevelanders, and Pittsburghers of the planet. Make no mistake about it, historical accidents do indeed define present-day identities, but when is a little amnesia a good thing? When does Pittsburgh try to forget its smelty past? When should Detroit rid itself of its automotive identity? At what point does Milwaukee shrug off the shackles of its manufacturing and brewing history? Or perhaps a sort of urban renaissance will encourage cities to promote these positive histories and leverage them to their advantage.

These are certainly some of the critical questions of our time. The future of some of America's (once) great cities is now in question. But let's back up a bit. Where did we first go wrong? Was it the systematic disinvestment in central cities? Was it FHA and Fannie Mae home loans in the post-WWII era? Was it globalization and its discontents—Bangalore and Beijing's competitive advantages intact? Was it the exiting of the upper- and upper-middle classes (i.e. white flight) and the ensuing suburbanization? Or was it poor local and national leadership? Was it shoe-string HUD budgets? Was it the emergence of the suburban office park? Or was it the crack epidemic and rampant unemployment and the ensuing social pathologies that typically accompany such cultural realities? Or was it even urban renewal—a program once touted as the much-needed catalyst for reversing urban decay and spurring private sector development but soon became known all-too-well as 'Negro removal'?

Many a scholar would tend to agree that all of the aforementioned phenomena contribute to a sort of cumulative causation effect. As for the outputs and consequences of these fairly recent developments within our national urban landscapes, that was largely captured in the first study of this series. To recapitulate, there are substantial disparities in incomes between the central city and suburban regions with the Milwaukee MSA. There is a profound racial imbalance and asymmetry regarding income, employment, educational attainment, poverty, and other related socio-economic and demographic indicators. The central city has witnessed both relative and absolute population loss. The MSA has experienced profound growth in municipal incorporations—and therefore, governmental fragmentation. There are a host of other challenges that the Milwaukee MSA faces as it proceeds—albeit somewhat hesitantly—into the 21<sup>st</sup> century.

Despite the fact that Milwaukee has historically been known as a manufacturing and brewing powerhouse, it has since taken steps to diversify its economic functions. With a variety of regional specializations—including electrical equipment, internet service providers, printing, and couriers—Milwaukee has been performing secondary and tertiary economic functions as well as diversifying into the service sector. Several important industries have experienced substantial growth in recent years (health care, private sector, services), while other sectors have witnessed a severe decline (logging, mining, textiles, manufacturing). The Milwaukee MSA is also heavily gender-stratified, with men occupying managerial, finance, and construction positions and women typically clustering in healthcare support activities and teaching. Sectors experiencing the highest growth rates are private services, wholesale trade, and construction; while declining industries include but are not limited to military functions, state government, farming, and notably, manufacturing.

As the first report in this series indicated, Milwaukee's economy shifted away from manufacturing and towards the service sector. In the turbulent midst of such a rapidly shifting

economy, income disparities, differential investment patterns, a widespread urban exodus, and rampant—particularly Black male—joblessness remain all too visible. This undertaking shall seek to address and evaluate potential remedies geared at reversing these trends. These remedies typically take the form of economic development. Economic development, for the purposes of this report, refers to the deliberative strengthening of communities and qualities of life through workforce development, job creation (retention and growth), skills matching, educational opportunities, physical-infrastructure improvements, and other programs geared at reviving the social and economic well-being of individuals and neighborhoods. It is also critical to examine the role of public-private partnerships and linkages, mobility programs, tax incentives, targeting, brownfield redevelopment, business incubators, business improvement districts, targeted investment neighborhoods, planned manufacturing districts, revolving grant funding, entrepreneurial support, minority business empowerment (microfinance), transit connectivity, the role of urban design and place-making, as well as responding to the calls for regionalism.

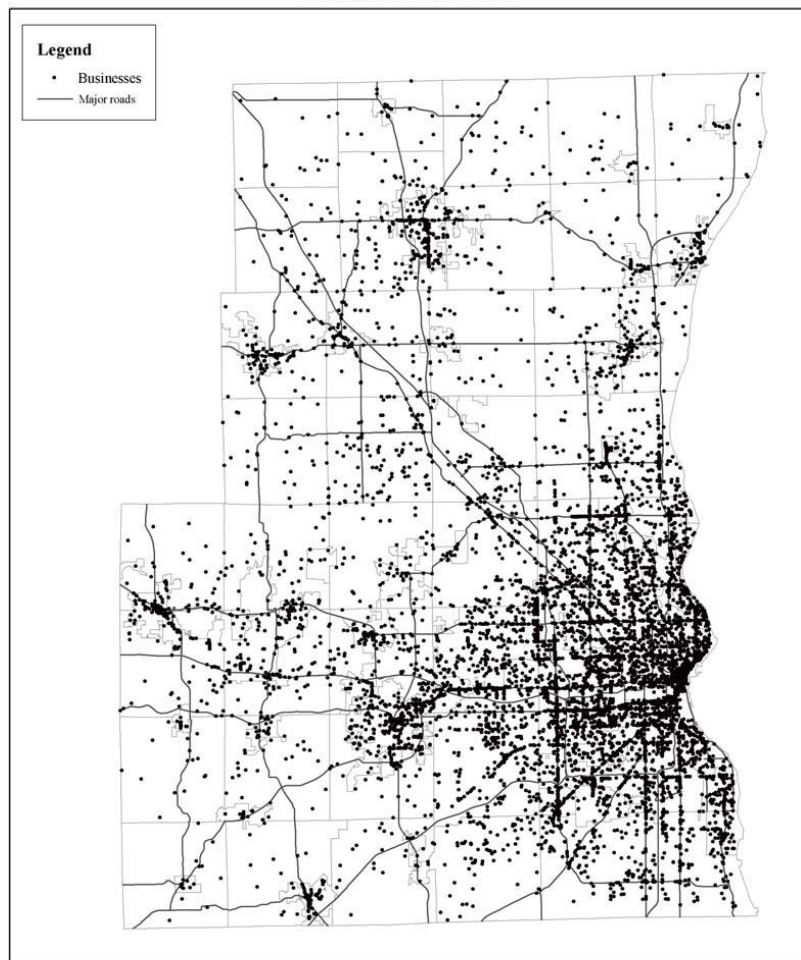
Workforce development programs may have been carefully crafted in their intent, but the implementation phases have revealed a number of challenges, hurdles, and impasses. Industry targeting has also had limited success in the Milwaukee MSA, though it should be noted that biotechnology firms are on the rise in the metro. Tax Increment Financing (TIF) offers some relief to developments in only the most blighted parts of the city. Brownfield redevelopment incentives and tax relief do spur development where prime urban land was being un- or under-utilized—but not without enormous environmental liabilities. Targeting has occasionally been dismissed as “putting all the eggs in one basket,” and it is something of a gamble, especially in an era in which economic diversification is perhaps the best way to hedge against sector-specific volatility in the marketplace. Nevertheless, without exposure to emerging growth opportunities—an inherently risky business venture—it will be impossible to capitalize on these rising stars and capture new tax revenues.

## **Workforce Development**

Workforce development in the Milwaukee MSA has taken on a uniquely regional approach. Regional officials, stakeholders, and business leaders have forged the Milwaukee-7, an agglomeration of seven southeastern Wisconsin counties teaming up, pooling resources, and combating common problems that tend to transcend political boundaries. In addition to the five counties included in the US Census MSA designation (Milwaukee, Ozaukee, Washington, Waukesha, and Racine), Walworth and Kenosha counties are also included in the Milwaukee-7. The pilot project will ideally encourage better skills matching and accessibility to both higher-end and low-end jobs. There is considerable evidence that low-skilled jobs tend to cluster in the inner city, while labor pools are decentralizing outwards. The map below illustrates that the vast majority of entry-level positions at firms with strong employment projections are in fact clustered in the inner city. The map also highlights the increasing degree of polycentricity within the local urban morphology as well as edge nodes sprouting on the ex-urban fringes. Lastly, it is worthwhile to note the job concentration along major commercial nodes and corridors.

### Figure XVIII

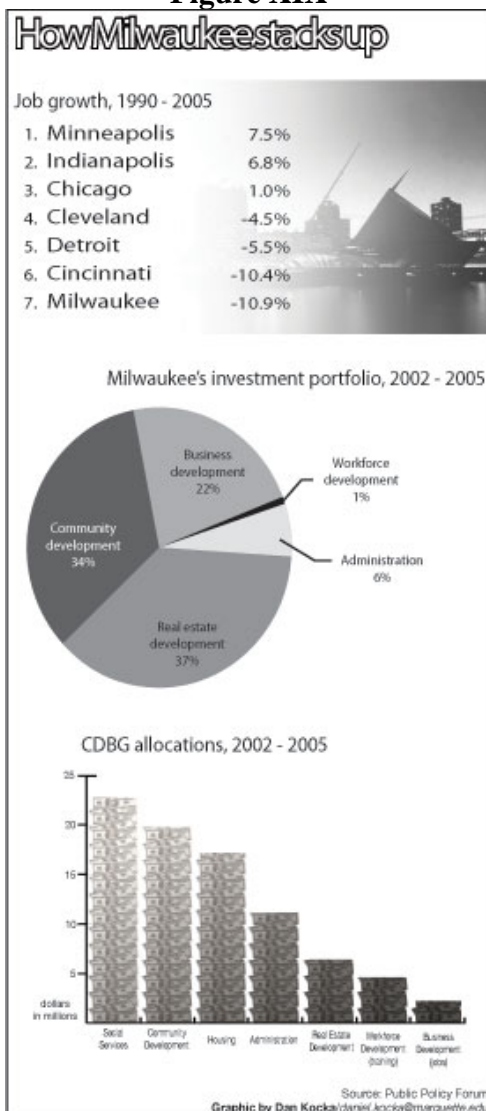
Map 3. Businesses with Strong Hiring Projections for Entry-Level Workers  
Milwaukee Metro Area



Source: WI Department of Workforce Development, 2001

Assembled in 2005, the Milwaukee-7 includes economic development organizations such as the Milwaukee Economic Development Corporation (MEDC), municipal governmental entities such as the City Council and Department of City Development (DCD), employers ranging all magnitudes and sectors, and educational institutions such as UWM and local K-12 institutions. The city’s comprehensive plan and compliance with state-mandated Smart Growth policies all coalesce around the Milwaukee-7 regional plan. The Milwaukee-7 seeks to achieve regional integration by analyzing current assets, identifying opportunities to support both emerging and existing growth, and recommend strategies that link crucial resources with new opportunities. Maria Pandazi, a city planner with the DCD, is confident that in order to achieve a sustainable, viable, and economically thriving Milwaukee, “We [Milwaukee] should not compete with Racine or Kenosha, but we need to compete with China, India, and Brazil” (Pandazi, 2008). Given Pandazi’s bold and lofty aspirations, the DCD is striving to improve Milwaukee’s local, regional, and global economic positioning on a daily basis.

**Figure XIX**



The founders of the Milwaukee-7 framework have adopted a six-pronged approach to help actualize their ambitious—and regionally integrative—vision.

- 1) Link training to new jobs
- 2) Inspire youth
- 3) Target investment
- 4) Support entrepreneurship
- 5) Improve transportation
- 6) Ensure safe neighborhoods (DCDa, 2008)

The economic development plan's strategic policy framework focuses on connecting residents with employers and jobs with skills. Transit is no small part of that. There is a great deal of under-utilized land in the MSA, and channeling investment towards emerging cluster opportunities will make the region better poised for future growth as well as better-situated in the innovation economy.

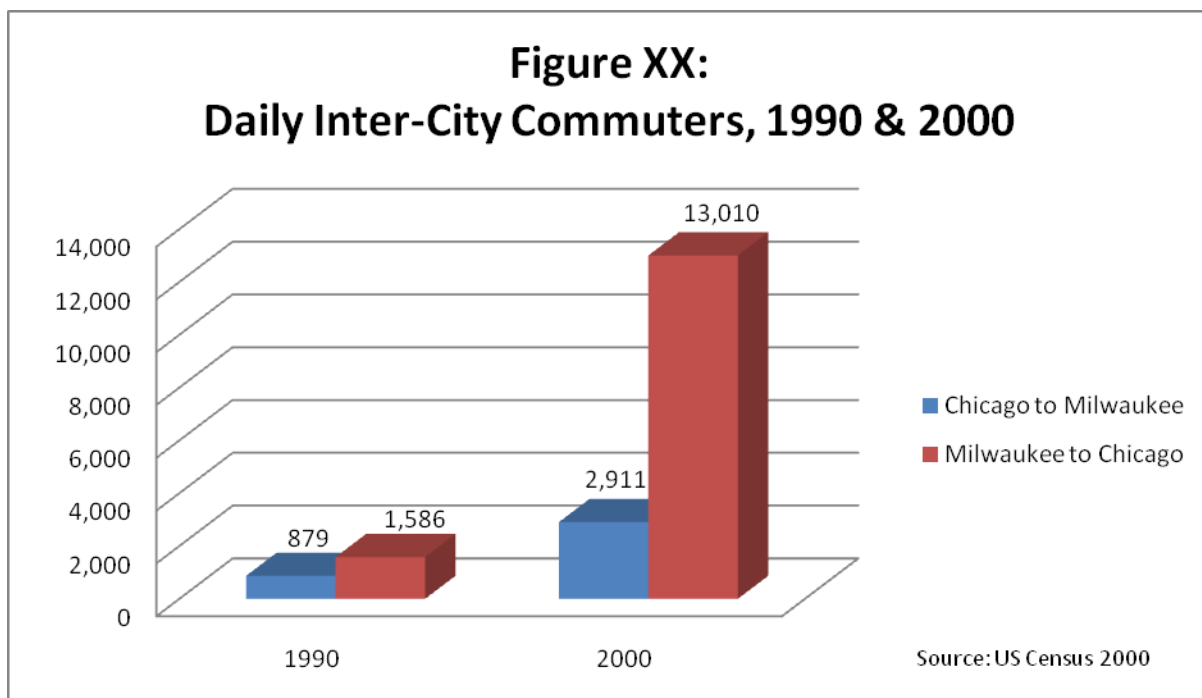
According to the Public Policy Forum (2005), Milwaukee ranked last among seven comparable frostbelt cities with a job growth rate of -10.9%, which indicates a net job loss

between 1990 and 2005. Milwaukee’s investment portfolio was the most concentrated in the real estate development sector (37%) and the least focused on workforce development (1%). The top three largest beneficiaries of Community Development Block Grants (CDBGs) were social services, community development, and housing.

Milwaukee’s leadership community has identified a number of both existing and emerging economic growth opportunities. Some of the emerging opportunities include advanced manufacturing and prototyping, clean and green technologies, fresh water research and development, and biomedical technology. Some of the existing opportunities include health care, traditional manufacturing, business services, and food processing. There are also a number of critical assets within metro Milwaukee. An international city with a vibrant downtown and a strong cultural heritage make for a high quality of life. A robust corporate presence, strong academic institutions, an effective city government, and relatively advanced telecommunications, data, and internet infrastructure lend to an innovation economy. The highly specialized regional skill sets within the finance and IT, engineering, and arts and design sectors will set the stage for emerging future growth nodes. There is also ample redevelopment expertise regarding brownfields and land assembly in the region. Lastly, there is an available—and yet, underutilized—workforce to fill employment demand in the region (DCDb, 2008).

### Catalytic Projects

The city of Milwaukee has a jobs shortage and a skills mismatch. In fact, there are far more metropolitan commuters making daily trips to Chicago than vice versa, even relative to population. To correct for this, Milwaukee leaders have implemented five catalytic projects that link the city of Milwaukee to the Milwaukee-7 regional vision. These projects are designed to have strong, positive impacts at both the neighborhood and regional levels. These projects are meant to spur and catalyze other developments in the region by increasing investor confidence, better preparing the workforce, capitalizing on strategic assets, as well as improving the relative attractiveness of the community.



The five projects are:

- 1) Workforce Development: Regional Workforce Alliance implemented to tackle worker training on a wider scale.
- 2) The “Great Lakes Green Industry Complex” in the 30<sup>th</sup> Street Corridor: The goal is to reinvent brownfield properties in the 30<sup>th</sup> Street corridor as a place where companies in the emerging clean and green sector can manufacture, process, distribute, and sell products.
- 3) Fresh Water Research and Technology Center: Given the success of the Great Lakes Water Institute, the availability of lakefront land near the port, and our city’s strength in water-related industries, Milwaukee has the opportunity to create a major fresh water research and technology center.
- 4) Life Ventures Center: The Life Ventures Center would enrich programs at outstanding community facilities like the Urban Ecology Center, Growing Power, Pier Wisconsin, and the Milwaukee Youth Arts Center. Children engaged in the exciting activities at these facilities identify and nurture their talents, learn about careers to which they may not otherwise be exposed.
- 5) Centers for Family Prosperity: This approach helps households increase their income and spending power by combining, in neighborhood locations, employment counseling and job training, financial management resources, and access to income supports like the Earned Income Tax Credit (DCDb, 2008).

Focus groups involving stakeholders, community members, and policy-makers are well underway. These catalytic projects will allow the 7 county region to better capitalize on its Great Lakes position, the emerging third wave of the green revolution, as well as to better train and educate the very families and communities that will one day embody the future workforce.

### **GROW Grant**

The State of Wisconsin’s Department of Workforce Development recently fulfilled a large grant request to the Southeastern Wisconsin Regional Workforce Alliance. The GROW grant (Growing Regional Opportunities in Wisconsin) will be mostly used for workforce development and other precursors to economic growth. The GROW grant will bridge geographic boundaries and help develop strong partnerships with regional leaders in economic development, education, business, and labor (DWD, 2006). The Regional Workforce Alliance is led by an Executive Leadership Team comprised of the Waukesha-Ozaukee-Washington Workforce Development Board, the City of Milwaukee, the Milwaukee Private Industry Council, and the Southeast Workforce Development Board. This leadership community reinforces the centrality of collaboration—ideally in the form of public-private linkages. The collaboration brings together public and private sector leaders from the Milwaukee-7 in order to encourage investment to drive the economic development of Southeastern Wisconsin.

The grant will essentially support a region-wide “state of the workforce” report, develop a regional workforce development strategic plan, and establish a regional business services team to better coordinate employment training services with area businesses. The grant will also work to identify funding sources for workforce development as well as support continuing efforts to develop a region-wide strategy to increase career opportunities in science, technology, engineering, and mathematics fields in order to build connections to the regional 21<sup>st</sup> Century Learning Initiative in K-12 education.

## PMDs, TIFs, and Brownfields

Another controversial economic development tool is the Planned Manufacturing District (PMD). PMDs do, however, offer viable alternatives to the outsourcing of blue collar manufacturing jobs. With the well-documented decentralization and suburbanization of both jobs and people, preserving low- and moderately-skilled blue collar employment is increasingly important to revitalizing neighborhoods and inner city economies. Thus, PMDs have the potential to offer some degree of relief from the catastrophic problem of spatial mismatch between jobs, people, and skill levels. PMDs were used in Chicago in the late 1980s as part of an effort to deploy innovative policy aimed at preserving manufacturing employment in a rapidly gentrifying area on the city's Near North Side. According to the UWM Center for Economic Development, a PMD is

A special zoning designation which places significant restrictions on the rezoning of industrial land for non-industrial uses. PMDs are intended to preserve manufacturing jobs by protecting industrial firms from encroachment by land uses incompatible with manufacturing (i.e. residential) (UWM-CEDA, 2005:2).

**Figure XXI:  
Job Decentralization in the Milwaukee Region (1970-2000)**

Region	1970	1980	1990	2000	% Change
Milwaukee (city)	293,800	306,697	314,960	285,260	-2.9
Milwaukee County	420,000	456,126	483,594	463,914	10.5
Ozaukee County	16,400	22,037	30,172	39,126	138.6
Waukesha County	62,700	105,833	160,711	209,068	178.6
Washington County	17,400	26,773	36,574	48,482	233.4
Metro Total	516,500	610,769	711,021	760,590	47.3

Source: US Census

Between 1988 and 2004, the number of businesses in the PMD zones increased from 255 to 356 (UWM-CEDA, 2005). PMDs are, however, often times conflict prone. When opposition does arise, it is crucial that a solid core of leadership and support exists among local corporations. “With respect to overall job and business creation and retention, the PMDs have performed remarkably well...however, business activity in the PMDs is undergoing a transformation” (UWM-CEDA, 2005:24). Manufacturing tends to represent a small and shrinking portion of a PMD’s overall economic activity. Still, preserving job opportunities—particularly low-skilled manufacturing jobs in the city—is important to Milwaukee’s broader economic revitalization. PMDs are an effective way to combat the devastating effects of job decentralization and spatial mismatch.

PMDs do require a combination of careful planning, support by stakeholders, and a strong commitment from the city. Absent any one of these conditions, a PMD is likely to encounter problems. Also, PMDs are not immune to political game-playing. One manufacturer put it quite aptly.

I think the PMDs—this one and all others—are only as good as the officials in office that want them to be there. If another mayor came in and wanted housing developments because the developers were all over him, [this business] would be history. The PMD is only as strong as the



officials that protect it. Otherwise the land goes to the highest bidder, highest use (UWM-CEDa, 2005:23).

This Chicago manufacturer points out the tendency of municipalities to favor the best and highest use. Municipalities have built-in incentives to encourage those uses that require the fewest public services and simultaneously contribute the most revenue to their tax bases. This increases the tax revenue to service ratio. PMDs also require strong commitments from both the planning and policy arenas within a city and region.

TIFs are also a fairly controversial tool available to planners, policy-makers, and economic development specialists. In Milwaukee, TIFs have been popular along older, sagging manufacturing corridors where no new development would have occurred absent this redevelopment tool and tax subsidy. When demand shifts from raw manufacturing and the marketplace calls for residential developments, TIFs are one way to subsidize the front-end economic development costs in exchange for greater tax revenues at the tail-end. In most states, TIF can only be used to redevelop areas where a sufficient number of properties are considered “blighted.” Also, TIFs can only be used where the municipality demonstrates that the area in question could not be redeveloped “but for” the use of TIF. Once an area becomes designated as a TIF district, the initial assessed property valuation for the district is held constant for a designated period—typically around 20 years. The municipality uses its powers of eminent domain, land assembly, site clearance, utility installation, and street repair to attract private investment. Naturally, property values will rise. The difference between the base value and the new assessed value is the tax increment (Weber, 2003).

With the increasing popularity of TIF comes increasing scrutiny regarding its operations and impacts. Substantial abuses, public costs, and inequities have been uncovered in localities across the country. “This scrutiny makes it imperative that policymakers fully understand how the [TIF] mechanism operates in practice as well as what TIF’s larger implications are for the fiscal health of municipalities” (Weber, 2003:54).

Occasionally, TIFs are used in conjunction with brownfield redevelopment incentives. Brownfields are contaminated (often vacant) land that was once the site of heavy industrial or manufacturing activities. These activities have led to substantial environmental degradation which in turn translates into considerable liabilities for developers. In Milwaukee, “most developers of brownfields were mature developers that focused primarily on brownfield properties and multi-story projects in the urban market” (De Sousa & UWM-CEDb, 2006:2). The most attractive aspects of brownfields tend to be their central location, the low price of land, subsidy provisions, and other state or local level incentives. The most common disincentives for developers were the high cost of cleanup, liability risks, longer project duration, and ‘unknown’ or ‘surprise’ costs.

Brownfields offer prime opportunities for economic development. They are typically located near the downtown core, land acquisition costs are cheap (though cleanup is high), and they have the potential to revitalize both a community as well as municipalities’ tax bases—which were once suffocating from large, vacant, non-tax-generating plots of land.

Thus far, brownfields redevelopment in Milwaukee consists largely of mid- to high-end, high-density, market rate housing built by for-profit developers clustered in neighborhoods near the downtown core, while lower density and affordable units are constructed in other parts of the city mainly by non-profits or the municipal government with the hope of sparking interest in renewal (De Sousa & UWM-CEDb, 2006:46).

Brownfield conversions offer much hope to decaying, vacant city lots by way of infill, mainly residential developments. While this may not seem to have much direct impact on economic development, it does indirectly set the scene for future economic development projects. It also revitalizes a city's tax base. They increase the overall density, attractiveness, livability, and quality of life in a region. Furthermore, they send a message to developers that no parcels are left to decay, that the city is properly maintained, and that there will be no immediate negative, downward pressures on property values in the region. Ultimately, cities must take a more comprehensive look at their brownfield inventories, develop portfolios of city and privately owned brownfields, and then devise site-specific or area-wide strategies for renewal based on public and private interests (De Sousa & UWM-CEDb, 2006).

### **Other Economic Development Initiatives**

Yet another economic development initiative in the Milwaukee MSA is the Renewal Community Initiative (RCI). HUD selected Milwaukee as one of 40 nationwide communities to receive RCI funding. RCI funds are targeted tax incentives to spur economic development and job growth (UEDA, 2008). The RCI is a four-part package. First, the Renewal Community Wage Credit credits federal taxes up to \$1,500 for each year of renewal community designation for every employee living and working in the renewal community area. It also includes a 15% tax credit on the first \$10,000 in wages per employee—effective annually through 2009. Second, the Commercial Revitalization Deduction is an accelerated depreciation deduction for commercial real estate property rehabilitation. Third, the Capital Gain Exclusion allows for a 0% capital gains rate for renewal community assets held for a minimum of five years. Fourth, the Increased Section 179 Deduction allows for up to an additional \$35,000 in immediate depreciation expenditures for machinery or equipment, including computers, placed in service for that year (UEDA, 2008).

There are a number of other strategies that municipalities and regions may implement in order to strengthen and improve their economic position. There are a variety of tax incentives, abatements, and subsidies that encourage certain types of business relocation or growth within a region. There is considerable evidence, however, that corporations tend to play municipalities off of one another in order to create a subsidy war, when the firm had already decided where to locate. These subsidies include

Property tax abatements, corporate income tax credits, sales and excise tax exemptions, tax increment financing, low-interest loans and loan guarantees, free land and land write-downs, training grants, infrastructure aid—and just plain cash grants (LeRoy, 2005:1).

The main dilemma regarding subsidies and tax incentives is that firms tend to make their locational and siting decisions early on, and then simply use their leverage to increase front-end funding and incentives. A retired North Carolina construction executive admitted during a lawsuit deposition,

I hate to give examples, but we decided very early in the game we were going to locate somewhere in the Winston-Salem/Greensboro area and narrowed it down to Kernersville rather rapidly; but spent a lot of time in Siler City and Asheboro and other communities hearing their story, primarily to use as a leverage to get all we could out of Winston-Salem. Now I give you that as a local example. But a more recent one—in Dickinson, Tennessee, we had about ten west Tennessee municipalities chasing us with all kinds of offers; although we knew through the whole process it was going to be Dickinson. And it was unfair and probably, as bad as it sounds, we used the others to get what we could out of where we were going in the first place...you know,



I've been around it a long time; but to me it's the process. Usually, you know early where you are going, and you use your leverage (LeRoy, 2005:14).

If nothing else, this testimony should serve as something of a precaution for reckless job creation on the part of municipalities, Milwaukee in particular.

### **Minority Business Empowerment**

Minority business empowerment and support, as well as entrepreneurial support and incentives are also another tool in the economic development specialist's toolbox. Minority-owned businesses tend to hire minority employees (Levine & UWM-CEDd, 2007; UWM-CEDe, 2001). Thus, financially empowering minority-owned businesses should theoretically lead to a decrease in black male unemployment—a major crisis in Milwaukee's inner city. In fact, "The black male jobless rate remains unacceptably high in Milwaukee, with black joblessness here ranking second highest (behind Detroit) among comparable Northeast-Midwest metropolitan areas in 2005" (UWM-CEDc, 2001:6). This furthers the need for the emerging microfinance sector. When compared to other U.S. cities, Milwaukee's disparity between White and Black male joblessness was 29.2 points, the next highest were Kansas City, Rochester, and Buffalo at 20.4, 17.9, and 17.8 respectively.

**Figure XXII**  
**Racial Disparities in Employment for Males, 2002**

<b>Metropolitan Area</b>	<b>White Jobless Rate</b>	<b>Black Jobless Rate</b>	<b>Disparity</b>
Atlanta	19.6	26.5	6.9
Baltimore	26	36.9	10.9
Boston	26.3	30.4	4.1
Buffalo	33.7	51.5	17.8
Charlotte	26.4	38.6	12.2
Chicago	26.8	44.5	17.7
Cincinnati	27.2	44.5	17.3
Cleveland	27.6	33.9	6.3
Columbus	24.8	35.3	10.5
Dallas	21.7	25.4	3.7
Dayton	38.7	47	8.3
Denver	24.1	35.9	11.8
Detroit	29.9	46.6	16.7
Ft. Lauderdale	29.5	27.4	-2.1
Hartford	27.9	36.1	8.2
Houston	22.2	35.6	13.4
Kansas City	24.6	45	20.4
Los Angeles	28.2	42.5	14.3
Memphis	24.7	30.5	5.8
Miami	37.2	31.4	-5.8
<b>Milwaukee</b>	<b>24.8</b>	<b>54</b>	<b>29.2</b>
Minneapolis	21.6	31	9.4
Nassau-Suffolk	28.4	39.4	11
New Orleans	32.7	41.6	8.9
New York	35.8	44	8.2
Newark	26.6	39.6	13
Norfolk-Va. Beach	30.2	42.7	12.5
Oakland	25.2	41.4	16.2
Oklahoma City	28.7	32.4	3.7
Philadelphia	29.2	41.8	12.6
Phoenix-Mesa	27.3	25.3	-2
Providence	30.9	29.1	-1.8
Riverside	29	39.3	10.3
Rochester, NY	33.1	51	17.9
St. Louis	27.9	40.1	12.1
Tampa	35.1	36.9	1.8
Washington, D.C.	20.7	29.8	9.1

Source: BLS, 2005

A narrowing of the Milwaukee region’s heavily racialized jobs gap means more income equity, more mobility, and less metropolitan polarization (UWN-CEDf, 2002). This will create less residential segregation which increases exposure to various socio-economic groups, which in turn increases social capital and word-to-mouth access to economic opportunities. This will make the region not only more attractive to investors, developers, and corporations, but also more sustainable and equitable over the long term. There are substantial grounds for optimism regarding minority-owned businesses. According to data from the US Bureau of the Census’ Survey of Minority-Owned Businesses,



Milwaukee ranked 13<sup>th</sup> among the nation's largest 50 metropolitan areas in the growth in the number of Black-owned businesses between 1992 and 1997...More spectacularly, during the same period Milwaukee ranked 1<sup>st</sup> among the nation's largest metropolitan areas in the growth of payroll and employment at Hispanic-owned businesses (UWM-CEDe, 2001:3).

These figures can be deceiving, and it is crucial to keep them in perspective and to counterbalance them. "When we control for differences in the racial composition of metropolitan areas, in 1997 Milwaukee ranked 48<sup>th</sup> among the 50 largest metropolitan areas in Black-owned firms per 1,000 Black population" (UWM-CEDe, 2001:3). So, essentially, Milwaukee has witnessed fairly rapid growth in the relative number of Black-owned businesses, but it lags behind in terms of the absolute number of these firms.

### **Cultural Districts and Amenities**

Minority business empowerment can take on various forms, however. Although funding sources such as revolving grant funds are crucial, they can only partially encourage meaningful minority business empowerment. Establishing unique cultural districts and business incubators have also proven to be promising methods by which to promote minority-owned businesses. Unique cultural districts essentially cluster agglomeration economies of scale together in such close proximity so as to reap mutual benefit from both the spinoff and multiplier effects (CITE). Business incubators promote and facilitate this by offering cheap rent and occupancy costs to start-up and entrepreneurial businesses. They also simplify both supply-side and demand-side efficiency by streamlining commodity and distribution chains as well as centralizing market delivery centers.

One such cultural district in the Milwaukee MSA is the Bronzeville Cultural and Entertainment District. With a focus area within the heart of African American community,

The plan is intended to create...a geographic area specifically focused on the attraction and promotion of African-American arts, entertainment, and culture. Bronzeville will be a year-round tourist destination celebrating a rich cultural heritage by offering authentic ethnic music, art, and cuisine. As the district matures and the market develops, it may also offer gallery space, mores specialized retail opportunities, and regional theater. As added benefits to the city, the plan will improve the physical character of the commercial district and the surrounding residential neighborhood, create investment and employment opportunity, support tourism, and celebrate racial diversity (Redevelopment Authority of the City of Milwaukee et al., 2005:1).

This sort of agglomeration leads to innovation economies, increased levels of social capital, improved cultural amenities, and lead to the sort of fringe benefits such as increased residential redevelopment investment and expanding employment opportunities. Another cultural district in Milwaukee is known as the "Sohi District" (South of Highland). The Sohi district is also located in a predominantly Black neighborhood. The district—which is home to Marquette University, SBC, Miller Brewing, and Harley-Davidson—was one of 4 Milwaukee areas to receive Main Street Milwaukee funding. The Redevelopment Authority of the City of Milwaukee is in the process of implementing a medium-density, mixed-use, transit-oriented, pedestrian-centered, traditionally-designed neighborhood plan that caters to the local culture. Unique cultural and urban experiences like Sohi and Bronzeville tend to attract the innovative and creative classes and increase the relative "stickiness" of a region. This is just what the doctor ordered for Milwaukee.

## **The Role of the University**

To survey the impacts of these projects as well as to better capitalize on other economic opportunities, the University of Wisconsin-Milwaukee needs to transition into a major research institution. This would facilitate the emerging bio-technology and fresh water research sectors. It would also encourage multi-lateral cooperation and help bridge the 3-way public-private-university divide. The economics, planning, geography, political science, and sociology departments undoubtedly have a great deal to offer by way of program evaluation, implementation of strategies, data management, fieldwork, high-technology accessibility, identifying funding sources, and analogous activities (Pandazi, 2008). UWM would also be able to better train and prepare the local labor force as well as assist with skills matching between employers and employees.

## **Place-Making**

Place-making also offers some hope regarding a Milwaukee turnaround. There are a number of capital improvement projects both underway and completed in the Milwaukee area. These include the Beerline “B” Project, the Riverwalk, and PabstCity Redevelopment. These projects require massive public-private investments, cooperation at various local and regional levels, and a cohesive vision for the future. Strong urban design guidelines played a large role in each project. The Beerline and Riverwalk are designed to encourage consumer spending, offer a variety of cultural amenities within close proximity (to form agglomeration economies), and capitalize on two of Milwaukee’s greatest assets—its riverfront and lakefront. PabstCity is a part of several large-scale redevelopment projects in the Milwaukee MSA that is attempting to be more responsive to increased market demand for extremely unique high-end residential spaces (UWM-CEDg, 2005). Encouraging walkability and pedestrian-friendliness will also complement Milwaukee’s Park Once program, which encourages downtown visitors to park only one time and then walk to their destinations. This promotes pedestrians to patronize local shops, leads to what Jane Jacobs would call “eyes on the streets,” and also lends to a shared sense of vibrancy and vitality that help to retain the creative classes.

The City of Milwaukee (the MSA to a much lesser extent) is currently engaging in the sort of trendy mixed-use, high-density developments commonly seen across the country. These unique living spaces tend to attract the highly talented creative classes to a region. PabstCity, for example, and like several other redevelopment projects—particularly in Milwaukee’s inner city, combines the attractiveness and vibrancy of downtown living with the historical distinctiveness and uniquely local flavor of old breweries. There are some questions about affordability, but these high-end developments cater to the regentrifiers of the talented classes. This is an efficient way for various groups to avoid demolition costs, and instead create revitalized and unique urban spaces.

Place-making is also about maintaining a pedestrian scale that increases the relative attractiveness of a region along with its ability to retain talented and innovative individuals. Traffic calming, by way of parking inlets, for example, allows for a safer pedestrian experience. Citizens are more likely to have positive, memorable experiences in the city. Building frontage and façade grants both help to create attractive, accessible, and lively spaces that are inviting to both businesses and shoppers. Diversity of land uses allows for more distinctive and convenient cityscapes. The integration of communal spaces such as central plazas, squares, and green spaces into the urban landscape also creates a meaningful place-based experience. Streetscaping and other beautification efforts combine with other urban rejuvenation efforts to create significant and evocative spaces. Murals, too, undoubtedly lead to a uniquely urban experience

and contribute to a strong sense of place. Reverse broken windows theory. Place-making, in its aggregate, cumulative manifestation, maintains a region's competitive advantage and serves as open invitations for businesses and firms to locate in that region by emanating a deliberative sense of place, a lively and energetic atmosphere, social dynamism, and a healthy economy.

### **Concluding Remarks**

So, does nothing work? Are economic development tools inherently politically charged? Are there any real, viable ways to truly revitalize some of our nation's most rapidly decaying cities? Is there any way to halt and reverse the decreasing importance of central cities and the decentralization of both population and economic activity to the fringes of the urban periphery? Cities, once the crossroads of supply and demand for agricultural markets, are at risk of becoming obsolete as the ongoing hollowing-out of the core continues to devastate inner-city communities by outsourcing jobs and tax bases just outside city limits. "The economic challenges facing Milwaukee's inner city are daunting but not unsolvable, and clearly no issue is more important to the future of this city" (UWM-CEDb, 2002:45).

But regional integration as encouraged by the Milwaukee-7 is a step in the right direction. Minority business empowerment also stands to correct the racial asymmetry in labor force participation rates. Improving transit accessibility and usability to allow city dwellers to access sub- and ex-urban economic opportunities is absolutely critical. However, there is ample evidence of an absolute job shortage in the Milwaukee MSA region.

In 2005, by *conservative* estimates, there were 88,294 more jobless than available jobs in metro Milwaukee; there were six jobless Milwaukeeans for every available job in 2005; there were an astounding *nine* jobless for every available *full-time* job (Levine & UWM-CEDd, 2007:10, emphasis in original).

Milwaukee needs to be open and inviting to new and existing economic growth opportunities. This—at least partially—may be accomplished by self-promotion and the marketing of place. Milwaukee needs to better leverage both its cultural and geographic position. To correct the gross inter- and intra-regional disparities in Southeastern Wisconsin, perhaps some sort of regional tax-base sharing is called for in the short term to even out the playing field. Infrastructure improvements by the public sector serve as invitations for even further private sector development. Perhaps above all, Milwaukee needs a strong and dedicated leadership community to guide it during its transition back to greatness, so that once again it may be called the Algonquin phrase: "that great gathering place by the water."

## Works Cited and Literature Referenced

- Bureau of Economic Analysis. (Various Years). [www.bea.gov](http://www.bea.gov)
- Bureau of Labor Statistics. (Various Years). [www.bls.gov](http://www.bls.gov)
- City of Milwaukee, Department of City Development (DCDa). (2008). "Citywide Policy Plan: Economic Development Plan."
- City of Milwaukee, Department of City Development (DCDb). (2008). "Milwaukee Comprehensive Plan: Economic Development Strategy and Policy Framework."
- Craig, Steven & Ng, Pin. (2001). "Using Quantile Smoothing Splines to Identify Employment Subcenters in a Multicentric Urban Area." *Journal of Urban Economics*. 49(3):100-120
- De Sousa, Cristopher & University of Wisconsin-Milwaukee, Center for Economic Development (UWM CEDb). (2006). "Residential Development Activity on Urban Brownfields in Milwaukee and Chicago: An examination of redevelopment trends, developer perceptions, and future prospects." Department of Geography & the Brownfields Research Consortium. September, 2006 Report.
- Ip, Greg. (2005). "Moving Up: Challenges to The American Dream; Degrees of Separation: as Economy Shifts, A New Generation Fights to Keep Up; In Milwaukee, Factories Close and Skills, Not Seniority, Are Key to Advancement; An Ex-Welder's Computer Job." *Wall Street Journal*. June 22, 2005: pg. A.1
- Jackson, Janet C. (2001). "Women Middle Managers' Perception of the Glass Ceiling." *Women in Management Review*. 16(1):30-41
- Lank, Avrum D. (2005). "Household Income Comes Up Short." *Milwaukee Journal Sentinel*. March, 4<sup>th</sup> 2005
- LeRoy, Greg. (2005). [The Great American Jobs Scam: Corporate Tax Dodging and the Myth of Job Creation](#). Berrett-Koehler Publishers, Inc: San Francisco, CA
- Levine, Marc V. & University of Wisconsin-Milwaukee, Center for Economic Development (UWM-CEDd). (2007). "The Crisis of Black Male Joblessness in Milwaukee: Trends, Explanations, and Policy Options." March, 2007 Report.
- Milwaukee County Historical Society. (2008). <http://www.milwaukeecountyhistsoc.org>
- Pandazi, Maria. (2008). Phone Interview. City of Milwaukee. Department of City Development. Interview took place on April 24, 2008 at 2:30 p.m. CST





- Redevelopment Authority, City of Milwaukee, Department of City Development (DCDc). (2005). "A Bronzeville Cultural and Entertainment District: Redevelopment Plan Amendment to the North 7<sup>th</sup> Street – West Garfield Avenue Redevelopment Project Area." Redevelopment Authority of the City of Milwaukee.
- Regional Economic Information System. (Various Years). [www.bea.gov/beat/regional/reis](http://www.bea.gov/beat/regional/reis)
- State of Wisconsin, Department of Workforce Development (DWD). (2006). "Southeastern Wisconsin's Regional Workforce Alliance."
- University of Wisconsin-Milwaukee, Center for Economic Development (UWM-CEDa). (2005). "Curbing Industrial Decline or Thwarting Redevelopment?: An Evaluation of Chicago's Clybourn Corridor, Goose Island, and Elston Corridor Planned Manufacturing Districts." November, 2005 Report.
- University of Wisconsin-Milwaukee, Center for Economic Development (UWM-CEDc). (2002). "The Economic State of Milwaukee's Inner-City: 1970-2000." December, 2002 Report.
- University of Wisconsin-Milwaukee, Center for Economic Development (UWM-CEDe). (2001). "Minority Business Ownership in Metropolitan Milwaukee in the 1990s: Some Statistical Indicators and Comparisons to the Nation's Largest Metropolitan Areas." May, 2001 Report.
- University of Wisconsin-Milwaukee, Center for Economic Development (UWM-CEDf). (2002). "Metropolitan Polarization in an Era of Affluence: Income Trends in Metropolitan Milwaukee Since 1990." January, 2002 Report.
- University of Wisconsin-Milwaukee, Center for Economic Development (UWM-CEDg). (2005). "The PabstCity Redevelopment Project: Inflated Projections and Dubious Economic Assumptions." A report prepared for the City of Milwaukee Common Council, Committee on Zoning, Neighborhoods, and Development. June, 2005 Report.
- Urban Economic Development Association of Wisconsin, Inc (UEDA). (2008). "Renewal Community Tax Incentives." Milwaukee Renewal Community Initiative.
- US Census Bureau. (Various Years). [www.census.gov](http://www.census.gov)
- Weber, Rachel. (2003). "Tax Incremental Financing in Theory and Practice." In S. White, R. Bingham, E. Hill (Eds.). (2003). Financing Economic Development in the 21<sup>st</sup> Century. M.E. Sharpe: New York, NY & London, UK