

MAY 2017



# ECONOMIC DEVELOPMENT STRATEGIC PLAN

## GREATER GREEN BAY CHAMBER



# ACKNOWLEDGEMENTS

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# STRATEGIC PLAN

## INTRODUCTION

The Greater Green Bay Chamber engaged TIP Strategies, an Austin-based economic development consulting firm, to assist with the preparation of an economic development strategic plan for the Greater Green Bay region. Over the course of 2016 and 2017, TIP worked closely with Greater Green Bay’s community leaders to identify the area’s most promising opportunities for economic growth. During the project’s “Discovery Phase”, the consulting team met with more than 300 community, business, and academic leaders through roundtable discussions, one-on-one employer interviews, and other meetings with key stakeholders. This work resulted in a shared set of initiatives for guiding the region’s economic development efforts over the next five years and beyond.

To provide a foundation for the planning process, TIP conducted an assessment of demographic and economic characteristics that influence Greater Green Bay’s competitiveness (Appendix A: Economic Assessment & SWOT). To maximize the value of this quantitative analysis, data are shown for Brown County, the three-county Green Bay metro area, the 18-county New North region, the state of Wisconsin, and the US as a whole. In addition, we compare Greater Green Bay to a group of 10 benchmark metro areas (five competitors and five aspirational peers). A review of strengths, weaknesses, opportunities, and threats identified during the planning process (a SWOT analysis) is also presented. A target industry analysis is included in Appendix D, which provides details on the most promising growth sectors for new business investment and job growth in Greater Green Bay. Finally, Appendix E provides an implementation matrix, which lists potential partners and suggested timeframes for all of the strategies and action items included in each of the 11 initiatives.

## STRATEGIC PLAN

### THE INITIATIVES

1. Build on the region’s manufacturing strengths.
2. Respond to the needs of existing employers & industries.
3. Recruit new businesses & investments.
4. Expand the size/scope of regional higher education assets.
5. Attract, retain, & develop talent.
6. Accelerate downtown & urban development.
7. Build a robust ecosystem for innovation & entrepreneurship.
8. Encourage greater alignment with the Green Bay Packers.
9. Elevate the role of events & conferences.
10. Ensure diversity & inclusiveness.
11. Enhance transportation access & connectivity.

#### TARGET INDUSTRIES

- Advanced manufacturing
- Digital media & entertainment
- Health care & medical technology
- Logistics & distribution
- Corporate HQs
- Financial Services

#### PERFORMANCE METRICS & OUTCOMES

- Educational attainment
- High-wage job creation
- Capital investment
- Business startups
- Growth of local tax base

## INITIATIVE 1: BUILD ON THE REGION'S MANUFACTURING STRENGTHS.

Manufacturing is an essential part of the region's economy. It accounts for the largest share of private sector jobs in Greater Green Bay. Retention and expansion of existing manufacturers remains vital to the health of the community. Identifying supply chain recruitment opportunities and encouraging additional research and development (R&D) among the area's manufacturers (potentially including spinouts and entrepreneurial ventures) are central to this plan's economic development initiatives.

The Greater Green Bay area owes much of its economic success—past and present—to the region's strong manufacturing base. Manufacturers account for 12 of the region's 30 largest employers, including several that employ more than 1,000 workers each: Georgia-Pacific, American Foods Group, Green Bay Packaging, Inc., and JBS Green Bay. The community's future growth can also benefit from this solid foundation, especially as the manufacturing sector becomes increasingly dependent on the development and adoption of new technologies. All of the major US technology hubs can trace their roots, either directly or indirectly, back to the manufacturing sector. With the diverse set of advanced manufacturers, corporate HQs, and related service providers operating in Greater Green Bay, the region has a significant opportunity to leverage these assets to plant seeds that lead to the creation of new companies, technologies, and industries.

### STRATEGIES & ACTIONS

- 1.1.** Work with local, regional, and state organizations to support the ongoing success of established employers and industries (paper products, food processing, industrial machinery) in Brown County and across Northeast Wisconsin.
  - 1.1.1.** Continue working with the Northeast Wisconsin Manufacturing Alliance to identify and address the needs of area manufacturers.
  - 1.1.2.** Continue supporting the partnerships between Northeast Wisconsin Technical College and the region's manufacturers to meet the short- and long-term workforce needs of area employers.
- 1.2.** Target strategic business expansion and recruitment projects that help support existing manufacturers (supply chain recruitment) and that further diversify the region's manufacturing base.
  - 1.2.1.** Identify the most common suppliers and service providers for regional manufacturers and target these companies for expansion/relocation into Greater Green Bay.
  - 1.2.2.** Work with existing manufacturers to help them add new product lines or expand their production capabilities to fill demands of regional businesses currently being satisfied by out-of-market firms.
  - 1.2.3.** Work with the Wisconsin Economic Development Corporation, the New North, and local economic development organizations across Northeast Wisconsin to highlight and market the region's advantages as a top location for manufacturing businesses.
- 1.3.** Highlight an "Upstream Value" strategy for technology-based manufacturing, focusing on industrial design and increased investment in process software and equipment improvements. *In the manufacturing sector, "upstream inputs" refer to the raw materials on which final products are dependent (e.g., trees for paper products). As technology exerts greater influence on industry in general, material inputs represent a smaller proportion of the value of manufactured goods. We encourage economic development organizations to think*

*of upstream inputs as those representing the most valuable inputs to the production process. From this perspective, R&D, industrial design, software-driven equipment, and process control are "the new upstream." These inputs require more creativity, ensure greater efficiency, and attract the skilled engineers and workers that keep companies competitive.*

- 1.3.1.** Pursue automation and advanced technologies that fuel the growth of local manufacturers (e.g., Autonomous Guided Vehicles, or AGVs, to operate heavy industrial processes).
- 1.3.2.** Encourage networking among the region's industrial design, engineering, and R&D workers employed by area manufacturers.



## **INITIATIVE 2: RESPOND TO THE NEEDS OF EXISTING EMPLOYERS AND INDUSTRIES.**

The business expansion and retention (BEAR) program is the most important aspect of a successful economic development organization. The US Small Business Administration estimates that roughly 60 percent of new jobs in a community are created through the expansion of existing businesses. Existing employers form the foundation of the Greater Green Bay economy and are its most valuable asset.

A strong business expansion and retention program is more important than a recruitment program, not only because of job creation, but because it is extremely difficult to recruit a new company if existing businesses are not thriving, especially if they have a negative attitude about the local business climate. A strong BEAR program for Greater Green Bay should also include efforts to mitigate risk and vulnerabilities facing existing employers. Businesses that have recently been acquired by out-of-state companies are at risk of downsizing or relocation. And the region's leadership cannot afford to assume that local corporate HQs (e.g., Schreiber Foods, Associated Bank, and Shopko Stores) will remain forever anchored to Greater Green Bay.

### **STRATEGIES & ACTIONS**

- 2.1.** Establish, maintain, and grow a database of existing businesses in Brown County.
  - 2.1.1.** Update and evaluate the database continually.
  - 2.1.2.** Include all large employers and also focus on high-growth firms, companies that serve external markets, and firms that are suppliers or service providers for the area's major employers.
- 2.2.** Expand the Advance employer visitation program to meet with all major employers, high-growth firms, and other key businesses on an annual basis.
  - 2.2.1.** Prioritize business visits by employer size and growth rates (employment and revenue), target industries, and lease expiration dates.
  - 2.2.2.** Visits should be structured to gauge the abilities and needs of local employers in order to operate successfully and possibly expand in Brown County.
  - 2.2.3.** Each employer visit should achieve several outcomes:
    - Educate the employer about Advance and its services;
    - Collect answers to a standard set of questions about the employer's challenges and identify opportunities to address these challenges;
    - Identify employers that are expanding their operations within and outside of Greater Green Bay or are considering relocating outside of the region;
    - Probe supplier attraction opportunities that would benefit existing employers; and
    - Capture testimonials from local companies about why they have chosen Greater Green Bay as their business location.

- 2.3.** Increase the level of CEO engagement as part of the BEAR program.
  - 2.3.1.** Host regular CEO breakfasts and other networking events to encourage relationship-building and informal connections among the local business community.
  - 2.3.2.** Cultivate relationships with CEOs of local firms that are based outside of Brown County to build channels of communication with corporate leadership, including annual visits to out-of-market corporate HQs. Greater Green Bay is fortunate to have many corporate HQs locally, but there are also numerous local plants and offices that belong to a larger business based elsewhere. Making connections with key decision makers outside of Brown County could lead to future retention/expansion of local operations.
- 2.4.** Work with existing employers, local governments, and utility providers to identify gaps in the region's infrastructure and look for solutions to address these gaps to support the growth of existing employers and recruitment of new businesses.
  - 2.4.1.** Continue working with the Advance Municipal Issues Committee to address local and regional infrastructure issues impacting the success of area employers.
  - 2.4.2.** Involve local government partners in the BEAR program as appropriate.

## INITIATIVE 3: RECRUIT NEW BUSINESSES AND INVESTMENTS.

In addition to supporting the growth of existing employers, the region must also attract new investment and job growth through business recruitment. Since the Great Recession, competition has heated up for business expansion and relocation projects among communities in the Midwest and nationally. Communities and states with aggressive recruitment programs are seeing results. Greater Green Bay has not captured its share of business expansion projects in recent years.

New initiatives focused on a set of target industries will be required for the region to “up its game” and compete successfully for expansions and relocations. Continued and expanded partnerships between local (Advance), regional (New North), and state (Wisconsin Economic Development Corporation) business recruitment programs will be important. However, Brown County cannot rely on the state or the region to serve as sources of new business generation, especially given Wisconsin’s relatively weak incentive programs compared to other states. Greater Green Bay needs a strong local recruitment effort to exercise greater control over its own economic future. It can accomplish this by targeting the types of industries and companies that complement the community’s desires and its assets.

## STRATEGIES & ACTIONS

- 3.1.** Focus Greater Green Bay’s business attraction and marketing efforts on six target industries, which represent the best opportunities for new investment and employment growth. *(See Appendix D for a detailed explanation of these industries.)*
  - 3.1.1. ADVANCED MANUFACTURING:** paper products, food processing, industrial machinery, industrial design.
  - 3.1.2. DIGITAL MEDIA & ENTERTAINMENT:** sports & sports technology, digital media (including virtual/augmented reality).
  - 3.1.3. HEALTH CARE & MEDICAL TECHNOLOGY:** medical specialties, medical training, sports medicine, health software & IT.
  - 3.1.4. LOGISTICS & DISTRIBUTION:** truck transportation, water-based transportation, logistics consulting services.
  - 3.1.5. CORPORATE HQs:** national HQs, regional/divisional HQs, corporate supply chain (professional services).
  - 3.1.6. FINANCIAL SERVICES:** bank HQs, regional banks & credit unions, insurance services.
- 3.2.** Strengthen Greater Green Bay’s business recruitment efforts by cultivating networks and relationships with business decision makers including corporate executives, commercial real estate brokers, and site location consultants.
  - 3.2.1.** Expand outreach to corporate leaders and real estate brokers in Milwaukee and Chicago.
  - 3.2.2.** Host a “FAM tour” (familiarization tour) for site consultants and real estate brokers as a way to generate awareness of Brown County and the Green Bay region as a destination for business expansions among executives.

- Ensure that the tour is focused on business opportunities, including potential real estate development projects for the site selectors to provide input on (e.g., the Titledown District, corridor development between Lambeau Field and downtown Green Bay).
  - Leverage the event to showcase the region's amenities and assets, but keep in mind the end goal—to develop relationships with key business decision makers that can lead to new investments and business expansions in Greater Green Bay.
- 3.3.** Enhance Greater Green Bay's image as a destination for new businesses and investment through focused marketing channels (e.g., online, social media, and networks of trained local "ambassadors").
- 3.3.1.** Create new online marketing materials specific to target industries and showcasing up-to-date information on the region's workforce and business climate.
- 3.3.2.** Conduct an economic impact analysis of each target industry to showcase its importance to the regional economy in terms of jobs, wages, and tax base impacts. This should be done internally by Advance using economic modeling software such as IMPLAN or EMSI, but can also be accomplished by working with a consulting firm that specializes in economic impact analysis.
- 3.4.** Leverage business and personal relationships to encourage international business investment.
- 3.4.1.** Work closely with Greater Green Bay companies that have an existing global presence (e.g., KI Furniture, Schreiber Foods, Schneider) to explore international business development opportunities.
- 3.4.2.** Assist regional businesses with their existing and future global expansion plans.
- 3.5.** Recruit satellite offices of firms based in nearby larger markets and suppliers/service providers with existing business ties to Greater Green Bay's major employers.
- 3.5.1.** This should include targeted, industry-specific strategies for attracting business expansions from companies with major facilities or based in the four communities with nonstop flights to/from Green Bay: Chicago, Minneapolis-St. Paul, Detroit, and Atlanta.
- 3.5.2.** Conduct quarterly business development missions to the four nonstop flight destination metro areas so that each market is visited once per year.
- 3.5.3.** Take a small group of business executives (5–10) on each business development mission.
- 3.5.4.** Develop specific approaches for each target market that leverage existing business relationships.
- 3.5.5.** Include small divisions of existing Brown County corporate HQs as a potential target under this recruitment initiative. Since many of the region's locally based companies operate facilities nationwide, there is a significant opportunity to attract small expansion projects (e.g., marketing and sales offices, regional operations centers) associated with existing businesses.

## INITIATIVE 4: EXPAND THE SIZE AND SCOPE OF THE REGION'S HIGHER EDUCATION ASSETS.

The region benefits from several quality higher education institutions—the University of Wisconsin-Green Bay (UW-GB), Northeast Wisconsin Technical College (NWTC), St. Norbert College, Medical College of Wisconsin, and Bellin College—but the role of UW-GB must be elevated. Enrollment levels at UW-GB are among the lowest in the entire UW system and it is one of the few universities in the state to experience a decline in its academic R&D investments over the last 10 years (even from its low starting point). The Green Bay region needs a large, growing university with a broader range of programs (especially engineering, science, and technology) and a greater emphasis on research and technology commercialization.

The link between higher education—especially engineering—and economic development is well established. Besides the most obvious examples (Stanford University in Silicon Valley, Harvard and MIT in Boston, and the University of Texas in Austin), dozens of communities across the US can trace their economic development success to the role of higher education.

Greater Green Bay competes with Chicago, Minneapolis-St. Paul, Grand Rapids, and many other communities in the Midwest and nationally. The ability to draw skilled workers into the area is essential. The presence of engineering programs and engineering talent is a vital element of forward-looking communities. This allows the community to build a pipeline of its own talent, focused on technology skills. The region's current and future employers will increasingly demand people with these qualifications. Moreover, the future growth of entrepreneurship and innovation in Greater Green Bay will be closely linked with the expansion of UW-GB's programs in science, engineering, technology, and business.

A skilled workforce is similarly critical for long-standing employers such as Georgia-Pacific and Schreiber Foods. In addition, new high-growth firms such as Breakthrough Fuels will put increasing demands on the talent pool. Attracting students and employees is an essential component of successful economic development programs. And there is no better way to execute on this strategy than through support of and collaboration with higher education.

## STRATEGIES & ACTIONS

- 4.1.** Encourage UW-GB and NWTC to expand into downtown Green Bay with specific programs and facilities.
  - 4.1.1.** Expand portions of UW-GB's computer science, technology, engineering, and business programs into downtown.
  - 4.1.2.** Expand non-academic functions into downtown (e.g., university engagement and student housing).
  - 4.1.3.** Launch new academic/training partnerships between UW-GB and NWTC that serve the region's existing employers and emerging industries. Start by creating programs with a downtown location geared toward downtown employers.
- 4.2.** Re-mission UW-GB to be a larger, more R&D-focused, broader-reaching university.
  - 4.2.1.** Position UW-GB to compete with UW-Milwaukee through the introduction of highly focused engineering programs, including the creation of an engineering school at UW-GB.

- 4.2.2.** Set ambitious long-term enrollment growth targets to more than double UW-GB's enrollment over the next 10-15 years. *A potential target could be to grow enrollment to 15,000 students by 2030 (compared to 6,784 as of 2015).*
- 4.2.3.** Pursue major growth in UW-GB's R&D programs over the next five years and beyond. *A potential target could be to grow annual R&D investments to \$5 million by 2022 and to \$25 million by 2030 (compared to \$1.2 million in 2014).*
- 4.3.** Support the new STEM Innovation Center—a partnership between UW-GB, NWTC, and Brown County—to build a strong pipeline of science and technology talent for Greater Green Bay.
  - 4.3.1.** Leverage this new collaboration to benefit the region's existing employers and use it to promote the area for new business expansion projects.
  - 4.3.2.** Include the region's K-12 schools in this effort to help grow a larger foundation of future science and technology workers.
- 4.4.** Develop a "center of excellence" (COE) that brings together the region's higher education institutions, major employers, and investment partners to address a specific set of research and training opportunities. *Centers of excellence are typically a collaboration between higher education institutions and businesses. These centers leverage the unique assets found within a region to support research or training within a specific industry or focus area. They often serve as a magnet for industry expertise and are dedicated to the success of companies within a region.*
  - 4.4.1.** Establish a COE in downtown Green Bay that capitalizes on the region's higher education and industry assets to attract and nurture new talent, businesses, and investment.
  - 4.4.2.** Examples currently under consideration include sports-related media and advanced manufacturing specific to food processing.
- 4.5.** Bring together regional higher education and medical organizations to leverage the new Medical College of Wisconsin-Green Bay for economic development.
  - 4.5.1.** Hold a summit to evaluate and prioritize initiatives that could lead to new business creation, talent retention/attraction, recruitment of medical service providers and technology companies, and other outcomes.
  - 4.5.2.** Explore the long-term potential to develop a med-tech innovation district centered on the new medical school.

## EXAMPLES & BEST PRACTICES

- Examples of major **downtown** higher education expansions include: Arizona State University in Phoenix, University of Washington in Tacoma, University of Texas-San Antonio, and University of Central Florida in Orlando, just to name a few. There are also numerous smaller scale university expansions in downtown districts—UW-Eau Claire, University of Minnesota-Rochester, University of Massachusetts in Springfield, and University of Oregon in Portland.



- Center of excellence examples: Sematech & MCC in Austin, The Water Council in Milwaukee, NBAF (National Bio and Agro Defense Facility) in Manhattan (KS), and The Collider focused on climate science in Asheville (NC).
- Med-Tech innovation district examples: Dell Medical School and surrounding Med-Tech Innovation District in Austin, Global Center for Health Innovation in Cleveland, and the WestEdge innovation district in Charleston centered on the Medical University of South Carolina.

## INITIATIVE 5: ATTRACT, RETAIN, AND DEVELOP TALENT.

Access to a skilled workforce is *the* critical factor affecting the success of businesses in today's economy. According to *Area Development's* "30<sup>th</sup> Annual Survey of Corporate Executives (Q1 2016)", access to a skilled workforce ranked at the top of the list among 36 site selection factors. The table below details the top 10 site selection factors and how they have changed over the last three decades. Thirty years ago, labor costs were the most important consideration for business expansion projects. Today, the availability of skilled labor—regardless of labor costs—is the most important factor.

National demographic trends will lead to shrinkage of the working age population in the next couple of decades. If job growth continues, even at a minimal rate, employers will continue to have difficulties finding skilled workers. Thus, one of the most urgent priorities for communities is to attract, retain, and develop a pipeline of talent to support the growth of existing and future employers. Regions with a skilled population have a dramatic advantage over other areas. Addressing this issue is critical for the region's future growth. The Green Bay region needs to rise above its competition and offer a compelling reason for young, educated workers to choose Greater Green Bay.

**FIGURE 1. TOP 10 SITE SELECTION FACTORS (RANKED BY SCORE IN 2015)**  
WITH 30-YEAR COMPARISON

RANK	FACTOR	2015	2010	2005	2000	1995	1990	1986
1	<b>Availability of skilled labor</b>	<b>92.9</b>	<b>85.9</b>	<b>87.2</b>	<b>87.7</b>	<b>87.9</b>	<b>87.1</b>	<b>84.8</b>
2	Highway accessibility	88.0	97.3	91.4	95.9	93.6	92.3	91.3
3	Quality of life*	87.6	62.1	54.7	58.8	70.4	70.6	60.4
4	Occupancy or construction costs	85.4	89.8	83.7	83.0	90.2	88.5	N/A
5	Available buildings	83.7	81.0	N/A	N/A	N/A	N/A	N/A
6	Labor costs	80.8	91.0	87.9	91.6	94.2	92.1	96.6
7	Corporate tax rate	78.8	86.3	85.0	84.7	N/A	N/A	N/A
8	Proximity to major markets	76.3	66.4	83.2	76.8	74.5	74.9	84.8
9	State and local incentives	75.8	89.3	86.0	83.6	87.8	88.7	79.6
10	Energy availability and costs	75.3	82.1	82.8	77.7	89.6	88.1	N/A

Source: *Area Development* magazine, 30th Annual Survey of Corporate Executives

Note: All figures are percentages and are the total of "very important" and "important" ratings. \*Quality of life rating for prior years' surveys is the average of rating of nine quality of life factors (climate, housing availability, housing costs, healthcare facilities, ratings of public schools, cultural opportunities, recreational opportunities, colleges and universities in the area, and low crime rate).

## STRATEGIES & ACTIONS

**5.1.** Encourage greater alignment and partnerships between the region's employers, educational providers (K-12 and higher education), and workforce development organizations.

**5.1.1.** Continue to work with NWTC, UW-GB and other higher education institutions, the region's K-12 schools, and employers to implement more internships, create greater awareness of job opportunities among students and parents, and place more educators in "externships" with local employers.

**5.1.2.** Continue to work with the Northeast Wisconsin Manufacturers Alliance and other groups to raise awareness of career options in the region and to provide hands-on opportunities for exposing

students, teachers, and parents to potential career opportunities (e.g., manufacturing day and similar events). This should build on the success of Manufacturing Month (announced by Governor Walker in October 2016), but should include similar efforts to boost awareness of career options in manufacturing and other sectors throughout the year.

- 5.1.3.** Continue to work with the Bay Area Workforce Development Board, Achieve Brown County, and other local workforce development organizations to enhance the skills of Brown County's workforce and connect workers to employment opportunities.
- 5.2.** Launch a campaign to build awareness of the career opportunities available in Greater Green Bay.
  - 5.2.1.** Leverage social media tools, university/college alumni networks, and other forums to engage target audiences and promote the region as a great option for job seekers.
  - 5.2.2.** Create a digital ambassadors program as a channel to promote positive messages about the Greater Green Bay area. *Social Toaster is a good example of an online tool for managing this type of program. Organizations including universities, corporations, pro sports teams, and economic development organizations have used this approach successfully to engage "super fans" who share content through their social networks and increase awareness/excitement for the organization among target audiences.*
- 5.3.** Pool together resources from regional employers seeking to recruit and retain skilled workers.
  - 5.3.1.** Pursue joint job fairs and workforce recruitment trips that benefit multiple employers.
  - 5.3.2.** For example, the Chamber could lead a mission of several large employers with similar workforce needs to visit Chicago, Detroit, Minneapolis, or Atlanta to host job fairs/recruitment events to tap into talent in nearby major metro areas.
  - 5.3.3.** Create and share community-marketing collateral with employers to support and augment their talent recruitment efforts.
- 5.4.** Survey local employers regularly about their "hardest to fill" jobs and "hardest to find" skills.
  - 5.4.1.** Use information from employer surveys to develop training programs with educational providers and to recruit talent from outside of the region.
  - 5.4.2.** Work with employers to survey employees regularly to understand their desires/needs from employers and from the community as a whole (including information about quality of place and amenities).

## INITIATIVE 6: ACCELERATE DOWNTOWN AND URBAN DEVELOPMENT.

Today's generation of young adults favors urban living and everything that comes with it (walking, biking, and patronizing locally owned shops and restaurants). Providing an attractive environment that appeals to young professionals is critical for economic development. This does not apply only to large cities, nor does it apply only to a younger generation. A growing number of small and mid-size cities offer walkable neighborhoods and downtown districts that attract both young people and baby boomers.

The most successful downtowns are not necessarily the ones with the most jobs (or hotels, bars, entertainment venues, or any single thing). A vibrant downtown district usually has multiple primary functions that work together to attract people from all walks of life. Successful downtowns (and, by extension, successful communities) are all about growth and diversity. Greater Green Bay has made positive strides around these trends, thanks to adding public amenities (e.g., The CityDeck), corporate expansions (e.g., Schreiber Foods' downtown HQ), new urban residential options, and entertainment venues (e.g., Tiletown Brewing Company).

The new Tiletown District adjacent to Lambeau Field is another exciting catalyst project that will play a key role in attracting additional investments and urban amenities that can make the region a top destination for talent. The addition of new businesses, jobs, and residents in the region's urban core will lead to far-reaching economic benefits throughout Brown County and beyond.

Major investments from the public and private sectors will be essential for the continued transformation of downtown Green Bay. However, big and bold investments are not the only successful approach to urban revitalization. The emerging "tactical urbanism" movement favors quick and cheap actions that create nearly instantaneous positive results. This new approach—led by groups such as the Project for Public Spaces and the Better Block Project—is helping to re-energize hundreds of downtowns and urban corridors in small and large cities across the US. This strategy could provide significant benefits to downtown Green Bay, especially if it provides a forum for engaging and connecting the region's design professionals (e.g., architects, urban planners, and civil engineers) with the needs of area employers seeking to attract and retain talent.

## STRATEGIES & ACTIONS

### 6.1. Establish an "innovation district" centered on downtown Green Bay.

- 6.1.1.** As part of the innovation district, launch a pilot project to encourage the region's IT & software workers to locate downtown.
  - Start with 5-10 of the region's major employers and work with them to set up a shared co-working space for a portion of their IT workforce (10-20 workers initially).
  - Use this as a networking and talent retention strategy for the technology workers already employed by local businesses.
  - Depending on the success of the pilot, expand the initiative to include additional employers and organizations that can help create an environment that is favorable to innovation and creativity.
  - Encourage the region's higher education institutions, led by UW-GB, to play a role in this program.
- 6.1.2.** Work with the City of Green Bay and Brown County to establish public incentives that encourage new investment in a specified area in downtown Green Bay.

- 6.1.3.** Continue to engage the local arts and design community in projects that elevate the role of arts and culture in downtown Green Bay to create an atmosphere of creativity.
- 6.2.** Capitalize on Greater Green Bay’s most important natural asset—the waterfront.
  - 6.2.1.** Continue to invest in urban amenities such as CityDeck and the hike/bike trails along the Fox River to make downtown attractive for residents and businesses.
  - 6.2.2.** Enhance access to the Fox River and the bay through public investments and partnerships with the real estate community for new developments along the waterfront.
  - 6.2.3.** Explore the potential to add new trails along the Fox River and pedestrian/bike bridges spanning the river in multiple areas of Green Bay, De Pere, and throughout Brown County.
- 6.3.** Go “all in” to encourage new mixed-use commercial and residential development in downtown and in the Titletown District, but also maximize the development potential of the area between the two districts.
  - 6.3.1.** Evaluate and revise zoning and land use regulations to allow and encourage mixed-use (office, retail/restaurant, residential) and, where appropriate, dense residential development.
  - 6.3.2.** Ensure that prime employment sites are developed to allow the maximum amount of capital investment and high-wage job growth.
- 6.4.** Embrace a “tactical urbanism” approach for activating empty spaces and underutilized assets in Green Bay’s downtown area and in communities throughout Brown County.
  - 6.4.1.** Work with Downtown Green Bay, Inc. to support the growth of existing events—like the Wednesday Farmers Market—that bring people into the downtown on a regular basis.
  - 6.4.2.** Host alley fairs, parking lot music+food+art festivals, PARK(ing) Day events (temporarily turning an on-street parking spot into a public space), and other new events that enhance the downtown’s role as the region’s center of activity.
  - 6.4.3.** Engage the region’s architecture and urban design professionals (e.g., architecture firms, landscape architecture firms, urban planning, and civil engineering firms) in creative efforts to bring new energy and life into downtown Green Bay.
  - 6.4.4.** Support the urban revitalization efforts and place-making initiatives in urban districts and corridors in communities throughout Brown County (e.g., Main Avenue and Broadway in De Pere).

## EXAMPLES & BEST PRACTICES

- Downtown innovation district examples: Chattanooga, TN; Kansas City, MO; Austin, TX; Clearwater, FL; 16 Tech innovation district in Indianapolis, IN.
- Downtown waterfront best practices: Grand Rapids, MI; Eau Claire, WI; Pueblo, CO; Bend, OR; Austin, TX.
- Tactical urbanism best practices: Alley Fair in Fargo, ND; PARK(ing) Day, the Better Block Project.

## INITIATIVE 7: BUILD A ROBUST ECOSYSTEM FOR INNOVATION AND ENTREPRENEURSHIP.

Innovative companies, entrepreneurs, creative workers, and technology are critical elements of thriving regional economies. Greater Green Bay already has a number of the ingredients needed to become a center for innovation and entrepreneurship, but these elements are not connected. The region benefits from innovation within its large employers (e.g., Georgia-Pacific, Schreiber Foods) and smaller, high-growth firms (e.g., Breakthrough Fuels, Forsite Benefits), yet these benefits are not widely shared across companies and industries. Too much of the innovation and R&D taking place in Brown County stays within the confines of single companies. The region's startup community, capital/funding sources, educational institutions, business support organizations, and real estate sector need better alignment and strategic direction.

The regional economy's long-term success depends on how wholeheartedly the community's leadership embraces the role of innovation. Innovation must become a core component of the Greater Green Bay economic development program. There is a substantial unmet need and untapped opportunity for new investments and a coordinated approach toward accelerating entrepreneurship and innovation in Brown County.

### STRATEGIES & ACTIONS

#### 7.1. Launch a major entrepreneurship and innovation program for Greater Green Bay, as part of Advance.

- 7.1.1.** The purpose of this program will be to coordinate and connect resources, people, and businesses across Greater Green Bay and to create a robust environment for innovation, technology commercialization, and entrepreneurial businesses.
- 7.1.2.** Brand the new program as *the* resource for accelerating entrepreneurship and innovation across the region.
- 7.1.3.** Potential names for the new program include Greater Green Bay Technology Partners, Innovate Green Bay, or Greater Green Bay Ventures.
- 7.1.4.** This initiative should be led by a full-time, dedicated staff person and should include supporting staff and resources. Ideally, the person leading this effort will have experience running a high-profile accelerator or incubator. Experience with startup companies and with investment funds is essential.

#### 7.2. Expand established networking channels and create new opportunities for relationship building among the region's entrepreneurs, startups, and technology workers.

- 7.2.1.** Create a mentor program that connects regional business executives with entrepreneurs to expose emerging business leaders to the experience and expertise of seasoned executives.
- 7.2.2.** Strengthen the connections between entrepreneurs and tech workers in Green Bay and surrounding regions with a concentration of technology firms and startups (e.g., Madison, Milwaukee, Chicago, Minneapolis-St. Paul, Detroit, and Atlanta).
- 7.2.3.** Encourage Brown County entrepreneurs to engage with the 1 Million Cups (1MC) chapters in Appleton, Madison, and Milwaukee.



- 1MC is a national program designed to educate, engage, and connect entrepreneurs. Developed by the Kauffman Foundation, 1MC is based on the notion that entrepreneurs discover solutions and network over a million cups of coffee. One hundred chapters exist in communities across the US.
- Explore the potential to establish a One Million Cups chapter in Green Bay.

**7.2.4.** Also, establish linkages to other national technology hubs such as Silicon Valley, Boston, and Austin.

**7.3.** Expand access to capital in Greater Green Bay area for high-growth firms and startups.

**7.3.1.** Include local banks, angel investors, and high net worth individuals in addition to capital resources in nearby larger metro areas.

**7.3.2.** Explore the potential to create a new angel investment fund for Greater Green Bay risk capital model based on a REIT (real estate investment trust) structure.

- Ensure that the fund is professionally managed.
- Design the fund to benefit a specific geographic area (e.g., Brown County, the New North).
- Orient the fund toward re-investment opportunities that benefit local firms and real estate developments.

**7.4.** Recruit high-growth firms from other Midwest and national markets.

**7.4.1.** Start recruitment efforts targeting high-growth firms in Milwaukee and Madison, then extend out to other metro areas with regional and national innovation hubs.

**7.4.2.** Instead of aiming for total relocation from a larger market to Green Bay, pursue expansions and satellite offices of existing firms.

**7.4.3.** Use resources like the Inc. 5000 (a list of the fastest growing private firms in the US based on year-over-year revenue growth) to identify firms in other markets that would be a good fit for Greater Green Bay. Additional resources for identifying high-growth firms that could expand in the region include:

- CrunchBase (for identifying recent recipients of venture funding)
- Fast Company Magazine (World's Most Innovative Companies)
- Forbes (World's Most Innovative Companies)
- MIT Technology Review (Smartest Companies)
- Thomson Reuters (Top 100 Global Innovators)

## EXAMPLES & BEST PRACTICES

- The Venture Asheville program (part of the Asheville-Buncombe County Economic Development Coalition) is a good model of a successful entrepreneurial support initiative.
- Emerging Prairie in Fargo, North Dakota, is another good example of a program that is building a robust environment for entrepreneurs.

## INITIATIVE 8: ENCOURAGE GREATER ALIGNMENT WITH THE GREEN BAY PACKERS.

Greater Green Bay has a unique asset among smaller US metros (fewer than one million residents)—a professional sports franchise. And the Packers are not just any team. With one of the most storied franchises in sports history and a global following that makes them the third most televised NFL team, they represent an unparalleled positive brand and image for Green Bay. The community has always been supportive, but there are many more opportunities for capitalizing on the range of economic development opportunities presented by the Packers.

The team is already addressing some of these opportunities, most notably with the Titledown District. But there are numerous areas of untapped potential where the community can align its efforts more closely with the Packers. Partnerships between the region's higher education institutions and the Packers related to research, technology commercialization, startups, and innovation are just a few examples of what could and should be pursued as part of a "Packers + community" economic development strategy.

**FIGURE 2. THE MOST & LEAST TELEVISED TEAMS IN THE NFL, 2009-2014.**

BASED ON AVG. NO. OF ANNUAL TELEVISED GAMES IN US TV MARKETS, 2009-2014 REGULAR SEASONS

1	Dallas Cowboys	17	Washington Redskins
2	New York Giants	18	Houston Texans
<b>3</b>	<b>Green Bay Packers</b>	19	Miami Dolphins
4	Pittsburgh Steelers	20	Cincinnati Bengals
5	New England Patriots	21	Detroit Lions
6	Philadelphia Eagles	22	Kansas City Chiefs
7	Denver Broncos	23	Seattle Seahawks
8	Chicago Bears	24	Carolina Panthers
9	New Orleans Saints	25	Tennessee Titans
10	Indianapolis Colts	26	Oakland Raiders
11	San Francisco 49ers	27	Arizona Cardinals
12	Baltimore Ravens	28	St. Louis Rams ( <i>now Los Angeles</i> )
13	New York Jets	29	Tampa Bay Buccaneers
14	San Diego Chargers ( <i>now Los Angeles</i> )	30	Jacksonville Jaguars
15	Minnesota Vikings	31	Cleveland Browns
16	Atlanta Falcons	32	Buffalo Bills

Source: FiveThirtyEight.

## STRATEGIES & ACTIONS

### 8.1. Work closely with the Packers to support the success of the Titledown District.

- 8.1.1.** Help to identify the appropriate anchors and supporting tenants to occupy space in the district.
- 8.1.2.** Where appropriate, work with the Packers to recruit strategic businesses into the district that complement the team's unique strengths (e.g., companies involved in media, entertainment, and sports medicine).
- 8.1.3.** Encourage compatible development in adjacent and surrounding properties to create a growing hub of urban vitality.

**8.2.** Partner with the Packers to explore options to link the Titledown District with downtown Green Bay.

- 8.2.1.** Launch a collaborative effort between the Packers, the City of Green Bay, the Village of Ashwaubenon, Brown County, Advance, and the Chamber to revitalize and activate the districts and corridors connecting downtown Green Bay and the Lambeau Field/Titledown District area.
- 8.2.2.** Engage the real estate community to identify and encourage new investment and development to incorporate a mixture of uses (office, retail, restaurants/bars, hotels, and dense residential).
- 8.2.3.** Identify opportunities to improve physical connectivity (roads, signage, bike/pedestrian & trail access) and virtual connectivity (partnerships between businesses in both districts).
- 8.2.4.** Work with higher education partners and other groups to incorporate creative approaches (e.g., design competitions, art installations, and festivals/events) that help energize the space between the two districts. Focus on key nodes, gateways, and highly visible sites along the corridor.

**8.3.** Capitalize on the Packers' relationships with the NFL and the league's other 31 teams by convening an NFL owners/presidents summit in Greater Green Bay.

- 8.3.1.** The joint meeting should be focused on exploring best practices around NFL teams and their role in economic development.
- 8.3.2.** Representatives from NFL teams, local government leaders, and economic development organizations should take part in this summit.
- 8.3.3.** Discussions should cover the following topics:
  - The "two-way street" of community support for its team (including incentives for stadiums) and the investment from the team into the community.
  - Leveraging the team's brand for business recruitment and marketing.
  - Real estate development and public-private partnerships, focusing on what different teams have done beyond the stadium itself.
  - Innovation, technology development, and startup growth associated with the team.
- 8.3.4.** During the summit, showcase the Packers' role in regional economic development, including the Titledown District and community partnerships.

## **EXAMPLES & BEST PRACTICES**

- Frisco, Texas partnership with the Dallas Cowboys' corporate HQ & training facility as part of "\$5 Billion Mile."
- San Antonio Spurs and the SAGE (San Antonio for Growth on the Eastside) partnership to revitalize the area around the AT&T Center and neighborhoods connecting downtown San Antonio to the near Eastside.
- Fantag sports & social media technology startup in Sacramento (partnership with Greater Sacramento Economic Council and Sacramento Kings).

## INITIATIVE 9: ELEVATE THE ROLE OF EVENTS AND CONFERENCES.

Far too many communities have weak ties between their economic development program and their convention & visitors bureau. This can lead to missed opportunities for connecting the hospitality sector to broader economic development outcomes, such as target industry recruitment and talent attraction. The Green Bay region has a unique opportunity to connect its tourism and event promotion efforts, led by the Greater Green Bay Convention & Visitors Bureau, with its overall economic development activities led by the Greater Green Bay Chamber and Advance. The recruitment of new businesses and investments into the region can be facilitated through strategic partnerships between the CVB and the Chamber.

The Packers organization and its role in global media channels provide the region with another advantage that can be leveraged through events and conferences that attract new businesses and talent into the region. The potential of large-scale events to influence how the world views Green Bay should not be underestimated. A prime example of how events can translate into significant economic development outcomes (beyond just the tourism spending associated with the event itself) is how the SXSW Music+Interactive Festival has accelerated Austin's position as a national technology and innovation hub. These types of linkages between tourism and economic development should be encouraged in Greater Green Bay as well.

Public sector investments in tourism promotion and destination development (e.g., convention centers and urban amenities) are a key factor in catalyzing economic growth in many communities. The acclaimed Oklahoma City MAPS projects, funded through a one-cent sales tax, are a good example of strategic public investments that have played a central role in the transformation of the city's downtown and in supporting region-wide economic growth. A major benefit of these types of investments is that, in addition to boosting tourism and visitor attraction, they enhance the community's appeal for existing and future residents.

## STRATEGIES & ACTIONS

- 9.1.** Evaluate committing to a ½ percent Brown County sales tax and other public and private funding sources and dedicate the revenue toward catalyst projects.
  - 9.1.1.** Replace the existing Shopko Hall/Brown County Veterans Memorial Arena complex with a new facility to host major events.
  - 9.1.2.** In addition to the events center, a portion of the sales tax revenue and/or other public and private funding sources could also be used to fund other key projects to strengthen local amenities (e.g., trails, bike/pedestrian bridge over the Fox River, and enhanced physical connections between Titledown and downtown) and other economic development initiatives/projects identified in this plan.
- 9.2.** Encourage greater levels of collaboration between the CVB's event promotion efforts and Advance's business recruitment activities.
  - 9.2.1.** Identify specific events related to Greater Green Bay's target industries and host them locally, providing a unique marketing channel to key business decision makers within specific sectors.
  - 9.2.2.** Initiate a "backyard marketing" program in partnership with the CVB to bring relevant conferences into Brown County.

- Conduct a regular survey of local employers regularly about which out-of-market conferences they are attending.
- Depending on a range of factors (number of local professionals attending the event, size of the event, relevance to target industries, etc.), the CVB would pursue new events and work with local partners to host them in Brown County.

**9.3.** Work with the CVB and other partners to support the growth of Greater Green Bay's tourism industry.

**9.3.1.** Support the continued success and growth of existing events that bring in tourism spending and also create a strong sense of place and create new events that draw in outside visitors.

**9.3.2.** Market the Greater Green Bay area as a destination/point-of-departure for nearby tourism destinations including the Door Peninsula and the Upper Peninsula of Michigan.

## **EXAMPLES & BEST PRACTICES**

- SXSW Music+Interactive Festival in Austin
- ArtPrize in Grand Rapids
- OKC MAPS program in Oklahoma City

## INITIATIVE 10: ENSURE DIVERSITY AND INCLUSIVENESS.

The need to share economic prosperity across a wider range of groups (women, ethnic/racial minorities, young people) is a national imperative. Part of the challenge is to improve economic opportunities for all of the region's existing residents, including groups with access to fewer educational and financial resources.

Organizations such as the Greater Green Bay Chamber, the Community Foundation, and United Way are already spearheading efforts in this direction. However, the other equally important issue is encouraging greater diversity overall. Greater Green Bay is not as diverse as the US as a whole and this is a growing challenge given the need to attract and retain talented workers, especially in light of the large pool of baby boomers reaching retirement age. The region will need to broaden its appeal to non-traditional populations, including those already residing in the region and those who might consider moving to Greater Green Bay.

Working more closely with the region's existing employers is a promising approach to improving access to jobs and providing pathways toward greater economic opportunities for all of the region's populations. Existing employers represent the majority of current and future job openings and are more invested in the community than out-of-state market firms seeking to expand into the region are. Furthermore, these employers have many middle-skills positions and, in health care in particular, strong career pathways. It is these existing employers—well-established institutions with roots in the community—that are considered “anchor” institutions.

Anchor institutions, such as hospitals, universities, arts/cultural institutions, and sports venues, play a critical role in urban economic development in cities across the US. The Green Bay region is blessed with a wide range of anchors (e.g., hospitals, UW-GB, NWTC, St. Norbert College, Brown County, City of Green Bay, and the Packers) that can serve as foundations for additional economic development. The Greater Green Bay Chamber, the Community Foundation, and other groups should partner with these anchors to identify and implement new programs that provide better economic opportunities to underserved populations.

Partnering with anchor institutions to increase local procurement and hiring is a fairly new type of strategy that is promising. Though the strategy is still being refined, engaging these anchor institutions and ensuring that they can fill their human resource needs with local talent and their procurement needs with local suppliers will no doubt be one of the most effective ways to create new jobs in Greater Green Bay for residents seeking to enhance their earning potential and economic opportunities.

## STRATEGIES & ACTIONS

### 10.1. Embark on a regional anchor institution strategy.

**10.1.1.** Encourage anchors to engage in subcontracting that seeks out minority and women-owned businesses.

**10.1.2.** Assist anchors with setting up homebuyer assistance programs that encourage employees to become local homeowners near their place of employment.

**10.1.3.** Work with anchors to expand/create workforce-training programs that hire local residents.

**10.2.** Align economic development initiatives closely with the region's foundations and philanthropic community, led by the Greater Green Bay Community Foundation.

**10.3.** Raise the profile of inclusive development and diversity across the region's partner organizations.



**10.3.1.** Encourage companies and nonprofit organizations to seek diverse board representation.

**10.3.2.** Enhance the awareness of and connections to organizations that champion the needs of diverse populations.

## **EXAMPLES & BEST PRACTICES**

- Minneapolis-St Paul: McKnight Foundation & Corridors of Opportunity
- Northeast Ohio: Fund for our Economic Future
- Anchor institution examples: Cleveland Clinic, Midtown Detroit (Wayne State University, Detroit Medical Center, Henry Ford Health System), Mayo Clinic & Mayo Clinic Ventures in Rochester (MN)

## INITIATIVE 11: ENHANCE TRANSPORTATION ACCESS AND CONNECTIVITY.

Greater Green Bay has good transportation infrastructure and connections, but improvements are needed, especially to the region's highway infrastructure (a new bridge in De Pere) and additional flights to/from Green Bay Austin Straubel International Airport. Green Bay currently offers nonstop flights to the three major Midwest hub airports (Chicago-O'Hare, Detroit, and Minneapolis-St. Paul) as well as the recently added daily flight to Atlanta. This is similar to the level of connectivity offered at Appleton's airport and is comparable to other similarly sized communities, but additional nonstop destinations would make a huge positive impact on the area's business opportunities.

If Greater Green Bay can align its community and business leaders toward gaining additional connections to major national business centers and airport hubs (such as Dallas-Fort Worth, New York, DC, Denver, and Phoenix), the region will significantly improve its ability to recruit corporate headquarters, professional services firms, and other businesses that rely on frequent air travel. Over time, the addition of new nonstop flights from Green Bay Austin Straubel International Airport would eliminate most of the "leakage" caused by Northeast Wisconsin residents who drive south an extra one to three hours to fly out of the Milwaukee and Chicago airports. Brown County's business and government leaders must remain focused on leveraging and enhancing all of the community's existing transportation assets—the airport, the rail network, the highways, the Port of Green Bay—in order to enhance the region's long-term economic competitiveness.

### STRATEGIES & ACTIONS

- 11.1.** Continue working with regional business leaders and other stakeholders to support and expand the passenger and freight operations at Green Bay Austin Straubel International Airport.
- 11.2.** Leverage the Port of Green Bay to expand the role of water-based transport as an economic engine and in support of related sectors including manufacturing, construction, and agriculture.
- 11.3.** Advocate for regional transportation infrastructure investments in new highway and rail capacity to enhance Greater Green Bay's connections to outside markets.
- 11.4.** Convene a regular freight mobility working group meeting (bi-monthly or quarterly) of public and private sector leaders involved in freight mobility to discuss transportation issues affecting the region's economy.
  - 11.4.1.** This meeting should be designed to encourage networking within the region's logistics and distribution industry, including representation from the public and private sectors.
  - 11.4.2.** Design the meeting to engage Schneider and other regional businesses involved in goods movement to identify and evaluate the region's needs and opportunities associated with freight transportation.
  - 11.4.3.** The meeting should also include presentations from local/state/federal transportation planners and knowledge sharing about major transportation policies and infrastructure projects.

## PERFORMANCE METRICS

A critical component of successful strategic plans is the set of metrics by which the plan's implementation is tracked. Below are the suggested measures of success that should be tracked on a continual basis (monthly or quarterly if possible, but at least annually).

METRIC	EXPLANATION	DATA SOURCES
<b>Employment Growth</b>	Increase the number of jobs from existing and new employers.	US Bureau of Labor Statistics (Quarterly Census of Employment and Wages), business interviews, surveys, and media reports
<b>High-Wage Employment Growth</b>	Increase the number of jobs that pay above area median wages and/or above the median wage within the industry.	US Bureau of Labor Statistics (Quarterly Census of Employment and Wages), business interviews, surveys, and media reports
<b>Capital Investment</b>	Attract a higher level of new investment from new and existing companies, real estate developers, and other investors.	Business interviews, surveys, and media reports
<b>Business Startups</b>	Increase the number of new businesses created locally and startups attracted from outside of the region.	Business interviews, surveys, and media reports
<b>Business Recruitment &amp; Relocation</b>	Attract business expansion and/or relocation projects from outside of the community.	Business interviews, surveys, and media reports
<b>Educational Attainment</b>	Increase the share of adult population with bachelor's degrees.	U.S. Census Bureau – American Community Survey (1-year estimates)
<b>Tax Base Growth</b>	Expand the local property tax and sales tax base for Brown County and for local municipalities.	Brown County, local municipalities

# APPENDIX A: ECONOMIC ASSESSMENT & SWOT

## KEY FINDINGS

The economic assessment revealed numerous insights into the Greater Green Bay economy. The most significant findings are highlighted below:

- **The Greater Green Bay metro area population has grown at a steady pace** for the last couple of decades. The metro area grew from 244,000 residents in 1990 to 316,000 in 2015, an increase of nearly 30 percent.
- **The area's employment base has grown slowly** since 2010. The local economy added roughly 9,300 jobs between 2010 and 2016, an annual growth rate of about one percent, roughly half the two percent growth rate in the US as a whole.
- **Manufacturing is strong at the local, regional, and statewide levels.** Greater Green Bay has a significantly higher concentration of manufacturing jobs than the US economy.
- The largest employers in Brown County are primarily in **paper products, food processing, and health care**. These three sectors account for 18 of the county's 30 largest employers.
- **Brown County is a major employment center** for all of Northeast Wisconsin, drawing in 23,000 net inbound commuters from outside the county on a daily basis. The sectors bringing in the largest number of commuters include manufacturing, health care, and finance & insurance.
- **Brown County has gained nearly 500 net new residents from Cook County, Illinois** since 2010. The county gained a total of more than 650 net new residents from 2010 to 2015 due to migration. This includes net losses of residents to Outagamie County, Milwaukee County, and Dane County.
- **Air passenger traffic has declined significantly at Green Bay Austin Straubel International Airport**, while traffic at Appleton's airport has increased in recent years. The number of passengers flying in/out of Green Bay has decreased by nearly 40 percent since May 2008.
- **UW-Green Bay remains one of the smallest campuses in the UW system** (less than 7,000 students), despite growing its enrollment by 20 percent from 2005 to 2015. UW-Green Bay also has a smaller amount of academic R&D spending than many UW system universities, and has seen its level of R&D investments decline faster than any other higher education institution in Wisconsin from 2004 to 2014.
- **Downtown Green Bay's population declined from 2000 to 2010**, but has grown slightly from 2010 to 2016. The city's downtown population has expanded at a slower pace than many other cities, including competitors such as Milwaukee, Chicago, and Minneapolis.

## SWOT ANALYSIS

In addition to our review of economic and demographic data, our understanding of Greater Green Bay was informed by roundtable discussions and meetings with regional business, community, and academic leaders. Based on these qualitative insights, along with our experience working with communities across the country, we have developed an analysis of the region's strengths, weaknesses, opportunities, and threats—commonly referred to as a SWOT analysis.

A SWOT analysis can be defined as follows:

- **STRENGTHS.** Advantages that can be built on to grow and strengthen the regional economy.
- **WEAKNESSES.** Liabilities and obstacles to economic development that could limit the region's growth potential.
- **OPPORTUNITIES.** Assets and positive trends that hold significant potential for increased regional prosperity and the attraction of new businesses, investments, and people.
- **THREATS.** Unfavorable external factors and trends that could negatively impact the regional economy.

The results of our analysis are outlined below.



## STRENGTHS

- Greater Green Bay Chamber, including Advance, is a strong organization with broad-based support from the community's leadership (public and private sectors)
- Additional strong organizations supportive of economic development in the region (Greater Green Bay Convention & Visitors Bureau, Greater Green Bay Community Foundation, New North)
- Green Bay Packers organization and its global brand
- Second largest media market in Wisconsin (after Milwaukee, but larger than Madison)
- New Medical College of Wisconsin-Green Bay facility
- Multiple major health care systems
- Strong group of higher education institutions in region (UW-GB, NWTC, St. Norbert College, Medical College of Wisconsin-GB, Bellin College)
- Numerous strong K-12 school districts and private schools in region
- Successful initiatives aimed at inclusive economic development (e.g., Achieve Brown County, Partners in Education)
- Green Bay is the nexus of the New North regional effort
- Advance Business & Manufacturing Center
- Rapidly improving downtown district driven by the City of Green Bay, with new private investment in office space (Schreiber Foods, Inc. and Associated Bank HQs), residential development, and restaurant/entertainment venues
- Brown County Resource Recovery programs to enhance environmental sustainability and support economic development
- Second largest farmers market in Wisconsin
- Downtown is free from major physical barriers limiting development potential such as an interstate highway
- Titletown District adjacent to Lambeau Field
- Community culture of collaboration and support for local businesses
- Strong support system for regional manufacturers, led by Northeast Wisconsin Technical College and Northeast Wisconsin Manufacturers Alliance
- Emerging group of high-growth startups in the region (including Breakthrough Fuels, Forsite Benefits, and others)



## STRENGTHS (CONTINUED)

- Geographic location and proximity to natural assets and tourism destinations (Door Peninsula, Upper Peninsula of Michigan)
- Affordable real estate (residential, commercial, and industrial) compared with larger markets such as Chicago
- Green Bay Austin Straubel International Airport has room for expansion and additional nonstop flights
- Commitment among local nonprofit organizations to support inclusiveness (such as seeking diversity in boards of directors)
- Large pools of capital available in the community through local financial institutions and high-net-worth individuals
- The region is relatively compact and easily accessible (short commute times relative to US average)



## WEAKNESSES

- Relatively low share of professional services firms and professional job opportunities
- Relatively low educational attainment levels (share of adults with a Bachelor's degree or higher)
- Regional collaboration is sometimes made more difficult due to the large number of municipalities in Brown County, each of which has its own priorities and vision for success in economic development
- Lack of diversity (racial, ethnic, cultural, geographic) is a challenge for attracting new residents
- Major new highway bridge needed in De Pere has been delayed for 20 years
- Perceptions of East vs. West barrier (Fox River) within the region
- Many employers struggle to fill professional positions and skilled trades positions
- Perceptions of Green Bay as a blue-collar community that lacks professional job opportunities
- Many young adults desire to leave Green Bay for larger urban environments (Milwaukee, Chicago, Minneapolis-St. Paul)



## OPPORTUNITIES

- Potential for greater alignment and leadership among key regional entities (Chamber, Advance, CVB, Community Foundation) and private sector
- Expansion of University of Wisconsin-Green Bay (including enrollment growth, academic R&D growth, and physical expansion into the downtown)
- Continued development of downtown Green Bay
- Leverage Titledown District to attract businesses and additional nearby development
- Capitalize on new Medical College of Wisconsin campus for economic development (partnerships, R&D)
- Opportunity for medical information technology innovation through major hospitals and startups, as well as medical supply vendors that would benefit from proximity to hospitals
- Potential for a dedicated county sales tax to fund catalyst projects for economic development (similar to the Oklahoma City MAPS program)
- Leverage the media and global brand awareness of the Green Bay Packers
- Promote the region's natural assets for economic development, especially water





## OPPORTUNITIES (CONTINUED)

- Enhance the region's connections to tech startup communities in Milwaukee, Madison, Chicago, and Minneapolis-St. Paul
- Build additional linkages between economic development and tourism (Advance + CVB + Packers)
- Leverage Green Bay's existing nonstop flight destinations (Chicago, MSP, Detroit, and Atlanta) for talent attraction and business recruitment efforts
- Pursue additional nonstop flight destinations at Green Bay Austin Straubel International Airport (potentially Dallas-Fort Worth, Denver, New York)
- Support the region's entrepreneurship ecosystem through new programs, support services, networking opportunities, and facilities
- Establish a "science & industry" museum to engage K-12 students and for tourism
- Expand networking opportunities, support systems, and leadership engagement for diverse segments of the community's population
- Move regional employers toward skills-based hiring, instead of only credentials-based hiring
- Build on Green Bay's role as a regional service center (additional retail, restaurants, services, health care) for the large rural areas outside of the community
- Potential for a major new multi-use sports facility to serve the community and bring in tourism spending
- Potential for more strategic use of TIF (tax increment financing) to support economic development



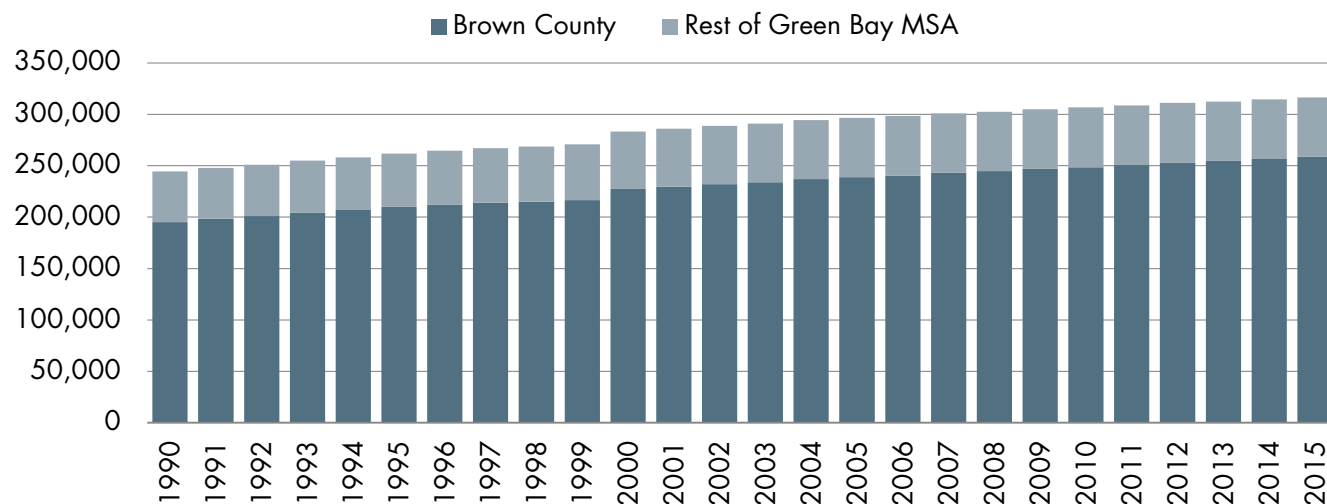
## THREATS

- Loss of talent to larger metro areas in the state (Milwaukee and Madison) and Midwest (Chicago, Minneapolis-St. Paul)
- Changes in sports viewing habits at the national level, such as a potential future decline in NFL viewership, which may impact the Packers
- Risk-averse culture in the region and state limits growth potential, in comparison to communities that place a higher priority on innovation and entrepreneurship (such as Austin, Silicon Valley, and even smaller communities like Asheville and Boulder)
- Major employers vulnerable due to ongoing/potential acquisitions, technology disruptions, and changing consumer behaviors
- Continued decline in passenger traffic at Green Bay Austin Straubel International Airport

## ECONOMIC TRENDS

The three-county Green Bay metro area—Brown, Kewaunee, and Oconto Counties—has grown steadily from a 1990 population of 244,000 to more than 316,000 residents in 2015, a gain of more than 70,000.

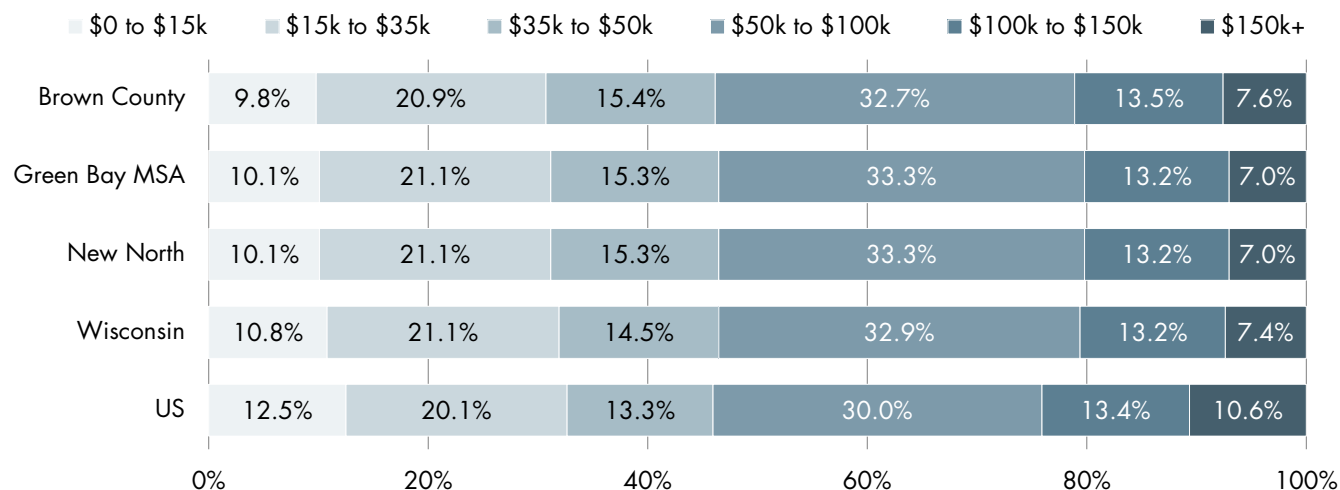
**FIGURE 3. POPULATION TRENDS, BROWN COUNTY & THE REST OF THE GREEN BAY MSA**  
BROWN COUNTY & REST OF GREEN BAY METRO AREA POPULATION, 1990-2015



Source: US Census Bureau, Population Estimates Program

Greater Green Bay has a higher share of middle-income households than the US as a whole. Only 9.8 percent of households in Brown County have incomes less than \$15,000, compared with 12.5 percent in the US. Similarly, only 7.6 percent of Brown County households earn more than \$150,000, compared with 10.6 percent for the US.

**FIGURE 4. HOUSEHOLD ANNUAL INCOME DISTRIBUTION, 2016**  
SHARE OF HOUSEHOLDS BY SELECTED ANNUAL INCOME CATEGORIES



Source: ESRI Community Analyst

The Greater Green Bay economy is driven by dozens of large employers across several industries. Among the 30 largest employers in Brown County, 18 are in the health care, paper products, and food processing sectors. The majority (17 out of 30) of the largest employers are headquartered in Brown County.

#### FIGURE 5. MAJOR EMPLOYERS IN GREATER GREEN BAY, 2016

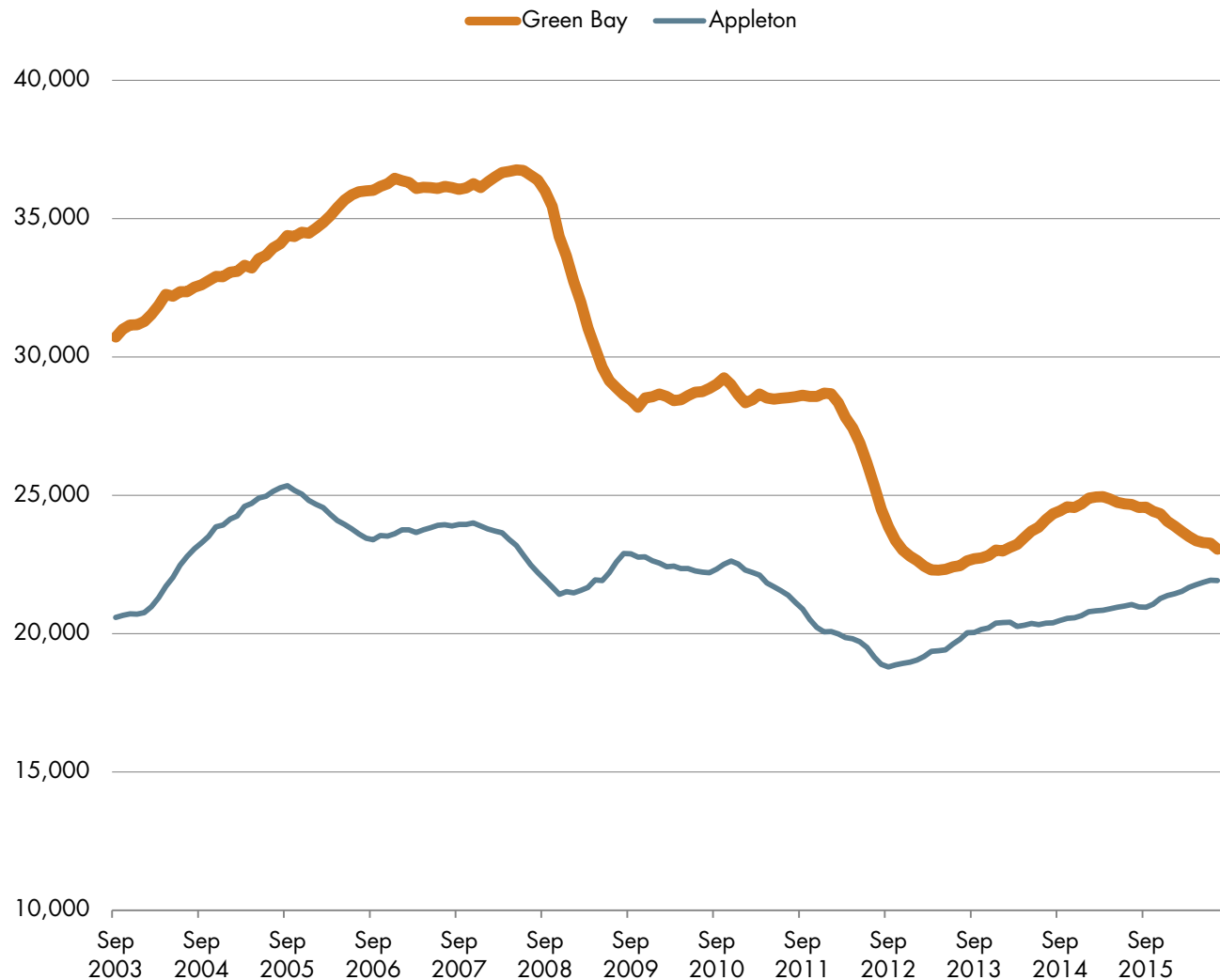
30 LARGEST PRIVATE EMPLOYERS, RANKED BY NUMBER OF JOBS IN BROWN COUNTY

TOP 30 EMPLOYERS IN GREATER GREEN BAY, 2016 (BROWN COUNTY-BASED EMPLOYERS HIGHLIGHTED)				
NO.	EMPLOYER	INDUSTRY/PRODUCT TYPE	HQ LOCATION	JOBS
1	Humana	Health Care	Louisville, KY	3,283
2	Bellin Health	Health Care	Green Bay, WI	2,729
3	Oneida Nation	Tribal Government	Oneida, WI	2,700
4	Schneider	Truck Transportation	Ashwaubenon, WI	2,633
5	Georgia-Pacific	Paper Products Mfg.	Atlanta, GA	2,100
6	UnitedHealthcare	Health Care	Minnetonka, MN	2,050
7	Aurora Health Care	Health Care	Milwaukee, WI	2,009
8	St. Vincent Hospital	Health Care	Springfield, IL	1,605
9	American Foods Group	Food Processing (Meat)	Green Bay, WI	1,467
10	Prevea Health	Health Care	Ashwaubenon, WI	1,417
11	Green Bay Packaging, Inc.	Paper Products Mfg.	Green Bay, WI	1,401
12	Wisconsin Public Service	Utilities	Green Bay, WI	1,162
13	JBS Green Bay	Food Processing (Meat)	Greeley, CO	1,142
14	Shopko	Retail	Ashwaubenon, WI	1,129
15	Wal-Mart Stores, Inc.	Retail	Bentonville, AR	1,119
16	Associated Banc-Corp.	Finance	Green Bay, WI	1,108
17	Ameriprise Auto & Home Insurance	Insurance	Ashwaubenon, WI	994
18	Festival Foods	Grocery Stores	De Pere, WI	900
19	KI Furniture	Furniture Manufacturing	Bellevue, WI	862
20	Schreiber Foods	Dairy Products	Green Bay, WI	760
21	Paper Converting Machine Company	Industrial Machinery Mfg.	Green Bay, WI	750
22	RR Donnelley	Printing Products	Chicago, IL	716
23	Belmark, Inc.	Paper Products Mfg.	De Pere, WI	697
24	Proctor & Gamble Paper Products	Paper Products Mfg.	Cincinnati, OH	691
25	St. Norbert College	Higher Education	De Pere, WI	550
26	EGS (formerly APAC Customer Services)	Call Center	Plano, TX	530
27	Nsight & Cellcom	Telecommunications	Green Bay, WI	513
28	St. Mary's Hospital Medical Center	Health Care	Springfield, IL	483
29	Prolamina	Paper Products Mfg.	Westfield, MA	482
30	Nature's Way	Food Processing (Herbal)	Green Bay, WI	439

Source: Greater Green Bay Chamber, May 2016

The number of passengers traveling through Green Bay Austin Straubel International Airport has declined significantly since 2008. Over the 12-month period ending in July 2016, there were an average of 23,055 passengers at Green Bay’s airport, compared with 36,757 passengers for the 12 months ending in May 2008, the highest level of traffic before the Great Recession began. This is a decline of more than 37 percent. During this same period, Appleton’s airport traffic has remained relatively constant. A concerning trend in recent months, beginning in early 2015, is the continued decline of passenger traffic in Green Bay, along with a notable increase of traffic in Appleton. A decade ago, Green Bay’s monthly air passenger traffic was consistently 30 to 40 percent higher than Appleton’s was. Today, Green Bay’s traffic is only 5 percent higher than Appleton’s is. Two potential explanations for this include: 1) travelers that previously flew out of Green Bay are now choosing Appleton; and/or 2) Appleton residents that previously flew out of Green Bay are now choosing Appleton’s airport. These trends are worrisome for Green Bay’s economic development leaders, given the importance of air travel for the retention and attraction of businesses.

**FIGURE 6. AIR TRAVEL PASSENGERS, GREEN BAY & APPLETON AIRPORTS**  
AVERAGE MONTHLY DOMESTIC PASSENGERS (12-MONTH ROLLING AVG.), SEPT. 2003-JULY 2016



Source: US Department of Transportation, Bureau of Transportation Statistics

County-to-county migration flow data from the US Internal Revenue Service help to illustrate the geographic mobility of residents. The table below presents the top 20 county-to-county migration flows to and from Brown County. Between 2010 and 2015, Brown County experienced a total inflow of 41,221 residents and a total outflow of 40,565 residents, for a grand total of 656 net new residents in the county due to migration. The top county sending new residents to Brown County during this period was Cook County, Illinois, which sent 458 net new residents to Brown County. Other counties from which Brown County gained at least 100 net new residents include Manitowoc (315), Shawano (177), Door (137), Winnebago (127), Kewaunee (109), and Marinette (102). Brown County experienced a net outflow of at least 100 people to the following counties: Outagamie (243), Dane (206), Milwaukee (205), Hennepin County, MN (165), and Maricopa County, AZ (105). Brown County also experienced significant inflows to and outflows from Oconto County, with roughly 3,000 residents moving in both directions.

In addition to measuring the flow of people, this data source sheds light on the adjusted gross income levels of households moving across county lines. Despite gaining a small share of residents due to migration from 2010 to 2015, Brown County lost a net annual \$22 million in AGI (adjusted gross income) during this period. This finding suggests that people moving away from Brown County have slightly higher incomes than people moving into the county do.

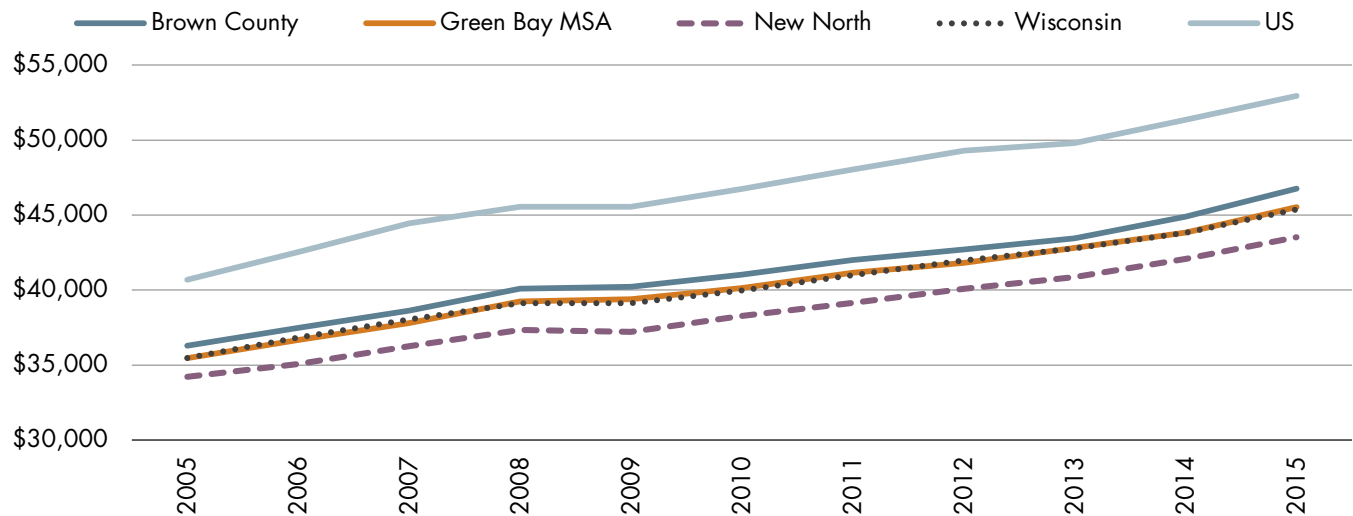
**FIGURE 7. COUNTY-TO-COUNTY MIGRATION FLOWS FOR BROWN COUNTY, 2010-2015**  
TOP 20 CUMULATIVE NET FLOWS OF RESIDENTS & ADJUSTED GROSS INCOME TO/FROM BROWN COUNTY

Geography	Migration			Adj. Gross Income (in \$1,000s)		
	Inflow	Outflow	Net	Inflow	Outflow	Net
Cook County, IL	1,316	858	458	\$20,742	\$19,700	\$1,042
Manitowoc County, WI	1,489	1,174	315	\$36,358	\$24,410	\$11,948
Shawano County, WI	1,445	1,268	177	\$31,119	\$24,289	\$6,830
Door County, WI	903	766	137	\$23,178	\$26,539	-\$3,361
Winnebago County, WI	1,341	1,214	127	\$28,712	\$26,454	\$2,258
Kewaunee County, WI	1,732	1,623	109	\$38,574	\$32,947	\$5,627
Marinette County, WI	1,169	1,067	102	\$22,389	\$22,922	-\$533
Marathon County, WI	580	485	95	\$14,456	\$18,085	-\$3,629
Calumet County, WI	679	604	75	\$17,722	\$12,795	\$4,927
Portage County, WI	328	255	73	\$7,593	\$5,346	\$2,247
Sheboygan County, WI	560	489	71	\$17,981	\$6,793	\$11,188
Fond du Lac County, WI	328	271	57	\$7,276	\$5,839	\$1,437
Oconto County, WI	3,049	3,001	48	\$65,656	\$76,178	-\$10,522
Waupaca County, WI	319	315	4	\$5,704	\$6,150	-\$446
Waukesha County, WI	447	458	(11)	\$15,169	\$15,906	-\$737
Maricopa County, AZ	368	473	(105)	\$7,366	\$12,672	-\$5,306
Hennepin County, MN	412	577	(165)	\$8,505	\$13,384	-\$4,879
Milwaukee County, WI	1,617	1,822	(205)	\$33,544	\$33,587	-\$43
Dane County, WI	798	1,004	(206)	\$27,610	\$28,181	-\$571
Outagamie County, WI	4,555	4,798	(243)	\$100,626	\$108,198	-\$7,572

Source: US Internal Revenue Service

Average annual wages in Brown County grew from just over \$36,000 in 2005 to nearly \$47,000 in 2015 (not adjusted for inflation). Wages in Brown County have consistently been about two to three percent higher than wages in the Green Bay MSA and in Wisconsin as a whole, but have lagged US average wages by nearly 15 percent during this period. Wages in the New North region have remained between six and eight percent lower than Brown County, due to the rural counties in the region with significantly lower wages.

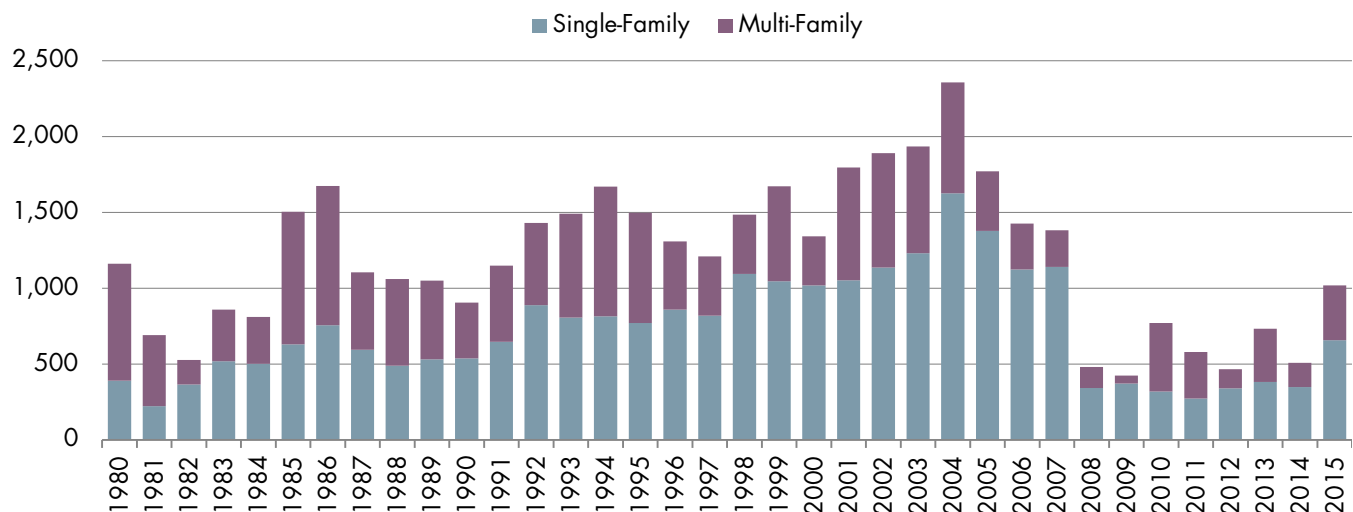
**FIGURE 8. WAGE GROWTH TRENDS**  
AVERAGE ANNUAL WAGES, 2005-2015



Source: US Bureau of Labor Statistics, QCEW

Before the Great Recession, the construction of new homes in the Green Bay metro area averaged well over 1,000 new housing units each year. Similar to the rest of the US, new home construction declined dramatically in 2008 and stayed far below previous levels for several years. However, the region's housing sector showed new signs of life in 2015, which was the first year since before the recession that more than 1,000 housing permits were issued.

**FIGURE 9. NEW HOME CONSTRUCTION IN GREEN BAY MSA, 1980-2015**  
NUMBER OF SINGLE-FAMILY & MULTI-FAMILY HOUSING PERMITS ISSUED BY YEAR



Source: US Dept. of Housing & Urban Development, Building Permits Database

## COMMUTING PATTERNS

Nearly 85,000 people live and work in Brown County, representing 61 percent of the county's employment and 73 percent of its employed residents. However, the county has strong economic ties to other parts of Wisconsin. Thanks to its role as a regional employment center, Brown County is a net importer of workers from surrounding counties.

**FIGURE 10. INFLOW/OUTFLOW FOR BROWN COUNTY, 2014**  
FLOW OF WORKERS TO/FROM THE COUNTY

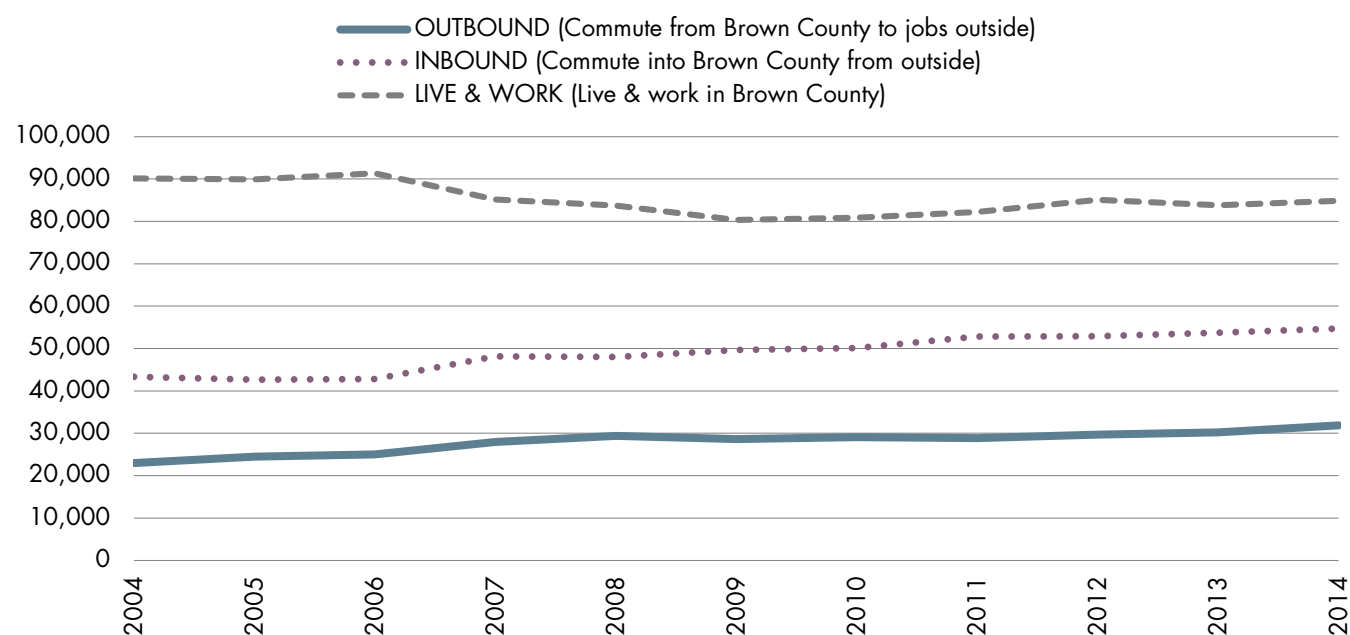


Source: US Census Bureau, Local Employment Dynamics.

Notes: Overlay arrows are for illustrative purposes and do not indicate directionality of worker flow between home and employment locations.

The number of people that live and work in Brown County has declined slightly over the last 10 years, while inbound and outbound commuting has increased significantly (by 26 percent and 38 percent, respectively).

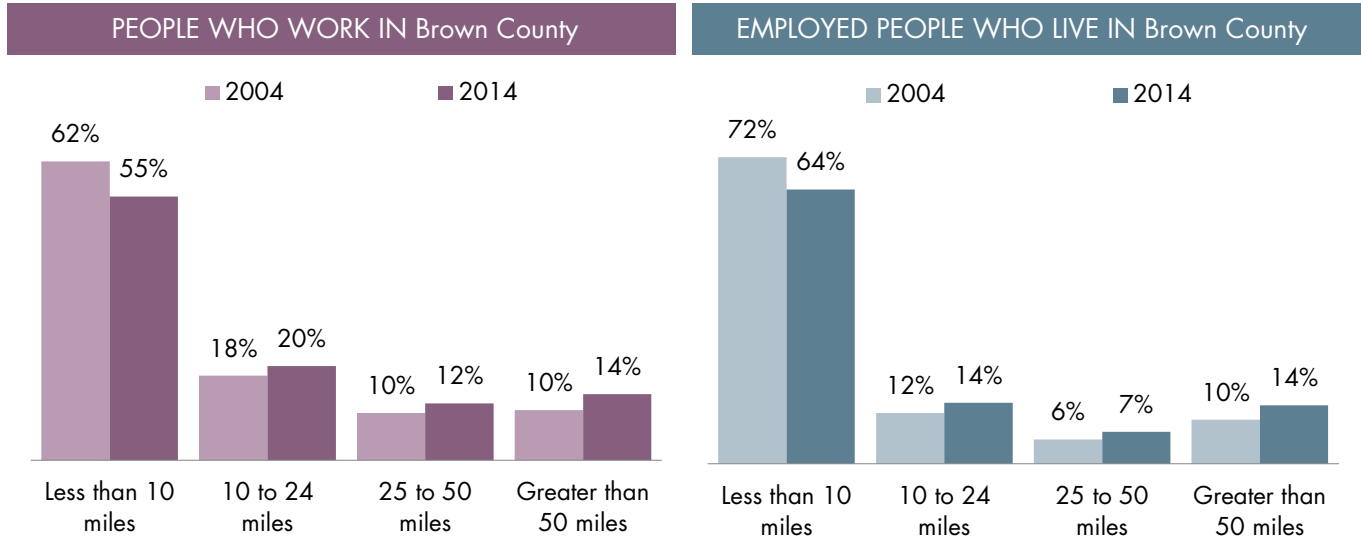
**FIGURE 11. COMMUTING FLOWS, 2004 TO 2014**  
NUMBER OF JOB HOLDERS



Source: US Census Bureau, Local Employment Dynamics

The majority of people that work in Brown County and employed residents of Brown County commute less than 10 miles to work. However, similar to most areas in the country, workers are traveling longer distances to work. The share of commuters traveling greater than 50 miles increased from 10 percent in 2004 to 14 percent in 2014.

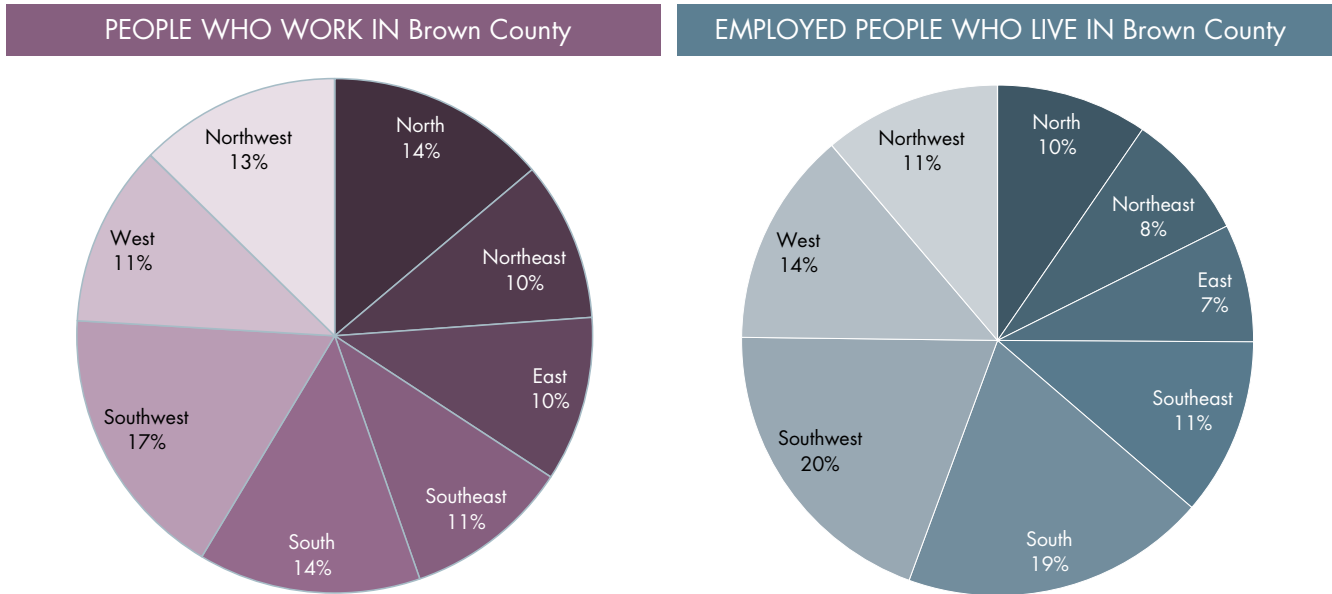
**FIGURE 12. DISTANCE TRAVELED, 2004 VS. 2014**  
SHARE OF JOB HOLDERS



Source (both figures): US Census Bureau, Local Employment Dynamics.

Brown County’s workforce travels in from all directions, with the top three directions of travel from home to work being southwest, north, and south. Brown County’s employed residents also commute in every direction, with the largest share of people commuting southwest, south, and west.

**DIRECTION TRAVELED, 2004 VS. 2014**  
SHARE OF JOB HOLDERS

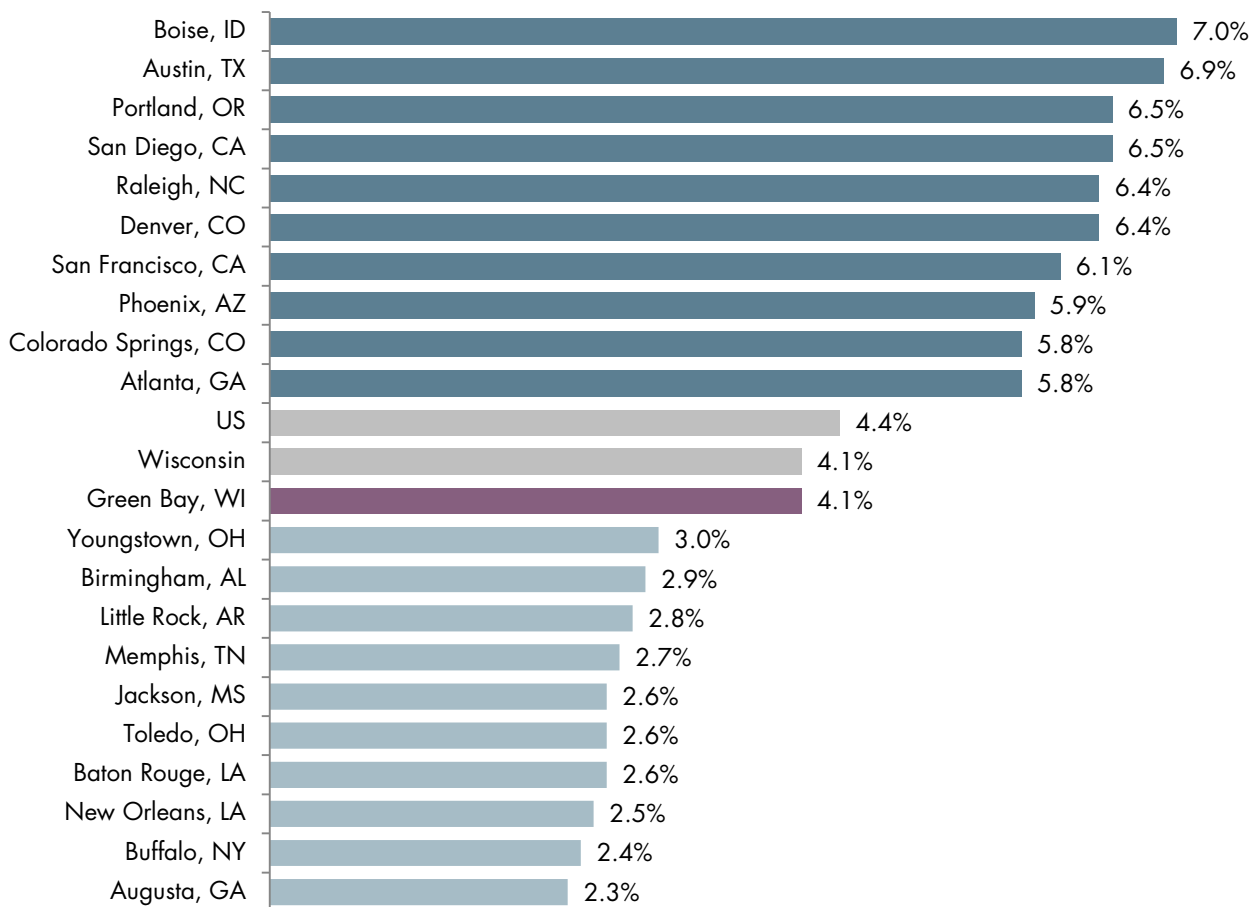


Source (both figures): US Census Bureau, Local Employment Dynamics.



Technological advancements and changing social norms have enabled a growing share of workers to live anywhere because their work can be done anywhere. According to recent estimates from the US Census Bureau, 4.4 percent of the population works from home. Communities with a much higher or lower share than the US average can be defined as places that people are either choosing to live or choosing not to live. The bottom 10 metro areas (among the 100 largest) are generally places with struggling economies. This includes Memphis, Toledo, Buffalo, Jackson and other areas with far fewer people working from home than the US average. At the other end of the spectrum, the top 10 metro areas combine high desirability with robust economies. Austin, Portland, Denver, San Francisco, and other metro areas in this group have a much higher work-from-home population. People making the decision to live in these areas are not necessarily choosing "place over work". They are simply choosing "place" and the work can be done anywhere. Green Bay lies in the middle of this spectrum, with 4.1 percent of workers working from home. This indicates that Green Bay is not losing large numbers of mobile workers to other areas, but is also not a destination for workers that can choose to live anywhere.

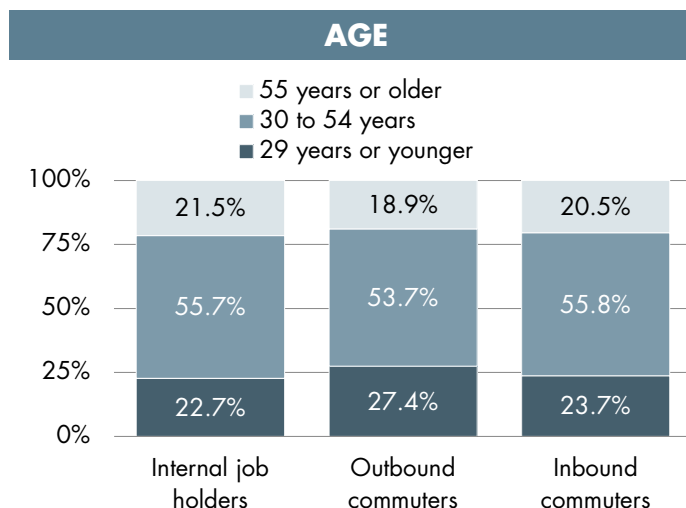
**FIGURE 13. PERCENT OF ADULT WORKERS (AGE 16+) WORKING FROM HOME, 2014**  
GREEN BAY VS. 10 LOWEST & 10 HIGHEST METRO AREAS AMONG 100 LARGEST



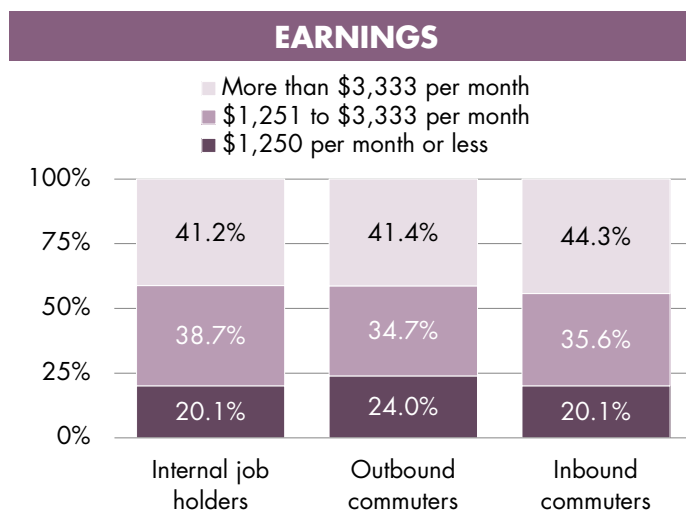
Source: U.S. Census Bureau, American Community Survey 5-Year Estimates (2014)

**FIGURE 14. SELECT JOBHOLDER CHARACTERISTICS**

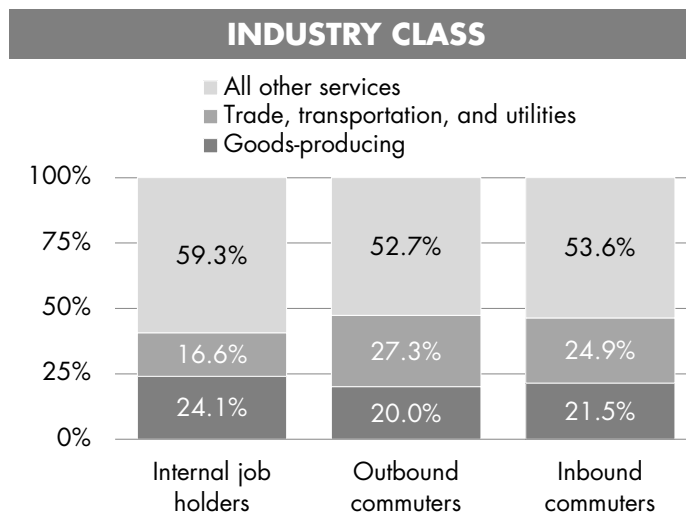
SHARE OF WORKERS BY TYPE OF COMMUTING FLOW (INTERNAL, OUTBOUND, INBOUND), 2014



Most jobs held by internal, outbound, and inbound commuters in Brown County are held by people age 30 to 54. Young jobholders in Brown County (age 29 and younger) are more likely to commute outbound than to stay within the county for employment (27.4 percent vs. 22.7 percent). People age 55 and older are more likely to stay within the county for employment than to commute outside the county (21.5 percent vs. 18.9 percent).



Inbound commuters are more likely to hold jobs with high earnings (more than \$3,333 per month) than internal and outbound commuters. This is an indication of Brown County's role as a regional economic center and illustrates the high quality of employment options available within the county relative to surrounding counties.



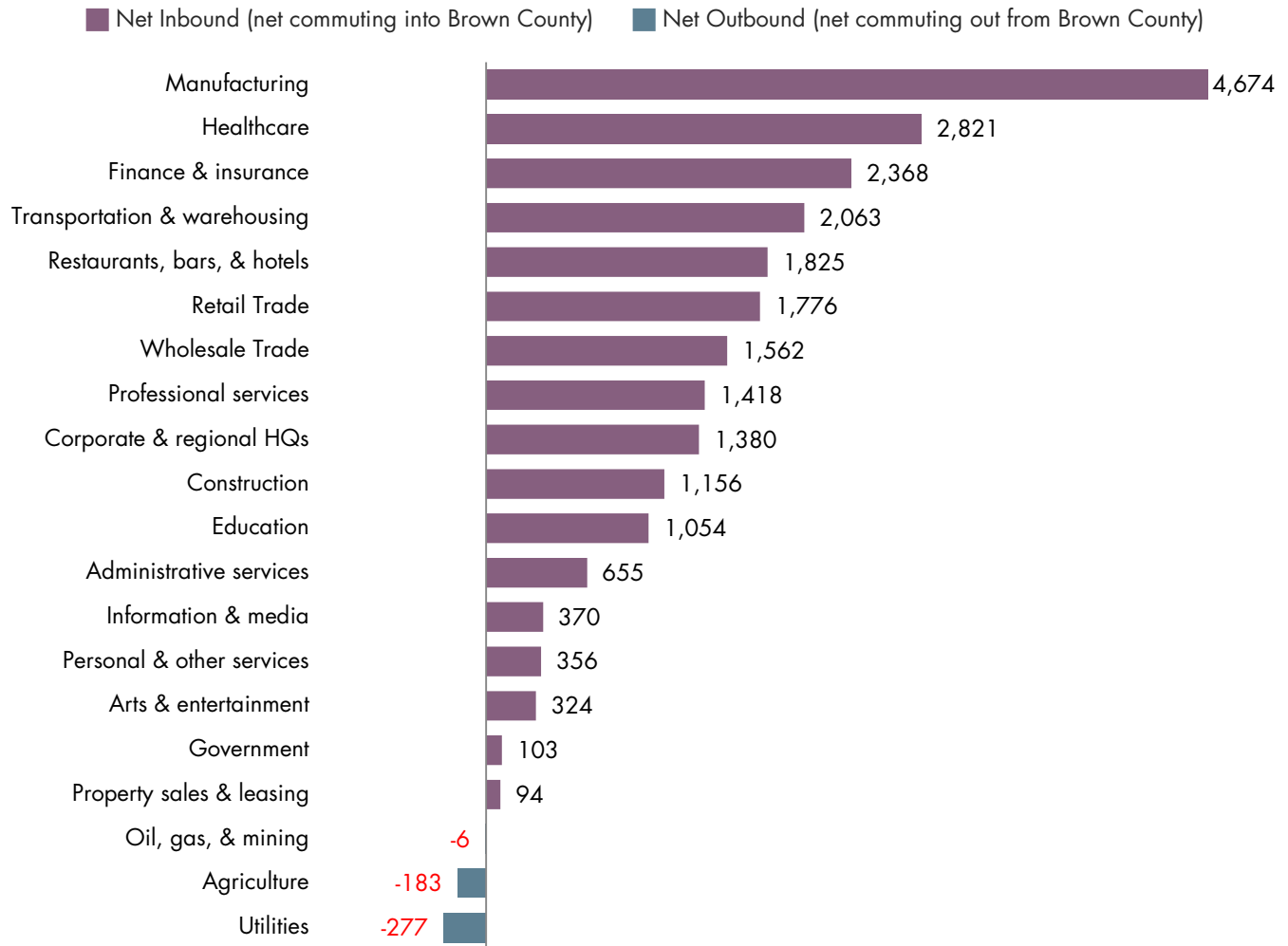
Internal jobholders are more likely to work in goods-producing jobs than outbound and inbound commuters are (24.1 percent vs. 20 percent and 21.5 percent, respectively). This figure highlights the important role that manufacturing plays in Brown County's economy. Outbound and inbound commuters are much more likely to work in trade, transportation, and utilities jobs than internal jobholders. Nonetheless, service sector jobs represent the majority of jobs held by internal, outbound, and inbound commuters.

Source (all figures): US Census Bureau, Local Employment Dynamics

Brown County experiences a net inflow of workers on a daily basis across nearly every sector. Manufacturing represents the largest net inflow of workers, with nearly 4,700 net inbound commuters. At least 2,000 net workers commute into the county to work in health care, finance & insurance, and transportation & warehousing. A combined total of nearly 3,000 net workers commute into the county for professional services and corporate & regional HQs, two sectors that contain many of the highest-paying local jobs. The only sectors in which Brown County exports workers to surrounding counties are utilities, agriculture, and oil, gas, & mining.

**FIGURE 15. NET COMMUTING FLOWS BY SECTOR**

NET FLOWS = INBOUND - OUTBOUND FLOWS


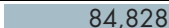




















Source: US Census Bureau, Local Employment Dynamics

The figures below indicate the top 10 counties in Brown County's laborshed (where workers live) and commute-shed (where employed residents work). In both cases, Brown County's economy is relatively self-sufficient, with a majority of people living and working within Brown County. However, the county does exhibit important ties to other Wisconsin counties. The strongest linkages are with Outagamie County, which accounts for 7.6 percent of Brown County's workforce (10,600 people that live in Outagamie County and work in Brown County).

#### FIGURE 16. LABORSHED & COMMUTE-SHED DESTINATIONS, 2014

TOP 10 COUNTIES IN BROWN COUNTY'S LABORSHED (WHERE WORKERS LIVE) & COMMUTE-SHED (WHERE EMPLOYED RESIDENTS WORK)





















Where Brown County Workers LIVE				Where employed Brown County residents WORK			
County		Count	Share	County		Count	Share
1 Brown County, WI		84,828	60.8%	1 Brown County, WI		84,828	72.7%
2 Outagamie County, WI		10,594	7.6%	2 Outagamie County, WI		7,169	6.1%
3 Oconto County, WI		6,660	4.8%	3 Milwaukee County, WI		3,408	2.9%
4 Winnebago County, WI		3,628	2.6%	4 Winnebago County, WI		2,488	2.1%
5 Manitowoc County, WI		3,336	2.4%	5 Waukesha County, WI		1,990	1.7%
6 Kewaunee County, WI		3,163	2.3%	6 Dane County, WI		1,762	1.5%
7 Shawano County, WI		3,047	2.2%	7 Manitowoc County, WI		1,452	1.2%
8 Milwaukee County, WI		2,249	1.6%	8 Kewaunee County, WI		1,092	0.9%
9 Calumet County, WI		2,030	1.5%	9 Calumet County, WI		951	0.8%
10 Marinette County, WI		1,537	1.1%	10 Sheboygan County, WI		840	0.7%
All Other Locations		18,496	13.3%	All Other Locations		10,691	9.2%
<b>Total</b>		<b>139,568</b>	<b>100.0%</b>	<b>Total</b>		<b>116,671</b>	<b>100.0%</b>

Source (both figures): US Census Bureau, Local Employment Dynamics.

On a net basis, Brown County gains workers from all of the surrounding counties except for Milwaukee and Dane.

#### FIGURE 17. TOP 20 SOURCES OF WORKERS, 2014

NET COMMUTING FLOWS FOR TOP 10 COUNTIES WHERE BROWN COUNTY WORKERS LIVE

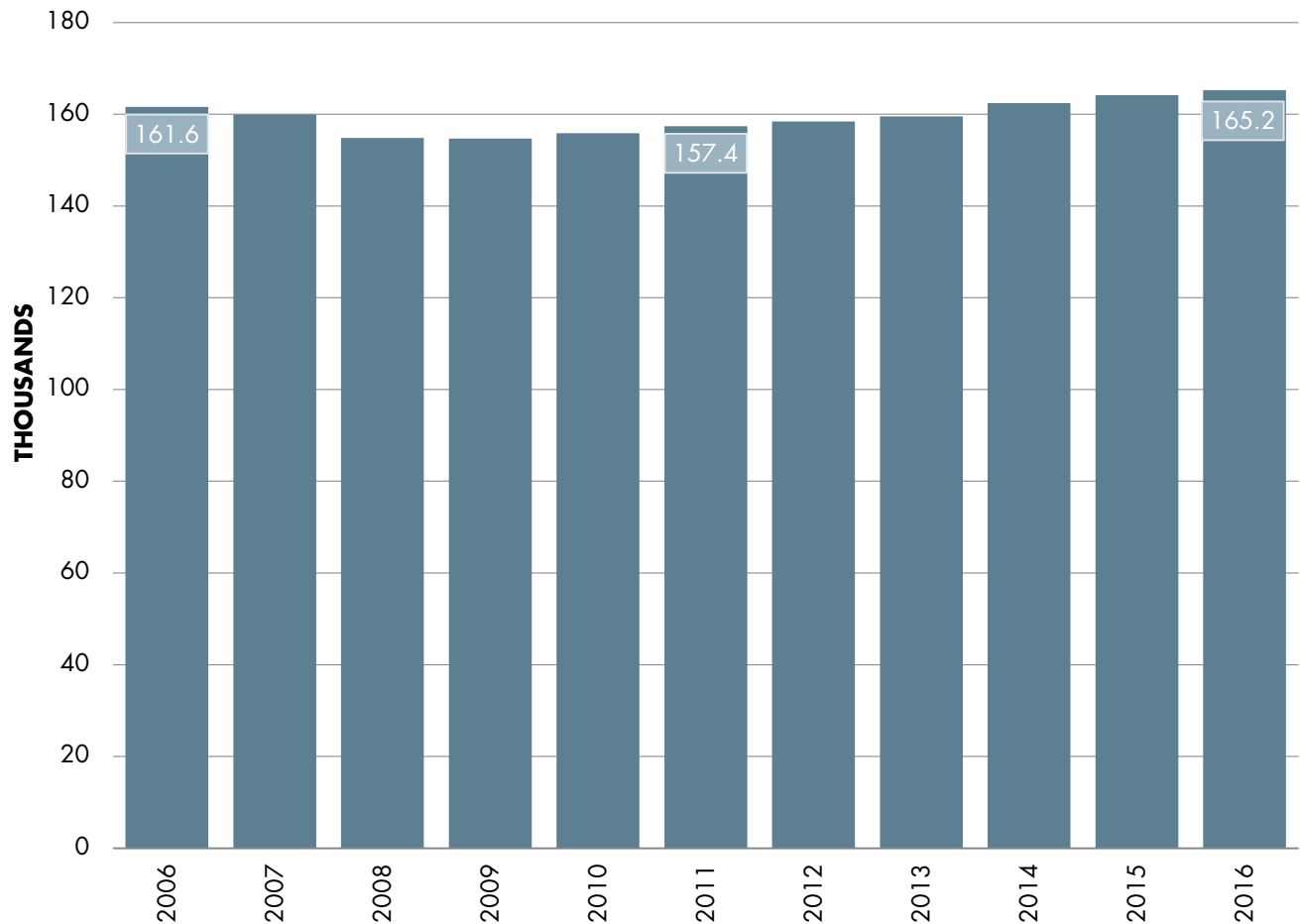
	People who WORK in Brown County and live in this county	People who LIVE in Brown County and work in this county	Net flow
1 Outagamie County, WI	 10,594	 7,169	3,425
2 Oconto County, WI	 6,660	 739	5,921
3 Winnebago County, WI	 3,628	 2,488	1,140
4 Manitowoc County, WI	 3,336	 1,452	1,884
5 Kewaunee County, WI	 3,163	 1,092	2,071
6 Shawano County, WI	 3,047	 602	2,445
7 Milwaukee County, WI	 2,249	 3,408	-1,159
8 Calumet County, WI	 2,030	 951	1,079
9 Marinette County, WI	 1,537	 596	941
10 Dane County, WI	 1,276	 1,762	-486

Source (both figures): US Census Bureau, Local Employment Dynamics.

# INDUSTRY ANALYSIS

Brown County has gained jobs each year since 2010. Total employment in the county for 2016 is estimated at just over 165,000 jobs. This is only 2.3 percent higher than the county’s total employment in 2006.

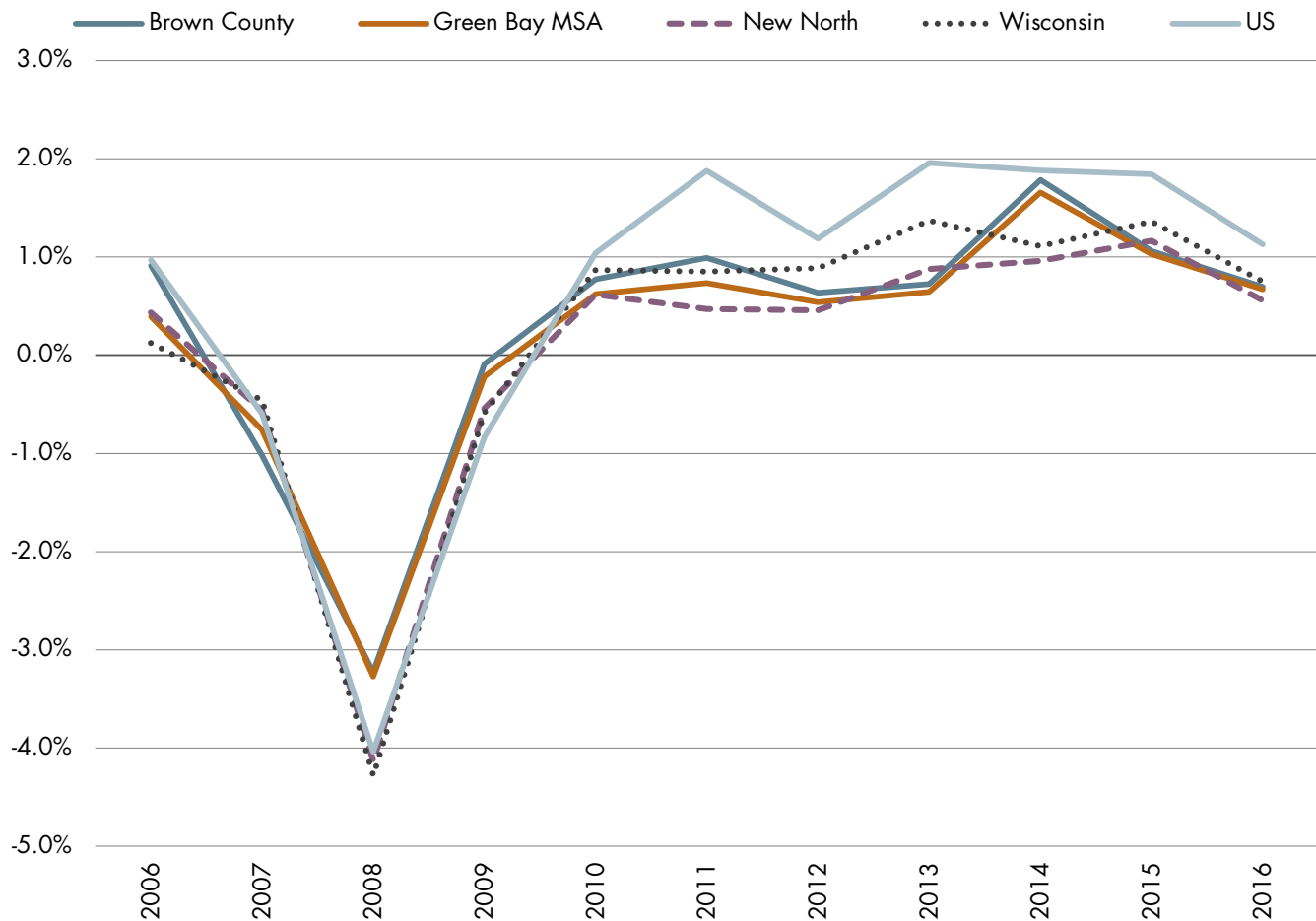
**FIGURE 18. BROWN COUNTY EMPLOYMENT, 2006-2016**  
TOTAL NONFARM JOBS IN BROWN COUNTY



Source: EMSI 2016.3 – QCEW Employees, Non-QCEW Employees, and Self-Employed

The Great Recession affected the entire US with significant job losses between 2007 and 2009. However, Brown County and the Green Bay metro area weathered the recession somewhat better than the surrounding New North region, Wisconsin, and the US. The annual decline in employment during 2008 in Brown County and the Green Bay area was about three percent, compared with four percent for the national economy as a whole. Since 2010, the Greater Green Bay economy has recovered more slowly than the US, with modest annual job growth rates equivalent to roughly half of the US. Brown County and the Green Bay metro area have experienced job growth rates in line with the larger New North region, with the exception of 2014, during which Green Bay's economy added jobs at nearly double the rate of the New North as a whole.

**FIGURE 19. EMPLOYMENT TRENDS, 2006-2016**  
ANNUAL JOB GROWTH RATE (% CHANGE FROM PRIOR YEAR)



Source: EMSI 2016.3 – QCEW Employees, Non-QCEW Employees, and Self-Employed

This section looks at employment in Brown County and comparison geographies according to different categories of industries based on the North American Industry Classification System (NAICS). The top three industries in Brown County and the Green Bay metro area ranked by percentage of total jobs are manufacturing, health care, and retail trade. These three sectors represent 38 percent of all jobs in Brown County and in the surrounding metro area. The percent of jobs in the manufacturing sector in Brown County, the Green Bay metro area, and Wisconsin is about two times higher than the nation's share of jobs in manufacturing. The New North region has an even higher share of manufacturing jobs. Education and professional services represent a significantly lower share of total employment in Greater Green Bay compared to the US as a whole.

**FIGURE 20. INDUSTRY DISTRIBUTION (% OF TOTAL), 2016**  
COMPARISON OF BROWN COUNTY WITH STATES AND NATION

NAICS Code & Description	Brown County	Green Bay MSA	New North	Wisconsin	US
31-33 Manufacturing	15.7%	16.3%	20.9%	15.4%	8.0%
62 Healthcare & social assistance*	13.1%	12.8%	11.7%	13.5%	13.5%
44-45 Retail trade	9.3%	9.2%	10.2%	10.4%	10.6%
61 Education*	7.4%	7.4%	7.4%	8.3%	9.3%
72 Lodging, restaurants, & bars	7.4%	7.2%	7.5%	7.7%	8.6%
52 Finance & insurance	6.4%	5.9%	4.2%	4.2%	3.9%
23 Construction	4.9%	5.0%	5.5%	4.8%	5.5%
42 Wholesale trade	4.8%	4.4%	3.6%	4.0%	3.9%
48-49 Transportation & warehousing	4.4%	4.3%	3.3%	3.5%	3.4%
56 Administrative & support services	4.3%	4.0%	4.3%	5.0%	6.4%
54 Professional services	4.3%	4.0%	2.9%	3.9%	6.5%
9039 Local govt.	4.0%	4.4%	4.4%	4.1%	3.6%
81 Personal & other services	3.7%	3.7%	4.5%	4.7%	4.8%
55 Corporate & regional offices	3.5%	3.2%	1.9%	2.1%	1.4%
71 Arts, entertainment, & recreation	2.0%	1.9%	1.4%	1.4%	1.7%
51 Information	1.1%	1.0%	1.1%	1.6%	1.9%
11 Agriculture & forestry	1.1%	2.6%	2.7%	1.8%	1.2%
53 Property sales & leasing	1.0%	1.0%	0.9%	1.0%	1.7%
9011 Federal govt. (civilian)	0.7%	0.7%	0.5%	1.0%	1.8%
9029 State govt.	0.6%	0.5%	0.6%	1.1%	1.5%
22 Utilities	0.3%	0.4%	0.3%	0.4%	0.4%
21 Mining (incl. oil & gas)	0.0%	0.0%	0.1%	0.1%	0.4%

Source: EMSI 2016.3 – QCEW Employees, Non-QCEW Employees, and Self-Employed

Notes: \*Note: Education includes all public schools, colleges, & universities, and healthcare includes all public hospitals. Excludes military and unclassified employment. Three largest industries are highlighted.

Location quotient (LQ) analysis can provide an understanding of an area's relative strengths. A comparison of industry employment LQs reveals significant differences between Greater Green Bay's economy in comparison to the New North region, Wisconsin, and the US. The most highly concentrated sectors in Brown County are corporate & regional offices (2.47 LQ), manufacturing (1.99 LQ), finance & insurance (1.63 LQ), and transportation & warehousing (1.32 LQ). Sectors that are significantly under-represented in Brown County include administrative & support services (0.68 LQ), professional services (0.66 LQ), property sales & leasing (0.64 LQ), and information (0.62 LQ). The growth of professional services should be a focus area for Green Bay's leadership since this sector contains high-paying jobs and would be a key support structure for the area's existing corporate HQs. Additional sectors with growth potential include health care (0.97 LQ), retail trade (0.88 LQ), and lodging, restaurants, & bars (0.86 LQ). Given Green Bay's role as a regional service center, these sectors could expand to better serve the larger New North region.

**LOCATION QUOTIENT (LQ) ANALYSIS** is a statistical technique used to suggest areas of relative advantage based on a region's employment base. LQs are calculated as an industry's share of total local employment divided by the same industry's share of employment at the national level. If the local industry and national industry are perfectly proportional, the LQ will be 1.00. LQs greater than 1.25 are presumed to indicate a comparative advantage; those below 0.75 suggest areas of weakness but may also point to opportunities for expansion or attraction.

**FIGURE 21. INDUSTRY CONCENTRATION (LQ), 2016**  
BROWN COUNTY AND COMPARISON GEOGRAPHIES

NAICS Code & Description	Brown County	Green Bay MSA	New North	Wisconsin	US
55 Corporate & regional offices	2.47	2.22	1.33	1.48	1.00
31-33 Manufacturing	1.99	2.06	2.65	1.93	1.00
52 Finance & insurance	1.63	1.51	1.09	1.06	1.00
48-49 Transportation & warehousing	1.32	1.29	0.99	1.04	1.00
42 Wholesale trade	1.24	1.14	0.93	1.04	1.00
71 Arts, entertainment, & recreation	1.15	1.10	0.81	0.82	1.00
9039 Local govt.	1.13	1.23	1.22	1.16	1.00
62 Healthcare & social assistance*	0.97	0.95	0.87	1.00	1.00
23 Construction	0.90	0.92	1.00	0.88	1.00
11 Agriculture & forestry	0.89	2.14	2.21	1.49	1.00
44-45 Retail trade	0.88	0.87	0.97	0.98	1.00
72 Lodging, restaurants, & bars	0.86	0.85	0.88	0.90	1.00
22 Utilities	0.83	1.05	0.90	0.97	1.00
61 Education*	0.80	0.80	0.79	0.90	1.00
81 Personal & other services	0.77	0.77	0.94	0.97	1.00
56 Administrative & support services	0.68	0.64	0.68	0.79	1.00
54 Professional services	0.66	0.62	0.45	0.60	1.00
53 Property sales & leasing	0.64	0.60	0.52	0.62	1.00
51 Information	0.62	0.56	0.59	0.86	1.00
9029 State govt.	0.41	0.37	0.45	0.75	1.00
9011 Federal govt. (civilian)	0.39	0.39	0.30	0.52	1.00
21 Mining (incl. oil & gas)	0.09	0.11	0.25	0.27	1.00

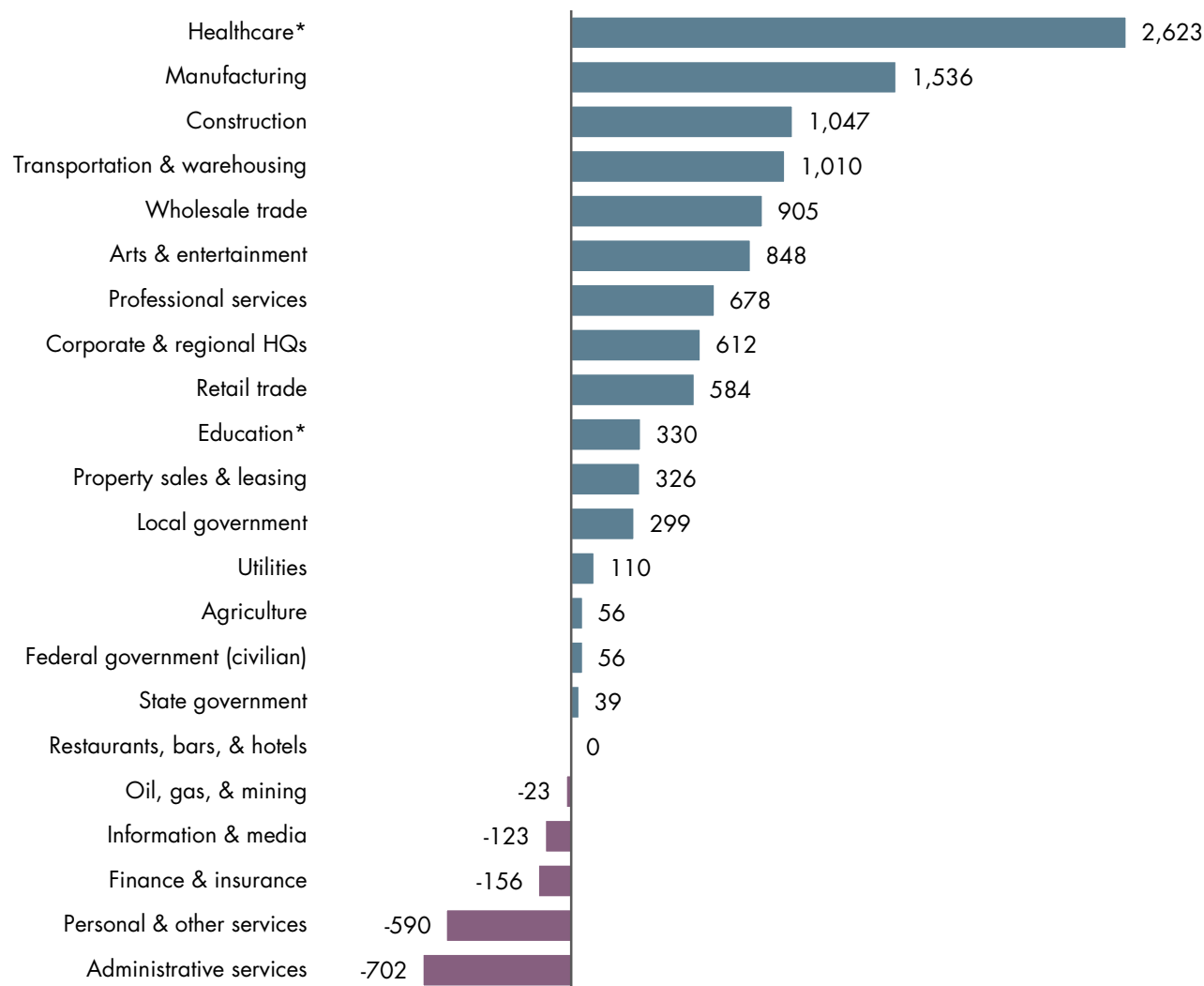
Source: EMSI 2016.3 – QCEW Employees, Non-QCEW Employees, and Self-Employed

Notes: \*Note: Education includes all public schools, colleges, & universities, and healthcare includes all public hospitals. Excludes military and unclassified employment. LQs greater than 1.25 are presumed to show competitive advantage and are highlighted.



Health care has been the leading job creator in Brown County from 2010 to 2016, accounting for more than 2,600 net new jobs. Manufacturing, construction, and transportation & warehousing have each added more than 1,000 new jobs since 2010. Sectors with significant job declines (greater than 500 jobs) between 2010 and 2016 include personal services and administrative services.

**FIGURE 22. NET JOB CHANGE IN BROWN COUNTY BY INDUSTRY, 2010-2016**



Source: EMSI 2016.3 – QCEW Employees, Non-QCEW Employees, and Self-Employed

Notes: \*Note: Education includes all public schools, colleges, & universities, i.e., these jobs are not included with local or state government.

The table on this page highlights the top 30 industries (at the 4-digit NAICS level) ranked by LQ in Brown County. This more detailed analysis of industries illustrates some of Greater Green Bay's unique economic strengths. The paper industry figures prominently in the local economy: pulp, paper, and paperboard mills (33.84 LQ); converted paper product manufacturing (9.46 LQ); and printing and related support services (5.54 LQ). Food products are also a major strength: dairy product manufacturing (8.45 LQ); animal slaughtering and processing (5.70 LQ); fruit & vegetable preserving & specialty food manufacturing (4.05 LQ); animal production and aquaculture (2.88 LQ); and bakeries and tortilla manufacturing (2.62 LQ). And the Green Bay Packers' influence on the local economy is illustrated through spectator sports (4.58 LQ), promoters of performing arts, sports, & similar events (4.00 LQ), and radio and television broadcasting (2.37 LQ).

**FIGURE 23. TOP 30 INDUSTRIES IN BROWN COUNTY RANKED BY LQ, 2016**

NAICS Code & Description	Jobs 2010	Jobs 2016	Net Chg., 2010-16	Projected Chg.*	EPW**	LQ 2016
3221 Pulp, Paper, and Paperboard Mills	4,119	3,499	-620	▼	\$88,265	33.84
3332 Industrial Machinery Manufacturing	1,323	1,354	+31	▼	\$80,166	11.51
3222 Converted Paper Product Manufacturing	2,456	2,647	+192	▲	\$68,284	9.46
3115 Dairy Product Manufacturing	1,211	1,207	-5	▼	\$79,597	8.45
3371 Household & Institutional Furniture & Kitchen Cabinet Mfg.	1,404	1,702	+298	▼	\$53,376	6.20
3116 Animal Slaughtering and Processing	3,028	2,891	-137	▼	\$48,465	5.70
3231 Printing and Related Support Activities	2,372	2,657	+286	▲	\$57,937	5.54
7112 Spectator Sports	506	918	+412	▲	\$262,771	4.58
3114 Fruit & Vegetable Preserving & Specialty Food Mfg.	545	729	+183	▲	\$65,167	4.05
7113 Promoters of Performing Arts, Sports, & Similar Events	466	628	+162	▲	\$20,834	4.00
5241 Insurance Carriers	4,562	4,617	+55	▲	\$70,352	3.64
3325 Hardware Manufacturing	26	83	+56	▲	\$36,929	3.39
3132 Fabric Mills	180	189	+8	▲	\$63,317	3.33
4237 Hardware, Plumbing & Heat. Equip. Wholesalers	555	858	+303	▲	\$67,067	3.32
4841 General Freight Trucking	3,205	3,859	+654	▲	\$57,183	3.12
3328 Coating, Engraving, Heat Treating, & Allied Activities	412	435	+23	▼	\$52,431	3.09
1120 Animal Production and Aquaculture	1,329	1,271	-57	▼	\$33,347	2.88
7224 Drinking Places (Alcoholic Beverages)	1,108	1,081	-27	▼	\$14,082	2.69
4854 School and Employee Bus Transportation	421	534	+113	▲	\$24,896	2.66
3118 Bakeries and Tortilla Manufacturing	825	866	+40	▲	\$44,969	2.62
5172 Wireless Telecommunications Carriers (except Satellite)	328	358	+29	▲	\$66,348	2.59
4233 Lumber & Other Construction Materials Wholesalers	687	559	-128	▼	\$63,735	2.51
3336 Engine, Turbine, and Power Transmission Equip. Mfg.	249	256	+7	▲	\$83,429	2.51
3274 Lime and Gypsum Product Manufacturing	15	38	+23	▲	\$75,269	2.49
3329 Other Fabricated Metal Product Manufacturing	469	691	+222	▲	\$61,360	2.47
5511 Management of Companies and Enterprises	5,154	5,766	+612	▲	\$105,098	2.47
5151 Radio and Television Broadcasting	592	562	-30	▼	\$72,063	2.37
3323 Architectural and Structural Metals Manufacturing	487	854	+368	▲	\$60,849	2.26
5242 Agencies, Brokerages, & Other Insurance Rel. Activities	3,012	2,942	-70	▲	\$69,208	2.18
4238 Machinery, Equip., & Supplies Merchant Wholesalers	1,249	1,547	+298	▼	\$77,973	2.18

Source: EMSI, 2016.3 – QCEW Employees, Non-QCEW Employees, and Self-Employed

Notes: **\*Directional trend of EMSI employment projections through 2020.** \*\*Earnings per worker (EPW) = Total annual earnings of a regional industry (wages, salaries, profits, benefits, and other compensation) divided by the number of jobs in the industry. It is intended to provide an indication of the industry's impact and is not equivalent to wages paid to individual workers.

The table on this page shows the top 30 industries (at the 4-digit NAICS level) ranked by net job change in Brown County from 2010 to 2016. The top 30 job-creating sectors in Brown County are spread across a wide range of industries and include a mix of low-wage, mid-wage, and high-wage sectors. Four of the top 10 sectors are in health care and education: general medical and surgical hospitals (1,021 new jobs); colleges, universities, and professional schools (536 new jobs); offices of other health practitioners (426 new jobs); and offices of physicians (365 new jobs). Thanks to the Green Bay Packers, the spectator sports industry was one of the top job creators in the county, with 412 net new jobs and average earnings per worker of nearly \$263,000. The top manufacturing sectors ranked by net new jobs include architectural and structural metals (368 new jobs); household & institutional furniture & kitchen cabinets (298 new jobs); printing and related support services (286 new jobs); other fabricated metal products (222 new jobs); converted paper products (192 new jobs); fruit & vegetable preserving & specialty foods (183 new jobs); and commercial & service industry machinery (129 new jobs).

**FIGURE 24. TOP 30 INDUSTRIES IN BROWN COUNTY RANKED BY NET JOB GROWTH, 2016**

NAICS Code & Description	Jobs 2010	Jobs 2016	Net Chg., 2010-16	Projected Chg.*	EPW**	LQ 2016
6221 General Medical and Surgical Hospitals	6,425	7,446	+1,021	▲	\$78,745	1.54
4841 General Freight Trucking	3,205	3,859	+654	▲	\$57,183	3.12
5511 Management of Companies and Enterprises	5,154	5,766	+612	▲	\$105,098	2.47
6113 Colleges, Universities, and Professional Schools	1,600	2,136	+536	▲	\$33,219	1.06
6213 Offices of Other Health Practitioners	597	1,024	+426	▲	\$33,780	1.01
7112 Spectator Sports	506	918	+412	▲	\$262,771	4.58
2382 Building Equipment Contractors	1,981	2,365	+384	▲	\$71,934	1.00
3323 Architectural and Structural Metals Manufacturing	487	854	+368	▲	\$60,849	2.26
6211 Offices of Physicians	2,556	2,921	+365	▲	\$134,869	1.06
4237 Hardware, Plumbing & Heat. Equip. Wholesalers	555	858	+303	▲	\$67,067	3.32
7139 Other Amusement and Recreation Industries	1,014	1,315	+302	▲	\$18,770	0.93
9039 Local Government, Excluding Education and Hospitals	6,267	6,566	+299	▲	\$60,805	1.13
4238 Machinery, Equip., & Supplies Merchant Wholesalers	1,249	1,547	+298	▼	\$77,973	2.18
3371 Household & Institutional Furniture & Kitchen Cabinet Mfg.	1,404	1,702	+298	▼	\$53,376	6.20
3231 Printing and Related Support Activities	2,372	2,657	+286	▲	\$57,937	5.54
5413 Architectural, Engineering, and Related Services	1,241	1,476	+236	▲	\$82,200	0.93
6233 Continuing Care Retirement Communities & Assisted Living	873	1,107	+235	▲	\$28,207	1.19
3329 Other Fabricated Metal Product Manufacturing	469	691	+222	▲	\$61,360	2.47
4533 Used Merchandise Stores	118	337	+218	▲	\$20,638	1.46
3222 Converted Paper Product Manufacturing	2,456	2,647	+192	▲	\$68,284	9.46
3114 Fruit & Vegetable Preserving & Specialty Food Mfg.	545	729	+183	▲	\$65,167	4.05
2371 Utility System Construction	326	509	+183	▲	\$80,694	0.97
7113 Promoters of Performing Arts, Sports, and Similar Events	466	628	+162	▲	\$20,834	4.00
4411 Automobile Dealers	1,100	1,261	+161	▲	\$57,123	0.91
4231 Motor Vehicle & Related Parts/Supplies Wholesalers	414	572	+158	▲	\$55,945	1.60
4244 Grocery and Related Product Merchant Wholesalers	1,159	1,300	+142	▲	\$48,386	1.62
4441 Building Material and Supplies Dealers	1,072	1,203	+131	▼	\$36,595	1.01
4234 Professional & Commercial Equip. & Supplies Wholesalers	614	745	+131	▲	\$83,688	1.14
4842 Specialized Freight Trucking	799	928	+130	▼	\$60,805	1.91
3333 Commercial and Service Industry Machinery Mfg.	27	155	+129	▲	\$79,663	1.73

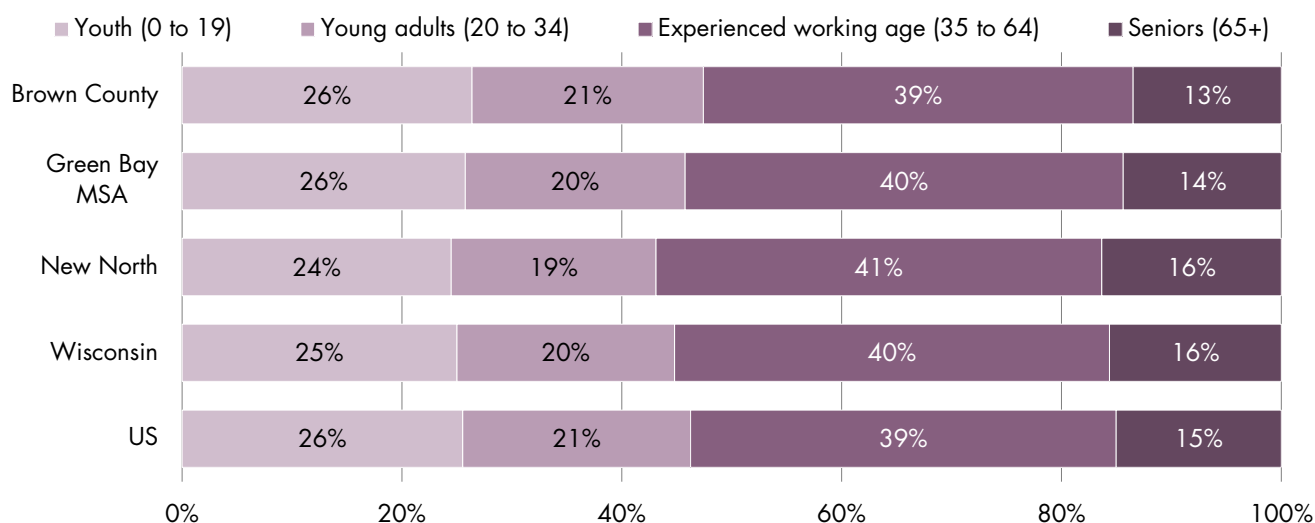
EMSI, 2016.3 – QCEW Employees, Non-QCEW Employees, and Self-Employed

Notes: \*Directional trend of EMSI employment projections through 2020. \*\*Earnings per worker (EPW) = Total annual earnings of a regional industry (wages, salaries, profits, benefits, and other compensation) divided by the number of jobs in the industry. It is intended to provide an indication of the industry's impact and is not equivalent to wages paid to individual workers.

## WORKFORCE & OCCUPATIONAL ANALYSIS

The age structure of residents in Brown County and the Green Bay metro area generally reflects national demographics, with similar levels of youth (0 to 19), young adults (20 to 34), and experienced working age (35 to 64). However, Brown County's 13 percent share of seniors (65+) is slightly below the US share of 15 percent.

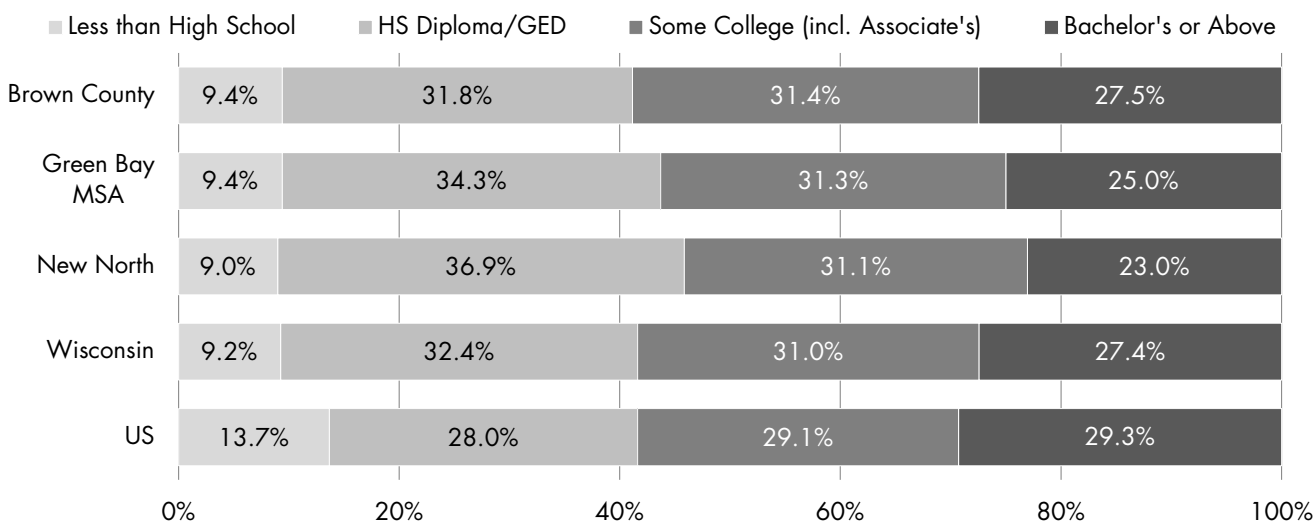
**FIGURE 25. AGE STRUCTURE, 2016**  
SHARE OF POPULATION BY SELECTED AGE GROUPS



Source: ESRI Community Analyst

Brown County's educational attainment levels are nearly identical to Wisconsin as a whole. County residents possessing a bachelor's degree or higher account for 27.5 percent of the population, less than the US (29.3 percent), but higher than the Green Bay metro area (25 percent) and substantially higher than the New North region (23 percent).

**FIGURE 26. EDUCATIONAL ATTAINMENT, 2014**  
HIGHEST LEVEL OF EDUCATIONAL ATTAINMENT, POPULATION AGE 25+



Source: 2010-2014 American Community Survey 5-Year Estimates

The earlier Industry Analysis section focused on the distribution of jobs by sector according to NAICS codes. This section uses the Standard Occupational Classification (SOC) system to look at the structure of employment by occupation. The top three occupational groups in Brown County—office & administrative support, sales, and production—account for more than 36 percent of total employment. The most notable difference between Greater Green Bay and the US is the larger share of production jobs, which account for roughly 10 percent of all jobs in Brown County, the Green Bay metro area, and Wisconsin, compared with only 6 percent of total employment in the US. This reflects the importance of manufacturing to the regional and state economies. In the New North region, production jobs represent an even greater share of total employment, 13.2 percent.

**FIGURE 27. DISTRIBUTION OF EMPLOYMENT BY OCCUPATION, 2016**  
SHARE OF TOTAL EMPLOYMENT BY MAJOR OCCUPATIONAL GROUP

SOC Code & Description	Brown County	Green Bay MSA	New North	Wisconsin	US
43 Office & Administrative Support	16.1%	15.5%	14.1%	14.5%	15.3%
41 Sales & Related	10.4%	10.1%	9.6%	9.5%	10.3%
51 Production	9.9%	10.2%	13.2%	10.3%	6.1%
35 Food Preparation & Serving Related	8.0%	7.9%	8.0%	7.8%	8.4%
53 Transportation & Material Moving	7.7%	7.6%	7.2%	7.2%	6.6%
29 Healthcare Practitioners & Technical	5.4%	5.2%	4.6%	5.3%	5.5%
11 Management	5.0%	5.7%	5.7%	5.6%	5.5%
13 Business & Financial Operations	5.0%	4.7%	4.1%	4.5%	5.0%
25 Education, Training, & Library	4.9%	5.0%	5.1%	5.6%	5.8%
39 Personal Care & Service	4.6%	4.7%	4.3%	5.0%	4.1%
47 Construction & Extraction	3.9%	4.0%	4.5%	4.0%	4.5%
49 Installation, Maintenance, & Repair	3.8%	3.8%	4.0%	3.7%	3.9%
37 Building/Grounds Cleaning & Maint.	2.8%	2.8%	3.0%	3.3%	3.8%
15 Computer & Mathematical	2.7%	2.5%	1.7%	2.4%	2.8%
31 Healthcare Support	2.1%	2.1%	2.3%	2.5%	2.8%
33 Protective Service	2.0%	2.0%	1.9%	1.8%	2.3%
27 Arts, Design, Entertainment, & Media	1.6%	1.5%	1.3%	1.6%	1.8%
17 Architecture & Engineering	1.5%	1.5%	1.8%	1.7%	1.7%
21 Community & Social Service	1.3%	1.3%	1.6%	1.6%	1.6%
19 Life, Physical, & Social Science	0.6%	0.6%	0.6%	0.7%	0.8%
45 Farming, Fishing, & Forestry	0.5%	1.1%	1.1%	0.8%	0.8%
23 Legal	0.3%	0.3%	0.3%	0.5%	0.8%

EMSI 2016.3 – QCEW Employees, Non-QCEW Employees, and Self-Employed

Occupational concentrations in the region tend to align with industry specializations. Again, given the regional and statewide strengths in manufacturing, the most notable concentration of jobs across all geographies, relative to the US, is production occupations. Each of the four geographies has an LQ well above 1.50 for production occupations. Brown County's occupational concentration within several high-wage, high-skill occupational categories is comparable to the US as a whole, including business & finance (0.99 LQ), computer & math (0.97 LQ), management (0.91 LQ), and architecture & engineering (0.89 LQ). The least concentrated occupation locally and statewide is legal workers, with an LQ of 0.38 in Brown County and 0.64 in Wisconsin.

**FIGURE 28. CONCENTRATION OF EMPLOYMENT BY OCCUPATION, 2016**  
LOCATION QUOTIENT (LQ) ANALYSIS BY MAJOR OCCUPATIONAL GROUP, US=1.00

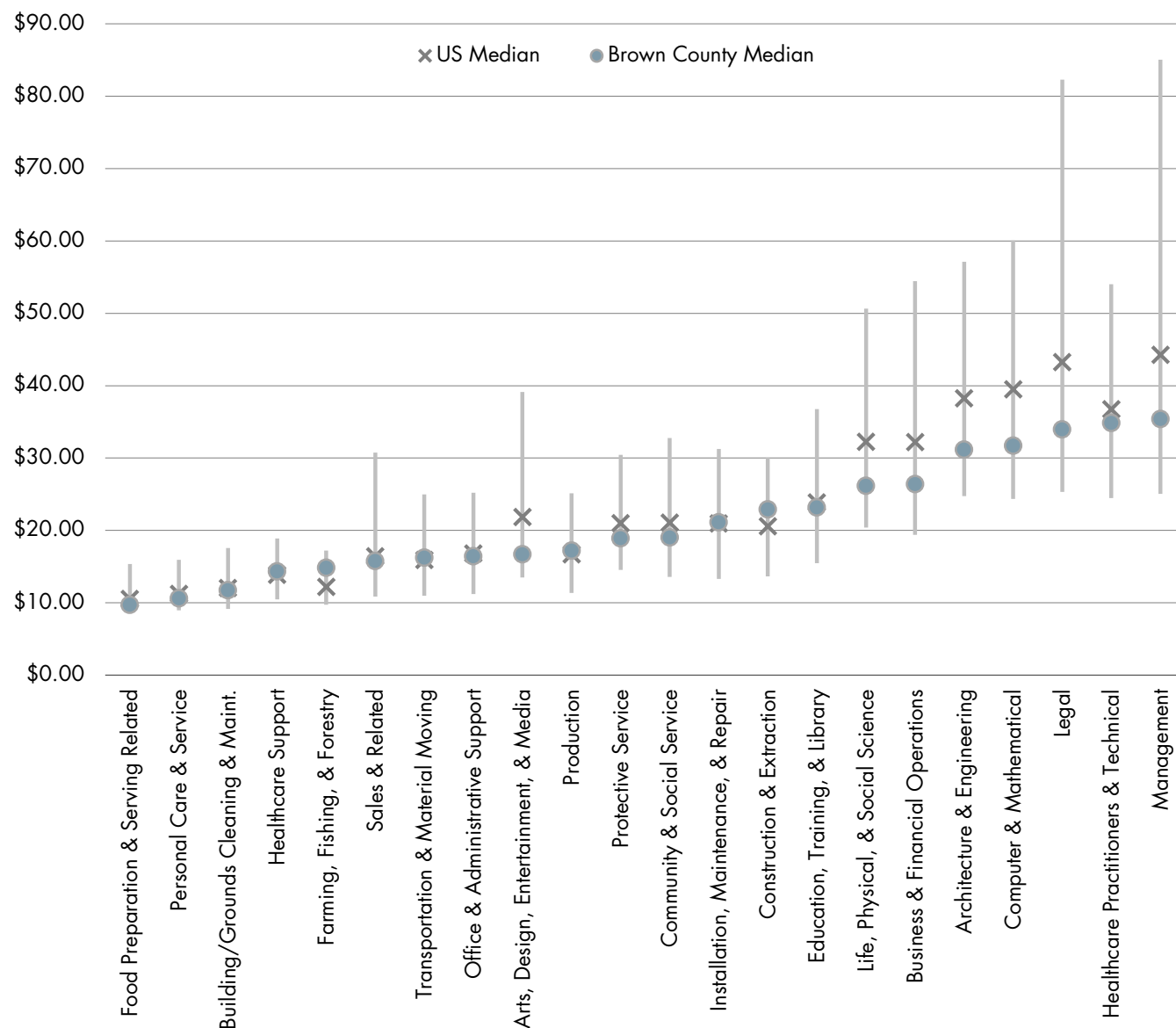
SOC Code & Description	Brown County	Green Bay MSA	New North	Wisconsin	US
51 Production	1.63	1.67	2.18	1.69	1.00
53 Transportation & Material Moving	1.16	1.15	1.10	1.08	1.00
39 Personal Care & Service	1.12	1.15	1.06	1.23	1.00
43 Office & Administrative Support	1.05	1.01	0.92	0.95	1.00
41 Sales & Related	1.02	0.98	0.93	0.93	1.00
29 Healthcare Practitioners & Technical	0.99	0.95	0.85	0.98	1.00
49 Installation, Maintenance, & Repair	0.99	0.99	1.03	0.96	1.00
13 Business & Financial Operations	0.99	0.94	0.81	0.89	1.00
15 Computer & Mathematical	0.97	0.89	0.62	0.87	1.00
35 Food Preparation & Serving Related	0.95	0.95	0.96	0.94	1.00
11 Management	0.91	1.03	1.04	1.01	1.00
27 Arts, Design, Entertainment, & Media	0.89	0.86	0.75	0.87	1.00
17 Architecture & Engineering	0.89	0.89	1.08	1.03	1.00
33 Protective Service	0.87	0.89	0.83	0.81	1.00
47 Construction & Extraction	0.86	0.89	0.99	0.89	1.00
25 Education, Training, & Library	0.84	0.86	0.87	0.97	1.00
21 Community & Social Service	0.79	0.79	0.95	0.99	1.00
31 Healthcare Support	0.77	0.76	0.83	0.90	1.00
37 Building/Grounds Cleaning & Maint.	0.73	0.73	0.78	0.86	1.00
19 Life, Physical, & Social Science	0.69	0.70	0.73	0.83	1.00
45 Farming, Fishing, & Forestry	0.67	1.38	1.44	1.04	1.00
23 Legal	0.38	0.36	0.39	0.64	1.00

EMSI 2016.3 – QCEW Employees, Non-QCEW Employees, and Self-Employed

Most of the highest paying occupational groups pay significantly lower wages in Brown County than the US, including life, physical, & social science; business & finance; architecture & engineering; computer & math; legal; and management. Occupations that pay slightly higher median wages in Brown County compared to the US include health care support; farming, fishing, & forestry; transportation & materials moving; production; installation, maintenance, & repair; and construction & extraction.

**FIGURE 29. BROWN COUNTY MEDIAN HOURLY WAGE RATES BY OCCUPATION, 2016**  
BROWN COUNTY WAGES PRESENTED IN THE CONTEXT OF US WAGE RANGE

Line = US wage range from 10th to 90th percentile; Markers = median hourly wage rates for US (x) and Brown County (dot)



EMS1 2016.3 – QCEW Employees, Non-QCEW Employees, and Self-Employed

## HIGHER EDUCATION TRENDS

The University of Wisconsin-Green Bay has grown its enrollment by more than 20 percent from 2005 to 2015, a higher growth rate than all of the UW system campuses besides Platteville and Oshkosh. However, UW-Green Bay remains one of the smallest campuses in the state, with the 11<sup>th</sup> largest student population out of 14 UW campuses.

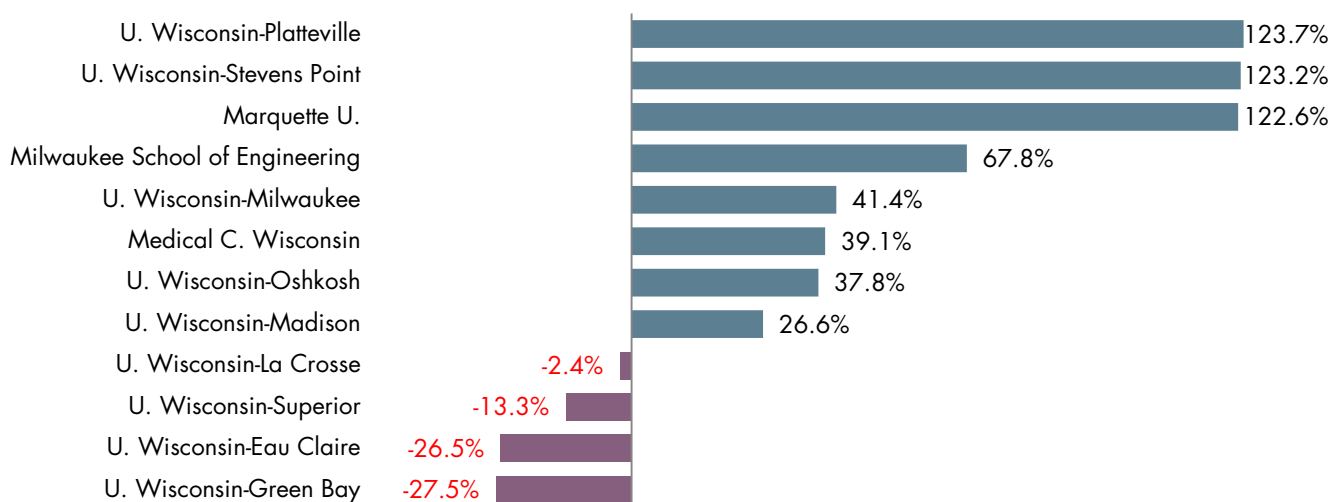
**FIGURE 30. UNIVERSITY OF WISCONSIN SYSTEM ENROLLMENT & ACADEMIC R&D**  
FALL ENROLLMENT AT UW CAMPUSES, 2005-2015; ACADEMIC R&D SPENDING, 2014

University	Fall Enrollment		2005 to 2015		2014 Academic R&D Spending (\$1,000s)
	2005	2015	Net Chg.	% Chg.	
UW-Platteville	6,493	8,945	+2,452	37.8%	\$1,000,000
UW-Oshkosh	11,433	14,051	+2,618	22.9%	\$2,196,000
UW-Green Bay	5,628	6,784	+1,156	20.5%	\$1,171,000
UW-Stout	8,227	9,554	+1,327	16.1%	\$0
UW-Whitewater	10,750	12,360	+1,610	15.0%	\$0
UW-La Crosse	9,397	10,490	+1,093	11.6%	\$3,424,000
UW Colleges	12,374	13,454	+1,080	8.7%	\$0
UW-Stevens Point	8,747	9,265	+518	5.9%	\$4,450,000
UW-Madison	40,793	42,716	+1,923	4.7%	\$1,108,564,000
UW-Eau Claire	10,688	10,592	-96	-0.9%	\$915,000
UW-River Falls	6,118	5,949	-169	-2.8%	\$0
UW-Milwaukee	27,502	26,726	-776	-2.8%	\$60,752,000
UW-Parkside	4,923	4,412	-511	-10.4%	\$0
UW-Superior	2,872	2,497	-375	-13.1%	\$1,000,000

Sources: National Center for Education Statistics, National Science Foundation

UW-Green Bay has experienced the greatest percentage decline in academic R&D spending since 2004 among Wisconsin higher education institutions, decreasing from \$1,615,000 in 2004 to \$1,171,000 in 2014.

**FIGURE 31. ACADEMIC R&D SPENDING TRENDS IN WISCONSIN, 2004-2014**  
PERCENT CHANGE IN ACADEMIC R&D SPENDING AT WISCONSIN HIGHER EDUCATION INSTITUTIONS



Source: National Science Foundation

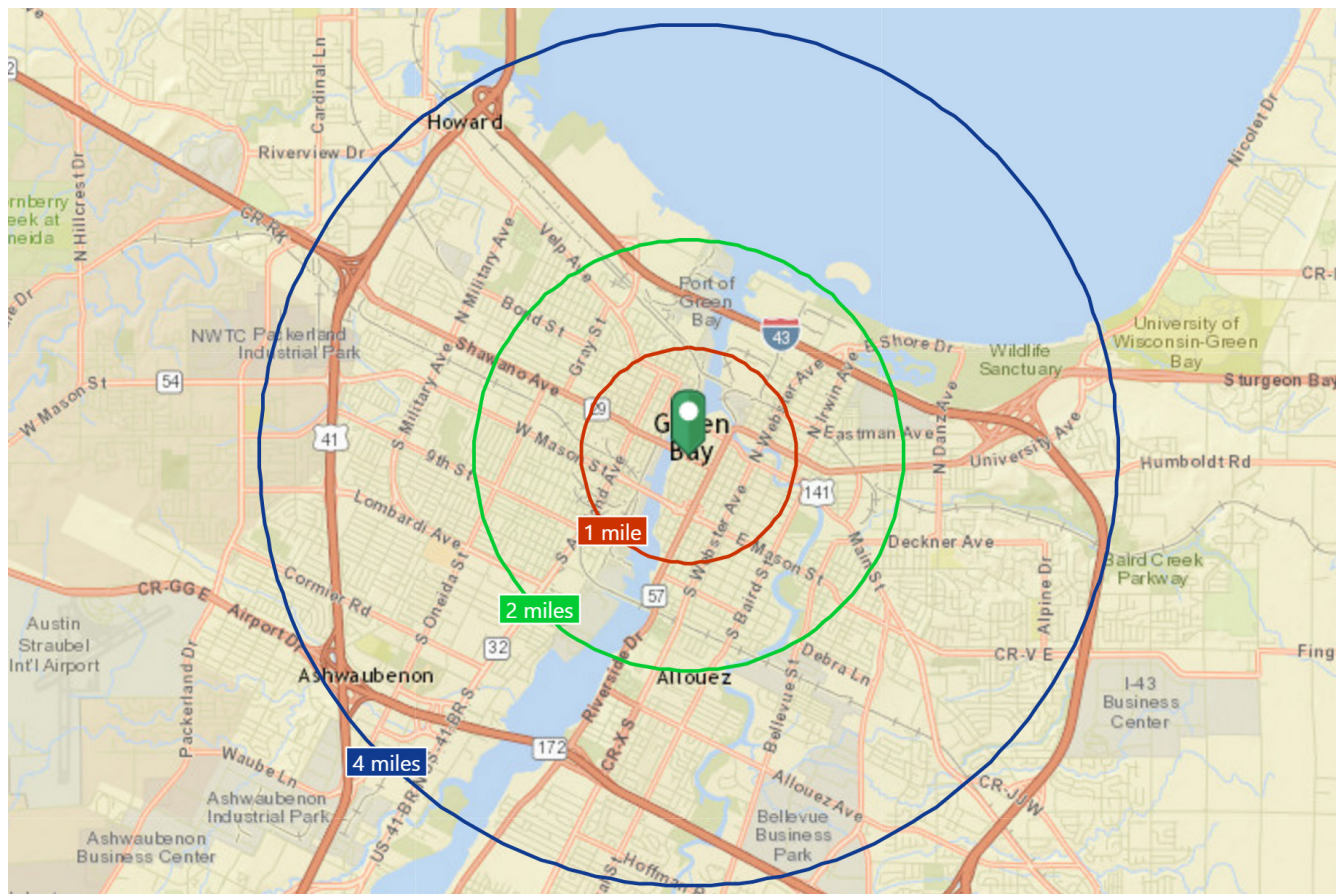


## DOWNTOWN GROWTH TRENDS

The map below illustrates three levels of concentric rings around downtown Green Bay. The table below the map highlights the population growth trends in these three zones compared to the entire metro area.

**FIGURE 32. 1-MILE, 2-MILE, & 4-MILE RADIUS AROUND DOWNTOWN GREEN BAY**

1-MILE RING = CENTRAL BUSINESS DISTRICT (CBD); CBD 2-MILE RING; CBD-4-MILE RING



Source: ESRI Community Analyst

Downtown Green Bay and surrounding areas lost population from 2000 to 2010. However, this trend has reversed, with residential growth in the downtown area from 2010 to 2016, albeit at a slower pace than the metro area.

**FIGURE 33. DOWNTOWN POPULATION GROWTH TRENDS, 2000-2016**

POPULATION CHANGE IN CBD 1-MILE, CBD 2-MILE, AND CBD-4 MILE RINGS VS. GREEN BAY METRO AREA

Geography	Population			2000 to 2010		2010 to 2016	
	2000	2010	2016	Net Chg.	Annual Chg.	Net Chg.	Annual Chg.
CBD 1-Mile	14,906	13,552	13,589	-1,354	-0.9%	+37	0.0%
CBD 2-Mile	46,269	44,182	44,752	-2,087	-0.5%	+570	0.2%
CBD 4-Mile	115,651	113,013	114,855	-2,638	-0.2%	+1,842	0.3%
Green Bay MSA	282,599	306,241	318,291	+23,642	0.8%	+12,050	0.7%

Source: ESRI Community Analyst

## APPENDIX B: BENCHMARKING ASSESSMENT

In addition to the economic and demographic comparisons of Brown County, the three-county Green Bay metro area, the 18-county New North region, the State of Wisconsin and the US, it is also important to understand how Greater Green Bay compares with other communities. This section provides insights on how the Green Bay economy is performing vis-à-vis its nearby competitors in Wisconsin and Minnesota, along with a handful of aspirational peer communities across the Midwest and Eastern US.

For the purposes of this benchmarking assessment, the benchmark metro areas include a mix of regional competitor markets and aspirational metro areas. The competitors—Appleton, Chicago, Madison, Milwaukee, and Minneapolis-St. Paul—are places that Greater Green Bay battles on a continual basis for new businesses, investments, and talent. The aspirational benchmarks—Asheville, Des Moines, Fargo, Grand Rapids, and Nashville—are successful economies in the Midwest and Eastern US. They are not so much “competitors” of Green Bay as they are examples of similarly situated regions that can yield a combination of case studies and inspiration for Greater Green Bay’s leadership.

**FIGURE 34. GREEN BAY & BENCHMARK METRO AREAS (5 COMPETITORS & 5 ASPIRATIONAL PEERS)**

BENCHMARK METRO AREA	METRO POP. (2015)	CENTRAL COUNTY	COUNTY POP. (2015)	CENTRAL CITY	CITY POP. (2015)
Appleton, WI	233,007	Outagamie	183,245	Appleton	74,139
Chicago, IL-IN-WI	9,551,031	Cook	5,238,216	Chicago	2,720,546
Madison, WI	641,385	Dane	523,643	Madison	248,951
Milwaukee, WI	1,575,747	Milwaukee	957,735	Milwaukee	600,155
Minneapolis-St. Paul, MN-WI	3,524,583	Hennepin	1,223,149	Minneapolis	410,939
REGIONAL COMPETITORS ↑					
<b>Green Bay, WI</b>	<b>316,519</b>	<b>Brown</b>	<b>258,718</b>	<b>Green Bay</b>	<b>105,207</b>
ASPIRATIONAL BENCHMARKS ↓					
Asheville, NC	446,840	Buncombe	253,178	Asheville	88,512
Des Moines, IA	622,899	Polk	467,711	Des Moines	210,330
Fargo, ND-MN	233,836	Cass	171,512	Fargo	118,523
Grand Rapids, MI	1,038,583	Kent	636,369	Grand Rapids	195,097
Nashville, TN	1,830,345	Davidson	678,889	Nashville	654,610

Green Bay's population has grown by 3.4 percent from 2010 to 2015, less than the 4.1 percent US growth rate, and below 7 of the 10 benchmark metro areas. The metro area's median age of 37.4 is slightly younger than the US median age of 38.

**FIGURE 35. POPULATION GROWTH & MEDIAN AGE**

Geography	2010	2015	2010 to 2015		Median Age
			Net Chg.	% Chg.	
Fargo	208,777	233,836	+25,059	+12.0%	32.9
Nashville	1,670,890	1,830,345	+159,455	+9.5%	37
Des Moines	569,633	622,899	+53,266	+9.4%	36.1
Madison	605,435	641,385	+35,950	+5.9%	36.7
Minneapolis-St. Paul	3,348,859	3,524,583	+175,724	+5.2%	37
Asheville	424,858	446,840	+21,982	+5.2%	44
Grand Rapids	988,938	1,038,583	+49,645	+5.0%	36.1
<b>US</b>	<b>308.7 M</b>	<b>321.4 M</b>	<b>+12.7 M</b>	<b>+4.1%</b>	<b>38</b>
Green Bay	306,241	316,519	+10,278	+3.4%	37.4
Appleton	225,666	233,007	+7,341	+3.3%	38.4
Milwaukee	1,555,908	1,575,747	+19,839	+1.3%	37.8
Chicago	9,461,105	9,551,031	+89,926	+1.0%	36.7

Sources: US Census Bureau, Population Estimates Program. ESRI Community Analyst.

The labor force in Greater Green Bay grew by just over 1,000 from 2010 to 2015, an increase of only 0.6 percent and a slower growth rate than all of the benchmark geographies except Chicago. The labor force growth rates in Grand Rapids, Fargo, and Nashville were more than 10 times higher than Green Bay's rate. Nonetheless, Green Bay's latest unemployment rate (August 2016) of 3.7 percent is well below the national rate of five percent.

**FIGURE 36. LABOR FORCE GROWTH & UNEMPLOYMENT & LABOR FORCE PARTICIPATION RATES**

Geography	2010	2015	2010 to 2015		Unemployment Rate (Aug. 2016)
			Net Chg.	% Chg.	
Grand Rapids	513,987	555,089	+41,102	+8.0%	3.3%
Fargo	122,707	130,872	+8,165	+6.7%	2.3%
Nashville	878,271	934,339	+56,068	+6.4%	3.9%
Des Moines	322,911	339,510	+16,599	+5.1%	3.9%
Asheville	209,300	219,077	+9,777	+4.7%	4.1%
Madison	360,359	376,680	+16,321	+4.5%	2.8%
Minneapolis-St. Paul	1,870,769	1,938,857	+68,088	+3.6%	3.6%
<b>US</b>	<b>153.9 M</b>	<b>157.1 M</b>	<b>+3.2 M</b>	<b>+2.1%</b>	<b>5.0%</b>
Appleton	127,899	129,447	+1,548	+1.2%	3.5%
Milwaukee	817,477	822,946	+5,469	+0.7%	4.7%
Green Bay	169,659	170,741	+1,082	+0.6%	3.7%
Chicago	4,872,833	4,888,024	+15,191	+0.3%	5.4%

Source: US Bureau of Labor Statistics

The Greater Green Bay economy has added more than 9,000 jobs since 2010. The metro area's 5.3 percent job growth rate during this period was lower than all of the benchmark geographies, and about half of the 10.2 percent US job growth rate. Green Bay's average annual earnings per worker are nearly \$55,000, higher than four of the 10 benchmarks' rates, but lower than the US rate of more than \$61,000.

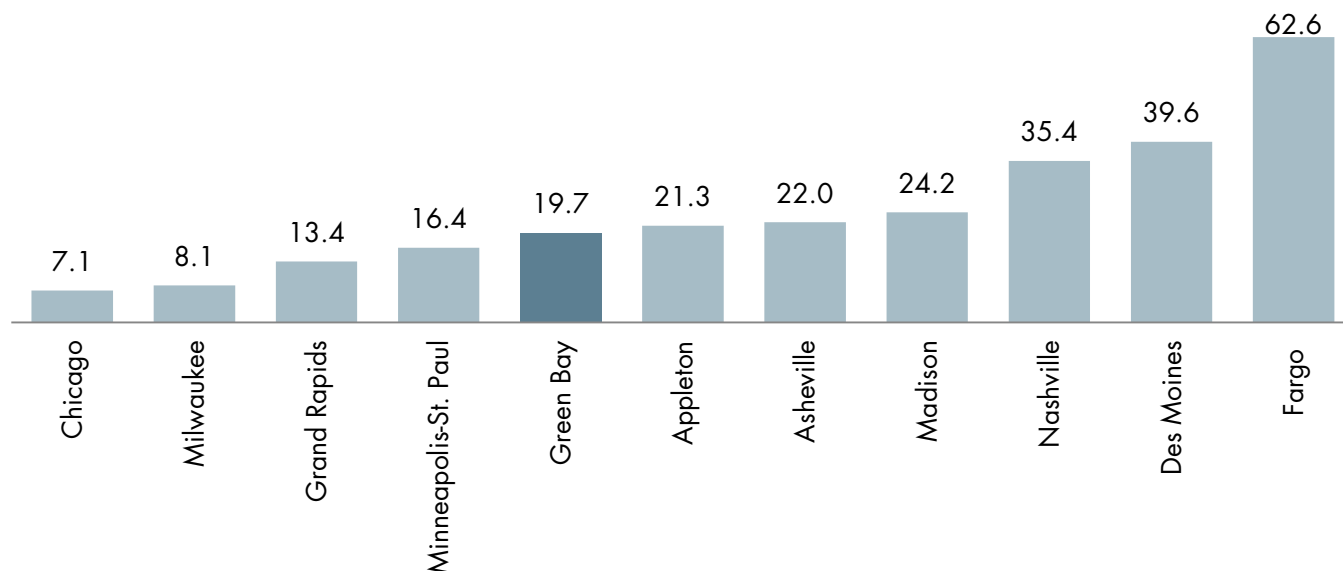
**FIGURE 37. EMPLOYMENT GROWTH & EARNINGS PER WORKER**

Geography	2010	2016	2010 to 2016		Avg. Annual Earnings per Worker
			Net Chg.	% Chg.	
Grand Rapids	478,309	579,876	+101,567	+21.2%	\$52,988
Nashville	850,445	1,004,903	+154,458	+18.2%	\$59,925
Fargo	131,885	150,565	+18,680	+14.2%	\$52,861
Asheville	188,033	210,845	+22,812	+12.1%	\$44,793
Des Moines	344,207	383,825	+39,618	+11.5%	\$61,526
Minneapolis-St. Paul	1,857,901	2,052,286	+194,385	+10.5%	\$66,550
Madison	374,430	412,611	+38,181	+10.2%	\$61,319
<b>US</b>	<b>144.2 M</b>	<b>155.9 M</b>	<b>+14.7 M</b>	<b>+10.2%</b>	<b>\$61,396</b>
Chicago	4,447,161	4,845,764	+398,603	+9.0%	\$68,807
Appleton	121,540	130,792	+9,252	+7.6%	\$52,207
Milwaukee	841,871	890,145	+48,274	+5.7%	\$60,173
Green Bay	174,307	183,608	+9,301	+5.3%	\$54,616

Source: EMSI, 2016.3 – QCEW Employees, Non-QCEW Employees, and Self-Employed

New home construction between 2010 and 2015 in Green Bay took place at a higher rate than Minneapolis-St. Paul, Grand Rapids, Milwaukee, and Chicago. Fargo's new housing construction rate was much higher than the rest of the group during this period, with Des Moines and Nashville coming in second and third place, respectively.

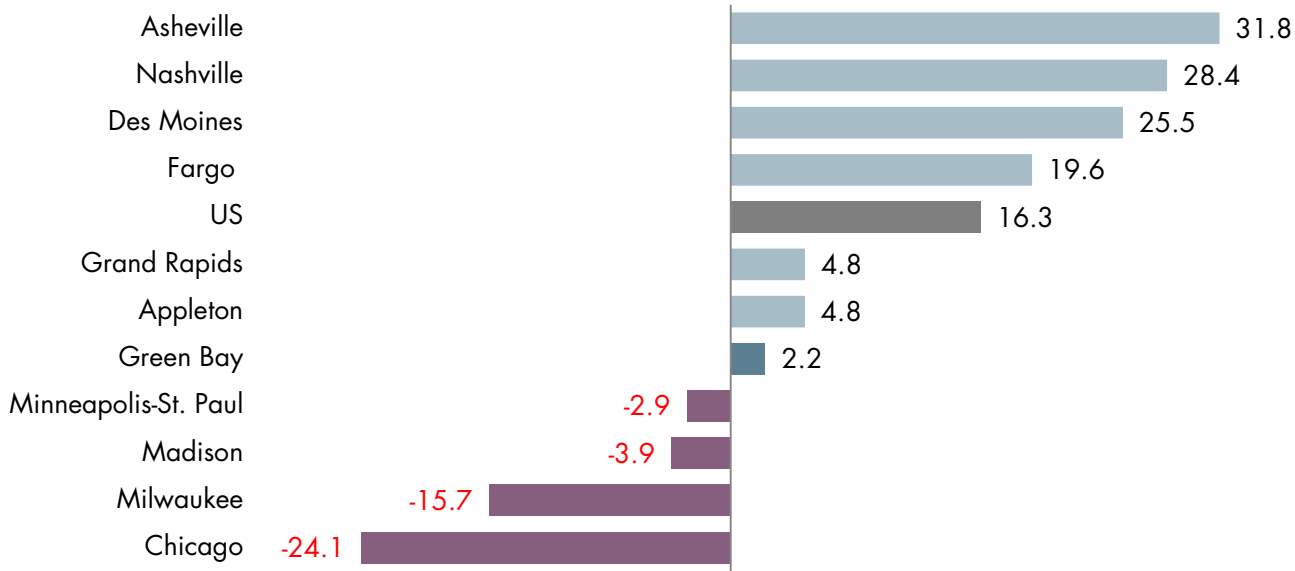
**FIGURE 38. HOUSING PERMITS ISSUED PER 1,000 RESIDENTS, 2010-2015**



Source: US Dept. of Housing & Urban Development, Building Permits Database

Between 2010 and 2015, the Green Bay metro area gained a total of 712 net new residents due to migration, a rate of 2.2 net migrants per 1,000 residents. This was significantly lower than the US net immigration rate of 16.3 residents per 1,000 residents. Asheville, Nashville, Des Moines, and Fargo grew from migration at a faster pace than the US. Minneapolis-St. Paul, Madison, Milwaukee, and Chicago each lost residents from out-migration.

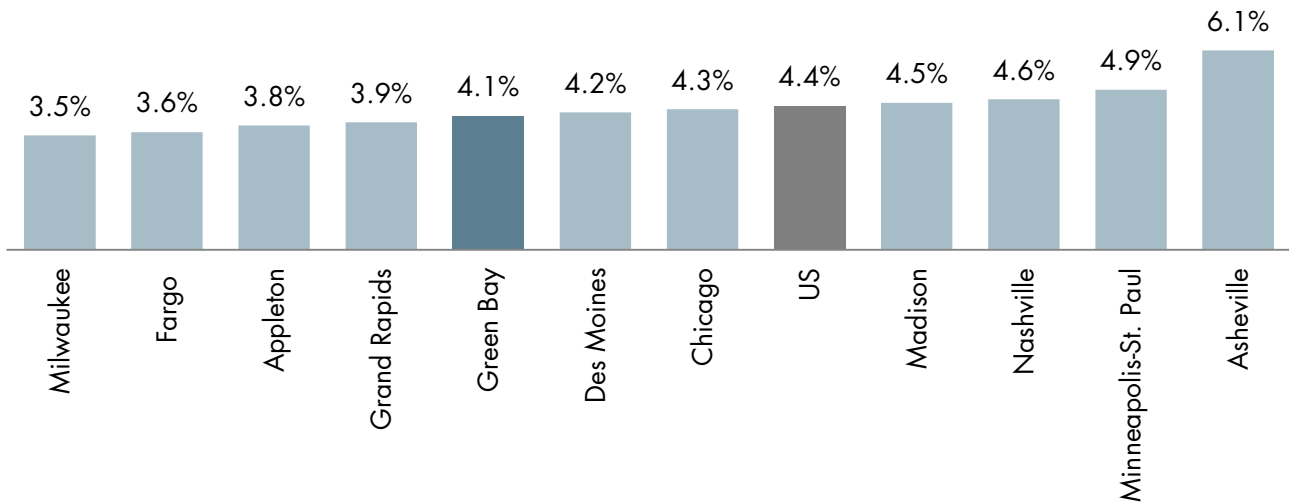
**FIGURE 39. NET INBOUND/OUTBOUND MIGRATION PER 1,000 RESIDENTS, 2010-2015**



Source: 2010-2015 IRS Migration by Metro Area

The share of workers in Green Bay working from home (4.1 percent of workers age 16 and older) is comparable to the US and most of the benchmarks. Asheville stands above the group, with 6.1 percent of its population working from home, an indicator of the community’s appeal to people who can choose to live anywhere and work remotely.

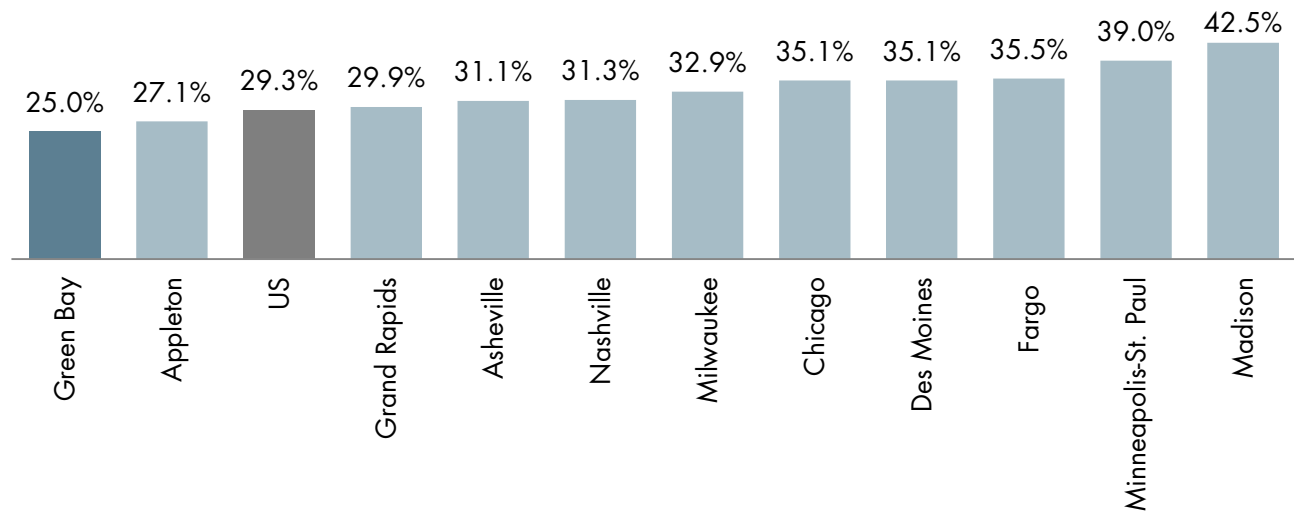
**FIGURE 40. PERCENT OF WORKERS 16 YEARS AND OLDER WORKING AT HOME, 2014**



Source: 2010-2014 American Community Survey 5-Year Estimates

Green Bay has the lowest share of adults with at least a bachelor’s degree (25 percent) among the benchmarks. Madison has the highest level of educational attainment among the group, with 42.5 percent of its residents holding a bachelor’s degree or higher. Minneapolis-St. Paul is a close second with 39 percent.

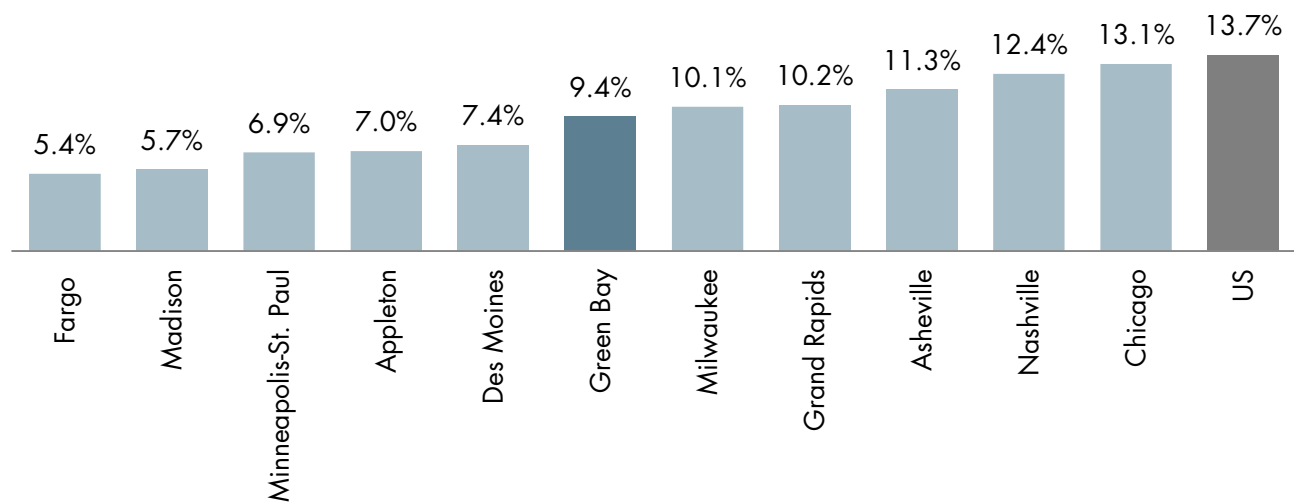
**FIGURE 41. EDUCATIONAL ATTAINMENT, 2014**  
PERCENT OF POPULATION (AGE 25+) WITH A BACHELOR’S DEGREE OR HIGHER, 2014



Source: 2010-2014 American Community Survey 5-Year Estimates

Green Bay has a relatively low share of residents without a high school diploma, with less than 10 percent of the metro area’s population lacking this basic credential. This compares favorably to the US rate of nearly 14 percent and is significantly better than Chicago, Nashville, and Asheville. Fargo and Madison have the lowest share of residents without a high school diploma.

**FIGURE 42. EDUCATIONAL ATTAINMENT**  
PERCENT OF POPULATION (AGE 25+) WITHOUT HIGH SCHOOL DIPLOMA, 2014

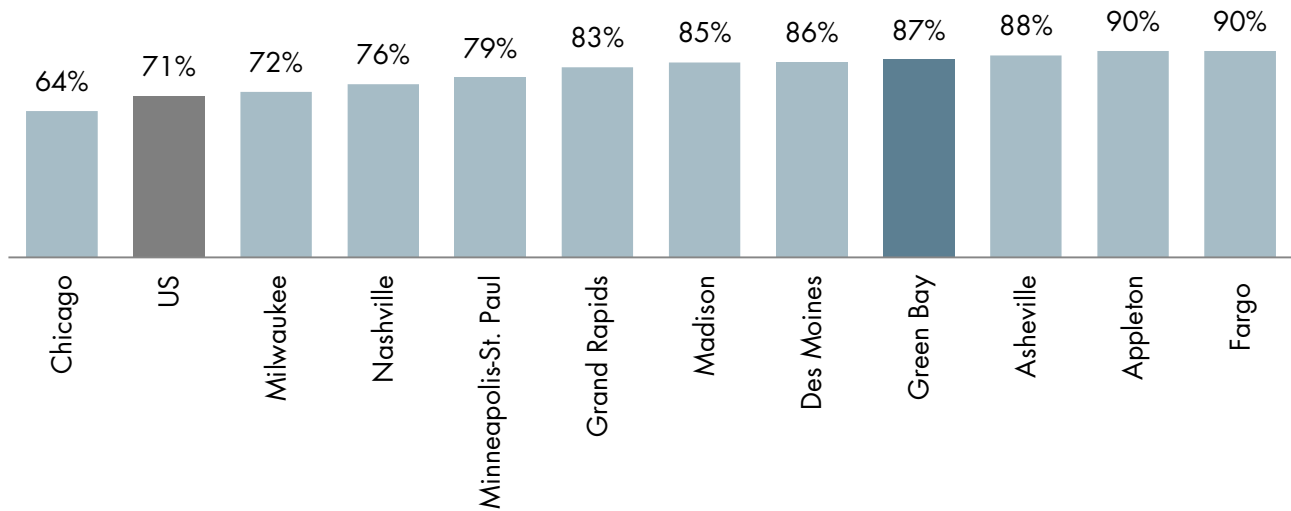


Source: 2010-2014 American Community Survey 5-Year Estimates

Green Bay's white population accounts for 87 percent of all residents, making the metro area far less diverse than the US as a whole. In addition to Green Bay, six of the 10 the benchmark metro areas have white populations that account for more than 80 percent of all residents. Only Chicago has a higher share of non-whites than the US.

#### FIGURE 43. RACIAL DIVERSITY

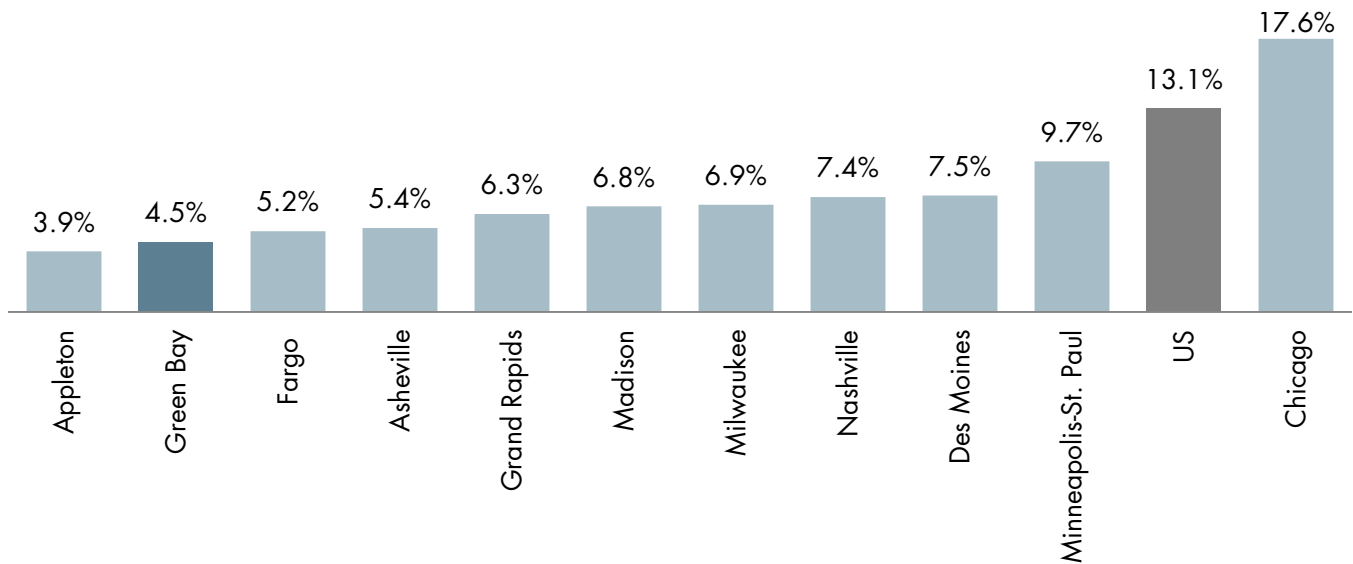
WHITE POPULATION AS A PERCENTAGE OF TOTAL, 2016



Source: ESRI Community Analyst

Another indicator of diversity is the share of foreign-born residents. By this measure, Green Bay is more diverse than Appleton is, but is less diverse than the rest of the benchmarks are. Only Chicago has a higher share of foreign-born residents than the US.

#### FIGURE 44. FOREIGN-BORN POPULATION (AS PERCENT OF TOTAL), 2014

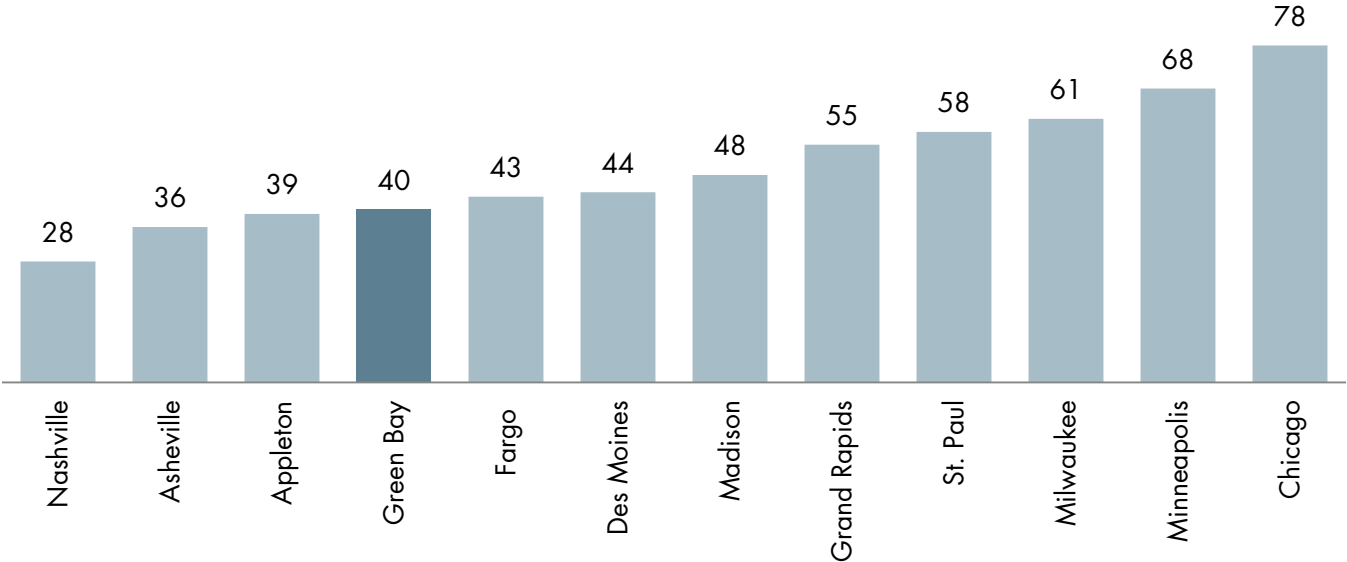


Source: 2010-2014 American Community Survey 5-Year Estimates



Walk Score is a ranking between 0 and 100 that grades the walkability of cities and neighborhoods across the US using a patented system that analyzes data from a wide range of sources. Green Bay has a Walk Score of 40, higher than Nashville (Walk Score of 28), Asheville (36), and Appleton (39). Not surprisingly, Chicago is the most walkable city among the group, with a Walk Score of 78, followed by Minneapolis (68) and Milwaukee (61).

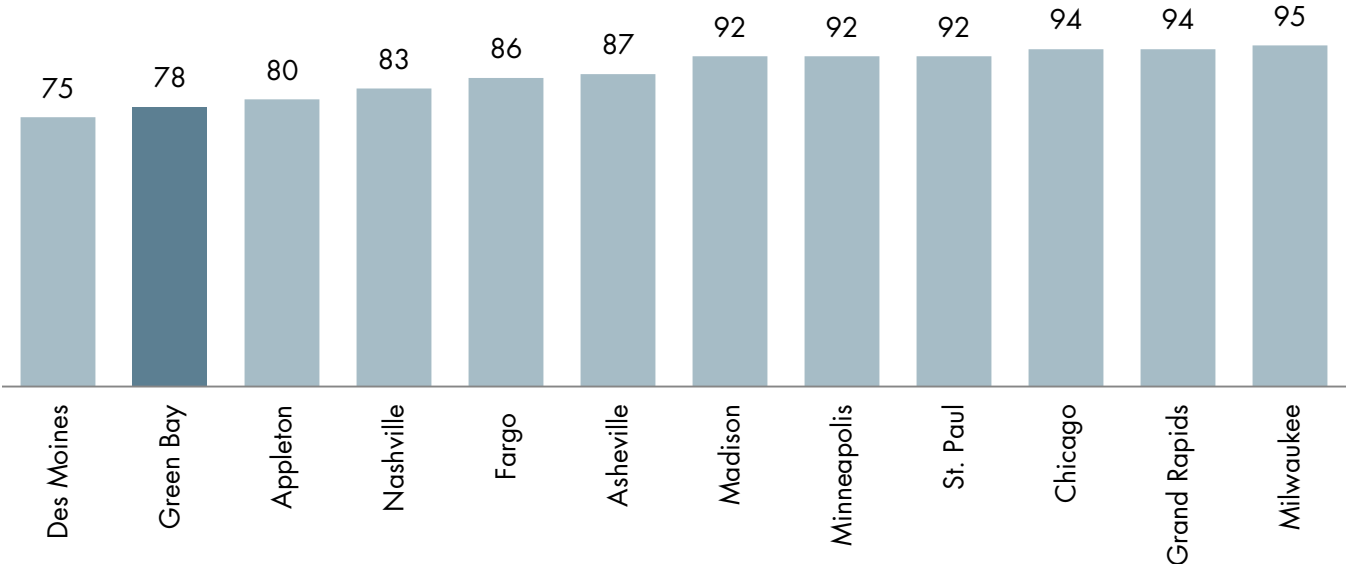
FIGURE 45. WALK SCORE, CITY



Source: WalkScore.com

Downtown Green Bay is much more walkable than the city as a whole, with a Walk Score of 78. Each of the benchmark cities' downtowns are significantly more walkable than the cities overall. The top three most walkable downtowns among the group are Milwaukee (95), Grand Rapids (94), and Chicago (94).

FIGURE 46. WALK SCORE, DOWNTOWN



Source: WalkScore.com



Downtown Green Bay, defined as the one-mile radius extending from the center of the city's Central Business District (CBD), experienced a 9.1 percent population decline from 2000 to 2010. Only two other benchmark cities—Appleton and Fargo—also lost downtown residents during this period. All of the benchmark cities grew their downtown populations from 2010 to 2016, but Green Bay's growth rate was the slowest. However, downtown Green Bay represents 4.3 percent of the metro area's total population, a higher share than most of the benchmarks. Nashville, Des Moines, and Chicago experienced the highest downtown growth rates from 2010 to 2016. Downtown Chicago has gained more residents since 2000 than all the other benchmarks combined.

**FIGURE 47. DOWNTOWN POPULATION GROWTH TRENDS, CBD 1-MILE RADIUS**

Geography	Population			2000 to 2010		2010 to 2016		Share of MSA Pop.
	2000	2010	2016	Net Chg.	Annual Chg.	Net Chg.	Annual Chg.	
Nashville	5,551	7,716	9,407	+2,165	3.9%	+1,691	3.7%	0.5%
Des Moines	8,517	8,624	10,479	+107	0.1%	+1,855	3.6%	1.7%
Chicago	22,930	45,151	51,727	+22,221	9.7%	+6,576	2.4%	0.5%
Minneapolis	25,764	30,723	34,233	+4,959	1.9%	+3,510	1.9%	1.0%
Fargo	15,363	14,637	16,253	-726	-0.5%	+1,616	1.8%	6.8%
St. Paul	13,186	15,111	16,446	+1,925	1.5%	+1,335	1.5%	0.5%
Asheville	9,113	9,293	10,004	+180	0.2%	+711	1.3%	2.2%
Grand Rapids	15,864	16,057	17,212	+193	0.1%	+1,155	1.2%	1.7%
Madison	28,797	30,727	32,791	+1,930	0.7%	+2,064	1.1%	5.2%
Milwaukee	14,046	17,504	18,244	+3,458	2.5%	+740	0.7%	1.2%
Appleton	16,679	15,664	16,046	-1,015	-0.6%	+382	0.4%	6.8%
Green Bay	14,906	13,552	13,589	-1,354	-0.9%	+37	0.0%	4.3%

Source: ESRI Community Analyst

The greater downtown area of Green Bay, the zone extending out two miles from the CBD, accounts for 14.1 percent of the metro area's total population, a higher share than all of the benchmarks except Appleton and Fargo. This CBD two-mile radius zone experienced a loss of residents in about half of the benchmarks between 2000 and 2010, including Green Bay, but grew in each city from 2010 to 2016. The highest downtown population growth rates since 2010 were in Nashville, Chicago, and Des Moines. Downtown Green Bay had the slowest growth.

**FIGURE 48. DOWNTOWN POPULATION GROWTH TRENDS, CBD 2-MILE RADIUS**

Geography	Population			2000 to 2010		2010 to 2016		Share of MSA Pop.
	2000	2010	2016	Net Chg.	Annual Chg.	Net Chg.	Annual Chg.	
Nashville	46,499	48,278	53,301	+1,779	0.4%	+5,023	1.7%	2.9%
Chicago	117,510	166,407	183,198	+48,897	4.2%	+16,791	1.7%	1.9%
Des Moines	42,912	41,977	46,154	-935	-0.2%	+4,177	1.7%	7.3%
Minneapolis	113,857	120,928	131,847	+7,071	0.6%	+10,919	1.5%	3.7%
Fargo	52,919	52,048	56,511	-871	-0.2%	+4,463	1.4%	23.6%
Asheville	25,277	27,844	30,213	+2,567	1.0%	+2,369	1.4%	6.6%
Grand Rapids	76,711	71,707	76,196	-5,004	-0.7%	+4,489	1.0%	7.3%
Madison	54,716	55,834	59,134	+1,118	0.2%	+3,300	1.0%	9.3%
St. Paul	77,593	74,433	77,812	-3,160	-0.4%	+3,379	0.8%	2.2%
Appleton	53,820	52,165	53,549	-1,655	-0.3%	+1,384	0.4%	22.7%
Milwaukee	74,639	78,062	79,620	+3,423	0.5%	+1,558	0.3%	5.1%
Green Bay	46,269	44,182	44,752	-2,087	-0.5%	+570	0.2%	14.1%

Source: ESRI Community Analyst

Within the four-mile zone surrounding the CBD, half of the benchmarks lost population from 2000 to 2010, but all of them gained residents from 2010 to 2016. The three fastest growing CBD four-mile zones since 2010 were Fargo, Asheville, and Nashville. The three slowest growing CBD four-mile zones during this period were Appleton, Green Bay, and Milwaukee. Well over one-third of Green Bay's entire metro area resides within four miles of the CBD, a higher share than all of the benchmarks, except for Fargo and Appleton.

**FIGURE 49. DOWNTOWN POPULATION GROWTH TRENDS, CBD 4-MILE RADIUS**

Geography	Population			2000 to 2010		2010 to 2016		Share of MSA Pop.
	2000	2010	2016	Net Chg.	Annual Chg.	Net Chg.	Annual Chg.	
Fargo	116,538	121,250	133,401	+4,712	0.4%	+12,151	1.7%	55.8%
Asheville	65,498	71,106	77,303	+5,608	0.9%	+6,197	1.5%	16.8%
Nashville	150,075	148,800	160,567	-1,275	-0.1%	+11,767	1.3%	8.7%
Minneapolis	314,692	315,799	339,117	+1,107	0.0%	+23,318	1.2%	9.6%
Des Moines	155,481	154,027	165,011	-1,454	-0.1%	+10,984	1.2%	26.0%
Chicago	449,791	465,406	494,421	+15,615	0.3%	+29,015	1.0%	5.1%
Madison	133,022	133,565	140,321	+543	0.0%	+6,756	0.8%	22.1%
Grand Rapids	196,155	186,824	195,843	-9,331	-0.5%	+9,019	0.8%	18.9%
St. Paul	250,005	246,574	257,964	-3,431	-0.1%	+11,390	0.8%	7.3%
Appleton	114,874	119,441	124,198	+4,567	0.4%	+4,757	0.7%	52.7%
Green Bay	115,651	113,013	114,855	-2,638	-0.2%	+1,842	0.3%	36.1%
Milwaukee	309,996	306,560	306,711	-3,436	-0.1%	+151	0.0%	19.5%

Source: ESRI Community Analyst

Green Bay has among the most affordable home prices among the benchmarks, with a Zillow Home Value Index of \$154,300 in September 2016 and a median list price of \$159,900. Greater Green Bay's housing market consists of 7.7 percent of homes with "underwater" mortgages, compared to a 12.2 percent negative equity rate nationally.

**FIGURE 50. HOME VALUE TRENDS**

Geography	Zillow Home Value Index		Median List Price		Q2 2016 Negative Equity
	Sep. 2016	1-yr. % chg.	Sep. 2016	1-yr. % chg.	
Grand Rapids	\$160,200	7.4%	\$195,000	14.8%	5.0%
Asheville	\$208,400	9.6%	\$295,000	13.5%	4.5%
Des Moines	\$164,700	3.3%	\$200,000	11.2%	6.9%
Milwaukee	\$205,900	8.1%	\$230,000	9.6%	26.1%
Madison	\$220,800	6.9%	\$249,900	9.1%	5.5%
Appleton	\$131,000	4.3%	\$162,000	8.0%	7.3%
Chicago	\$202,200	4.7%	\$248,000	7.9%	22.2%
Nashville	\$201,100	11.0%	\$290,000	7.4%	7.1%
Green Bay	\$154,300	7.2%	\$159,900	6.7%	7.7%
<b>US</b>	<b>\$189,400</b>	<b>5.5%</b>	<b>\$239,900</b>	<b>4.8%</b>	<b>12.2%</b>
Fargo	\$197,500	5.7%	\$244,900	3.3%	4.3%
Minneapolis-St. Paul	\$230,200	5.9%	\$264,900	1.9%	9.5%

Source: Zillow

## APPENDIX C: DISCOVERY PHASE SUMMARY

In June 2016, TIP Strategies assisted the Greater Green Bay Chamber in facilitating a series of roundtable discussions with business, community, and academic leaders from the region. Each of the sessions focused on a specific subject, ranging from target industries to potential strategies. The purpose of the discussions was to gather input from regional leaders to help inform the development of strategies and actions for this strategic plan. Additional one-on-one meetings and group discussions with key stakeholders were held in July 2016 to explore opportunities in further detail. The final round of input sessions held as part of the Discovery phase took place in October 2016. The complete list of attendees from the 21 group meetings is included below, organized by topic and date.

### REAL ESTATE, CONSTRUCTION, ENGINEERING (JUNE 7, 2016)

NAME	ORGANIZATION
Jamie Blom	Immel Construction
Cheryl Reed	Jacobs
Garritt Bader	GB Real Estate
Todd DeVillers	RE Commercial
Tim Feldhausen	Simon & Feldhausen
Paul Belschner	Base Companies, LLC

### MANUFACTURERS (JUNE 8, 2016)

NAME	ORGANIZATION
Todd Cullen	Georgia-Pacific
Mike Kawleski	Georgia-Pacific
Dan Lloyd	Proctor & Gamble
Mike Kwaterski	Paper Converting Machine
Jake Swenson	RR Donnelley
Kelly Anderson	KI Furniture
Tom Abrahamson	KI Furniture
Kurt Voss	Amerilux
Francesca Elfner	BelGioioso Cheese
Brian Mikkelsen	Seroogy's
Greg Bredael	WEL Companies
Bruce Tielens	WEL Companies
Randy Charles	AK Pizza Crust
Paul Belschner	Base Companies, LLC

**ECONOMIC DEVELOPMENT PARTNERS (JUNE 8, 2016)**

<b>NAME</b>	<b>ORGANIZATION</b>
Jim Schmitt	City of Green Bay Mayor
Larry Delo	City of De Pere
Kim Flom	City of De Pere
Andrew Vickers	Village of Hobart
Angela Gorall	Village of Bellevue
Bob Bartelt	Town of Lawrence
Kristan Sanchez	Village of Ashwaubenon
Mike Aubinger	Village of Ashwaubenon
Paul Evert	Village of Howard
Reed Woodward	Village of Pulaski
Sarah Burdette	Town of Ledgeview
Troy Streckenbach	Brown County Executive
Cole Runge	Brown County Government
Mark Walter	Brown County Port & Resource Recovery
Allison Swanson	Village of Ashwaubenon
Brad Toll	Greater Green Bay Convention and Visitors Bureau
Jerry Murphy	New North, Inc.
Jeff Mirkes	Downtown Green Bay
Matt Hohner	Definitely De Pere
Naletta Burr	WEDC
Tony Parr	Oneida Nation
Todd Cullen	Georgia-Pacific

**RECYCLING ECONOMIC DEVELOPMENT PROGRAMS (JUNE 8, 2016)**

<b>NAME</b>	<b>ORGANIZATION</b>
Bill Seleen	Habitat for Humanity
Matt Bergeon	Golder Associates
Dean Haen	Brown County Port & Resource Recovery
John Arendt	UW-GB
John Katers	UW-GB
Troy Streckenbach	Brown County Executive
Chad Weininger	Brown County

**INCLUSIVE DEVELOPMENT (JUNE 8, 2016)**

<b>NAME</b>	<b>ORGANIZATION</b>
David Pamperin	Greater Green Bay Community Foundation
Greg Maass	Brown County United Way
Adam Hardy	Achieve Brown County
Amanda Kim	St. Norbert College
Ngosong Fonkem	Corneille Law Group
Michelle Langenfeld, Ed.D.	Green Bay Area Public School District
Brittany Zaehring	Brown County Government
Robyn Davis	Freedom House
Dr. Bola Delano-Oriaran	St. Norbert College
Mohammed Bey	NWTC, Diversity & Inclusion Director
Anna Steinfest	AFF Research
Dan Fabry	Cellcom

**STARTUPS, TECH SECTOR, & HOME-GROWN BUSINESSES (JUNE 8, 2016)**

<b>NAME</b>	<b>ORGANIZATION</b>
Peter Nugent	Docking Station
Jamie Veaser	Machine Plus
Mark Moran	Shift Visuals
Scott Johnson	Green Bay Press Gazette
Jim Kratowicz	Titletown Brewing Company
Dave Stauffacher	SBDC
Chris Schmitz	Digital Fertilizer
Lennie Shefchik	Paper Transport, Inc.
Jeff Shefchik	Paper Transport, Inc.
Drew Leatherberry	Forsite Benefits
Kevin Edwards	SharpLogixx
Paul Belschner	Base Companies, LLC

**YOUNG PROFESSIONALS (JUNE 8, 2016)**

<b>NAME</b>	<b>ORGANIZATION</b>
Drew Leatherberry	Forsite Benefits
Garritt R. Bader	GB Real Estate
Ryan Krumrie	Hager, Dewick & Zuengler, S.C.
Joshua Oliver	Humana
Nicole Tilot	Thrivent Financial
Barbara Koldos	Somerville Inc.
Tyler Welch	Student

**PROFESSIONAL SERVICES & CORPORATE HEADQUARTERS (JUNE 9, 2016)**

<b>NAME</b>	<b>ORGANIZATION</b>
George Grossardt	Master Fleet, LLC
Carol Karls	Wisconsin Public Service
Dan Miller	Wipfli LLP
Sara Funk	Wipfli LLP
Pat Hopkins	Imaginasium Inc.
Mark Higgins	Johnson Bank
Steve Pasowicz	Johnson Bank
Bruce Zak	Chase
Matt Schueller	Nature's Way
Tom Rohen	Davis & Kuelthau, S.C.
Al Timmerman	Jet Air Group
Jamee Mangold	Wells Fargo Bank
Dan Sweeney	Wells Fargo Bank
Christine Loose	Kohler
Cheryl Reed	Jacobs
Paul Belschner	Base Companies, LLC

**HEALTHCARE (JUNE 9, 2016)**

<b>NAME</b>	<b>ORGANIZATION</b>
Kim Allen	Humana
David Bishop	United Healthcare
Gwen Christensen	Aurora Health Care
Dr. Ashok Rai	Prevea Health
Kaitlin Swanson	St. Vincent Hospital
Jim Dietsche	Bellin Health

**WORKFORCE & EDUCATION (JUNE 9, 2016)**

<b>NAME</b>	<b>ORGANIZATION</b>
Ron Pfeifer	UW-GB
Tom Hoh	Green Bay Area Public Schools
John Benberg	Boys & Girls Club of Green Bay
Brian Hanes	Ashwaubenon School District
Norbert Hill	Oneida Nation
Adam Hardy	Achieve Brown County
Todd Cullen	Georgia-Pacific

**ECONOMIC DEVELOPMENT PARTNERS (JULY 26, 2016)**

<b>NAME</b>	<b>ORGANIZATION</b>
Dave Wiese	Village of Howard
Andrew Vickers	Village of Hobart
Bob Bartelt	Town of Lawrence
Troy Streckenbach	Brown County Executive
Larry Delo	City of De Pere
Andrew Vissers	Village of Bellevue
Brad Lange	Village of Allouez
Troy Parr	Oneida Nation
Brad Toll	Greater Green Bay Convention & Visitors Bureau
Jeff Mirkes	Downtown Green Bay
Barb Lamue	WEDC
Tom Miller	Green Bay Austin Straubel International Airport
Chuck Lamine	Brown County
Jim Schmitt	City of Green Bay Mayor
Jerry Murphy	New North
Allison Swanson	Village of Ashwaubenon
Craig Aderhold	Wisconsin Bank & Trust

**LEADERSHIP GREEN BAY (JULY 26, 2016)**

<b>NAME</b>	<b>ORGANIZATION</b>
Matt Brault	Schreiber Foods
Tanessa Klug	Medical College of Wisconsin
Jessica Hopp	UW-GB
Steve Krueger	Conway, Olejniczak & Jerry, S.C.
Tamy Ashauer	PAI
Nicholas Linz	Hager, Dewick & Zuengler, S.C.

**BETTER BY THE BAY (JULY 26, 2016)**

<b>NAME</b>	<b>ORGANIZATION</b>
Larry Delo	City of De Pere
Jim Rivett	Khrome
Karen Sinette	Elevate97
Jennifer Kalies	Performa
Bridget O'Connor	O'Connor Connective
Brad Toll	Greater Green Bay Convention & Visitors Bureau
Deborah (Deb) Mauthe	Prevea Health

**GREATER GREEN BAY CHAMBER BOARD OF DIRECTORS (JULY 28, 2016)**

See Acknowledgements section for list of members.

**STRATEGIC PLANNING EXECUTIVE COMMITTEE (JULY 28, 2016)**

See Acknowledgements section for list of members.

**ECONOMIC DEVELOPMENT PARTNERS (OCTOBER 25, 2016)**

<b>NAME</b>	<b>ORGANIZATION</b>
Angela Gorall	Village of Bellevue
Larry Delo	Village of De Pere
Kim Flom	Village of De Pere
Carol Karls	Wisconsin Public Service
Troy Streckenbach	Brown County Executive
Chuck Lamine	Brown County
Allison Swanson	Village of Ashwaubenon
Brad Toll	Greater Green Bay Convention & Visitors Bureau
Jeff Mirkes	Downtown Green Bay
Marty Piette	Green Bay Austin Straubel International Airport
Barb LaMue	WEDC
Troy Parr	Oneida Nation
Jim Schmitt	City of Green Bay Mayor
Paul Evert	Village of Howard
Brad Lange	Village of Allouez
Dean Haen	Brown County Port & Resource Recovery

**HIGHER EDUCATION (OCTOBER 25, 2016)**

<b>NAME</b>	<b>ORGANIZATION</b>
Jeff Rafn, Ph.D.	Northeast Wisconsin Technical College
Tom Kunkel	St. Norbert College

**MANUFACTURING (OCTOBER 26, 2016)**

<b>NAME</b>	<b>ORGANIZATION</b>
Todd Cullen	Georgia-Pacific
Kelly Anderson	KI Furniture
Tom Abrahamson	KI Furniture
Ann Franz	NEW Manufacturing Alliance
Scott Kettler	EMT
Francesca Elfner	Belgioioso
Randy Charles	AK Pizza Crust



## **INNOVATION & ENTREPRENEURSHIP (OCTOBER 26, 2016)**

<b>NAME</b>	<b>ORGANIZATION</b>
Tom Hedge	Schreiber Foods
Debra Cherney	Cherney Microbiological Services
Scott Koffarnus	Cineviz
Pat Hopkins	Imaginasium Inc.
Ryan Hatch	Resultech
Paul Belschner	Base Companies, LLC
Dan Miller	Wipfli LLP
Elizabeth Slade	Greater Green Bay Chamber (Advance)
Tim Feldhausen	Davis & Kuelthau, S.C.

## **ADVANCE BOARD OF DIRECTORS (OCTOBER 27, 2016)**

See Acknowledgements section for list of members.

## **STRATEGIC PLANNING EXECUTIVE COMMITTEE (OCTOBER 27, 2016)**

See Acknowledgements section for list of members.

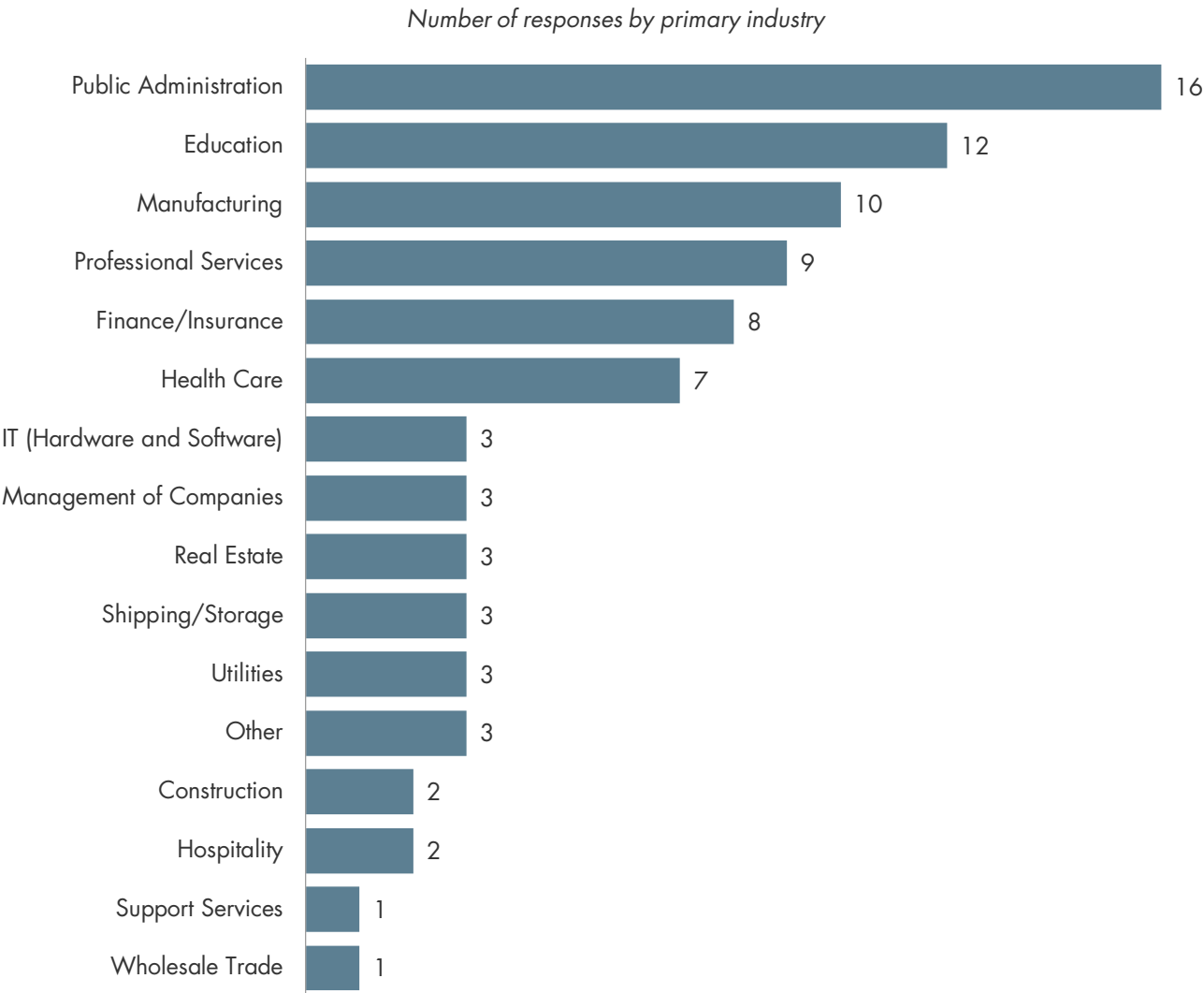
# ONLINE SURVEY SUMMARY

To better understand the opportunities and challenges associated with Green Bay’s workforce, an online survey was conducted as part of the strategic planning process. The survey afforded employers the opportunity to share their experience with hiring, retaining, and training workers in the region. The survey was distributed to employers in Brown County. A total of 93 employers participated.

The summary below is intended to provide a snapshot of the responses received. Numeric responses are presented as charts. Figures 59 and 60 utilize “Word Clouds” to summarize open-ended text responses. Word Clouds are visual representations of the most commonly used words and phrases contained in participant responses. The relative size of the words represents their frequency among responses. Open-ended responses were used as submitted by the participants and may contain typos, misspellings, or other errors.

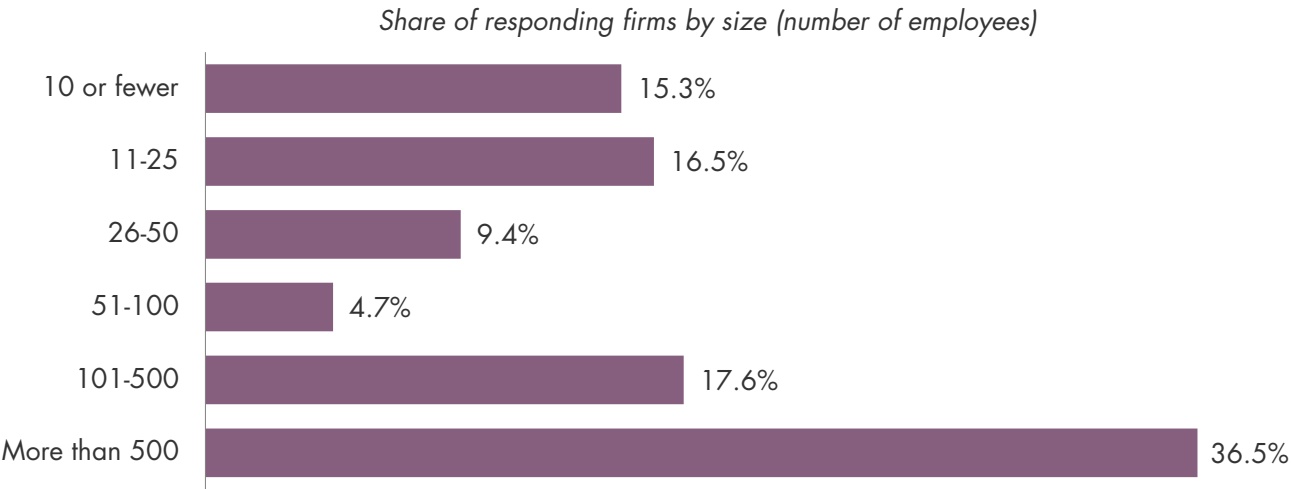
**FIGURE 51. INDUSTRY FOCUS**

*Which of the following best describes the primary industry focus of your organization?*



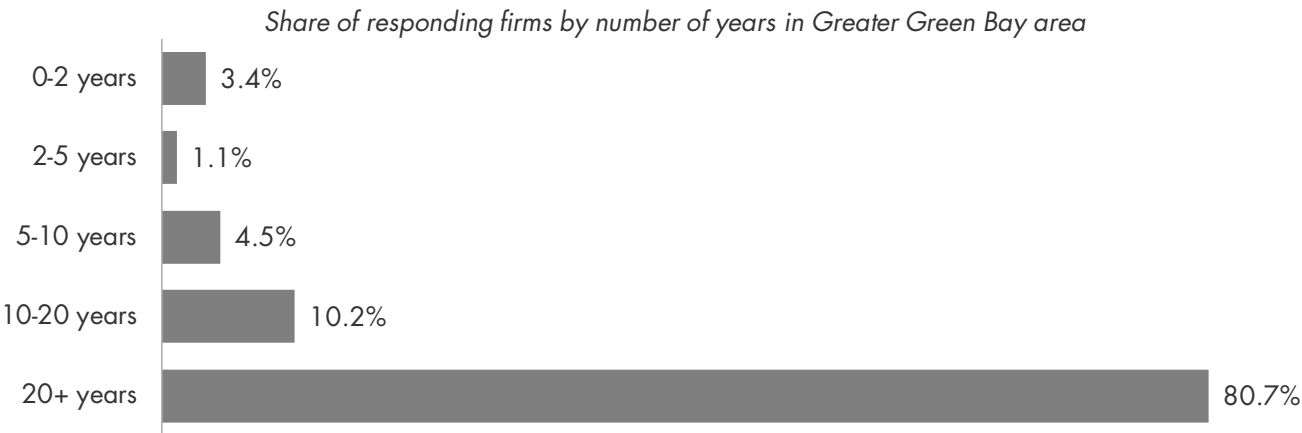
**FIGURE 52. NUMBER OF EMPLOYEES**

*How many full-time workers are employed by your business in the Greater Green Bay area?*



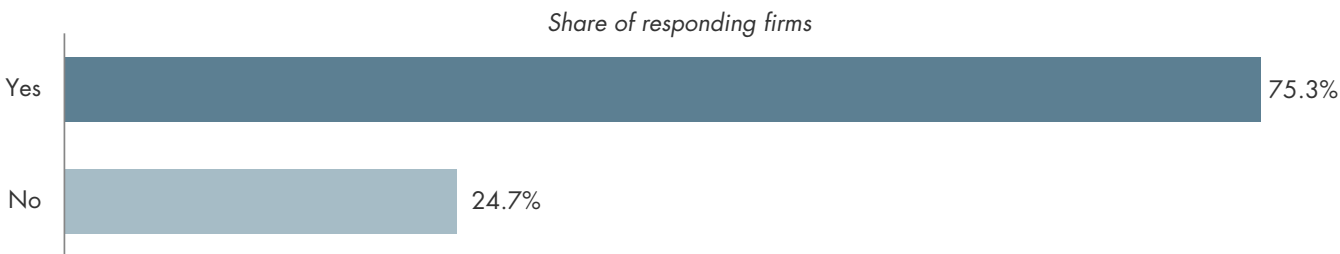
**FIGURE 53. NUMBER OF YEARS IN BUSINESS**

*How long has your organization been located in the Greater Green Bay area?*



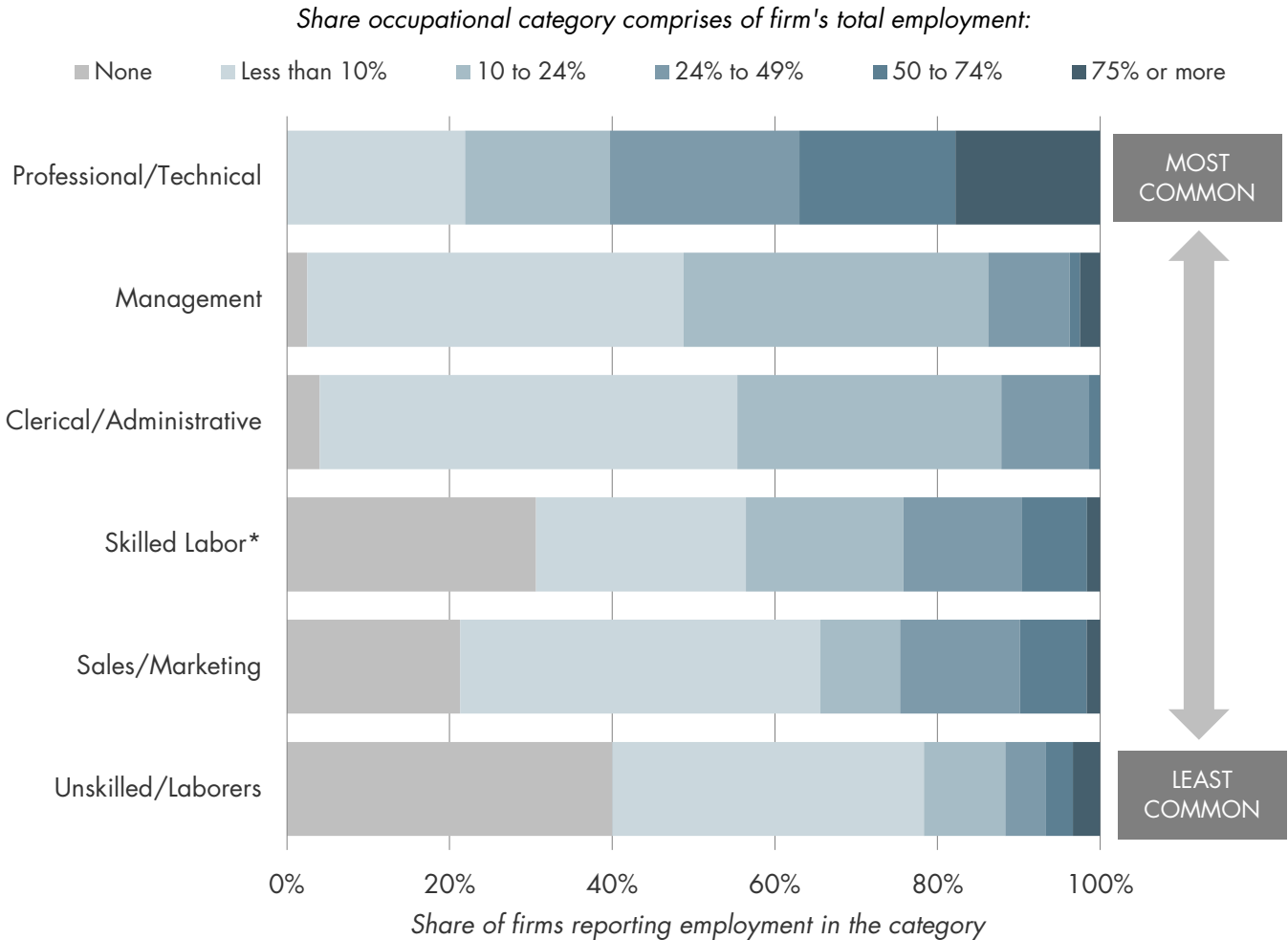
**FIGURE 54. HEADQUARTERS LOCATION**

*Is your organization headquartered in the Greater Green Bay area?*



**FIGURE 55. WORKFORCE CATEGORIES**

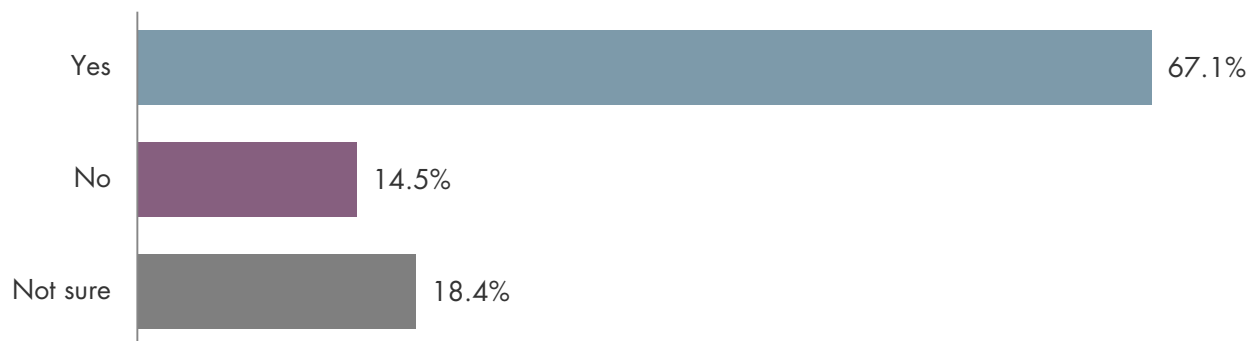
*Approximately what percentage of your workforce is employed in the following categories?*



\*Skilled Labor (e.g., skilled production, craft workers, machinists, welders)

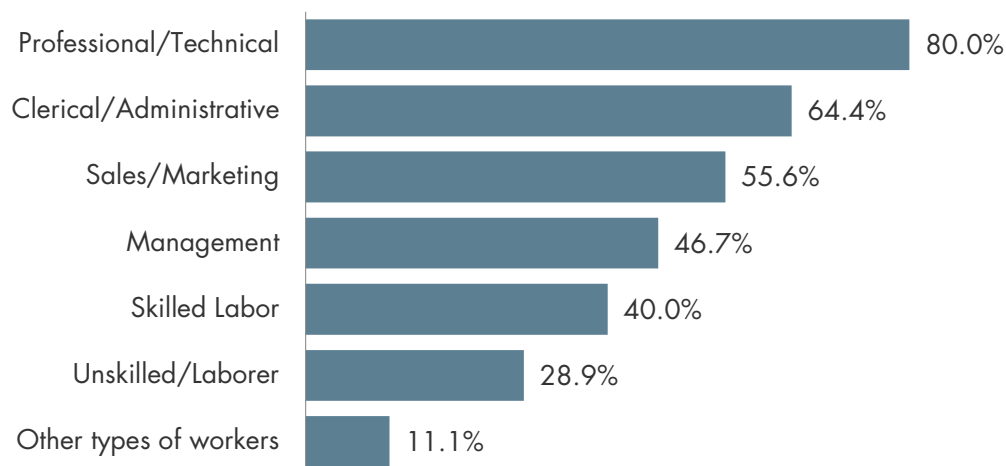
**FIGURE 56. HIRING PLANS**

*Over the next 2 years, do you plan to hire additional employees within the Greater Green Bay area?*

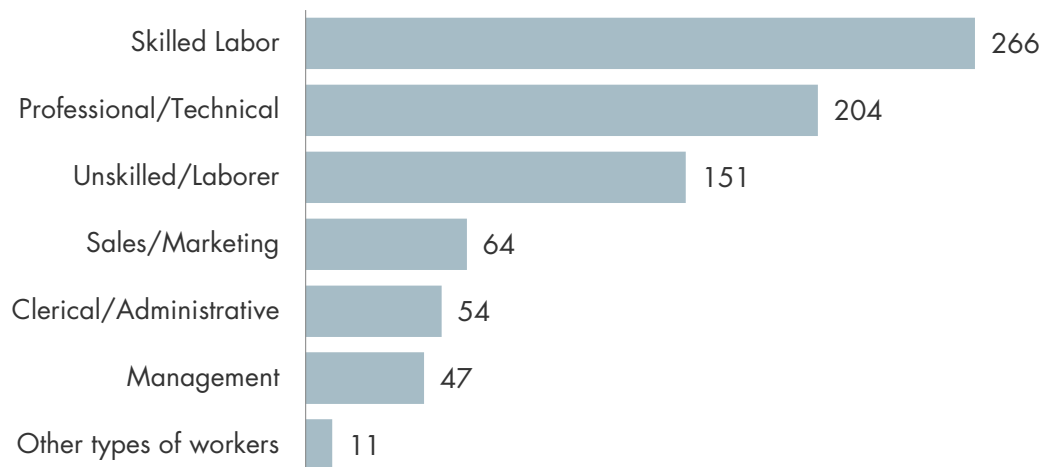
**FIGURE 57. HIRING PLANS BY WORKFORCE CATEGORY**

*If you plan to hire additional employees in the region over the next 2 years, approximately how many workers do you plan to add in each of the following categories?*

*Share of responding firms planning to hire workers in specified category*

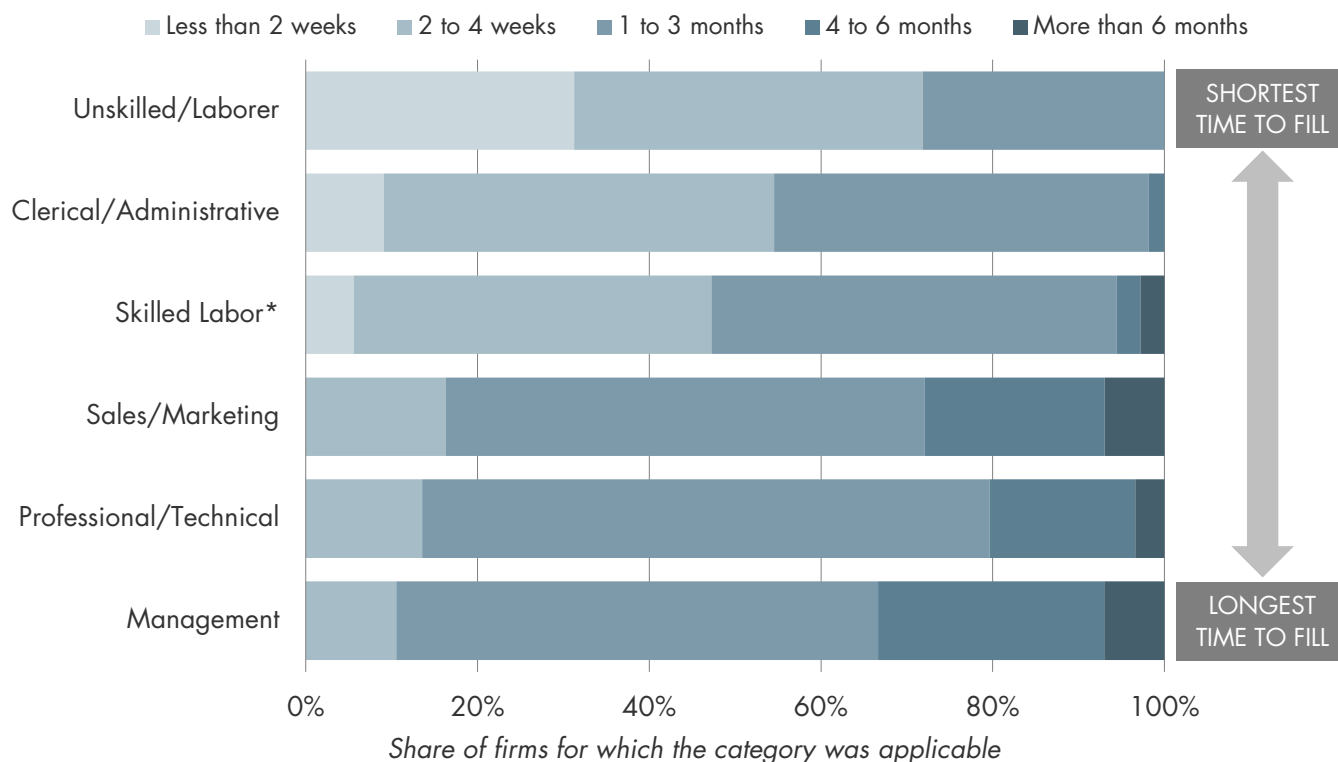


*Number of anticipated hires indicated*



### FIGURE 58. TYPICAL HIRING TIMEFRAME BY WORKFORCE CATEGORY

Approximately, how long does it typically take to fill a vacancy for each of the following classifications of workers?



\*Skilled Labor (e.g., skilled production, craft workers, machinists, welders)

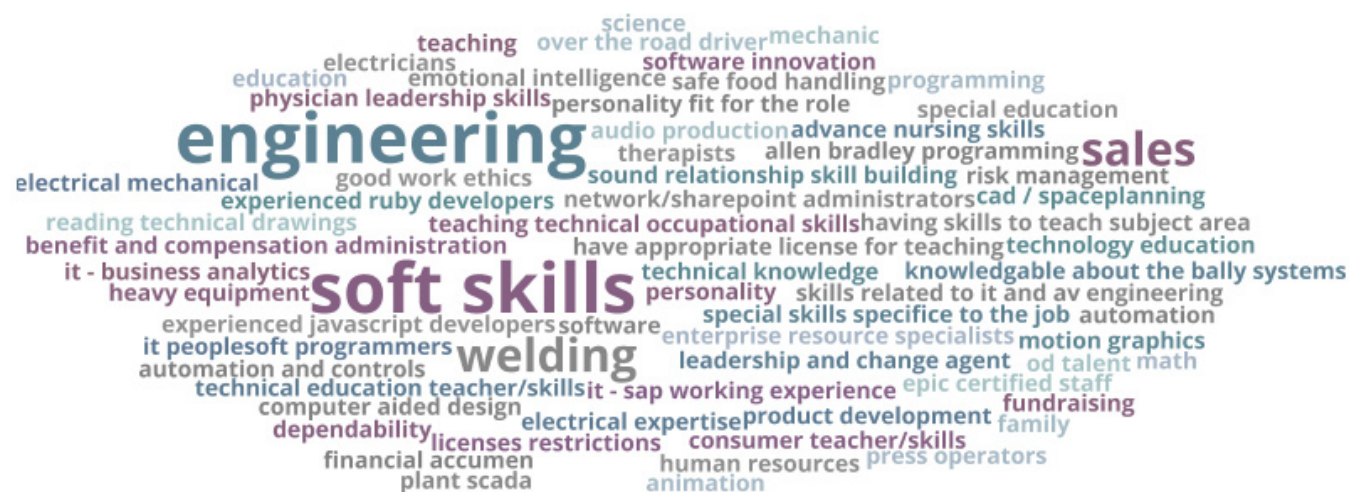
### FIGURE 59. HARD TO FILL POSITIONS

Which occupations are difficult to recruit in your industry?



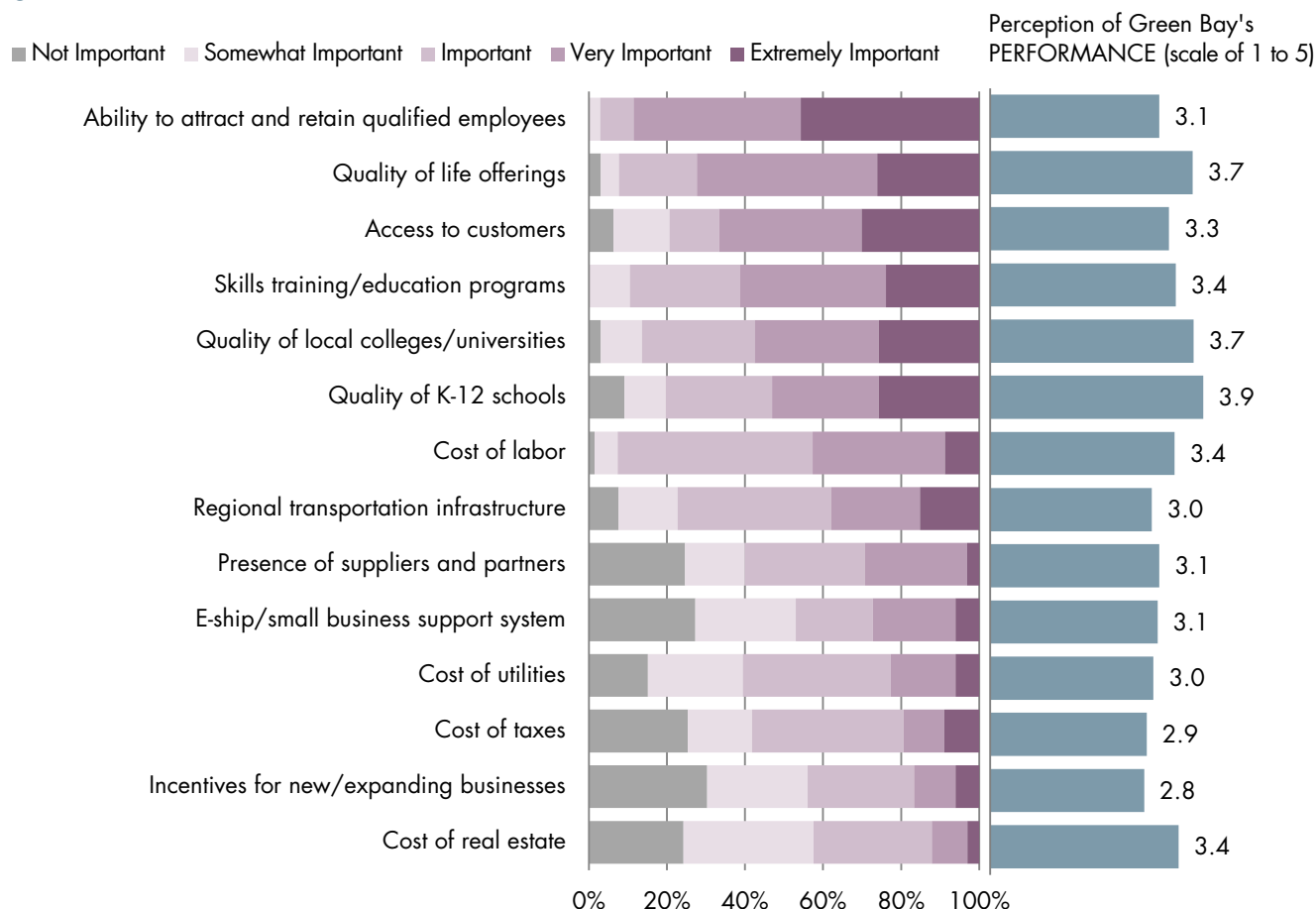
### FIGURE 60. HARD TO FILL SKILLS

Which skills are difficult to find in your industry? Examples of skills would include the ability to use a particular software program or perform a specific job function.



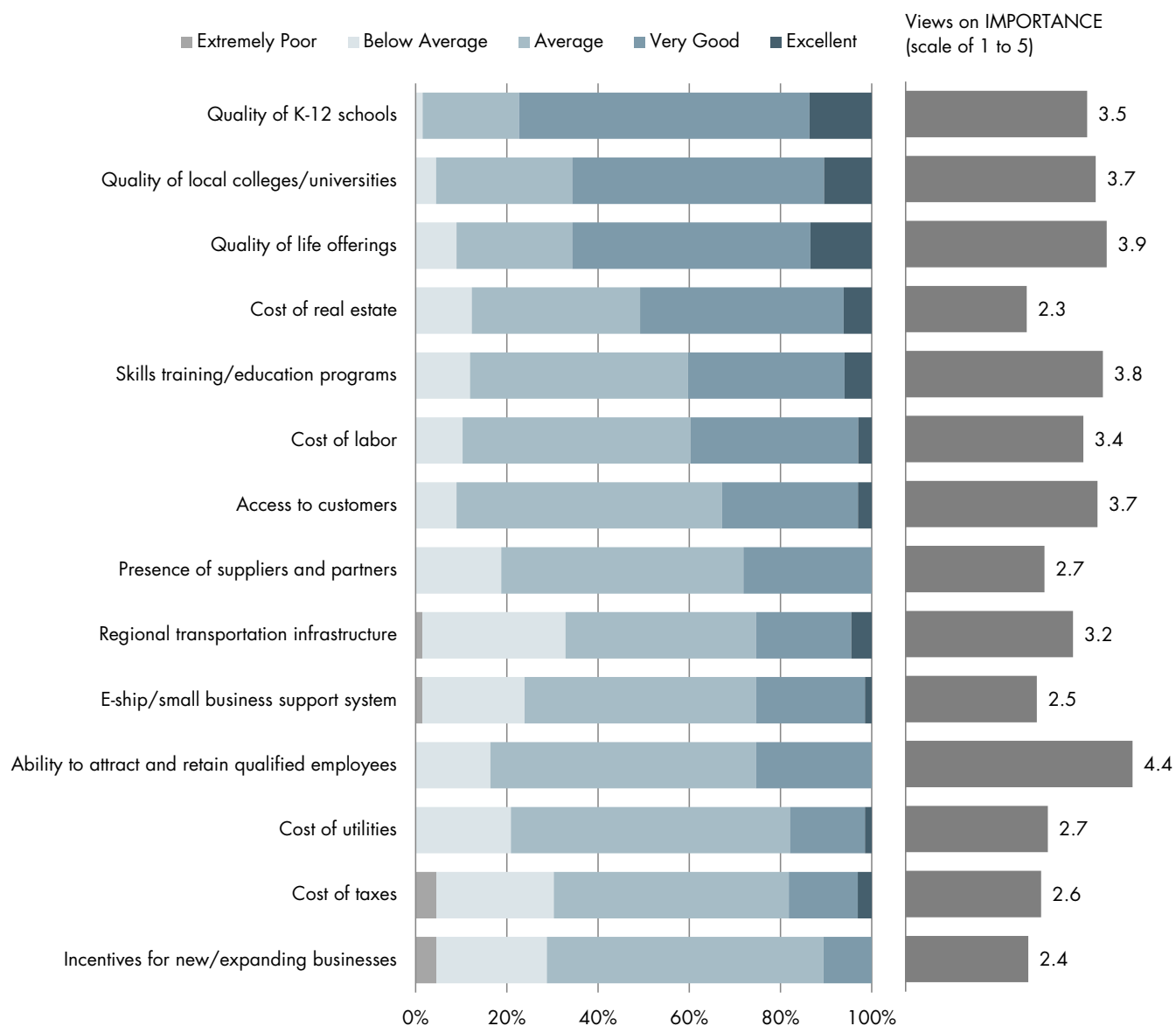
**FIGURE 61. BUSINESS SUCCESS FACTORS: IMPORTANCE**

Based on your experience, please rate the importance of the following factors to the success of your organization on a scale of 1 to 5.



**FIGURE 62. BUSINESS SUCCESS FACTORS: GREEN BAY'S PERFORMANCE**

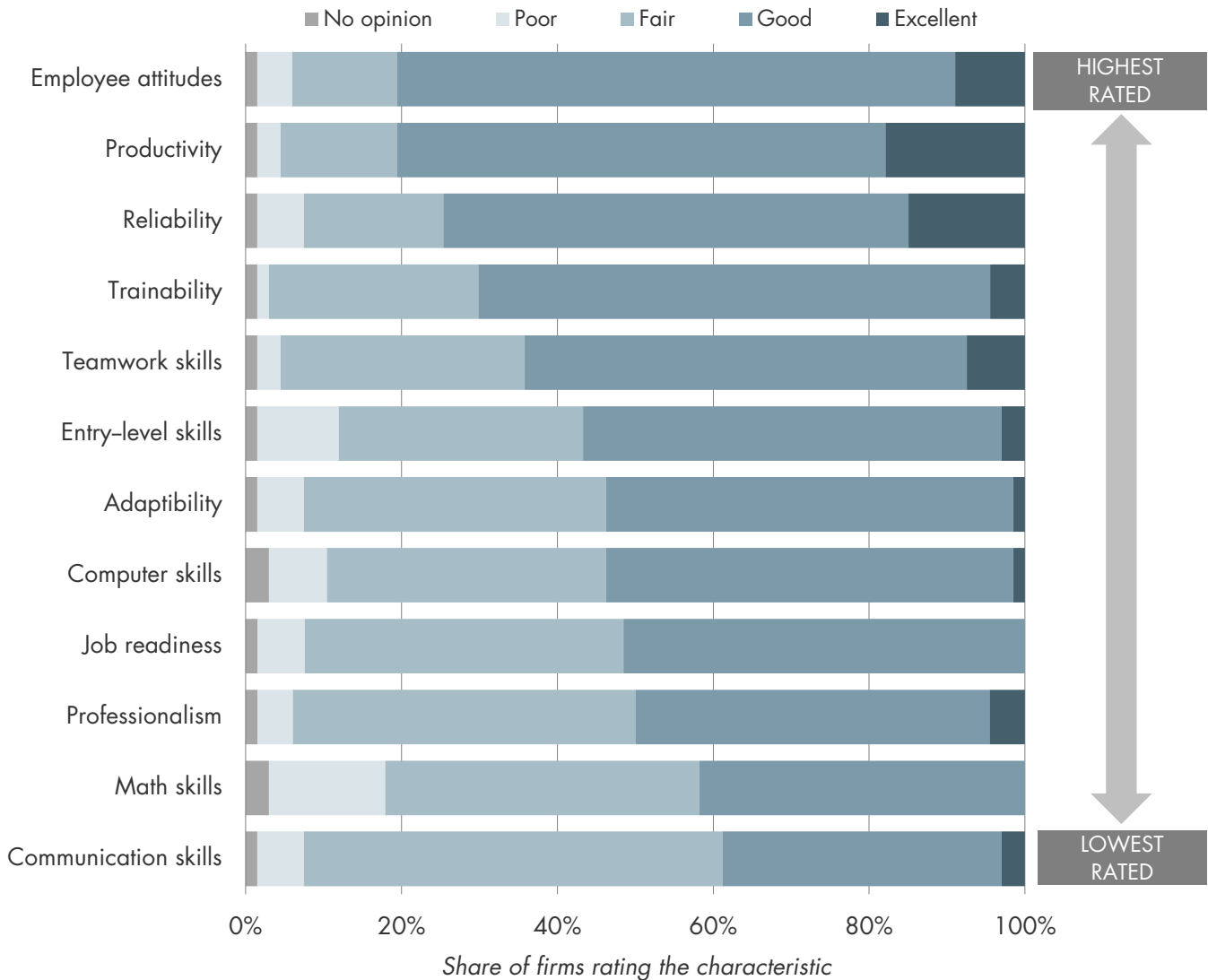
*Please rate Greater Green Bay on each of these items.*





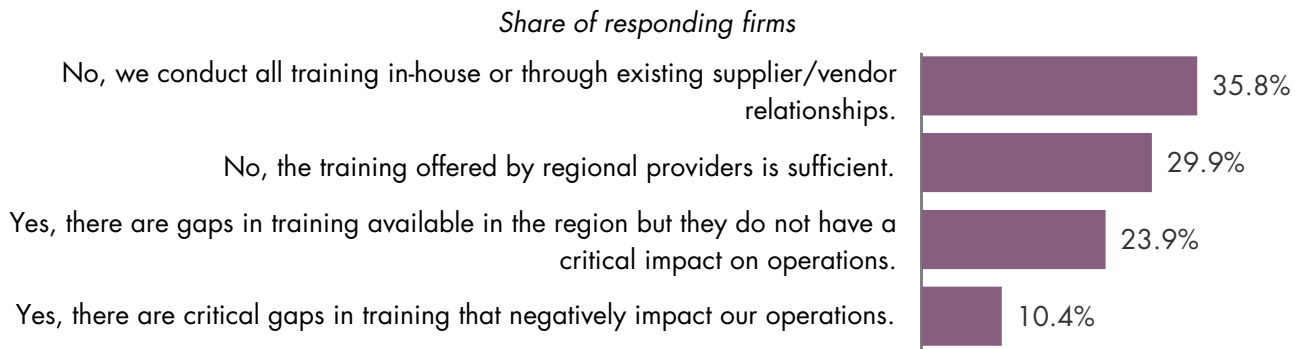
**FIGURE 63. BUSINESS SUCCESS FACTORS: REGIONAL WORKFORCE**

*How would you rate the regional workforce overall on the following characteristics?*



**FIGURE 64. BUSINESS SUCCESS FACTORS: REGIONAL TRAINING PROGRAMS**

*Are Greater Green Bay's existing training programs lacking in any areas that are critical to your training needs?*



**FIGURE 65. BUSINESS SUCCESS FACTORS: IMPORTANCE VS. PERFORMANCE**

Based on your experience, please rate the importance of the following factors to the success of your organization on a scale of 1 to 5.

<b>A</b> Ability to attract & retain quality employees	<b>H</b> Incentive programs (grants, loans, tax abatements) for new or expanding businesses
<b>B</b> Access to customers	<b>I</b> Presence of suppliers & partners
<b>C</b> Cost of labor	<b>J</b> Quality of K-12 schools
<b>D</b> Cost of real estate	<b>K</b> Quality of life offerings
<b>E</b> Cost of taxes	<b>L</b> Quality of local colleges/universities
<b>F</b> Cost of utilities	<b>M</b> Regional transportation infrastructure
<b>G</b> Entrepreneur & small business support system	<b>N</b> Training/education programs to enhance skills of existing workforce

