

BUFFALO NIAGARA 2010 LABOR MARKET ASSESSMENT

WHO'S YOUR ECONOMY?



“
Employers have more opportunities than ever to find the right fit with large pools of applicants in the region.
”



Report prepared for:



Report prepared by



The **Buffalo Niagara Enterprise** acknowledges the **University at Buffalo Regional Institute** for its project leadership and innovative approach to research and report development. We would like to express our gratitude to members of the **Project Advisory Group** for generously contributing their time, perspective and guidance over the course of this effort. Our appreciation is also extended to Lou Jean Fleron of the **Cornell University ILR (Industrial and Labor Relations) School** for her research and community engagement support.

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Project Advisory Group

- Jaison Abel, *Federal Reserve Bank of New York*
- Cesar Cabrera, *New York State Department of Labor*
- Colleen Cummings, *Buffalo Employment Training Center*
- Richard Deitz, *Federal Reserve Bank of New York*
- Thomas Fentner, *HealthNow New York Inc.*
- Matthew Hubacher, *Buffalo Niagara Enterprise*
- Kirsti A. Hunt, *Buffalo Niagara Human Resource Association*
- James Jarvis, *University at Buffalo Human Resources*
- Mark Lazzara, *WNY AmeriCorps*
- Brenda McDuffie, *Buffalo Urban League*
- Ann Mestrovich, *Buffalo Niagara Partnership*
- Sharon Randaccio, *Performance Management Partners, Inc.*
- John Slenker, *New York State Department of Labor*
- Graham Smith, *Buffalo Niagara Enterprise*

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Kathryn A. Foster
UB Regional Institute Director

Laura Quebral Fulton
Project Director, Senior Policy Associate

Sharon Ana Entress
Senior Policy Associate

Brenda A. Stynes
Graphic and Information Designer

Bart J. Roberts
Policy Associate

Rachel M. Teaman
Editor

Table of Contents

Introduction	3
Key Findings	4

IMAGINING THE CEO'S QUESTIONS



WHAT DOES THE REGIONAL ECONOMY LOOK LIKE?	6
WHAT IS THE REGIONAL DEMAND FOR LABOR?	8
WHAT IS THE REGIONAL SUPPLY OF LABOR?	10
WHO IS ENTERING AND EXITING THE WORKFORCE?	12
WHAT ARE WAGES LIKE IN THE REGION?	14
WHAT ABOUT UNIONS IN THE REGION?	16

SPECIAL REPORTS

 TARGET INDUSTRIES OF THE BUFFALO NIAGARA ENTERPRISE	18
 COUNTY COMPARISONS	32

Prospects for the Buffalo Niagara Labor Market	42
Data Sources & Notes	44

INTRODUCTION

If labor markets are defined by the industries and people of a region, then the story of the Buffalo Niagara regional labor market is one of change.

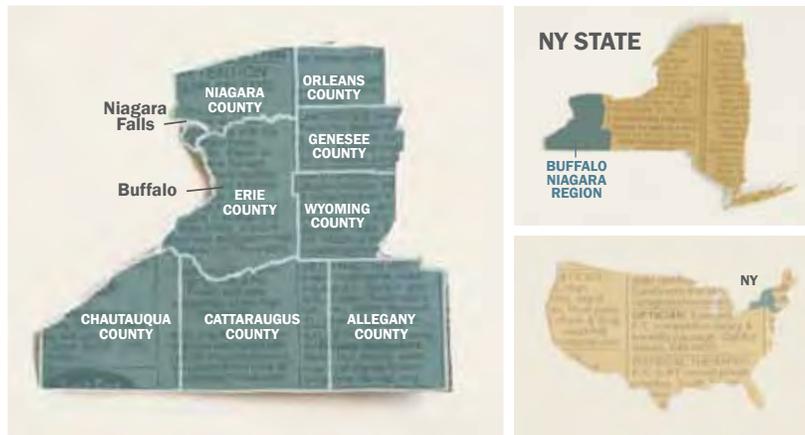
The Buffalo Niagara region, encompassing eight counties along the western edge of New York State, continues to undergo significant economic and demographic transitions. Its industry base is shifting toward diverse, knowledge-driven industries, while the region is increasingly leveraging border location and economic synergies with Canada. The region's population, while shrinking on the whole and older compared to the nation, includes highly educated and mobile workers. Together these forces have important implications for emerging demands for labor, workforce readiness and opportunities for regional economic growth.

In this context, the following report presents a comprehensive, independent assessment of the Buffalo Niagara region's labor market, including historical and forward-looking perspectives. Intended to provide relocating or expanding employers with the most current regional labor market information, *Buffalo Niagara Labor Market Assessment 2010* also guides the region's labor market leaders in advancing and aligning workforce and business development strategies.

The analyses in this report are presented as an imagined interview with prospective employers—a series of questions prompted by employer executives and answered with detailed data, analysis and perspectives. The report covers the core elements of a regional labor market, including economic context, demand for jobs, labor supply, the transition from retirees to new entrants, wage comparisons and unionization levels. Additionally, two special reports are included: 1) **Target Industries** examining seven strategic industries in the region and 2) **County Comparisons** highlighting labor market variations across the region's eight counties.

NOTE: While the region's labor market is shaped in part by workers that cross the Canadian border for jobs, specific data on these factors are not examined in this report.

THE BUFFALO NIAGARA REGION



WHAT WENT INTO THE REPORT

This report culminates a six-month research effort in 2010 enriched by the engagement of regional labor market stakeholders through multiple forums. Information and insights were gathered through diverse methods, including analysis of industrial and workforce data, a comprehensive review of labor market research literature, a survey of about 200 employers across the region, a series of focus groups and interviews with regional labor market stakeholders and consultation with the Project Advisory Group.

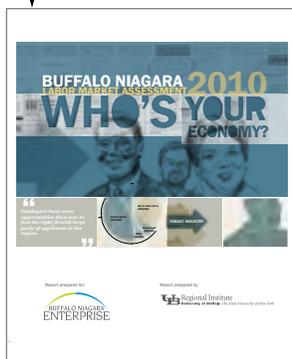
Project Advisory Group

14 regional labor market leaders representing employers, workforce development groups, human resources and organized labor provided insight and guidance on the project's scope and research approach.

Perspectives from the Labor Market Focus Groups



30 employer, workforce development and labor representatives shared diverse perspectives on the region's labor market challenges and opportunities.



Survey of Buffalo Niagara Employers

About 200 employers representing all eight counties and diverse industries participated in an online survey, providing new data on wages, employee benefits, unionization and demand for specific jobs and employee skills.

KEY FINDINGS

The Buffalo Niagara regional economy mirrors the nation as employment continues to expand in knowledge-driven industries. Although a significant component of the region's workforce is heading toward retirement, up-and-coming workers are more educated than ever

before, representing a prime labor source for knowledge-based jobs.

At the same time, this large pool of labor continues to temper wages in higher-paying occupations, providing employers with significant advantages in labor costs. In terms of organized labor, unionization

levels have declined steadily over the past few decades, and current labor relations show a growing sense of collaboration and effective relationships. The region's labor market is also characterized by diversity across myriad geographic and industrial sub-markets.

IMAGINING THE CEO'S QUESTIONS

WHAT DOES THE REGIONAL ECONOMY LOOK LIKE?

- *More than ever before, Buffalo Niagara's economy resembles that of the nation.*
- *Manufacturing no longer drives the economy as professional services and health services have become the greatest job generators in the region.*
- *The region's economic transition has allowed Buffalo Niagara to fare better than most during the recent economic downturn.*

WHAT IS THE REGIONAL DEMAND FOR LABOR?

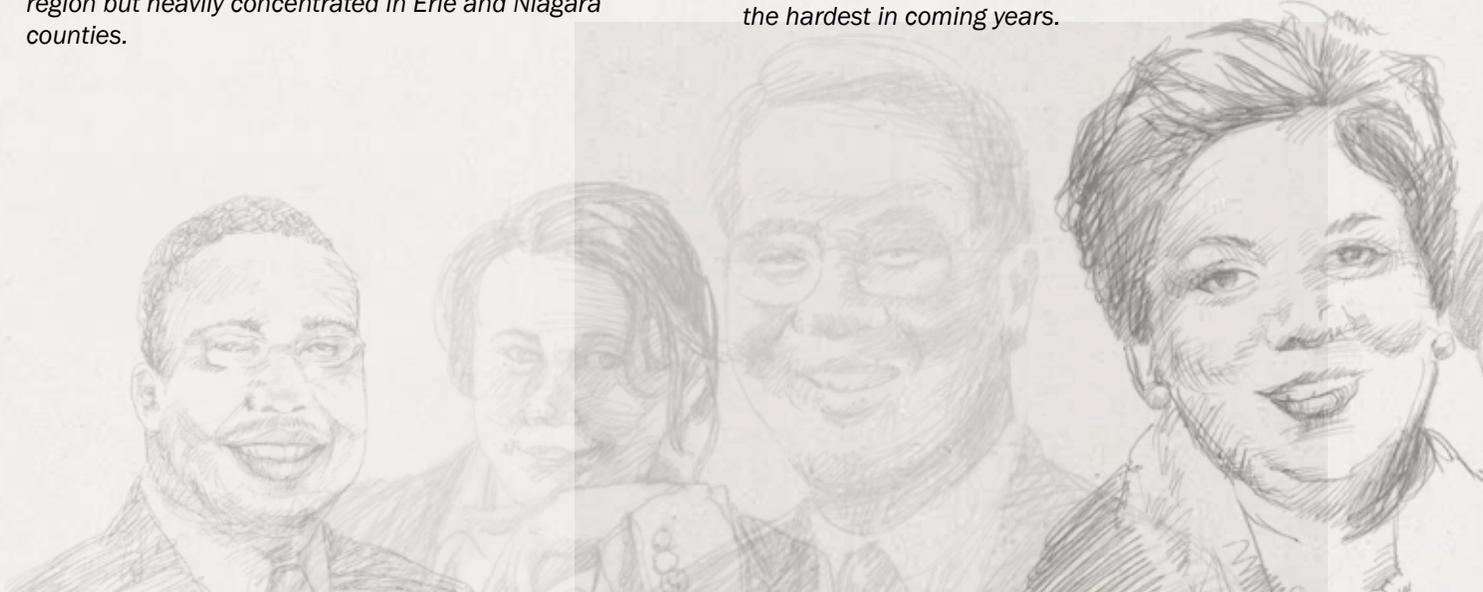
- *90% of net job growth since 2001 has been in five select service industries: health services, education, financial activities, professional & business services and leisure & hospitality.*
- *The majority of jobs are generated by larger employers.*
- *Jobs are dispersed across all eight counties of the region but heavily concentrated in Erie and Niagara counties.*

WHAT IS THE REGIONAL SUPPLY OF LABOR?

- *The labor force in the Buffalo Niagara region includes 793,000 workers.*
- *One out of every four workers lives outside Erie and Niagara counties.*
- *Younger workers are more educated than their peers around the country, but are slightly underrepresented in the regional workforce.*

WHO IS ENTERING AND EXITING THE WORKFORCE?

- *Each year, regional education institutions produce 30,000+ labor market entrants intent on launching a career in the region or elsewhere. This potential pool of workers helps offset the 10,000 workers who retire annually.*
- *A large majority of potential new workers are college-educated. For those absorbed into the regional labor market, most are taking jobs in health services, professional & business services, retail and hospitality.*
- *While retirees are leaving the health and education sectors in large numbers, the manufacturing industry could be hit the hardest in coming years.*



SPECIAL REPORTS

WHAT ARE WAGES LIKE IN THE REGION?

- The average wage across all occupations in the region is 3% lower than the average wage across the nation.
- Wages in the region for higher-paying job categories such as business & financial operations, computer & mathematics and the sciences are 10%-15% lower than comparable national wages.
- Buffalo Niagara wages are higher than national averages, though only by a slight margin, in fields such as production, transportation and construction.

WHAT ABOUT UNIONS IN THE REGION?

- While still above national levels, unionization is declining in the Buffalo Niagara region.
- More than half of the region's unionized workers are employed in the public sector. Only 17% of private sector workers are union members.
- Work stoppages of unionized workers have steadily declined and have been lower than national levels.



TARGET INDUSTRIES OF THE BUFFALO NIAGARA ENTERPRISE

In-depth look at seven high-growth industries defining the region's transitioning labor market: tourism, advanced manufacturing, green, back office, logistics, life sciences and agribusiness



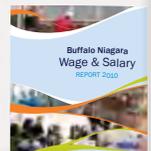
COUNTY COMPARISONS

Assessment of labor market patterns across the eight geographically and economically diverse counties of Buffalo Niagara

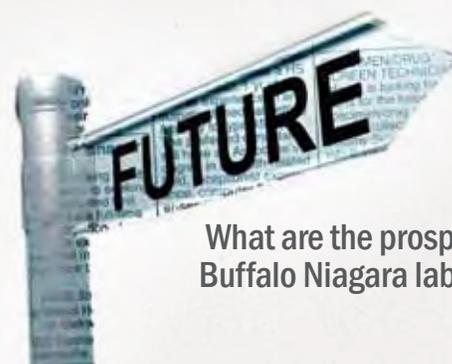
Available separately for purchase from the Buffalo Niagara Enterprise.

Comprehensive data on wages and benefits by job and industry in Buffalo Niagara, with national and regional comparisons

Wage & Salary Report



PROSPECTS



What are the prospects for the Buffalo Niagara labor market?

WHAT DOES THE REGIONAL ECONOMY LOOK LIKE?



While Buffalo Niagara may invoke visions of smokestacks and assembly lines, in reality clock towers and medical laboratories are much better descriptors for the region's economy today. Manufacturing remains important, but professional services and health services are driving forces of the new economy, comprising one in four of all jobs in the region.

At first glance, the Buffalo Niagara region looks like many older industrial regions. With its slow yet steady population loss, aging workforce and slightly higher concentration of jobs in manufacturing, it is easy to understand why the region often gets painted with the broad brush of the Rust Belt. Yet, a closer look at its market of jobs and workers suggests Buffalo Niagara's economy is not all that different from the nation as a whole. The region's increasingly diverse economy has shown to be a stabilizing force relative to unexpected downturns in the national and global economy.

The region's economic stability has been particularly noticeable during the recent economic recession. In 2009, the Buffalo-Niagara Falls metropolitan area (where unemployment was actually higher than the region as a whole) experienced job loss much less severe than most places in the country. Unemployment has remained about one percentage point lower than that of the nation and signs of recovery appear to be arriving earlier than elsewhere. In fact, the region was one of only two large metropolitan areas in the country to see unemployment decline between March 2009 and March 2010.

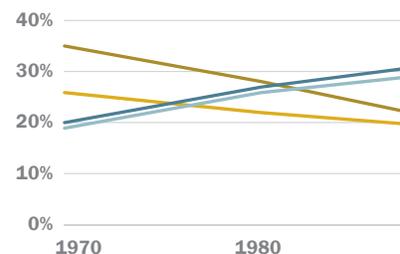
Buffalo Niagara Labor Market by the Numbers

Buffalo Niagara Population	1.53 million
Number of Firms	37,400+
Number of Jobs	660,000+
Number of People in the Labor Force, 2009	793,000
Gross Metropolitan Product, Erie & Niagara Counties, 2008	\$44 billion

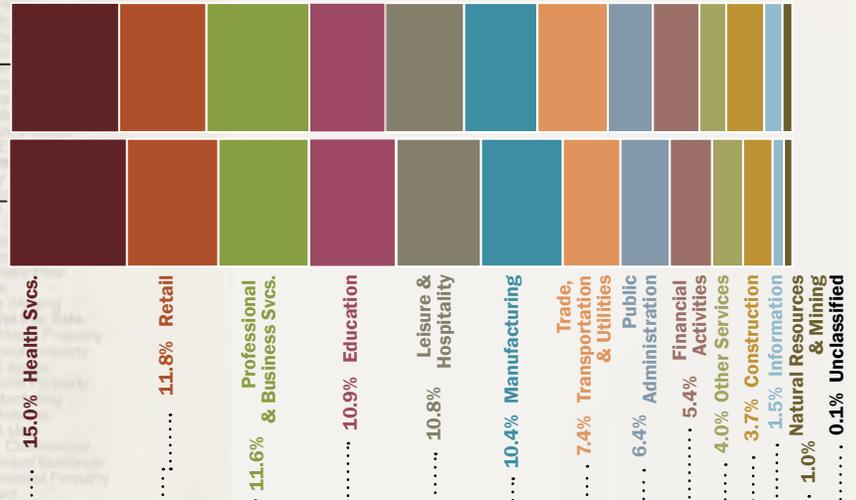
Source: See Data Sources & Notes

Declining manufacturing jobs in Buffalo Niagara have been replaced by job growth in financial, health, education and professional services.

% Total Employment in Manufacturing Buffalo Niagara and U.S., 1970 to 2009



Industry Composition, by % Total Employment, 2009



U.S.

More than ever before, Buffalo Niagara's economy mirrors that of the nation.

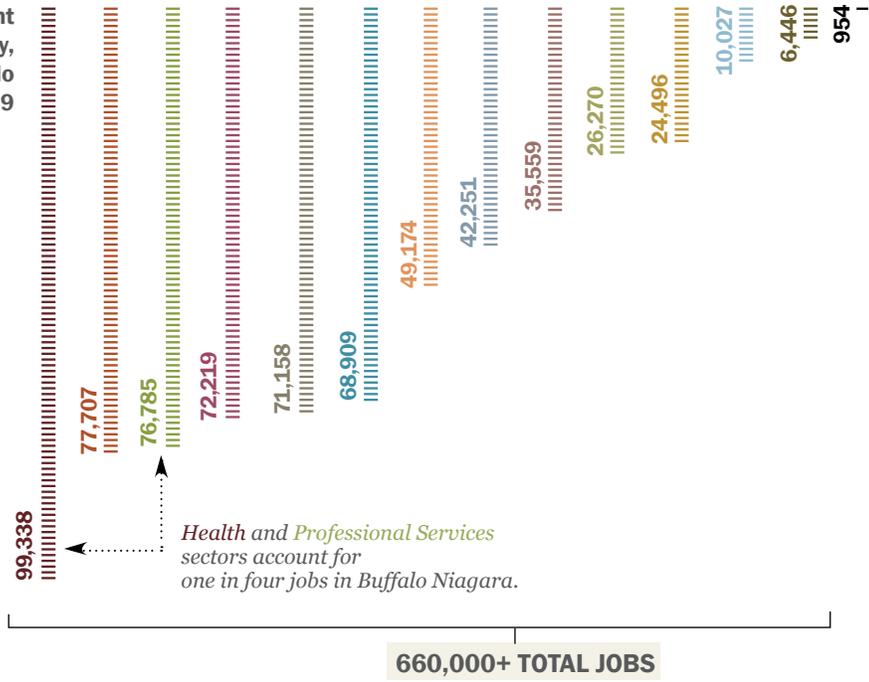


BUFFALO NIAGARA

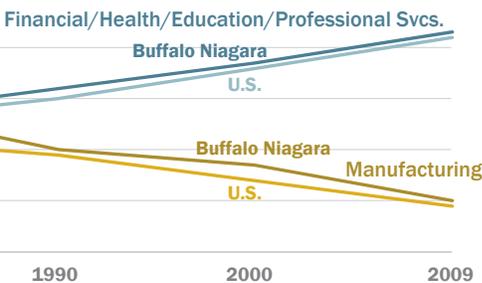
Source: Quarterly Census of Employment and Wages, 2009

These indicators may not have been true 30, 20 or even 10 years ago, when manufacturing was the primary driver of the regional economy. In 1970, manufacturing supplied one in three jobs compared to one in four nationally. Since then, manufacturing in the region has dipped sharply, today representing one in 10 jobs, a level comparable to that of the nation. Conversely, knowledge-based jobs have been on a steady ascent both regionally and nationally. Today, the sectors of health services and professional & business services drive the Buffalo Niagara economy, providing one in four jobs. Other growing fields diversifying the economy, including education, are often less susceptible to economic cycles. The Buffalo Niagara economy thus remains relatively stable and less subject to the "boom and bust" cycle seen in less diversified regions.

Employment by Industry, Buffalo Niagara 2009



and Financial/Health/Education/Professional Services,



Source: Quarterly Census of Employment and Wages, 2009; U.S. Census Bureau 1970, 1980, 1990 & 2000.

“We have a large pool of qualified individuals who are educated, well trained, skilled and have a strong work ethic.”
-from the Labor Market Focus Groups

WHAT IS THE REGIONAL DEMAND FOR LABOR?



Characterizing demand for labor in Buffalo Niagara, reflected by the region's 660,000+ jobs and 37,400+ firms, are three key factors: growth in the professional and hospitality-based service sectors, a relatively small number of large firms and various geographic centers of job concentration, particularly northern Erie and southern Niagara counties.

To produce goods and services that keep businesses alive, firms demand labor. The demand for labor among businesses in Buffalo Niagara translated into 660,000+ jobs across the region in 2009.

Net job gains over the past decade have been overwhelmingly generated by five industries—health services, professional & business services, leisure & hospitality, education and financial activities. These industries generated 90 percent of the net 28,300 private sector job gains between 2001 and

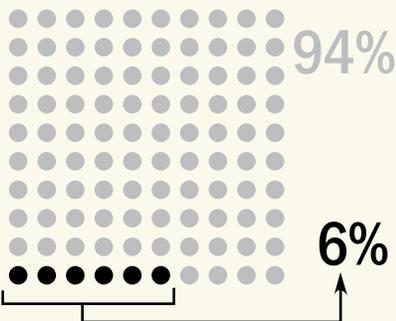
2008, offsetting the 24,000 manufacturing jobs lost during the same time period. Numerous forces have contributed to this shift - from the relocation of manufacturing jobs outside the U.S. to an aging population that has greater demand for health care than cars - and will continue to push up labor demand in these fields in the coming years.

On average, the region's 37,400+ firms employ 17 workers. An overwhelming majority of firms (94 percent) are small, with fewer than 50 employees,

BUFFALO NIAGARA FIRMS

% OF FIRMS BY EMPLOYEE COUNT

● SMALL FIRMS (1-49 EMPLOYEES) ● LARGE FIRMS (50 OR MORE EMPLOYEES)

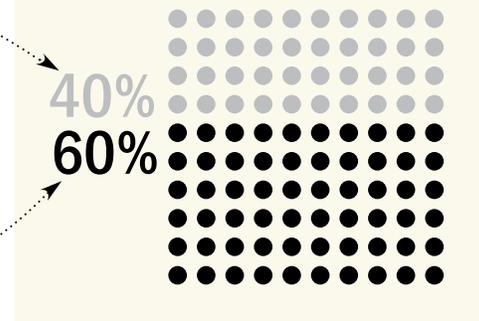


While small employers account for more than nine out of 10 firms in Buffalo Niagara, 60% of jobs are supplied by the region's large firms.

BUFFALO NIAGARA JOBS

% OF JOBS BY SIZE OF FIRM

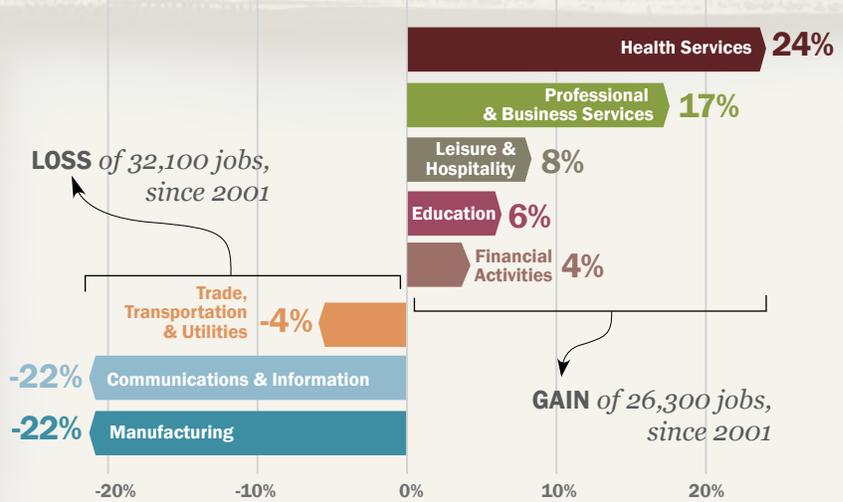
● SMALL FIRMS (1-49 EMPLOYEES) ● LARGE FIRMS (50 OR MORE EMPLOYEES)



Source: Quarterly Census of Employment and Wages, 2009

In recent years, five service-based industries have defined demand for labor in Buffalo Niagara, generating 9 out of 10 net job gains since 2001.

Private Sector Employment Change by Industry, 2001 to 2008



Source: Quarterly Census of Employment and Wages, 2001 and 2008

suggesting a vibrant regional economy for small businesses. Yet the region's large firms account for much of the region's labor demand, with just six percent of all regional firms employing 60 percent of the region's workforce.

From a geographic standpoint, jobs and firms are most heavily concentrated in the Buffalo-Niagara Falls metropolitan area. Defined as Erie and Niagara counties, this area accounts for 78 percent of private-sector jobs. This is true even more so for

companies in professional, business and financial services, where geographic proximity to other companies and individuals appears to offer business efficiencies. Small firms are more geographically dispersed, with at least one in four located outside the region's metropolitan core.

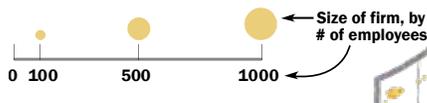
Where are the jobs in the Buffalo Niagara region?

Location of Private-Sector Employers in Buffalo Niagara, by Number of Workers Employed at Firm, 2008

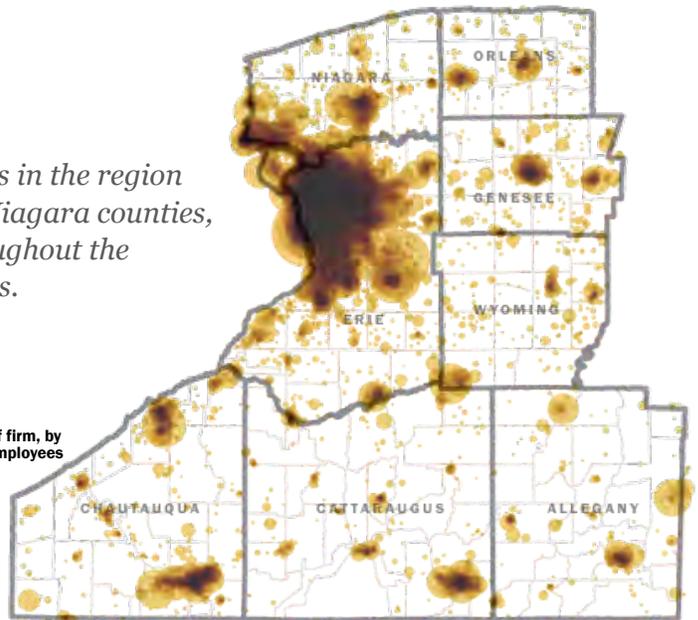
78% of private sector jobs in the region are located in Erie and Niagara counties, with the remainder throughout the region's six rural counties.

Private-sector employers...

...by size of firm



...and by degree of concentration



Source: U.S. Census Bureau, Local Employment Dynamics, On the Map, 2008

“There are plenty of training opportunities in the network; we just hope job opportunities can increase to match the supply.”

-from the Labor Market Focus Groups

WHAT IS THE REGIONAL SUPPLY OF LABOR?



The region's labor force of 793,000 in 2009, which includes those searching for work, has grown steadily since 2001. Attrition of the region's workforce is expected as older workers approach retirement, though this will

be balanced by an influx of more highly educated young workers. Similar to the distribution of jobs, the region's workforce is heavily concentrated in the region's metropolitan core.

“Employers have more opportunities than ever to find the right fit with large pools of applicants in the region.”

-from the Labor Market Focus Groups

The region's workforce is proportionally older relative to the U.S. and selected metro areas.

% Workforce Ages 55 and Up, Selected Metropolitan Areas, 2008

METRO	% LABOR FORCE Age 55+
Pittsburgh	19.8%
Cleveland	19.0%
Providence	17.8%
Buffalo-Niagara Falls	17.6%
Albuquerque	17.0%
U.S.	16.9%
Omaha	16.8%
Detroit	16.4%
Charlotte	15.9%

% Workforce Between the Ages of 25 and 34, Selected Metropolitan Areas, 2008

METRO	% LABOR FORCE Age 25-34
Charlotte	22.6%
Albuquerque	22.4%
Omaha	21.9%
U.S.	21.4%
Providence	19.8%
Detroit	19.7%
Buffalo-Niagara Falls	18.9%
Cleveland	18.5%
Pittsburgh	17.5%

workforce, with fewer young workers (age 25-34) and more older workers (age 55+) than the nation as a whole. As a result, retirement expectancy in the region over the next twenty years will exceed the national estimate.

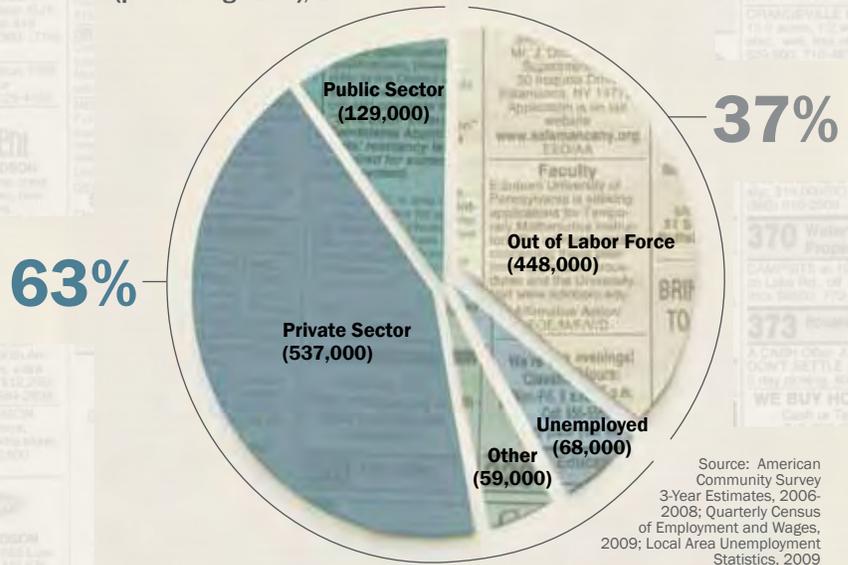
The educational level of younger and older workers in the region differs greatly, which is likely to have significant impacts on workforce readiness in the region in the coming years.

Buffalo Niagara's young workers are more likely to hold a college degree than are its older workers. Relative to national averages, the region has more college-educated youth, but fewer older persons with a college degree.

Source: American Community Survey 3-Year Estimates, 2006-2008

Buffalo Niagara labor supply is comprised of 1.2 million persons age 16+. About two-thirds are employed or seeking employment, constituting a workforce of nearly 800,000.

Distribution of Labor Supply in Buffalo Niagara (persons age 16+), 2009



Source: American Community Survey 3-Year Estimates, 2006-2008; Quarterly Census of Employment and Wages, 2009; Local Area Unemployment Statistics, 2009

Nationally, educational levels are similar among 25-34 year olds and 45-64 year olds. In Buffalo Niagara, however, young adults are more likely to hold a college degree than are their older counterparts, most likely due to the region's industrial past.

On the whole, patterns in the location of the region's labor force mirror the concentration of jobs in the region, with the majority residing in Erie and Niagara counties. Yet

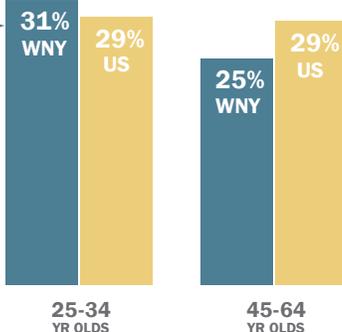
one in four workers lives in one of the region's six rural counties, suggesting a mobile workforce (see the "County Comparisons" special report for more information on commuting patterns in the region). Also, about one in 10 workers in the region hails from as far east as Rochester and Pennsylvania from the south.

Where Do Buffalo Niagara's Workers Live?

While the majority of workers live in Erie and Niagara counties, one out of four reside in the region's six rural counties, and about one in 10 come from outside the region altogether.

% Population by Age with a Bachelor's Degree or Higher, Buffalo Niagara and U.S., 2008

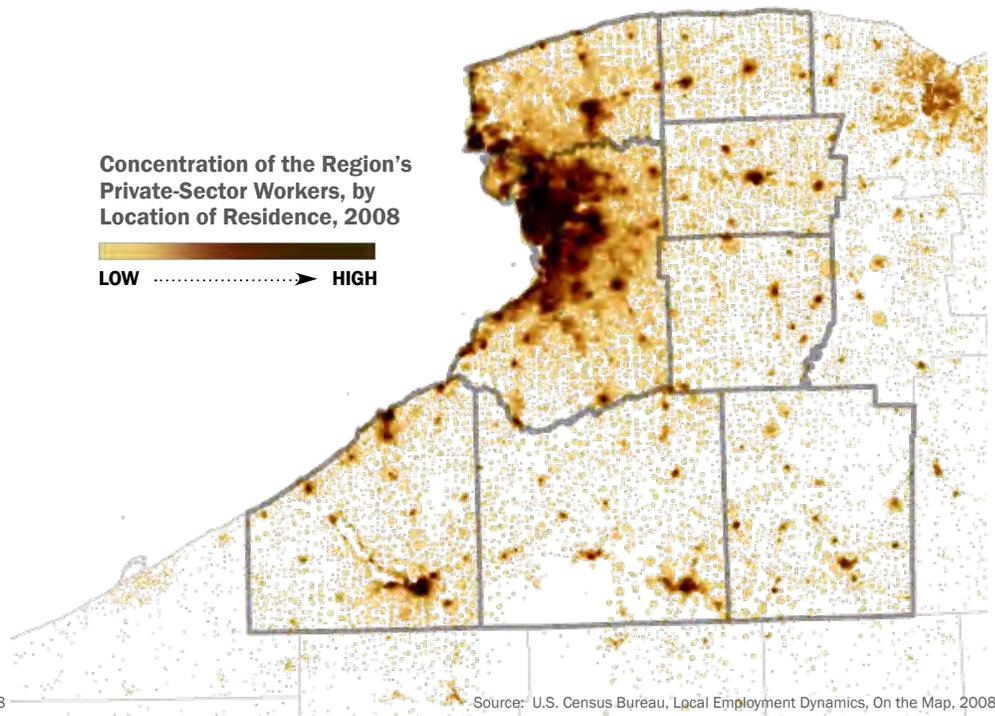
2% MORE 25-34 YR OLDS IN BUFFALO NIAGARA HAVE A COLLEGE DEGREE



Source: American Community Survey 3-Year Estimates, 2006-2008

Concentration of the Region's Private-Sector Workers, by Location of Residence, 2008

LOW HIGH



Source: U.S. Census Bureau, Local Employment Dynamics, On the Map, 2008

WHO IS ENTERING AND EXITING THE WORKFORCE?



Over 10,000 retirees a year will leave the region's labor force over the next decade, though the region's colleges pump out 26,000 new graduates annually. These college graduates will be primed to fill vacancies in industries such as professional & business services and leisure & hospitality. However, industries in which older workers are the majority - manufacturing and trade, transportation & utilities - may have a harder time filling vacancies.

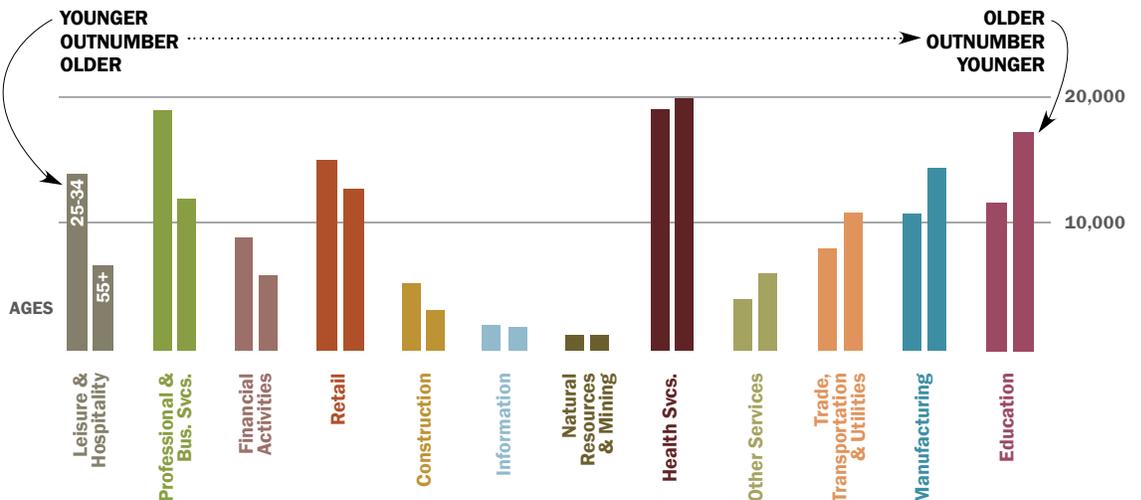
Between now and 2020, over 100,000 workers will reach retirement age, translating to 10,000 retirees a year, or about 15 percent of the total workforce. To compensate for the retirees exiting the workforce, new labor force entrants will be needed.

While workers and graduates relocating from other regions will generate some of these replacements, the most readily available source of new

entrants, and potential retiree replacements, is the 30,000 young persons in the region seeking to launch a career each year. These include 26,000 graduates from area colleges and the 4,500 area high school students who bypass college.

Yet the region's capacity to capture these new labor entrants will be influenced by a myriad of factors, including the quality and quantity of career opportunities the region has to offer, its ability

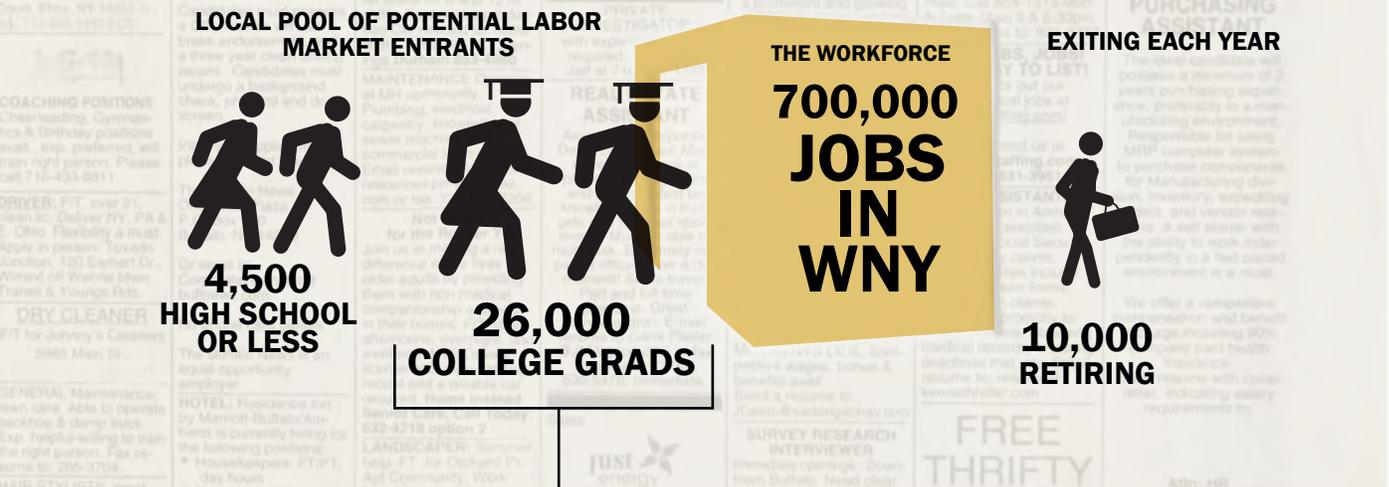
Number of Jobs by Industry and Age of Worker, Buffalo Niagara, 2009



Foreshadowing a potential mismatch in labor supply and demand, younger workers have tended toward jobs in the health, business and leisure fields, while workers approaching retirement age dominate industries such as manufacturing.

Source: U.S. Census Bureau: Local Employment Dynamics, Quarterly Workforce Indicators, 2008

For every person retiring in Buffalo Niagara over the next 10 years, there could be as many as three persons entering the region's labor force.



Source: New York State Education Department School Report Card Database, 2008; National Center for Education Statistics Integrated Postsecondary Education Data System, 2007-08; and American Community Survey 3-Year Estimates, 2006-2008

to retain this pool of workers in the face of competition from other regions and the match between graduates' educational focus and skills, to what is required by regional job openings.

A closer look at the jobs that retirees are vacating and those to which young workers are gravitating suggests the region will be hard-pressed to retain many of the region's graduates.

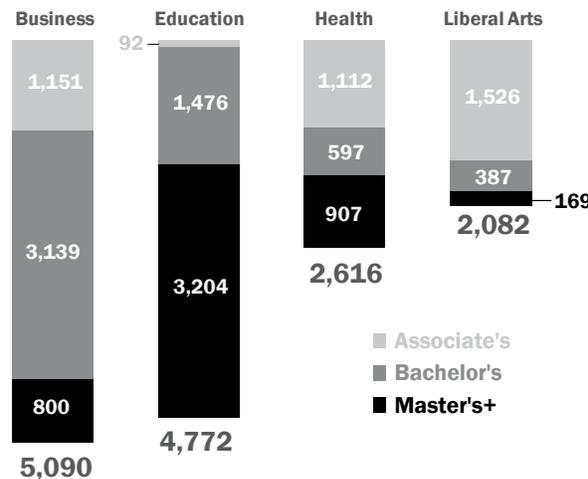
For instance, industries with large shares of older workers, including manufacturing and trade, transportation & utilities, are expected to shed about one-fifth of their workforce in coming years. As young workers tend toward other fields, particularly those allowing them to apply a college degree, manufacturers and other companies in search of skilled labor in the trades could potentially face shortages. Although education has the largest proportion of older workers and health services is the field where retirements are looming in the largest numbers, these fields tend to be more

attractive to younger workers, as evidenced by the thousands of college graduates that emerge each year with degrees in these fields.

Some might already be feeling the pinch in worker supply, according to a survey of Buffalo Niagara employers conducted for this report. About one in five hard-to-fill jobs reported by employers

is in the skilled trades, including machinists, sheet metal workers and molding technicians. More than one in 10 hard-to-fill jobs is for management-level positions, suggesting gaps in a pipeline that become apparent when young, entry-level workers cannot replace those with years of experience and knowledge.

College Degrees Granted by Buffalo Niagara's 22 Higher Education Institutions, Top Four Fields of Study, by Degree Type, 2007-08



Source: National Center for Education Statistics Integrated Postsecondary Education Data System, 2007-08

Over half of all college degrees granted by Buffalo Niagara's colleges and universities are in four fields of study.

“People seeking employment ask for traditional titles because they are not always aware of all the new opportunities out there.”

-from the Labor Market Focus Groups

WHAT ARE WAGES LIKE IN THE REGION?



Overall, the Buffalo Niagara region offers competitive wages relative to the national average. This trend is most pronounced within higher-paying occupational categories, including those representing the region's emerging knowledge economy. There is less wage variation, and some higher regional wages, in lower-wage occupations such as production, transportation and construction, industries representing the region's declining manufacturing-based economy.

Wages represent a significant portion of a company's operating expenses and are thus an important consideration for prospective employers seeking to relocate or expand. A comparison of wages in Buffalo Niagara against the national average can help companies more accurately assess the region's competitiveness in terms of labor costs.

than employers across the nation, or \$39,847 compared to \$41,275.

Wage variation can reflect a number of factors, including the mix of high- and low-paying jobs, skill distinctions, union status, industry differences, cost-of-living variance and the match between workforce supply and demand. An ideal wage comparison would control for multiple factors to reveal the degree to which relatively low wages reflect an "employer's

On average, employers in the Buffalo Niagara can expect to pay 3 percent less in wages

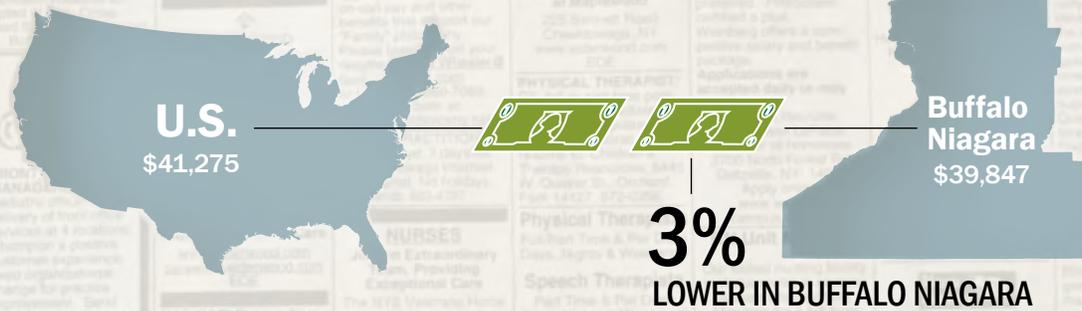
The Average Wage in Buffalo Niagara and its Comparison to the Adjusted U.S. Average Wage

% Buffalo Niagara wages are...



The average wage in Buffalo Niagara is 3% lower than it is across the nation.

Average Wage in Buffalo Niagara and the Adjusted U.S. Wage Across All Occupations, 2009



For purposes of comparison, the national average wage has been adjusted to reflect only those occupations and the occupational mix that exist in the Buffalo Niagara region.

Source: Occupational Employment Statistics from the NYS Dept. of Labor and U.S. Bureau of Labor Statistics, 2008-09

market,” where the supply of qualified candidates greatly exceeds job openings. For this analysis, wages have been adjusted for only some factors, including the wider range of occupations and greater concentration of higher paying jobs nationally relative to Buffalo Niagara.

The region’s wages fall most significantly below national averages for higher-paying occupations, typically within knowledge-based industries. For instance, regional wages

for business & financial operations and computer & mathematics jobs are 10% to 15% below the national average. Contributing to this may be the plentiful supply of college graduates in the region, all eager for a job in these fields. Moreover, these workers tend to be young and less experienced, thus commanding lower wages.

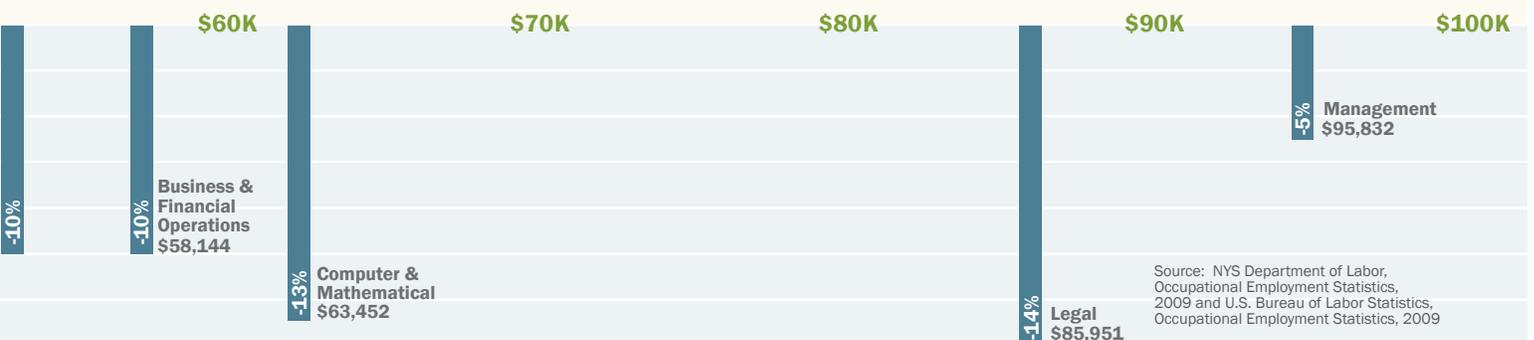
Less wage variation is observed in occupational categories paying around or less than the region’s

\$40,000 average wage. On the higher end, wages are approximately 2% to 5% above the national average for goods-producing and related jobs in production, construction and transportation. Such a trend may be driven by the older, more experienced workers that tend to hold these jobs. Moreover, the region still has a slightly higher proportion of jobs in the higher-paying auto manufacturing industry.

*For a full listing of wages by occupation, **Buffalo Niagara Wage and Salary Report 2010** is available for purchase from the Buffalo Niagara Enterprise.*

Management	Salary	Range	Employment
01-1000 Chief Executives	\$93,000	\$42,137 - \$151,987	X
01-1010 General & Operations Managers	\$52,000	\$21,000 - \$120,000	X
01-1020 Marketing & Promotion Managers	\$35,000	\$20,000 - \$60,000	X
01-1030 Sales Managers	\$35,000	\$20,000 - \$60,000	X
01-1040 Purchasing & Procurement Managers	\$35,000	\$20,000 - \$60,000	X
01-1050 Human Resources Managers	\$35,000	\$20,000 - \$60,000	X
01-1060 Training & Development Managers	\$35,000	\$20,000 - \$60,000	X
01-1070 Information Systems Managers	\$35,000	\$20,000 - \$60,000	X
01-1080 Financial Managers	\$35,000	\$20,000 - \$60,000	X
01-1090 Operations & Production Managers	\$35,000	\$20,000 - \$60,000	X
01-1100 Transportation, Storage & Distribution Managers	\$35,000	\$20,000 - \$60,000	X
01-1110 Construction Managers	\$35,000	\$20,000 - \$60,000	X
01-1120 Manufacturing Managers	\$35,000	\$20,000 - \$60,000	X
01-1130 Chemical Process Managers	\$35,000	\$20,000 - \$60,000	X
01-1140 Food Processing Managers	\$35,000	\$20,000 - \$60,000	X
01-1150 Textile, Apparel & Leather Goods Managers	\$35,000	\$20,000 - \$60,000	X
01-1160 Wood Product Managers	\$35,000	\$20,000 - \$60,000	X
01-1170 Paper Product Managers	\$35,000	\$20,000 - \$60,000	X
01-1180 Printing Managers	\$35,000	\$20,000 - \$60,000	X
01-1190 Miscellaneous Management Occupations	\$35,000	\$20,000 - \$60,000	X

C A T E G O R I E S



Source: NYS Department of Labor, Occupational Employment Statistics, 2009 and U.S. Bureau of Labor Statistics, Occupational Employment Statistics, 2009

WHAT ABOUT UNIONS IN THE REGION?



As of 2009, there were 189,000 unionized jobs in Buffalo Niagara, over half of which were in the public sector. In the private sector, where the bulk of jobs exist, union membership has been falling for nearly two decades. Like the nation, this decline has been driven by decreases in both union jobs and union representation in manufacturing, communication, utilities and transportation.

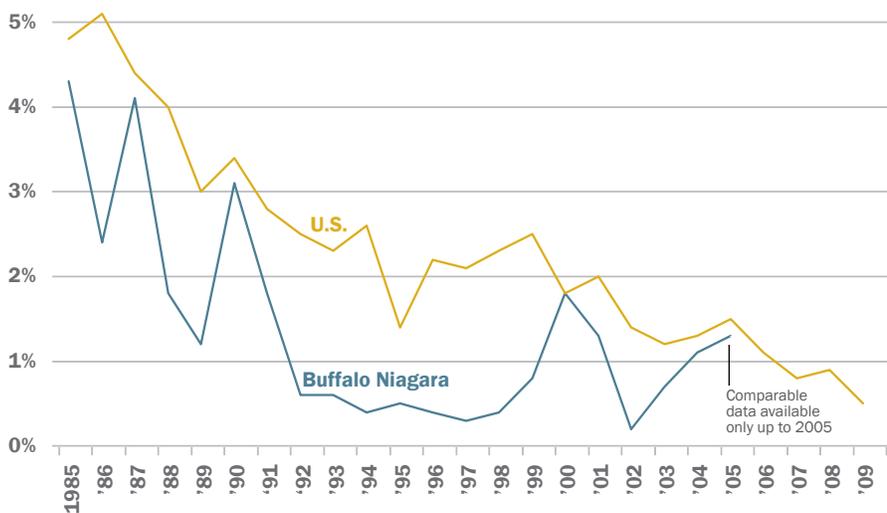
Unionization continues to decline in Buffalo Niagara, though levels are still above the national average. The share of unionized private-sector workers in the Buffalo-Niagara Falls metropolitan area (Erie and Niagara counties) fell by one-third between 1986 and 2009. In just the past decade, the rate dropped from 20 percent to 17 percent.

Organized labor is most common in the region's public sector, where 78 percent of

employees are unionized. Fewer than 20 percent of jobs in the private sector – which accounts for about 80 percent of the region's total employment – are unionized.

Contrary to common perceptions, unionization rates in the U.S. and the region are higher among skilled workers and in the professions. For instance, unions in Buffalo Niagara are more likely to represent nurses, security professionals, maintenance and repair technicians, teachers and social workers than the unskilled blue collar workers often associated with the economy of the industrial heartland.

Work Stoppages as a Percentage of Contracts Negotiated in Private Sector, 1985–2009

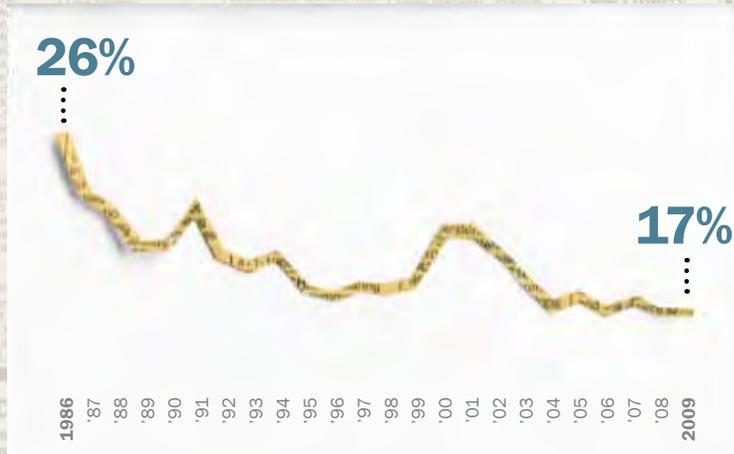


“
The perception is that we still have high union rates, but it doesn't get mentioned that is mostly government employees.
 ”

-from the Labor Market Focus Groups

Union membership among private-sector workers in the Buffalo-Niagara Falls metropolitan area has declined 9 percentage points over the past few decades.

% Union Membership Among Private Sector Workers in the Buffalo Niagara Falls Metropolitan Area, 1986-2009



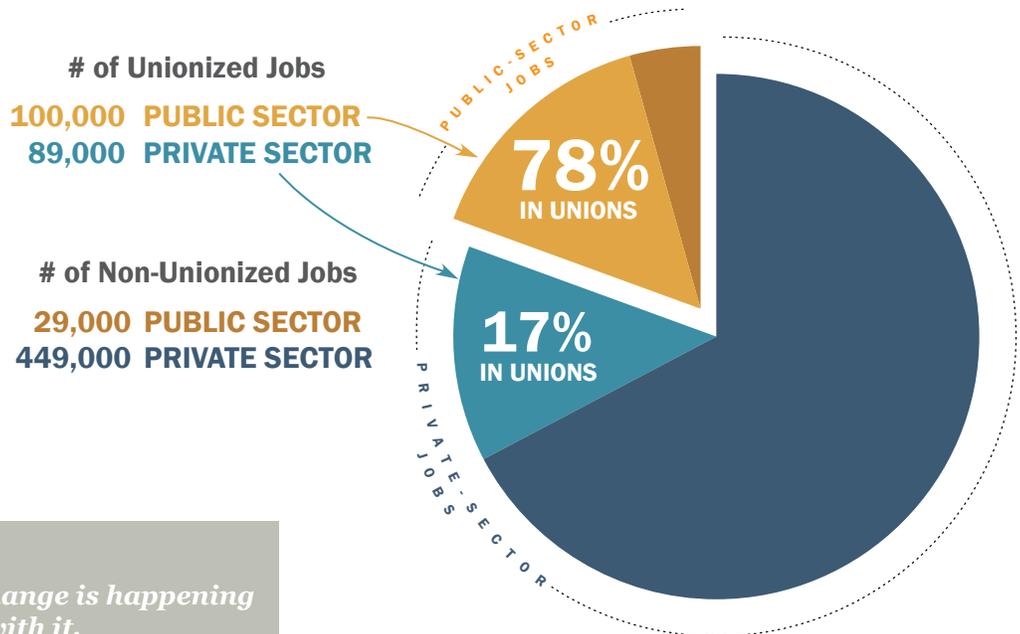
Source: Unionstats.com, Union membership and coverage database from the CPS, 1986-2009

The region's record of labor relations can be tracked over time by a rate of strikes and lockouts that is significantly lower than the national average. The trend since 1985 shows Western New York's work stoppages as a percentage of contracts negotiated were lower than the falling national rate. (Work stoppage data through 2005 cover the eight counties of Western New York, supplied by the Buffalo Field Office of Federal Mediation and Conciliation Service. Due to changes in FMCS reporting practices, those regional data are not available after 2005.)

Historically, the region's unions have played a vital role in workforce development through apprenticeship programs, technical retraining and new education initiatives. Employer-union cooperation and regional partnerships characterize many diverse educational programs that assure qualified workers for the jobs of tomorrow.

At 78%, the region's public-sector jobs are highly unionized; in contrast, only 17% of private-sector jobs are unionized.

Estimated Unionized Jobs among the Public and Private Sector in the Buffalo Niagara Region, 2009



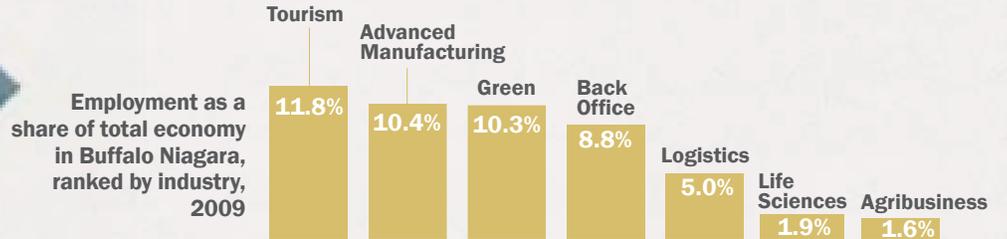
Source: Quarterly Census of Employment and Wages, 2009 and Unionstats.com, Union Membership and Coverage Database from the CPS, 2009

There is a realization that change is happening and unions have to change with it.

-from the Labor Market Focus Groups

TARGET INDUSTRIES OF THE BUFFALO NIAGARA ENTERPRISE

To capitalize on regional strengths, the Buffalo Niagara Enterprise has identified **seven target industries** for focused strategies and investment. This section provides some detail about the regional labor market for each of these industries.

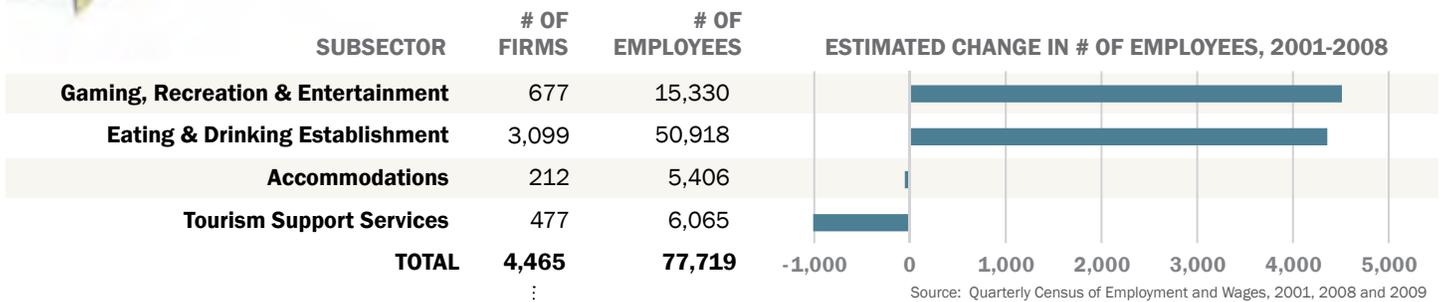


Source: Quarterly Census of Employment and Wages, 2009

Tourism



The tourism industry encompasses a broad range of services related to attracting and accommodating visitors to the region. Given this diversity, jobs in tourism can be found in various industries such as restaurants, bars, hotels, museums and travel agencies, to name a few. Niagara Falls is the region's most recognized attraction and draws more than 14 million tourists each year. Yet, other assets that attract visitors include numerous historical, cultural and architectural attractions, wineries, four seasons of outdoor recreation, professional sporting events and casino resorts. Responding to the importance this industry has on the regional economy, a number of schools have created specialties in hospitality and tourism administration.



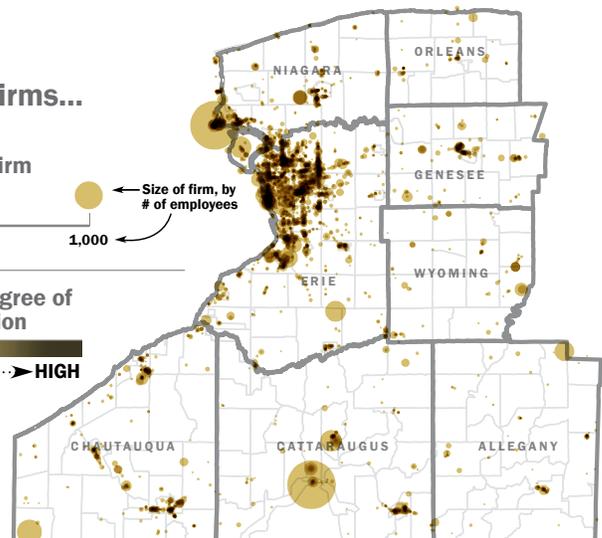
Gaming, recreation and entertainment attractions have significantly grown in job number over past years, as have the eating and drinking establishments that nourish both tourists and residents alike. Meanwhile, tourism support services have declined, reflecting changes in the way travel arrangements are made in this online, self-service age.

Tourism firms...

...by size of firm



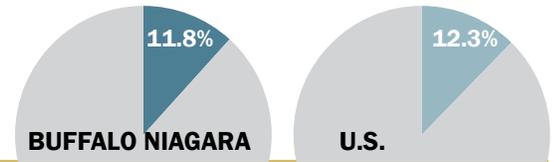
...and by degree of concentration



Source: Reference USA, 2010

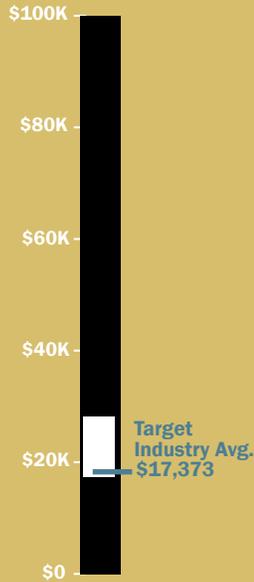
Although Niagara Falls and Buffalo house the bulk of tourism jobs, this field has a **significant presence in all eight counties of Buffalo Niagara.**

Industry employment as a share of total economy in...



The Top 10 Occupations in Tourism

Wage Range for Top 10 Target Jobs



Waiters & Waitresses	Take orders and serve food and beverages
Combined Food Preparation & Serving Workers	Perform duties that combine both food preparation and food service
Cooks, Restaurant	Prepare, season and cook soups, meats, vegetables, desserts or other foodstuffs in restaurants
Supervisors of Food Preparation & Serving Workers	Supervise workers engaged in preparing and serving food
Cooks, Fast Food	Prepare and cook food in a fast food restaurant with a limited menu
Food Preparation Workers	Perform a variety of food preparation duties
Maids & Housekeeping Cleaners	Perform any combination of light cleaning duties
Dishwashers	Clean dishes, kitchen, food preparation equipment or utensils
Cashiers	Receive and disburse money
Bartenders	Mix and serve drinks

Top 10 Occupations reflect those that exist in the greatest numbers across the nation within the target industry.
Source: U.S. Bureau of Labor, Occupational employment by industry, 2005-2007 and occupational descriptions from the O*NET 14.0 Database

Buffalo Niagara Workforce Preparedness for Tourism

A large supply of workers with the skills often required for tourism jobs

	# Buffalo Niagara workforce having skill at higher than average level
Reading Comprehension	317,000
Active Listening	303,000
Coordination	213,000
Speaking	203,000
Writing	181,000
Instructing	175,000
Social Perceptiveness	170,000
Service Orientation	136,000
Complex Problem Solving	103,000
Mgmt. of Material Resources	18,000

Each year, 6,800+ regional graduates earn tourism-related degrees

	Associate's	Bachelor's	Master's	Doctoral/Professional	TOTAL '07-'08
Business	1,151	3,139	787	13	5,090
Visual and Performing Arts	161	713	74	7	955
English Language & Literature	5	457	46	18	526
Parks, Recreation and Leisure	14	97	62	0	173
Culinary Services	61	0	0	0	61

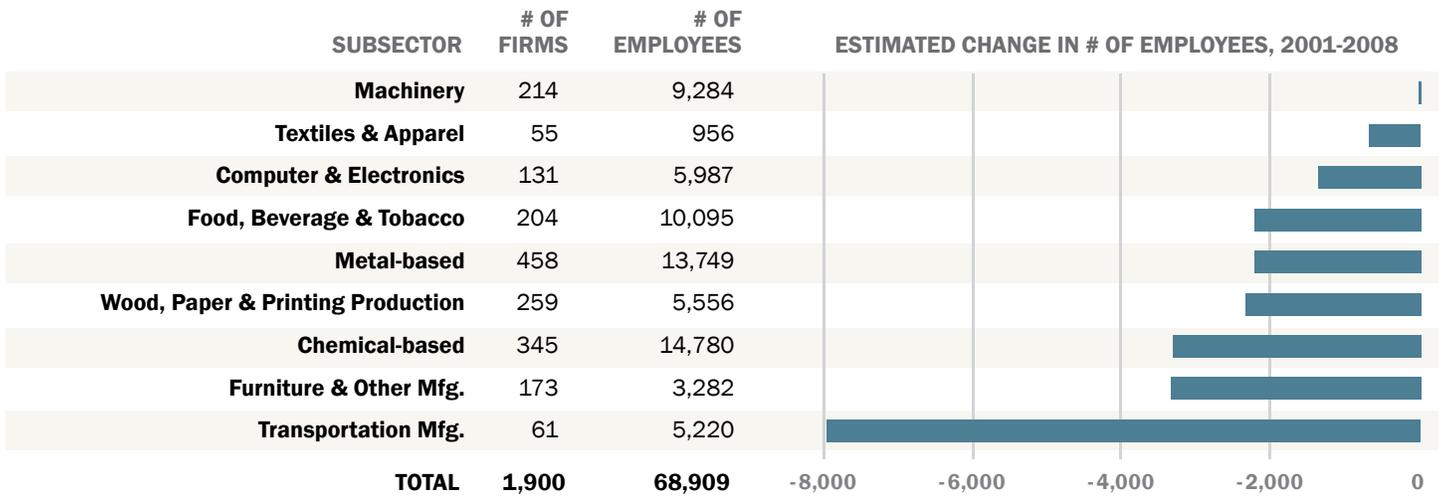
Source: Skills by occupation from the O*Net 14.0 Database

Source: National Center for Education Statistics Integrated Postsecondary Education Data System, 2007-08 and Crosswalk between occupations and fields of study from the National Crosswalk Service Center.



Advanced Manufacturing

Advanced manufacturing refers to production processes that rely on automation and innovative techniques for developing products or their component parts. Buffalo Niagara has a long history as an industrial center, providing it with both the workforce and physical infrastructure required in this industry. Since 1995, over \$500 million in investments have been made to increase technological capacities for: automotive part producers and their suppliers; aerospace and defense; industrial chemicals, advanced plastics and new polymers; and processing and packaging of food stuffs. The region also produces well over 1,000 graduates in engineering and related fields from area colleges and universities each year.

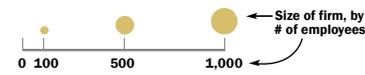


Source: Quarterly Census of Employment and Wages, 2001, 2008 and 2009

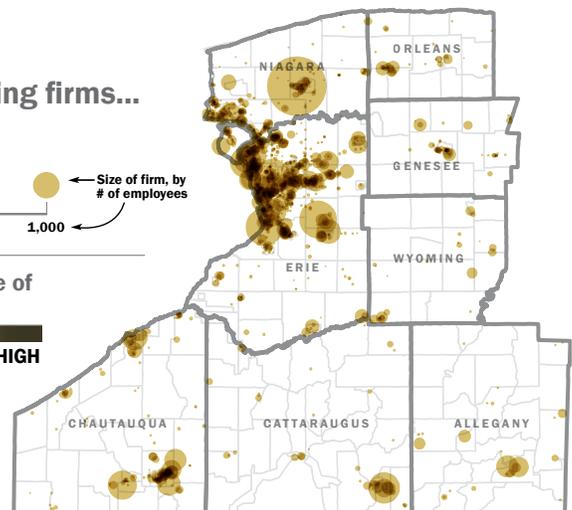
Job losses over the past decade in the region's advanced manufacturing industry were felt most heavily in the transportation subsector, with one out of three job cuts experienced by the region's automobile parts makers. Conversely, machinery manufacturing has been a relative bright spot, experiencing a small but positive net gain in jobs since 2001.

Advanced Manufacturing firms...

...by size of firm



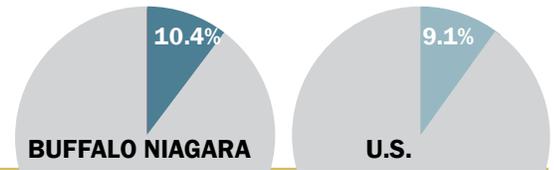
...and by degree of concentration



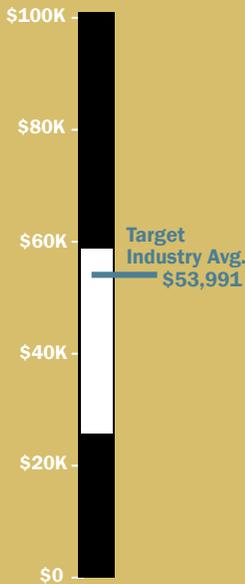
Source: Reference USA, 2010

Advanced manufacturing **remains an important component** to the Buffalo Niagara economy, representing 10% of all jobs in the region.

Industry employment as a share of total economy in...



Wage Range for Top 10 Target Jobs



The Top 10 Occupations in Advanced Manufacturing

Team Assemblers	Work as part of a team to assemble an entire product or component of a product
Supervisors of Production & Operating Workers	Supervise and coordinate the activities of production and operating workers
Machinists	Set up and operate a variety of machine tools to produce precision parts and instruments
Production Helpers	Help production workers by performing duties of lesser skill
Inspectors, Testers, Sorters, Samplers & Weighers	Inspect, test, sort, sample or weigh nonagricultural raw materials
Laborers & Freight, Stock & Material Movers	Manually move freight, stock or other materials or perform other unskilled general labor
Welders, Cutters, Solderers & Brazers	Use hand-welding, flame-cutting, hand soldering or brazing equipment to weld or join metal components
Sales Representatives, Wholesale & Mfg.	Sell goods for wholesalers or manufacturers; requires substantial knowledge of items sold
Maintenance & Repair Workers	Keep machines, mechanical equipment or the structure of an establishment in repair
Packaging & Filling Machine Operators	Operate or tend machines to prepare industrial or consumer products for storage or shipment

"Top 10 Occupations" reflect those that exist in the greatest numbers across the nation within the target industry. Source: U.S. Bureau of Labor, Occupational employment by industry, 2005-2007 and occupational descriptions from the O*NET 14.0 Database

Buffalo Niagara Workforce Preparedness for Advanced Manufacturing

A large supply of workers with the skills often required for advanced manufacturing jobs

Skill	# Buffalo Niagara workforce having skill at higher than average level
Active Listening	303,000
Coordination	213,000
Active Learning	210,000
Monitoring	210,000
Speaking	203,000
Time Management	174,000
Persuasion	115,000
Management of Personnel	58,000
Equipment Maintenance	56,000
Quality Control Analysis	38,000

Source: Skills by occupation from the O*Net 14.0 Database

Each year, 6,500+ regional graduates earn advanced manufacturing-related degrees

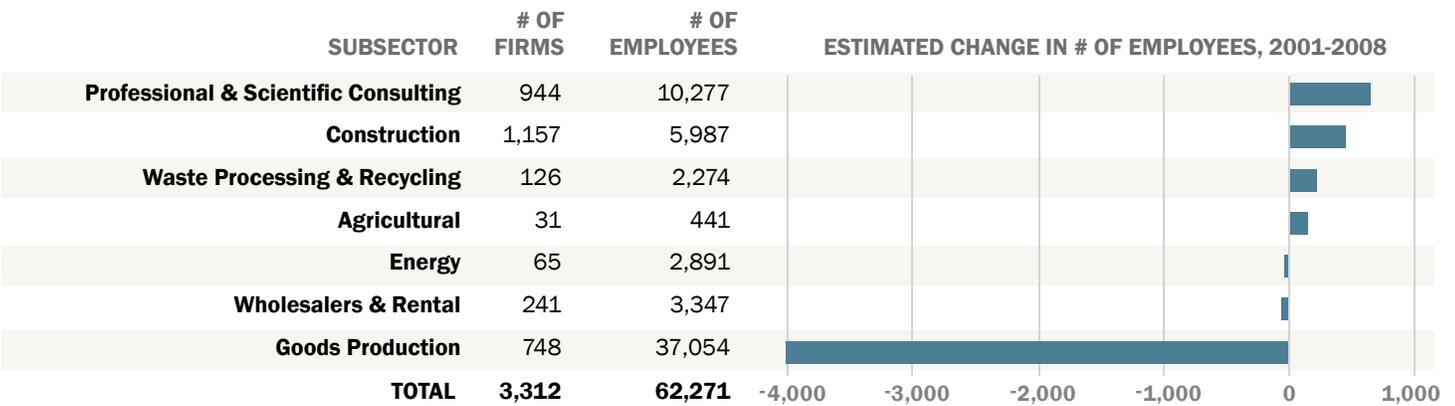
	Associate's	Bachelor's	Master's	Doctoral/ Professional	TOTAL '07-'08
Business	1,151	3,139	787	13	5,090
Engineering & Related Technologies	219	615	260	52	1,146
Mechanic and Repair Technologies	181	0	0	0	181
Construction Trades & Production	126	27	0	0	153

Source: National Center for Education Statistics Integrated Postsecondary Education Data System, 2007-08 and Crosswalk between occupations and fields of study from the National Crosswalk Service Center.



Green

Like many regions across the nation, Buffalo Niagara's economy is seeking to capitalize on the global demand for innovation in renewable energy and sustainability. This vision involves creating new processes for alternative energy and repurposing existing manufacturing techniques to create products needed for the green economy. Drawing on its industrial capacity, natural assets and manufacturing heritage, regional firms have begun to expand their capacities for wind, solar and hydropower. As these sectors continue to grow, Buffalo Niagara has the potential to become an important center for innovation and production in the new green economy.



Source: Quarterly Census of Employment and Wages, 2001, 2008 and 2009

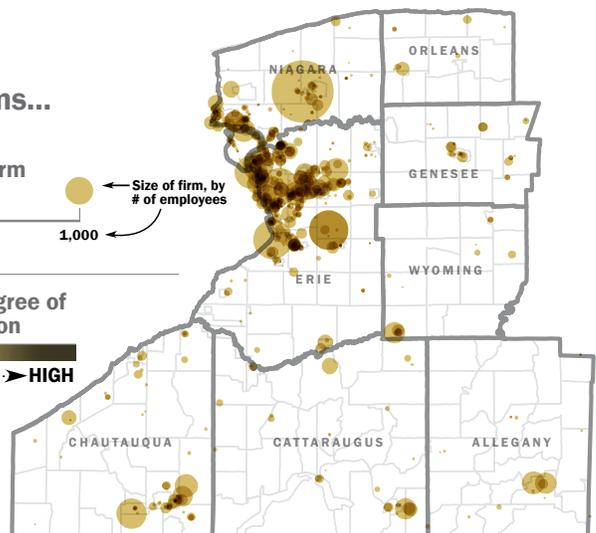
With the green industry being comprised of a variety of firm types from production and construction to wholesale brokers and environmental and other consulting firms, an array of workers plays a role in the region's green economy. This includes a range of jobs from electricians and carpenters to office clerks and professionals.

Green firms...

...by size of firm



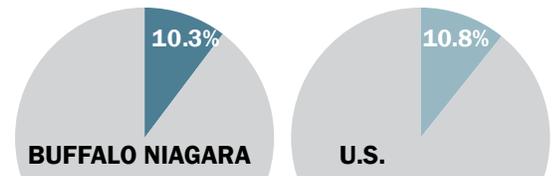
...and by degree of concentration



Source: Reference USA, 2010

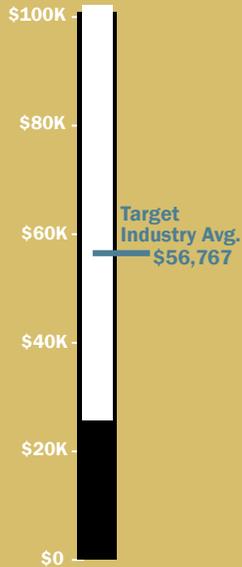
One in four green jobs is in the **growing fields** of construction and professional/scientific consulting.

Industry employment as a share of total economy in...



Wage Range for Top 10 Target Jobs

The Top 10 Occupations in Green



Electricians	Install, maintain and repair electrical wiring, equipment and fixtures
Carpenters	Construct, erect, install or repair structures and fixtures made of wood
Team Assemblers	Work as part of a team to assemble an entire product or component of a product
Construction Laborers	Perform tasks involving physical labor at building, highway and heavy construction projects
Plumbers, Pipefitters & Steamfitters	Assemble, install, alter and repair pipelines that carry water, steam, air or other liquids or gases
Office Clerks	Perform varied and diverse office duties
Supervisors of Construction Trades & Extraction Workers	Directly supervise and coordinate activities of construction or extraction workers
Laborers & Freight, Stock & Material Movers	Manually move freight, stock or other materials or perform other unskilled general labor
General & Operations Managers	Plan, direct or coordinate the operations of companies or public and private sector organizations
Supervisors of Production & Operating Workers	Supervise and coordinate the activities of production and operating workers

Top 10 Occupations reflect those that exist in the greatest numbers across the nation within the target industry. Source: U.S. Bureau of Labor, Occupational employment by industry, 2005-2007 and occupational descriptions from the O*NET 14.0 Database

Buffalo Niagara Workforce Preparedness for Green

A large supply of workers with the skills often required for green jobs

	# Buffalo Niagara workforce having skill at higher than average level
Critical Thinking	271,000
Coordination	213,000
Active Learning	210,000
Monitoring	210,000
Speaking	203,000
Learning Strategies	180,000
Time Management	174,000
Mathematics	89,000
Mgmt. of Personnel	58,000
Installation	39,000

Each year, 6,600+ regional graduates earn green-related degrees

	Associate's	Bachelor's	Master's	Doctoral/Professional	TOTAL '07-'08
Business	1,151	3,139	787	13	5,090
Engineering & Related Technologies	219	615	260	52	1,146
Construction Trades	115	27	0	0	142
Architecture & Planning	7	114	86	0	207
Natural Resources & Conservation	3	14	0	0	17

Source: Skills by occupation from the O*Net 14.0 Database

Source: National Center for Education Statistics Integrated Postsecondary Education Data System, 2007-08 and Crosswalk between occupations and fields of study from the National Crosswalk Service Center.



Back Office

The back office industry includes many of the professional support services required by various types of companies. These activities can include customer service, transaction processing, information technology support, accounting, human resources as well as other “nuts and bolts” processes required by many large firms. Buffalo Niagara has developed a strong reputation for its back office capacities, capitalizing on its 100,000+ college and university students and 26,000+ annual graduates, well-developed telecommunications infrastructure, affordable real estate and extensive air and ground connectivity.

SUBSECTOR	# OF FIRMS	# OF EMPLOYEES	ESTIMATED CHANGE IN # OF EMPLOYEES, 2001-2008
General Business Support	425	11,725	~2,800
Banking Accounting & Insurance	2,276	30,596	~2,500
Technical Professional Services	1,089	11,557	~1,800
Data & Telecommunications	237	4,065	~-1,500
TOTAL	4,027	57,943	

Source: Quarterly Census of Employment and Wages, 2001, 2008 and 2009

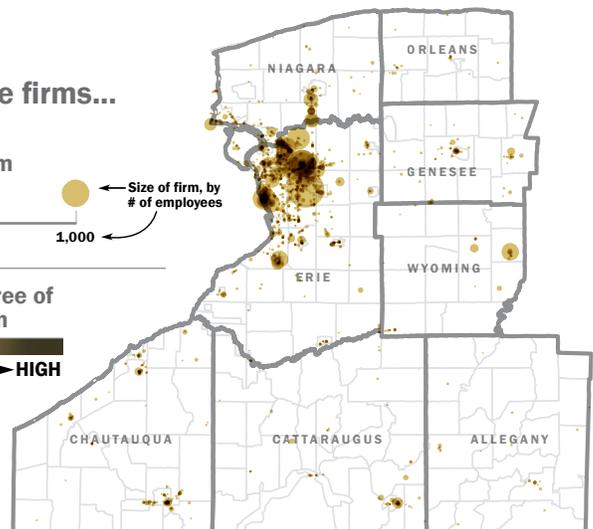
Back office firms tend to be concentrated in the northern portion of the region’s most densely populated Erie County. This target industry offers a mix of jobs, attracting both the region’s ample supply of college graduates as well as skilled, non-degree holders looking for higher-paying work than they might otherwise find in other industries.

Back Office firms...

...by size of firm



...and by degree of concentration



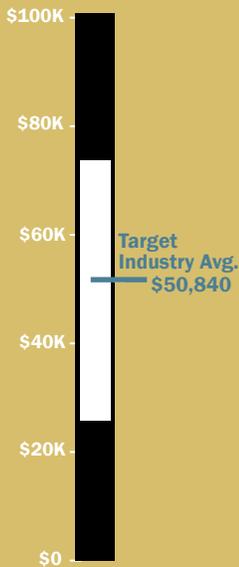
Source: Reference USA, 2010

Back Office is the fastest growing target industry and one of the most attractive to younger workers.

Industry employment as a share of total economy in...



Wage Range for Top 10 Target Jobs



The Top 10 Occupations in Back Office

Customer Service Representatives	Interact with customers to provide information in response to inquiries about products and services
Tellers	Receive and pay out money; keep records of money and negotiable instruments
Accountants & Auditors	Examine, analyze and interpret accounting records for the purpose of giving advice or preparing statements
Office Clerks, General	Perform varied and diverse office duties
Supervisors of Office & Administrative Support Workers	Supervise and coordinate the activities of clerical and administrative support workers
Loan Officers	Evaluate, authorize or recommend approval of commercial, real estate or credit loans
Bookkeeping, Accounting & Auditing Clerks	Compute, classify and record numerical data to keep financial records complete
Insurance Sales Agents	Sell life, property, casualty, health, automotive or other types of insurance
Executive Secretaries & Administrative Assistants	Provide high-level administrative support
Computer Software Engineers	Develop, create and modify general computer applications software

"Top 10 Occupations" reflect those that exist in the greatest numbers across the nation within the target industry. Source: U.S. Bureau of Labor, Occupational employment by industry, 2005-2007 and occupational descriptions from the O*NET 14.0 Database

Buffalo Niagara Workforce Preparedness for Back Office

A large supply of workers with the skills often required for back office jobs

Skill	# Buffalo Niagara workforce having skill at higher than average level
Reading Comprehension	317,000
Critical Thinking	271,000
Active Learning	210,000
Judgment & Decision Making	119,000
Complex Problem Solving	103,000
Troubleshooting	50,000
Quality Control Analysis	38,000
Systems Analysis	23,000
Technology Design	11,000
Programming	6,000

Source: Skills by occupation from the O*Net 14.0 Database

Each year, 7,400+ regional graduates earn back office-related degrees

	Associate's	Bachelor's	Master's	Doctoral/Professional	TOTAL '07-'08
Business	1,151	3,139	787	13	5,090
Engineering & Related Technologies	219	615	260	52	1,146
Computer and Information Science	170	198	149	16	533
Legal	72	15	13	233	333
Architecture & Planning	7	114	86	0	207
Mathematics & Statistics	0	118	18	4	140

Source: National Center for Education Statistics Integrated Postsecondary Education Data System, 2007-08 and Crosswalk between occupations and fields of study from the National Crosswalk Service Center.

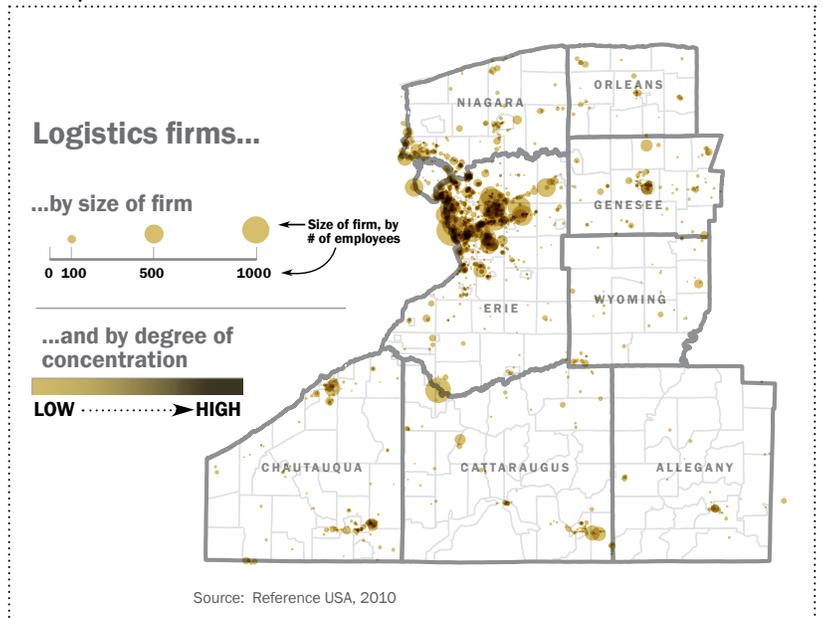


Logistics

Logistics involves the various component processes in how goods and resources flow from their point of origin to their end destination. Jobs in logistics can include those in freight forwarding, trucking and rail transport, wholesale supply and distribution and warehousing of goods. Buffalo Niagara's strategic location on two Great Lakes – Lake Ontario and Lake Erie – has established the region as a shipping and logistics hub. Home to eight international ports of entry (four auto, three rail, one water), the region facilitates \$81 billion in annual trade between Canada and the U.S. Additionally, Buffalo Niagara is the approximate mid-way point between major pairs of commercial centers New York City and Chicago, and Toronto and Pittsburgh. One can reach over 55 percent of the U.S. population in one day's drive.

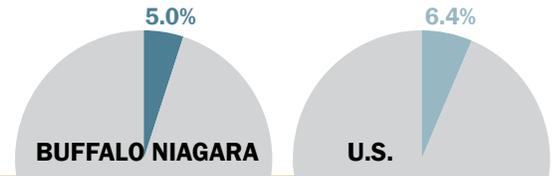


The region's location across the border from Canada, the nation's largest trading partner, makes it a prime location for the logistics industry. Buffalo Niagara is the second-largest trading port in all of North America. With the loss of jobs in select logistics subsectors, however, employment in this target industry accounts for a smaller percentage of the total economy than it does nationally.

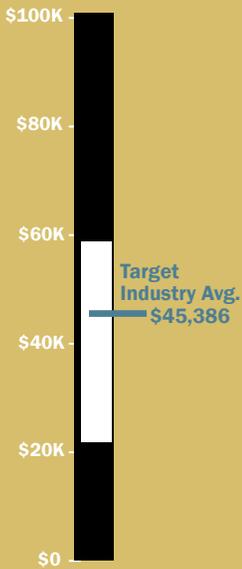


Jobs in freight arrangement and other logistics support activities **have grown by nearly 20%** over the past decade.

Industry employment as a share of total economy in...



Wage Range for Top 10 Target Jobs



The Top 10 Occupations in Logistics

Truck Drivers, Heavy and Tractor-Trailer	Drive a tractor-trailer combination or a truck
Laborers & Freight, Stock & Material Movers	Manually move freight, stock or other materials or perform other unskilled general labor
Sales Representatives	Sell goods for wholesalers or manufacturers; requires substantial knowledge of items sold
Truck Drivers, Light or Delivery Services	Drive a truck or van
Stock Clerks & Order Fillers	Receive, store and issue sales floor merchandise, materials, equipment and other items
Shipping, Receiving & Traffic Clerks	Verify and keep records on incoming and outgoing shipments; prepare items for shipment
Industrial Truck & Tractor Operators	Operate industrial trucks or tractors
Customer Service Representatives	Interact with customers to provide information about products and services and to handle and resolve complaints
Office Clerks	Perform varied and diverse office duties
Sales Representatives	Sell goods for wholesalers or manufacturers where technical or scientific knowledge is required

"Top 10 Occupations" reflect those that exist in the greatest numbers across the nation within the target industry. Source: U.S. Bureau of Labor, Occupational employment by industry, 2005-2007 and occupational descriptions from the O*NET 14.0 Database

Buffalo Niagara Workforce Preparedness for Logistics

A large supply of workers with the skills often required for logistics jobs

	# Buffalo Niagara workforce having skill at higher than average level
Reading Comprehension	317,000
Active Listening	303,000
Coordination	213,000
Speaking	203,000
Writing	181,000
Time Management	174,000
Social Perceptiveness	170,000
Service Orientation	136,000
Persuasion	115,000
Negotiation	67,000

Source: Skills by occupation from the O*Net 14.0 Database

Each year, 5,300+ regional graduates earn logistics-related degrees

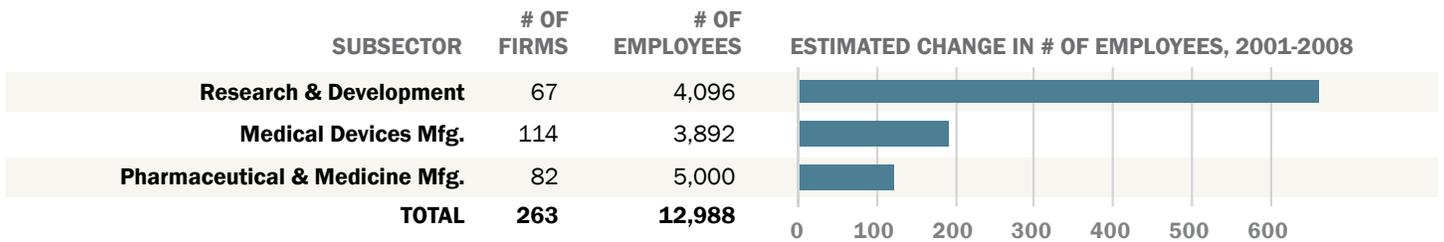
	Associate's	Bachelor's	Master's	Doctoral/Professional	TOTAL '07-'08
Business	1,151	3,139	787	13	5,090
Architecture & Planning	7	114	86	0	207
Transportation	5	0	0	0	5

Source: National Center for Education Statistics Integrated Postsecondary Education Data System, 2007-08 and Crosswalk between occupations and fields of study from the National Crosswalk Service Center.



Life Sciences

The life sciences industry includes the research and development of new medical technologies as well as the production of pharmaceuticals and medical devices borne out of this research. Anchored by the major centers of life sciences research such as the Buffalo Niagara Medical Campus (BNMC) and medical device and pharmaceutical manufacturers throughout the region, Buffalo Niagara is growing its reputation as a center for medical innovation for the 21st century. BNMC is a consortium of the region's clinical care, research and medical institutions, including Roswell Park Cancer Institute, University at Buffalo's New York State Center of Excellence in Bioinformatics and Life Sciences and Hauptman-Woodward Medical Research Institute.



Source: Quarterly Census of Employment and Wages, 2001, 2008 and 2009

With 22 colleges and universities across the region pumping out 10,500+ new degree-holders every year in fields connected to life science occupations from biology to engineering to business, the workforce training and development assets of Buffalo Niagara support a vital and growing life sciences industry.

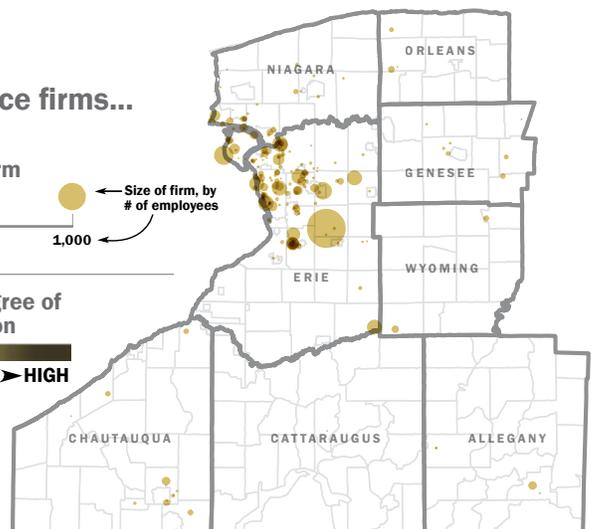
Life Science firms...

...by size of firm



...and by degree of concentration

LOW HIGH



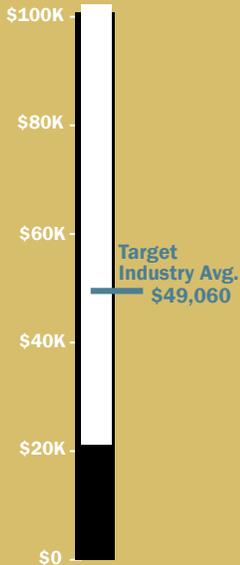
Source: Reference USA, 2010

With the growth of the Buffalo Niagara Medical Campus, jobs in research and development **have been on a steady rise** over the past decade.

Industry employment as a share of total economy in...



Wage Range for Top 10 Target Jobs



The Top 10 Occupations in Life Sciences

Team Assemblers	Work as part of a team to assemble an entire product or component of a product
Molding, Coremaking & Casting Machine Operators	Set up, operate or tend metal or plastic molding, casting or coremaking machines to mold or cast metal
Supervisors of Production & Operating Workers	Supervise and coordinate the activities of production and operating workers
Inspectors, Testers, Sorters, Samplers & Weighers	Inspect, test, sort, sample or weigh nonagricultural raw materials
Packaging & Filling Machine Operators	Operate or tend machines to prepare industrial or consumer products
General & Operations Managers	Plan, direct or coordinate the operations of companies or public and private sector organizations
Packers & Packagers, Hand	Pack or package by hand a wide variety of products and materials
Medical Scientists	Conduct research dealing with the understanding of human diseases and the improvement of human health
Executive Secretaries & Administrative Assistants	Provide high-level administrative support
Dental Laboratory Technicians	Construct and repair full or partial dentures or dental appliances

"Top 10 Occupations" reflect those that exist in the greatest numbers across the nation within the target industry. Source: U.S. Bureau of Labor, Occupational employment by industry, 2005-2007 and occupational descriptions from the O*NET 14.0 Database

Buffalo Niagara Workforce Preparedness for Life Sciences

A large supply of workers with the skills often required for life sciences jobs

	# Buffalo Niagara workforce having skill at higher than average level
Reading Comprehension	317,000
Active Listening	303,000
Critical Thinking	271,000
Coordination	213,000
Active Learning	210,000
Writing	181,000
Instructing	175,000
Time Management	174,000
Judgment & Decision Making	119,000
Science	12,000

Source: Skills by occupation from the O*Net 14.0 Database

Each year, 10,500+ regional graduates earn life sciences-related degrees

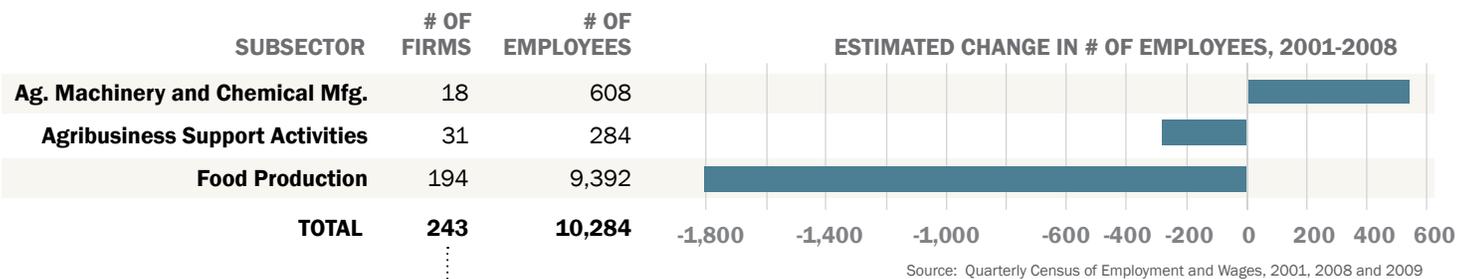
	Associate's	Bachelor's	Master's	Doctoral/Professional	TOTAL '07-'08
Business	1,151	3,139	787	13	5,090
Health	1,112	597	441	466	2,616
Engineering & Related Technologies	219	615	260	52	1,146
Biology and Biomedical Sciences	0	560	80	49	689
Computer and Info Science	170	198	149	16	533
Physical Sciences	33	350	32	30	445
Science Technologies	7	0	0	0	7

Source: National Center for Education Statistics Integrated Postsecondary Education Data System, 2007-08 and crosswalk between occupations and fields of study from the National Crosswalk Service Center.

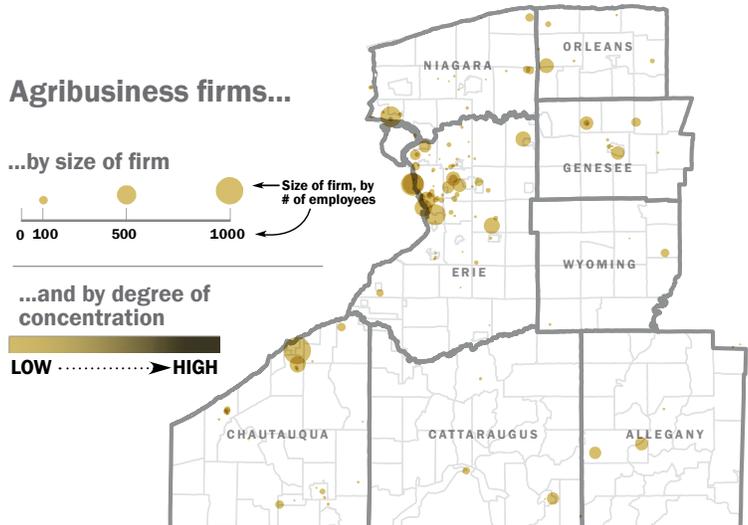


Agribusiness

Agribusiness primarily refers to the production of food, beverages and “food stuffs” but also includes the production of machinery and fertilizers used for these processes. Agricultural heritage, logistics capability and manufacturing bench strength combine to make Buffalo Niagara a prominent national food processing center. Agribusiness firms draw on the region’s 7,000+ farms and 21 dairy processing plants to support their production processes. In addition, Buffalo Niagara is exploring capacities for emerging bio-fuel technology.



Nine out of 10 jobs in the region’s agribusiness industry are in food and beverage production. The nearly 200 firms employing these workers can be found across all eight counties of the region, with a slightly higher concentration in northern Erie County. The industry is supported by area colleges offering related degrees in agriculture, food, business and natural resources.

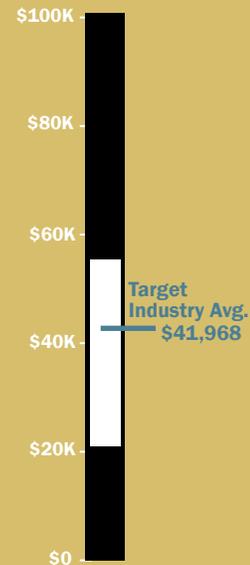


Agribusiness is the **smallest of the target industries** with over 10,000 workers.

Industry employment as a share of total economy in...



Wage Range for Top 10 Target Jobs



The Top 10 Occupations in Agribusiness

Packaging & Filling Machine Operators	Operate or tend machines to prepare industrial or consumer products
Meat, Poultry & Fish Cutters & Trimmers	Use hand tools to perform routine cutting and trimming of meat, poultry and fish
Packers & Packagers	Pack or package by hand a wide variety of products and materials
Food Batchmakers	Set up and operate equipment that mixes or blends ingredients used in the manufacturing of food products
Laborers & Freight, Stock & Material Movers	Manually move freight, stock or other materials or perform other unskilled general labor
Production Helpers	Help production workers by performing duties of lesser skill
Supervisors of Production & Operating Workers	Supervise and coordinate the activities of production and operating workers
Team Assemblers	Work as part of a team to assemble an entire product or component of a product
Bakers	Bake ingredients to produce breads, rolls, cookies, cakes, pies, pastries or other baked goods
Industrial Truck & Tractor Operators	Operate industrial trucks or tractors equipped to move materials

"Top 10 Occupations" reflect those that exist in the greatest numbers across the nation within the target industry.
Source: U.S. Bureau of Labor, Occupational employment by industry, 2005-2007 and occupational descriptions from the O*NET 14.0 Database

Buffalo Niagara Workforce Preparedness for Agribusiness

A large supply of workers with the skills often required for agribusiness jobs

	# Buffalo Niagara workforce having skill at higher than average level
Reading Comprehension	317,000
Active Listening	303,000
Coordination	213,000
Monitoring	210,000
Active Learning	210,000
Speaking	203,000
Learning Strategies	180,000
Instructing	175,000
Time Management	174,000
Mgmt. of Personnel	58,000

Each year, 5,300+ regional graduates earn agribusiness-related degrees

	Associate's	Bachelor's	Master's	Doctoral/Professional	TOTAL '07-'08
Business	1,151	3,139	787	13	5,090
Foods, Nutrition & Related Services	62	59	0	0	121
Culinary Services	61	0	0	0	61
Agriculture	34	0	0	0	34
Natural Resources & Conservation	3	14	0	0	17

Source: National Center for Education Statistics Integrated Postsecondary Education Data System, 2007-08 and crosswalk between occupations and fields of study from the National Crosswalk Service Center.

Source: Skills by occupation from the O*Net 14.0 Database

COUNTY COMPARISONS

Whether measured by the number of jobs, the number of firms or the concentration of workers, the supply and demand of the regional labor market is heaviest in the metropolitan area of Erie and Niagara counties. With 74 percent of the region's labor force, 75 percent of its firms and 78 percent of total jobs located in the region's metropolitan core, labor market variations across the region can get lost. This special report explores labor market patterns across the eight-county region as well as the specific labor submarket for each of these diverse counties.

JOB CONCENTRATION

For every **10 people** in the Buffalo Niagara region...
 ...there are about **5 jobs**



Reflecting job concentration, this is approximately how the **people-to-jobs ratio** breaks down by county.

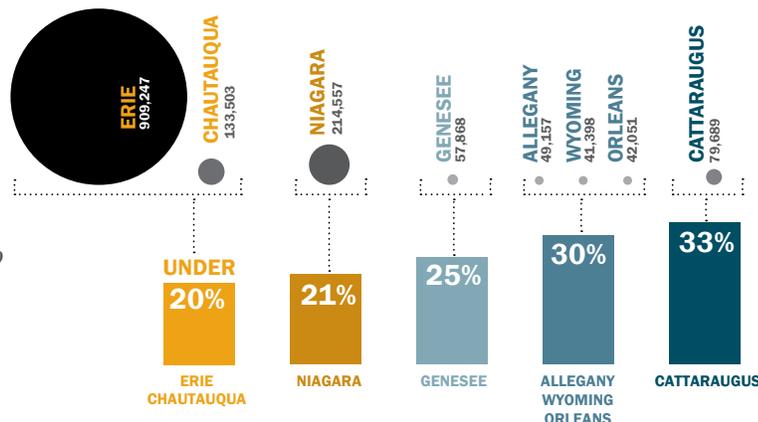
For every 10 people in...	...Erie County	5 jobs	
	...Genesee County	4 jobs	
	...Chautauqua County	4 jobs	
	...Cattaraugus County	4 jobs	
	...Niagara County	3 jobs	
	...Wyoming County	3 jobs	
	...Orleans County	3 jobs	
	...Allegany County	3 jobs	

Source: Quarterly Census of Employment and Wages, 2009 and U.S. Census Bureau, Population Estimates, 2009



PUBLIC SECTOR EMPLOYMENT

As a general rule, counties with smaller populations and fewer job opportunities tend to rely more heavily on the public sector to generate jobs.



Buffalo Niagara Population by County, 2009

% Public Employment by County, 2009

Source: Quarterly Census of Employment and Wages, 2009 and U.S. Census Bureau, Population Estimates, 2009

ALLEGANY COUNTY



Situated at the eastern end of the region's Southern Tier, Allegheny County is home to about 3 percent of the region's workforce and 2 percent of its jobs. Similar to other smaller counties in Buffalo Niagara, Allegheny County relies more heavily on the public sector for its employment as well as

workers who commute in from outside the county. Of those participating in the county's labor force, about one in five has a bachelor's degree or higher, relatively on par with the region's other counties. Despite its small population and workforce size, Allegheny County includes three colleges

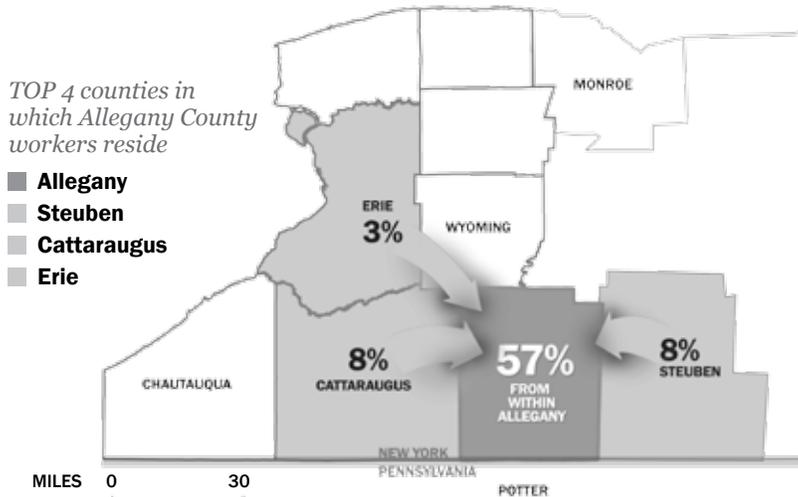
and universities graduating 1,768 students a year. Given the specialization of these institutions, Allegheny County's colleges produce a high number of workers in applied sciences and engineering.

EDUCATIONAL ATTAINMENT OF WORKFORCE

	Less than HS	HS Grad	Some college or Assoc. degree	Bachelor's degree or higher
Allegheny County	6%	37%	35%	21%
Buffalo Niagara	6%	30%	34%	30%
U.S.	10%	27%	30%	32%

Source: American Community Survey 3-Year Estimates, 2006-2008

COMMUTING TO ALLEGANY COUNTY PRIVATE SECTOR EMPLOYMENT, 2008



A 30-mile distance in Buffalo Niagara translates into approximately 40 minutes or less of drive time.

% of Allegheny County workers commuting...

...from these additional counties

3%	Monroe County
2%	Livingston County
2%	Potter County, PA
2%	Wyoming County
1%	Chautauqua County
14%	All Other Locations

Source: U.S. Census Bureau, Local Employment Dynamics, On the Map, 2008

ALLEGANY COUNTY BY THE NUMBERS, 2009

Population **49,157**

Number of Firms **949**

Number of Jobs **13,300**

Number of People in the Labor Force **24,000**

% Employment in Public Sector **29%**

Average Private Sector Wage (2008) **\$32,998**

Source: See Data Sources & Notes for the various data sources

TOP 10 FIELDS OF STUDY

DEGREES AWARDED AT ALLEGANY COUNTY COLLEGES, 2007-2008

TYPE OF DEGREE AWARDED	# OF DEGREES
Business, management, marketing	231
Visual and performing arts	210
Engineering technologies/technicians	196
Construction trades	126
Education	124
Health professions	113
Engineering	109
Mechanic and repair technologies	103
Liberal arts and sciences	94
Psychology	78

Source: National Center for Education Statistics Integrated Postsecondary Education Data System, 2007-08

CATTARAUGUS COUNTY



Directly south of Erie County, in the middle of the region's Southern Tier, Cattaraugus County includes nearly 30,000 jobs and over 40,000 workers. Despite being home to some major private tourist attractions, including the Holiday Valley Ski Resort and Seneca Allegany Casino

& Resort, about one-third of all jobs are generated by the public sector. The high percentage of public sector workers is due to the presence of Allegany State Park, a 65,000-acre regional attraction. For Cattaraugus County's private sector jobs, strong connectivity with

Routes 219 and 86 allows it to draw workers from Erie, Chautauqua and Allegany counties for work. About one in five in the workforce has a bachelor's degree or higher. St. Bonaventure University is the county's lone higher education institution and produces 734 graduates annually.

EDUCATIONAL ATTAINMENT OF WORKFORCE

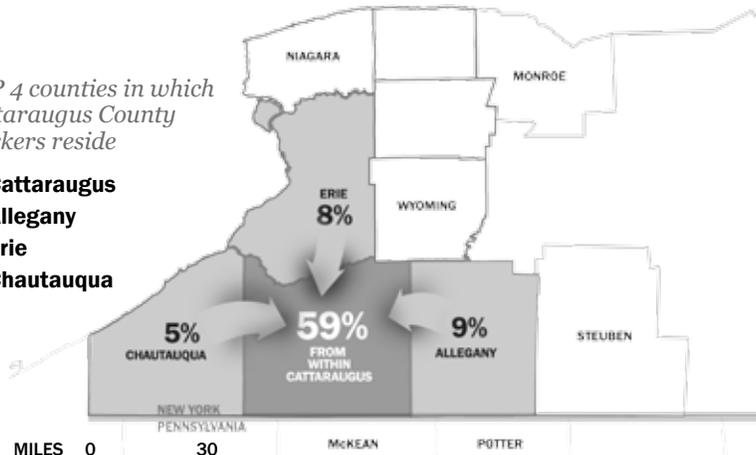
	Less than HS	HS Grad	Some college or Assoc. degree	Bachelor's degree or higher
Cattaraugus County	6%	41%	33%	21%
Buffalo Niagara	6%	30%	34%	30%
U.S.	10%	27%	30%	32%

Source: American Community Survey 3-Year Estimates, 2006-2008

COMMUTING TO CATTARAUGUS COUNTY PRIVATE SECTOR EMPLOYMENT, 2008

TOP 4 counties in which Cattaraugus County workers reside

- Cattaraugus
- Allegany
- Erie
- Chautauqua



A 30-mile distance in Buffalo Niagara translates into approximately 40 minutes or less of drive time.

% of Cattaraugus County workers commuting... ..from these additional counties

4%	McKeen County, PA
2%	Monroe County
1%	Steuben County
1%	Wyoming County
1%	Niagara County
1%	Potter County, PA
8%	All Other Locations

Source: U.S. Census Bureau, Local Employment Dynamics, On the Map, 2008

CATTARAUGUS COUNTY BY THE NUMBERS

Population	79,689
Number of Firms	1,861
Number of Jobs	29,969
Number of People in the Labor Force	42,000
% Employment in Public Sector	33%
Average Private Sector Wage (2008)	\$32,370

Source: See Data Sources & Notes for the various data sources

TOP 10 FIELDS OF STUDY

DEGREES AWARDED AT CATTARAUGUS COUNTY COLLEGES, 2007-2008

TYPE OF DEGREE AWARDED	# OF DEGREES
Business, management, marketing	231
Education	209
Communication, journalism and related	82
Social sciences	67
Psychology	29
English language and literature	28
History	22
Philosophy and religious studies	18
Biological and biomedical sciences	12
Computer and information sciences	11

Source: National Center for Education Statistics Integrated Postsecondary Education Data System, 2007-08

CHAUTAUQUA COUNTY



The third largest county in Buffalo Niagara, Chautauqua County is home to about 52,000 jobs and a labor force of 66,600. This close ratio of jobs to workers is somewhat unique to this county and is reflected in the smaller dependency on commuters from nearby counties. Unlike

its neighboring Southern Tier counties (Allegany and Cattaraugus), Chautauqua County is much less dependent on the public sector as more than 80 percent of jobs are in the private sector. Many of these jobs are located in the county's two urban centers – the cities

of Dunkirk and Jamestown. These two cities are also in close proximity to the county's two colleges, SUNY Fredonia and Jamestown Community College, which produce over 1,900 degrees annually, primarily in the humanities.

EDUCATIONAL ATTAINMENT OF WORKFORCE

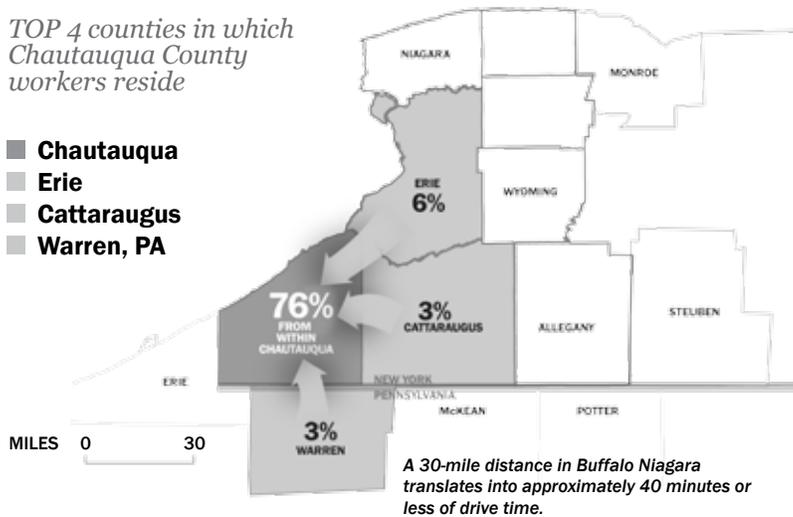
	Less than HS	HS Grad	Some college or Assoc. degree	Bachelor's degree or higher
Chautauqua County	8%	36%	33%	23%
Buffalo Niagara	6%	30%	34%	30%
U.S.	10%	27%	30%	32%

Source: American Community Survey 3-Year Estimates, 2006-2008

COMMUTING TO CHAUTAUQUA COUNTY PRIVATE SECTOR EMPLOYMENT, 2008

TOP 4 counties in which Chautauqua County workers reside

- Chautauqua
- Erie
- Cattaraugus
- Warren, PA



% of Chautauqua County workers commuting... ..from these additional counties

2%	Erie County, PA
2%	Monroe County
1%	Allegany County
1%	Niagara County
1%	Onondaga County
5%	All Other Locations

Source: U.S. Census Bureau, Local Employment Dynamics, On the Map, 2008

CHAUTAUQUA COUNTY BY THE NUMBERS, 2009

Population **133,503**

Number of Firms **3,285**

Number of Jobs **52,291**

Number of People in the Labor Force **66,600**

% Employment in Public Sector **19%**

Average Private Sector Wage (2008) **\$30,499**

Source: See Data Sources & Notes for the various data sources

TOP 10 FIELDS OF STUDY

DEGREES AWARDED AT CHAUTAUQUA COUNTY COLLEGES, 2007-2008

TYPE OF DEGREE AWARDED	# OF DEGREES
Education	464
Liberal arts and sciences	278
Business, management, marketing	236
Health professions	133
Visual and performing arts	123
Communication, journalism and related	106
Psychology	77
Social sciences	72
Multi/interdisciplinary studies	71
English language and literature	60

Source: National Center for Education Statistics Integrated Postsecondary Education Data System, 2007-08

ERIE COUNTY



Erie County is the population and economic center of Buffalo Niagara, home to 67 percent of the jobs and 60 percent of the workers in the region. Anchored by the City of Buffalo, the region's urban and industrial core, Erie County's share of jobs in the private sector is greater than anywhere

else in the region. Erie County also stands out in terms of educational attainment, with over one-third of its workforce holding a college degree, above national rates. Its 13 colleges and universities, which graduate 19,162 annually, have helped produce this educated workforce.

Even with a workforce nearing 480,000, Erie County attracts over 80,000 workers from beyond its borders. In part due to relatively minimal traffic congestion in the region, a surprising number of these workers comes from as far as Rochester, more than 50 miles away from the county's center.

EDUCATIONAL ATTAINMENT OF WORKFORCE

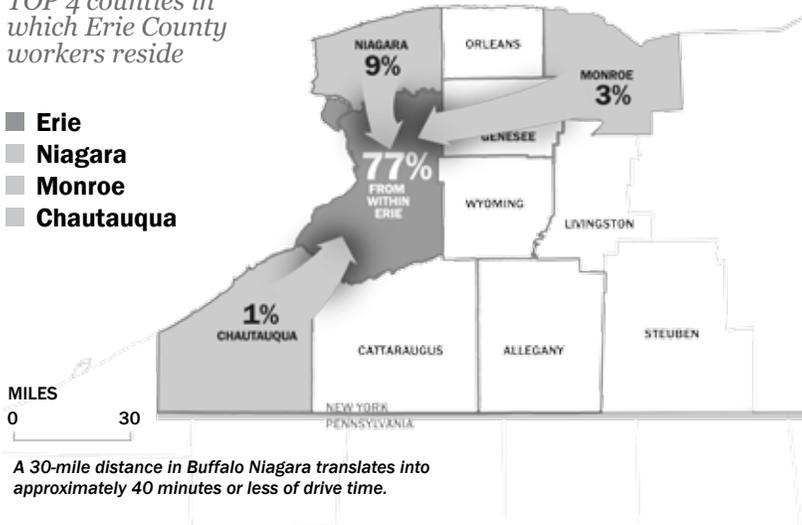
	Less than HS	HS Grad	Some college or Assoc. degree	Bachelor's degree or higher
Erie County	5%	26%	33%	35%
Buffalo Niagara	6%	30%	34%	30%
U.S.	10%	27%	30%	32%

Source: American Community Survey 3-Year Estimates, 2006-2008

COMMUTING TO ERIE COUNTY PRIVATE SECTOR EMPLOYMENT, 2008

TOP 4 counties in which Erie County workers reside

- Erie
- Niagara
- Monroe
- Chautauqua



A 30-mile distance in Buffalo Niagara translates into approximately 40 minutes or less of drive time.

% of Erie County workers commuting... ..from these additional counties

1%	Cattaraugus County
1%	Genesee County
1%	Onondaga County
1%	Wyoming County
6%	All Other Locations

Source: U.S. Census Bureau, Local Employment Dynamics, On the Map, 2008

ERIE COUNTY BY THE NUMBERS, 2009

Population **909,247**

Number of Firms **23,552**

Number of Jobs **438,799**

Number of People in the Labor Force **472,700**

% Employment in Public Sector **17%**

Average Private Sector Wage (2008) **\$38,309**

Source: See Data Sources & Notes for the various data sources

TOP 10 FIELDS OF STUDY DEGREES AWARDED AT ERIE COUNTY COLLEGES, 2007-2008

TYPE OF DEGREE AWARDED	# OF DEGREES
Business, management, marketing	3,804
Education	3,472
Health professions	2,054
Liberal arts and sciences	1,255
Psychology	782
Visual and performing arts	528
Public administration and social service	771
Communication, journalism and related	632
Social sciences	721
Engineering	699

Source: National Center for Education Statistics Integrated Postsecondary Education Data System, 2007-08

GENESEE COUNTY



Genesee County is located halfway between the cities of Buffalo in Erie County and Rochester in Monroe County. Three out of four of the approximately 23,500 jobs in Genesee County are in the private sector. Only slightly more than half of these jobs are filled by residents residing

in the county. One in four private-sector workers in Genesee County commutes from either Monroe County to the east, Erie County to the west or Wyoming County to the south. With so many employers just beyond Genesee County, residents here are within an easy drive

of two major labor markets, resulting perhaps in Genesee County's lower unemployment rate relative to the regional average. Labor supply and workforce development in Genesee County are supported by Genesee County Community College, which graduates over 600 students a year.

EDUCATIONAL ATTAINMENT OF WORKFORCE

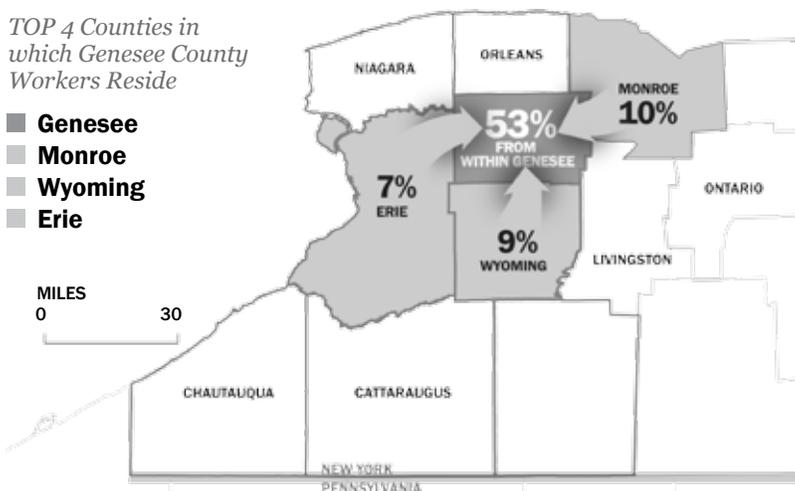
	Less than HS	HS Grad	Some college or Assoc. degree	Bachelor's degree or higher
Genesee County	6%	36%	38%	20%
Buffalo Niagara	6%	30%	34%	30%
U.S.	10%	27%	30%	32%

Source: American Community Survey 3-Year Estimates, 2006-2008

COMMUTING TO GENESEE COUNTY PRIVATE SECTOR EMPLOYMENT, 2008

TOP 4 Counties in which Genesee County Workers Reside

- Genesee
- Monroe
- Wyoming
- Erie



A 30-mile distance in Buffalo Niagara translates into approximately 40 minutes or less of drive time.

% of Genesee County workers commuting... ..from these additional counties

4%	Livingston County
3%	Orleans County
2%	Niagara County
1%	Ontario County
1%	Onondaga County
1%	Chautauqua County
9%	All Other Locations

Source: U.S. Census Bureau, Local Employment Dynamics, On the Map, 2008

GENESEE COUNTY BY THE NUMBERS, 2009

Population **57,868**

Number of Firms **1,449**

Number of Jobs **23,436**

Number of People in the Labor Force **33,300**

% Employment in Public Sector **25%**

Average Private Sector Wage (2008) **\$31,028**

Source: See Data Sources & Notes for the various data sources

TOP 10 FIELDS OF STUDY DEGREES AWARDED AT GENESEE COUNTY COLLEGES, 2007-2008

TYPE OF DEGREE AWARDED	# OF DEGREES
Liberal arts and sciences	198
Health professions	125
Business, management, marketing	119
Security and protective services	54
Public administration and social service	51
Computer and information sciences	20
Visual and performing arts	14
Communication, journalism and related	10
Legal professions	8
Education	4

Source: National Center for Education Statistics Integrated Postsecondary Education Data System, 2007-08

NIAGARA COUNTY



Situated at the northwest corner of the region and adjacent to the international border with Canada, Niagara County is part of the region's metropolitan area. There are nearly 70,000 jobs and 5,000 firms in Niagara County, making it the second most common county of location for

employers in Buffalo Niagara. Four out of five jobs in the county are private sector, with 65 percent filled by residents. One in four workers commutes from Erie County, with an easy, 20-minute drive from Niagara Falls to Buffalo. A steady supply of new labor from the county's two

institutions of higher education - Niagara University and Niagara County Community College - help employers in the county fill job openings. The colleges produce 2,000 new graduates a year with degrees in fields ranging from business to liberal arts to health studies.

EDUCATIONAL ATTAINMENT OF WORKFORCE

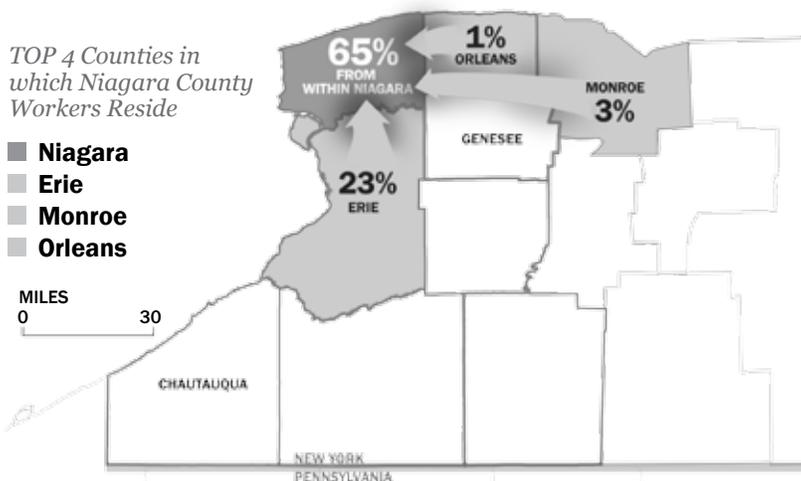
	Less than HS	HS Grad	Some college or Assoc. degree	Bachelor's degree or higher
Niagara County	7%	32%	37%	25%
Buffalo Niagara	6%	30%	34%	30%
U.S.	10%	27%	30%	32%

Source: American Community Survey 3-Year Estimates, 2006-2008

COMMUTING TO NIAGARA COUNTY PRIVATE SECTOR EMPLOYMENT, 2008

TOP 4 Counties in which Niagara County Workers Reside

- Niagara
- Erie
- Monroe
- Orleans



A 30-mile distance in Buffalo Niagara translates into approximately 40 minutes or less of drive time.

<i>% of Niagara County workers commuting...</i>	<i>...from these additional counties</i>
1%	Genesee County
1%	Chautauqua County
1%	Onondaga County
5%	All Other Locations

Source: U.S. Census Bureau, Local Employment Dynamics, On the Map, 2008

NIAGARA COUNTY BY THE NUMBERS, 2009

Population **214,557**

Number of Firms **4,710**

Number of Jobs **69,129**

Number of People in the Labor Force **114,100**

% Employment in Public Sector **21%**

Average Private Sector Wage (2008) **\$33,780**

Source: See Data Sources & Notes for the various data sources

TOP 10 FIELDS OF STUDY

DEGREES AWARDED AT NIAGARA COUNTY COLLEGES, 2007-2008

TYPE OF DEGREE AWARDED	# OF DEGREES
Education	499
Business, management, marketing	452
Liberal arts and sciences	257
Health professions	191
Security and protective services	167
Visual and performing arts	78
Communication, journalism and related	74
Public administration and social service	48
Psychology	39
Social sciences	38

Source: National Center for Education Statistics Integrated Postsecondary Education Data System, 2007-08

ORLEANS COUNTY



Orleans County sits at the far northeastern tip of the region, abutting Lake Ontario. About 12,800 jobs are located in this rural county. Close to one in three is in the public sector, likely due to the two correctional facilities located in this county. Three out of five private-sector jobs are

filled by residents. The others attract workers largely from Niagara County to the west and Monroe County to the east. Notably, relatively few workers commute from Erie County, the population core of the region and a significant supplier of labor for the other counties. Commuters from

the south might be hindered, especially in the winter, by the absence of an expressway leading into this rural county. While Orleans County isn't home to a college, there are 11 institutions of higher education within a 40-mile drive.

EDUCATIONAL ATTAINMENT OF WORKFORCE

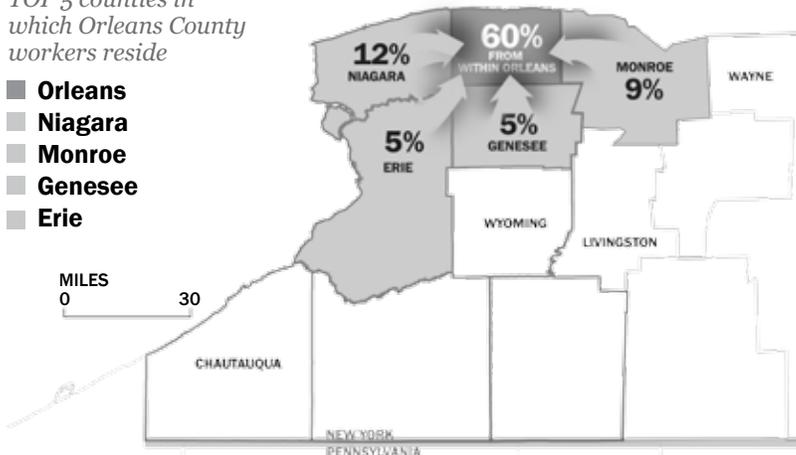
	Less than HS	HS Grad	Some college or Assoc. degree	Bachelor's degree or higher
Orleans County	10%	40%	33%	17%
Buffalo Niagara	6%	30%	34%	30%
U.S.	10%	27%	30%	32%

Source: American Community Survey 3-Year Estimates, 2006-2008

COMMUTING TO ORLEANS COUNTY PRIVATE SECTOR EMPLOYMENT, 2008

TOP 5 counties in which Orleans County workers reside

- Orleans
- Niagara
- Monroe
- Genesee
- Erie



A 30-mile distance in Buffalo Niagara translates into approximately 40 minutes or less of drive time.

% of Orleans County workers commuting...	...from these additional counties
1%	Genesee County
1%	Chautauqua County
1%	Onondaga County
1%	Wyoming County
1%	Wayne County
1%	Livingston County
3%	All Other Locations

Source: U.S. Census Bureau, Local Employment Dynamics, On the Map, 2008

ORLEANS COUNTY BY THE NUMBERS, 2009

Population **42,051**

Number of Firms **771**

Number of Jobs **12,765**

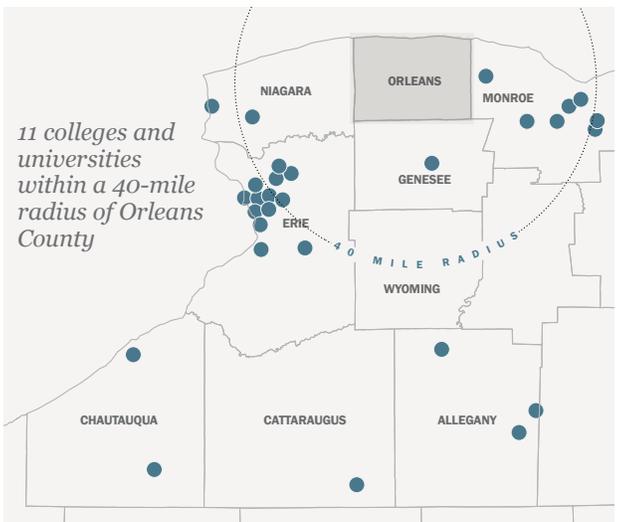
Number of People in the Labor Force **19,500**

% Employment in Public Sector **31%**

Average Private Sector Wage (2008) **\$28,513**

Source: See Data Sources & Notes for the various data sources

NEARBY COLLEGES



11 colleges and universities within a 40-mile radius of Orleans County

WYOMING COUNTY



East of Erie County and south of Genesee County sits Wyoming County. There are over 13,000 jobs and just over 900 employers in this rural county. About one in three jobs is in the public sector, likely due to Attica Correctional Facility and Letchworth State

Park. About half of Wyoming County's private-sector workers reside in the county, while the rest commute in to fill jobs offered by area employers. Erie and Cattaraugus counties are the largest suppliers of labor, followed by Livingston to the east. While there are no colleges in Wyoming County, its

workforce is highly educated, with over half having at least some college. Workforce education and development undoubtedly benefits from the 15 colleges and universities within a 40-mile drive of Wyoming County and primarily clustered near Buffalo.

EDUCATIONAL ATTAINMENT OF WORKFORCE

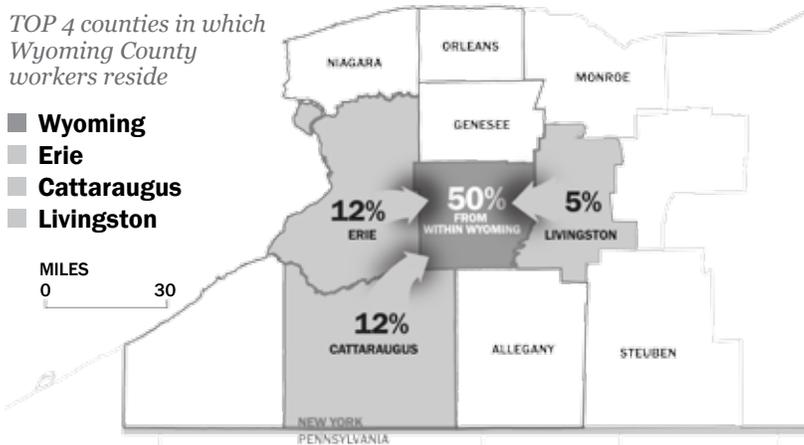
	Less than HS	HS Grad	Some college or Assoc. degree	Bachelor's degree or higher
Wyoming County	6%	42%	34%	19%
Buffalo Niagara	6%	30%	34%	30%
U.S.	10%	27%	30%	32%

Source: American Community Survey 3-Year Estimates, 2006-2008

COMMUTING TO WYOMING COUNTY PRIVATE SECTOR EMPLOYMENT, 2008

TOP 4 counties in which Wyoming County workers reside

- Wyoming
- Erie
- Cattaraugus
- Livingston



A 30-mile distance in Buffalo Niagara translates into approximately 40 minutes or less of drive time.

% of Wyoming County workers commuting...

...from these additional counties

5%	Genesee County
4%	Allegany County
3%	Monroe County
1%	Orleans County
1%	Niagara County
1%	Steuben County
6%	All Other Locations

Source: U.S. Census Bureau, Local Employment Dynamics, On the Map, 2008

WYOMING COUNTY BY THE NUMBERS, 2009

Population **41,398**

Number of Firms **904**

Number of Jobs **13,419**

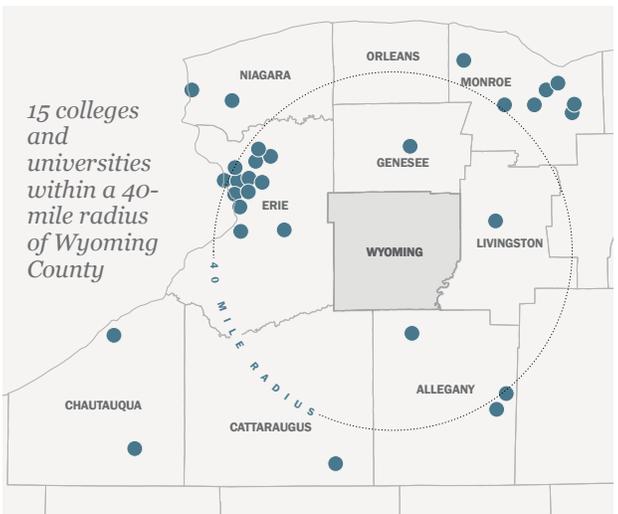
Number of People in the Labor Force **21,000**

% Employment in Public Sector **31%**

Average Private Sector Wage (2008) **\$30,692**

Source: See Data Sources & Notes for the various data sources

NEARBY COLLEGES



PROSPECTS

FOR THE BUFFALO NIAGARA LABOR MARKET

Prospects for the region’s labor market are mixed. While projections show low levels of overall job growth through 2020, the region also has the key ingredients for success in a knowledge economy, and thus a prime opportunity to leverage its labor market for economic growth.

The previous sections paint a comprehensive picture of the Buffalo Niagara labor market today, revealing such attributes as a large supply of young educated workers, affordable labor costs relative to national benchmarks and growth in knowledge-based fields such as

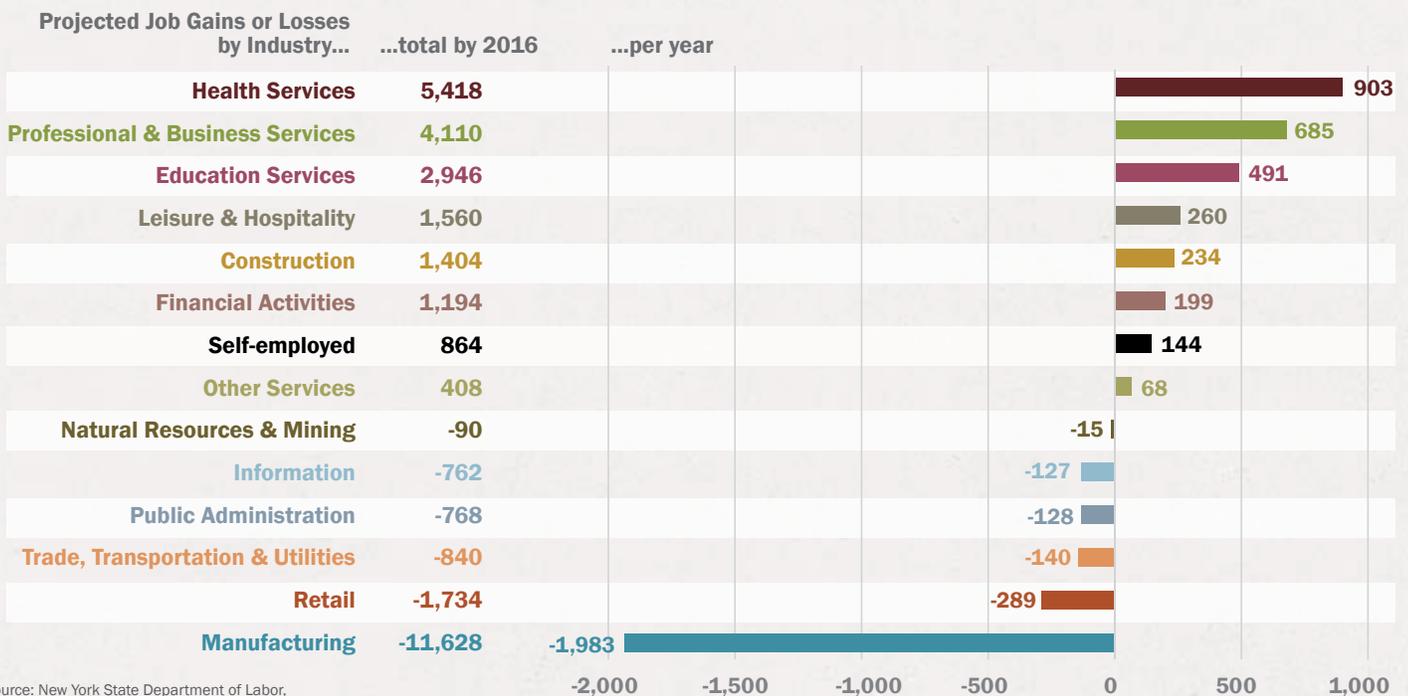
LOOKING AHEAD

WHAT WILL THE NEW ECONOMY LOOK LIKE?

Mirroring the nation, **Buffalo Niagara’s economy will continue to diversify toward knowledge-based industries and reflect national economic ups and downs.** The region and **employers will need to adapt to Buffalo Niagara’s shifting demographics,** including an aging population and an influx of college-educated youth.

WHAT WILL BE THE DEMAND FOR LABOR IN THE REGION?

As shown by job projections through 2016, demand for manufacturing and related workers will decline further, likely due to continued trends toward automation and offshoring. Meanwhile, **service-providing sectors, particularly health services, professional services and education, will expand in response to an aging population and knowledge-hungry youth.**



Source: New York State Department of Labor, Western New York Region Industry Projections to 2016

professional services, education and health services. Looking forward, the region has several prospects for a strong labor market, including a diverse base of higher education institutions that will continue to supply the firms of a diversified economy with highly educated labor. However, the

region is also faced with more challenging trends, including projections for minimal net job growth and an accelerating number of retirees. How these and other factors will affect the dynamics of the region's labor market and economy are discussed in more detail below.



HOW WILL THE PICTURE OF LABOR SUPPLY CHANGE?

Over the next 20 years, the number of workers age 55+ is expected to grow faster in Buffalo Niagara than nationally as a proportion of the workforce. With one in two 18-24 year-olds enrolled in or graduated from a higher education institution, **Buffalo Niagara's highly educated young population will need to fill this workforce void.** If Buffalo Niagara is to effectively manage this demographic shift in its workforce, the **knowledge-based sectors most attractive to the younger, more educated worker must continue to expand.**

WHAT IS ANTICIPATED FOR THOSE ENTERING AND EXITING THE WORKFORCE?

The region's emerging pool of workers is expected to remain ample due to the region's robust and growing capacity to enroll college students. However, only those that can land jobs appropriate to their education ultimately will be captured by the region's workforce. At the same time, **the region can anticipate an annual loss of 20,000 workers to retirement beginning in 2020**, disproportionately affecting education services and skill-based industries like manufacturing. Attrition in education will be met by the thousands of higher education students studying in this field. Manufacturing and production-related jobs, while generally shrinking, will likely face shortages without a supply of workers interested or skilled in the trades. Indeed, projections show that three out of four job openings will require a vocational award, related work experience or at least moderate levels of training.

HOW WILL WAGES LOOK IN THE FUTURE?

The diverse factors involved in determining a given job's wage makes it very difficult to project trends in employee pay in the future. Yet, when considering just one of those factors - the intersection of supply and demand of workers to jobs - **current projections suggest that existing wage trends will persist in future years.** This trend is highlighted by a significant disparity between regional and national wages for higher-paying, college degree-requiring jobs. As the region's 22 colleges and universities produce more than 26,000 college graduates annually, and occupational projections forecast that **only one in four job openings—about 4,000 annually through 2016—will require a college degree**, this trend is expected to remain.

WHAT ABOUT UNIONS IN THE REGION?

Unions in Buffalo Niagara continue to adapt to the challenges of global competition and economic change. As unions confront new challenges in the public sector, innovative approaches will be required. Through a commitment to improving standards of living and expanding opportunities for working people, **unions can play an important role in supporting both the interests of their members and the long-term viability of the region's workforce.**

DATA SOURCES & NOTES

Universe for Jobs and Firms

New York State Department of Labor, “Quarterly Census of Employment and Wages” (8-county roll-up), 2009:

New York State Department of Labor provided counts of jobs by industry subsector at the four-digit North American Industry Classification System (NAICS) code for the eight-county Buffalo Niagara region. Jobs that are covered by unemployment insurance or are in industries with fewer than three firms are not included in this universe. Unlike publicly available data for individual counties, however, these data were “rolled up” to include employment and firm counts where there are three or more firms in total across the eight counties.

“Supersectors”

To provide a broad view of the regional economy, industry classification is based on aggregated groupings referred to as “supersectors.” The supersectors analyzed in this report are consistent with those defined by the U.S. Economic Classification Policy Committee, with the exception of Education & Health Services, which were separated, and Retail, which was disaggregated from Trade, Transportation & Utilities. To remain consistent, supersector classification was based on the eight-county roll-up data provided by the New York State Department of Labor and combines both public and private employment.

Demographic Data

With the exception of population counts for which 2009 estimates are available, the most recent American Community Survey (ACS) three-year estimates (2006-08) from the U.S. Census Bureau were used for all demographic findings. Workforce data from the ACS refers to the “Civilian Labor Force.” While these numbers are only estimates, they represent the most accurate and current figures available at the county level.

Occupation and Wage Data

New York State Department of Labor, “Occupational Employment Statistics” (8-county roll-up) 2009

Because publicly available data at the regional level aggregates together only five of the region’s eight counties, “rolled-up” data that encompasses all eight counties were provided by the New York State Department of Labor for use in this report.

Benchmarking to Other Regions

A series of seven “benchmark regions” appears in various sections of the report to provide context on how Buffalo Niagara compares to other U.S. regions. Selection of comparative regions was based on the preference of the Buffalo Niagara Enterprise as well as common economic, demographic or geographic characteristics of the Buffalo Niagara region. In order to maintain consistency, comparisons used figures from the metropolitan region alone (consisting of Erie and Niagara counties).

Target Industries

Appropriate NAICS codes were used to define target industries as per the recommendations of the Buffalo Niagara Enterprise. To understand trends within each target industry, subsectors were created based on common attributes of 4-digit NAICS codes. The definition of these target industries (and subsectors) are as follows:

Tourism: *Gaming, Recreation & Entertainment* (7111, 7112, 7121, 7131, 7132, 7139, 5121, 7212); *Accommodations* (7211, 7213); *Eating & Drinking Establishments* (7221, 7222, 7223, 7224); *Tourism Support Services* (4852, 4853, 4855, 4859, 4871, 4872, 5321, 5615, 4532, 4811, 4812, 4831, 4881, 4884).

Advanced Manufacturing: *Food, Beverage & Tobacco* (3111 – 3121); *Textiles & Apparel* (3132 – 3152); *Wood, Paper & Printing Production* (3211 – 3231); *Chemical-based* (3241 – 3279); *Metal-based* (3311 – 3329); *Machinery* (3331 – 3339); *Computers & Electronics* (3341 – 3359); *Transportation Manufacturing* (3362 – 3369); *Furniture & Other Manufacturing* (3371 – 3399).

Green: *Professional & Scientific Consulting* (5413, 5414, 5416, 5417); *Construction* (2361, 2362, 2371); *Waste Processing & Recycling* (5621, 5622, 5629); *Agricultural* (1111, 1119, 1151); *Energy* (2111, 2211, 2213); *Wholesalers & Rental* (4237, 4239, 5324); *Goods Producing* (3211, 3219, 3222, 3241, 3251, 3252, 3261, 3272, 3279, 3312, 3314, 3315, 3321, 3323, 3324, 3329, 3331, 3332, 3334, 3336, 3339, 3341, 3344, 3345, 3351, 3353, 3359, 3363, 3365).

Back Office: *General Business Support* (5611, 5612, 5614); *Banking, Accounting & Insurance* (5221, 5222, 5223, 5231, 5241, 5242, 5412); *Technical Professional Services* (5414, 5415, 5419, 5413); *Data & Telecommunications* (5171, 5172, 5179, 5182).

Logistics: *Freight Movement & Storage* (4921, 4811, 4812, 4831, 4841, 4842, 4931); *Wholesale* (4231, 4232, 4233, 4234, 4235, 4236, 4237, 4238, 4239, 4241, 4242, 4243, 4244, 4245, 4246, 4247, 4248, 4249, 4921); *Support Activities for Freight Transportation* (4881, 4882, 4883, 4884, 4885, 4889).

Life Sciences: *Research & Development* (5417); *Medical Devices Manufacturing* (3345, 3391); *Pharmaceutical & Medical Manufacturing* (3254, 3261).

Agribusiness: *Agricultural Machinery and Chemical Manufacturing* (3253, 3331); *Agribusiness Support Activities* (1151, 1152); *Food & Beverage production* (3113, 3114, 3115, 3116, 3118, 3119, 3121).

WHAT DOES THE REGIONAL ECONOMY LOOK LIKE?

Industry composition by Total Employment, 2009:

New York State Department of Labor, "Quarterly Census of Employment and Wages" (8-county roll-up), 2009.

U.S. Department of Labor: Bureau of Labor Statistics, "Quarterly Census of Employment and Wages," 2009.

Buffalo Niagara Labor Market by the Numbers:

Buffalo Niagara Population: U.S. Census Bureau, "Population Estimates," 2009.

Number of Firms & Number of Jobs: New York State Department of Labor, "Quarterly Census of Employment and Wages" (8-county roll-up), 2009.

Number of People in the Labor Force: U.S. Bureau of Labor Statistics, "Local Area Unemployment Statistics", 2009

GMP, Erie & Niagara counties, 2008: U.S. Department of Commerce: Bureau of Economic Analysis, "GDP by Metropolitan Area in Current Dollars," 2008.

Employment by Industry, Buffalo Niagara, 2009:

New York State Department of Labor, "Quarterly Census of Employment and Wages" (8-county roll-up), 2009.

% Total Employment in Manufacturing and Financial/Health/Education/Professional Services, Buffalo Niagara and U.S., 1970 to 2009:

U.S. Census Bureau, 1970, 1980, 1990, 2000.

New York State Department of Labor, "Quarterly Census of Employment and Wages" (8-county roll-up), 2009.

U.S. Department of Labor: Bureau of Labor Statistics, "Quarterly Census of Employment and Wages," 2009.

Industry breakdown for 1970-2000 was derived from the U.S. Census while 2009 numbers came from the QCEW. Because industry classification has changed slightly across the years, inferences were made in defining Financial/Health/Education & Professional Services across decades.

WHAT IS THE REGIONAL DEMAND FOR LABOR?

Private Sector Employment Change by Industry, 2001 to 2008:

U.S. Department of Labor: Bureau of Labor Statistics, "Quarterly Census of Employment and Wages" 2001, 2008.

Graphic does not include all industry sectors that have increased or declined since 2001. Additional sectors that experienced decline from 2001-2008 include "Other Services," "Retail Trade" and "Unclassified." Additional sectors that experienced an increase over this period include "Natural Resources & Mining" and "Construction." In all cases, these changes amounted to a relatively small impact of less than 400 jobs per industry sector.

Distribution of Employers in Buffalo Niagara by Number of Jobs, 2009:

New York State Department of Labor, "Quarterly Census of Employment and Wages" (8-county roll-up), 2009.

Location of Private-sector Employers in Buffalo Niagara by Number of Workers Employed at Firm, 2008:

U.S. Census Bureau: Local Employment Dynamics, "On the Map." Work Area Profile Analysis for private-sector jobs in the eight-county region, 2008.

Map illustrates location of private sector jobs covered by unemployment insurance in the eight-county Buffalo Niagara region. Map precision is at the block level due to suppression by the U.S. Census Bureau for confidentiality purposes.

WHAT IS THE REGIONAL SUPPLY OF LABOR?

Distribution of Labor Supply in Buffalo Niagara (persons age 16+), 2009:

U.S. Census Bureau, "2006-2008 American Community Survey 3-Year Estimates."

U.S. Department of Labor: Bureau of Labor Statistics, "Local Area Unemployment Statistics", 2009.

New York State Department of Labor, "Quarterly Census of Employment and Wages" (8-county roll-up), 2009.

Universe of total population age 16+ was derived from the American Community Survey (ACS), as was the labor participation rate of 63%. The total count of the labor force (employed or unemployed) was adopted from the Local Area Unemployment Statistics, which provides a more accurate count of the labor force than the ACS. Breakdown by type of employment of the labor force was estimated by accounting for public and private sector jobs within the region. "Other" refers to those who are counted as in the labor force and employed, but are not counted by jobs data because their employment is exempt from or is not covered by unemployment insurance.

% Workforce Ages 55 and up, Selected Metropolitan Areas, 2008:

U.S. Census Bureau, "2006-2008 American Community Survey 3-Year Estimates."

% Workforce Between the Ages of 25 and 34, Selected Metropolitan Areas, 2008:

U.S. Census Bureau, "2006-2008 American Community Survey 3-Year Estimates."

% Population by Age with a Bachelor's Degree or Higher, Buffalo Niagara and U.S., 2008:

U.S. Census Bureau, "2006-2008 American Community Survey 3-Year Estimates."

Concentration of the region's private-sector workers by location of residence, 2008:

U.S. Census Bureau: Local Employment Dynamics, "On the Map." Labor Shed Analysis for private-sector jobs in the eight-county region, 2008.

Map illustrates where workers live who are employed in private sector jobs in the eight-county Buffalo Niagara region. Map precision is at the block level due to suppression by the U.S. Census Bureau for confidentiality purposes.

WHO IS ENTERING AND EXITING THE WORK FORCE?

Entering and Exiting the Workforce Each Year:

National Center for Education Statistics, "Integrated Postsecondary Education Data System," 2007-08.

New York State Education Department School Report Card Database, 2008.

U.S. Census Bureau, "2006-2008 American Community Survey 3-Year Estimates."

Calculation for number of expected retirees over the next 10 years is based on dividing the ~100,000 members of the workforce between the ages of 55 and 64 by 10. This calculation assumes that a portion of older workers will continue to work, which is supported by the ~30,000 individuals currently in the workforce who are over the age of 65. The calculation assumes these workers will retire in the next 10 years, but will be replaced by an equal amount of workers in the cohort between 55 and 64, thereby making up the difference. For those

entering the workforce, the ~26,000 graduates from higher education institutions annually in the region are assumed to be potential labor entrants, as are the ~4,500 students from the region's high schools who either drop out or graduate high school with plans to pursue employment rather than postsecondary education, the military or other programs. These data were adopted from the 2007-08 Academic Year and under this calculation are assumed to remain constant over the next 10 years.

Number of Jobs by Industry and Age of Worker: Buffalo Niagara, 2009

U.S. Census Bureau: Local Employment Dynamics, "Quarterly Workforce Indicators," 2008. Accessed via Cornell Virtual Research Data Center.

Due to data availability, age estimates by industry were calculated by applying age distribution percentages from 2008 quarterly averages to regional job counts from 2009. Public Administration was omitted from this analysis.

College Degrees Granted by Buffalo Niagara's 22 Higher Education Institutions, Top Four Fields of Study by Degree Type, 2007-08:

National Center for Education Statistics, "Integrated Postsecondary Education Data System," 2007-08.

WHAT ARE WAGES LIKE IN THE REGION?

Average Wage in Buffalo Niagara and the U.S., Across All Occupations:

New York State Department of Labor, "Occupational Employment Statistics" (8-county roll-up), 2009.

U.S. Department of Labor: Bureau of Labor Statistics, "Occupational Employment Statistics," 2009.

Average wage for the Buffalo Niagara region represents the average for all jobs in the region. The average national wage was adjusted for the occupations and occupational mix that exist in the region, therefore controlling for wage differences attributable to different occupations and/or different concentrations of higher- or lower-paying occupations.

Average Wages in Buffalo Niagara and its Comparison to the Adjusted U.S. Average Wage, by Selected Occupational Categories:

New York State Department of Labor, "Occupational Employment Statistics" (8-county roll-up), 2009.

U.S. Department of Labor: Bureau of Labor Statistics, "Occupational Employment Statistics," 2009.

Average wages for the Buffalo Niagara region and the U.S. are compared for selected standard occupational categories. In calculating the percentage difference between this region and the nation, average wages by occupational category across the nation were adjusted for the occupations and mix of occupations that exist in the region.

WHAT ABOUT UNIONS IN THE REGION?

% Union Membership Across Private Sector Workers in the Buffalo-Niagara Falls Metropolitan Area, 1986-2009

Barry Hirsch and David Macpherson, "Union Membership and Coverage Database," 1986-2009. Accessed via www.unionstats.com.

Union Membership Among Public- and Private-Sector Workers in the Buffalo-Niagara Falls Metropolitan Area, 2009:

Barry Hirsch and David Macpherson, "Union Membership and Coverage Database," 2009. Accessed via www.unionstats.com.

Because unionization data are available only for metropolitan areas, an estimate was generated for the eight-county Buffalo Niagara region by applying union membership levels by the public- and private-sectors in the Buffalo-Niagara Falls Metropolitan Area to the public- and private-sector jobs in all of Buffalo Niagara.

Work Stoppages as a Percentage of Contracts Negotiated in Private Sector, 1985-2009:

Federal Mediation and Conciliation Service, Annual Reports, 1985-2009.

TARGET INDUSTRIES

Profile of Target Industry

New York State Department of Labor, "Quarterly Census of Employment and Wages" (8-county roll-up), 2009.

U.S. Department of Labor: Bureau of Labor Statistics, "Quarterly Census of Employment and Wages," 2001, 2008.

Firm and employee counts reflect 2009 data for jobs covered by unemployment insurance. Estimates for employment change were generated by incorporating the best available information derived from job counts in 2001 and 2008 at the 4-digit NAICS. Because of the level of detail in how target industries are defined, employment change between 2001 and 2008 are estimates that, in some instances, were based on incomplete datasets. Nonetheless, "best estimates" were made based on data from 2009, 2008 and 2001 as well as supplementary research.

Firms by Size & Geography

Reference USA, "Business Database," 2010.

Firms were selected based on the primary NAICS code provided by Reference USA. Data excludes any firm with less than five employees.

Industry Employment as a Share of Total Economy

New York State Department of Labor, "Quarterly Census of Employment and Wages" (8-county roll-up), 2009.

U.S. Department of Labor: Bureau of Labor Statistics, "Quarterly Census of Employment and Wages," 2009.

Top 10 Occupations in Target Industry

U.S. Bureau of Labor, Occupational employment by industry, 2005-2007.

O*Net Resources Center, "O*NET 14.0 Database and Data Dictionary," 2010.

Top occupations, or those jobs that exist in the greatest numbers within the target industry, reflect the national distribution of occupations by industry subsector.

Top Skills Required

U.S. Bureau of Labor, Occupational employment by industry, 2005-2007.

O*Net Resources Center, "O*NET 14.0 Database and Data Dictionary," 2010.

Top skills are generally those needed at a higher than average level by top occupations within the target industry. The skills and skill levels associated with an occupation are provided by the O*NET Resources Center, which rates occupations on up to 35 possible job skills. Higher-than-average skill levels are those with a rating of 4 or higher on a scale of 0 to 7, with 0 being low/no skill and 7 being the highest level a job could require.

Degrees Awarded

National Center for Education Statistics, "Integrated Postsecondary Education Data System," 2007-08.

National Crosswalk Center, Crosswalk between SOC (Standard Occupational Classification) and 2000 CIP (Classification of Instructional Programs).

Degrees awarded in broad field of study were counted if they prepare graduates for a top occupation in the target industry. Fields of study were linked to occupations using the SOC to CIP crosswalk as a guide. Where most of the top 10 occupations didn't require a college degree, which was the case with tourism, fields of study related to less common jobs within the industry were included.

COUNTY COMPARISONS

“For every 10 people in the Buffalo Niagara region, there are about 5 jobs”:

U.S. Census Bureau, “Population Estimates,” 2009.

New York State Department of Labor, “Quarterly Census of Employment and Wages” (8-county roll-up), 2009.

Calculation was made by dividing the 2009 population estimate for a given county by the number of jobs covered by unemployment insurance in that county.

Buffalo Niagara Population by County, % Public Employment by County, 2009:

U.S. Census Bureau, “Population Estimates,” 2009.

New York State Department of Labor, “Quarterly Census of Employment and Wages” (8-county roll-up), 2009.

Percentage of employment in the public sector was taken from QCEW data for September, 2009.

Unemployment Rates, 2009:

U.S. Department of Labor: Bureau of Labor Statistics, “Local Area Unemployment Statistics”, 2009.

Unemployment rate reflects the annual average unemployment levels for each county, the composite regional unemployment rate and the nation.

Educational Attainment:

U.S. Census Bureau, “2006-2008 American Community Survey 3-Year Estimates.”

Wages:

U.S. Department of Labor: Bureau of Labor Statistics, “Quarterly Census of Employment and Wages,” 2008.

Average wage was taken from dividing the total wages granted by private-sector employers in a county by its number of private-sector jobs. Total wages and jobs include only those covered by unemployment insurance.

COUNTY BY COUNTY

Educational Attainment of Workforce:

U.S. Census Bureau, “2006-2008 American Community Survey 3-Year Estimates.”

“Commuting to...”

U.S. Census Bureau: Local Employment Dynamics, “On the Map.” Labor Shed Analysis for private-sector jobs in the selected county, 2008.

The average drive time for a 30-mile distance within the Buffalo Niagara Region was determined using Google Maps and reflects the average ratio of minutes to miles across approximately 10 selected distances of 30 miles covering all eight counties of the region.

Top 10 Fields of Study:

National Center for Education Statistics, “Integrated Postsecondary Education Data System,” 2007-08.

Findings refer to the degrees awarded in the 2007-08 academic year for all levels of higher education by institutions in a given county. For Orleans and Wyoming counties, where no higher education institutions exist, 40-mile radii were generated to calculate the approximate number of colleges within commuting distance from the center of these counties.

“...By the Numbers”:

Population: U.S. Census Bureau, “Population Estimates,” 2009.

Number of Firms & Number of Jobs: New York State Department of Labor, “Quarterly Census of Employment and Wages” (8-county roll-up), 2009.

Number of People in the Labor Force: U.S. Department of Labor: Bureau of Labor Statistics, “Local Area Unemployment Statistics”, 2009.

Average Private Sector Wage (2008): U.S. Department of Labor: Bureau of Labor Statistics, “Quarterly Census of Employment and Wages,” 2008.

PROSPECTS

WHAT WILL BE THE DEMAND FOR LABOR IN THE REGION?

New York State Department of Labor, “Western New York Region Industry Projections To 2016.” Accessed via NYS Department of Labor Web site May, 2010.

Job projections are available only for the five-county labor market region as defined by the NYS Department of Labor. Projections thus do not account for Orleans, Genesee or Wyoming counties.

HOW WILL THE PICTURE OF LABOR SUPPLY CHANGE?

U.S. Census Bureau, “2006-2008 American Community Survey 3-Year Estimates.”

Expected growth rate of retirees over the next twenty years was calculated by comparing the civilian labor force in the Buffalo Niagara Region age 45-54 to that of the nation; population of 18-24 year olds enrolled in or graduated from a higher education institution includes ACS estimates for this age cohort whose educational attainment status is “Some college or associate’s degree” or “Bachelor’s degree or higher.”

WHAT IS ANTICIPATED FOR THOSE ENTERING AND EXITING THE WORKFORCE?

U.S. Census Bureau, “2006-2008 American Community Survey 3-Year Estimates.”

Expected annual loss of workers to retirement beginning in 2020 was calculated by dividing the number of persons in the civilian labor force between the age of 45-54, approximated at close to 200,000, by 10.

HOW WILL WAGES LOOK IN THE FUTURE?

New York State Department of Labor, “Long-Term Occupational Projections 2006-2016, Western New York Region.” Accessed via NYS Department of Labor Web site February, 2010.

Job projections are available only for the five-county labor market region as defined by the NYS Department of Labor. Projections thus do not account for Orleans, Genesee or Wyoming counties. Projections by occupation and educational level were used to separate degree- and non-degree requiring jobs.

