

CITY OF MILWAUKIE: ECONOMIC OPPORTUNITIES ANALYSIS



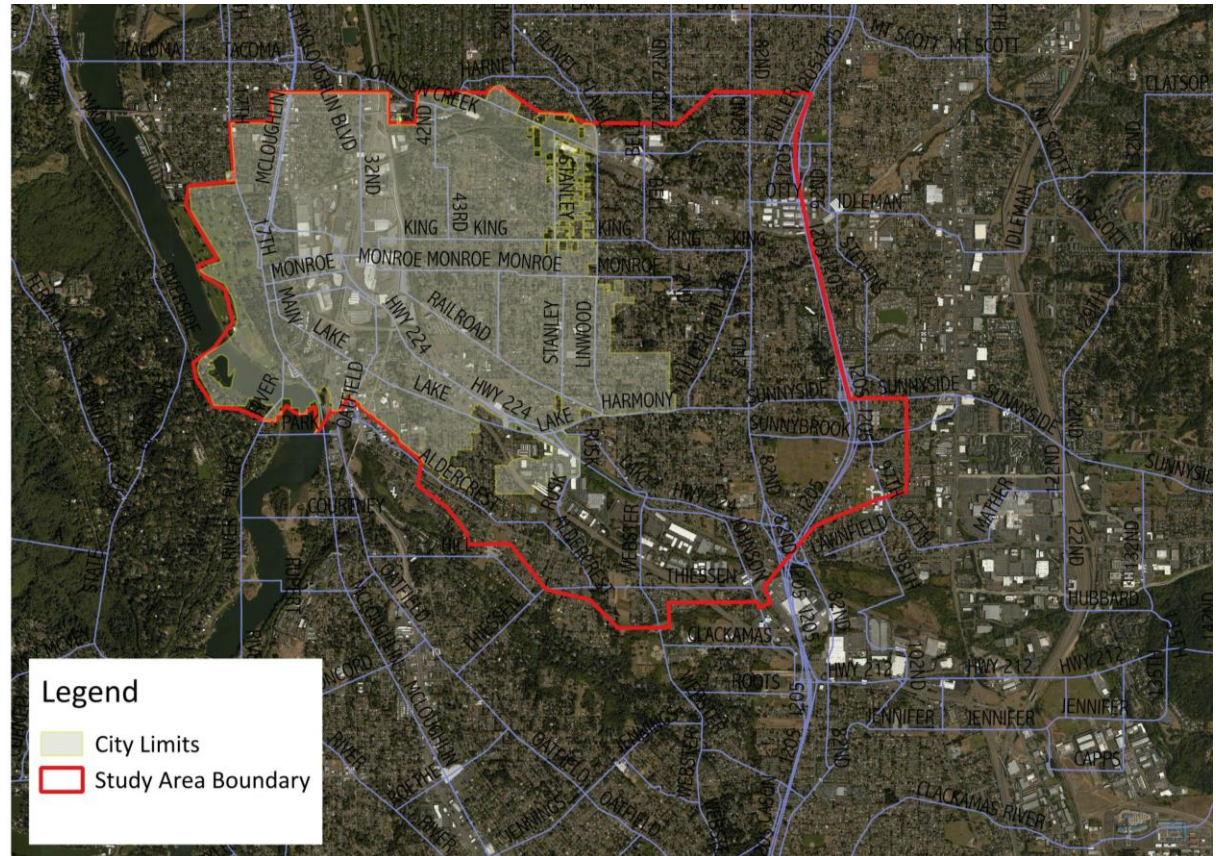
Target Industry Analysis

Introduction

This element of the Economic Opportunities Analysis utilizes a range of analytical tools to assess the economic landscape in Milwaukie. The objective of this process is to identify a range of industry typologies that can be considered targeted economic opportunities over the planning period.

In this process, we identify the anchors and clusters of interrelated industries that have already capitalized on Milwaukie's competitive advantages and assembled locally. However, this analysis will also consider how economies and industries are changing, the impact of recent investments in infrastructure, and how exogenous factors may shape future economic growth. In other words, an industry typology does not have to have a large existing presence to be considered a targeted opportunity.

Taken together, the research and analysis in this section and in the previous section represents an evaluation of the likely forces that will drive economic growth, and by extension land need, in coming cycles.



Target Industry Study Area:

While some planning decisions are made at the jurisdictional level, in reality economies do not conform to jurisdictional boundaries. Businesses in the City of Milwaukie function in a regional and in some cases global context. Milwaukie's existing city limits abuts a considerable amount of unincorporated employment land, which may be considered for future annexations. As such, to assess targeted industries in this analysis, we relied on Milwaukie's urban services boundary, which is roughly approximated in the map above.

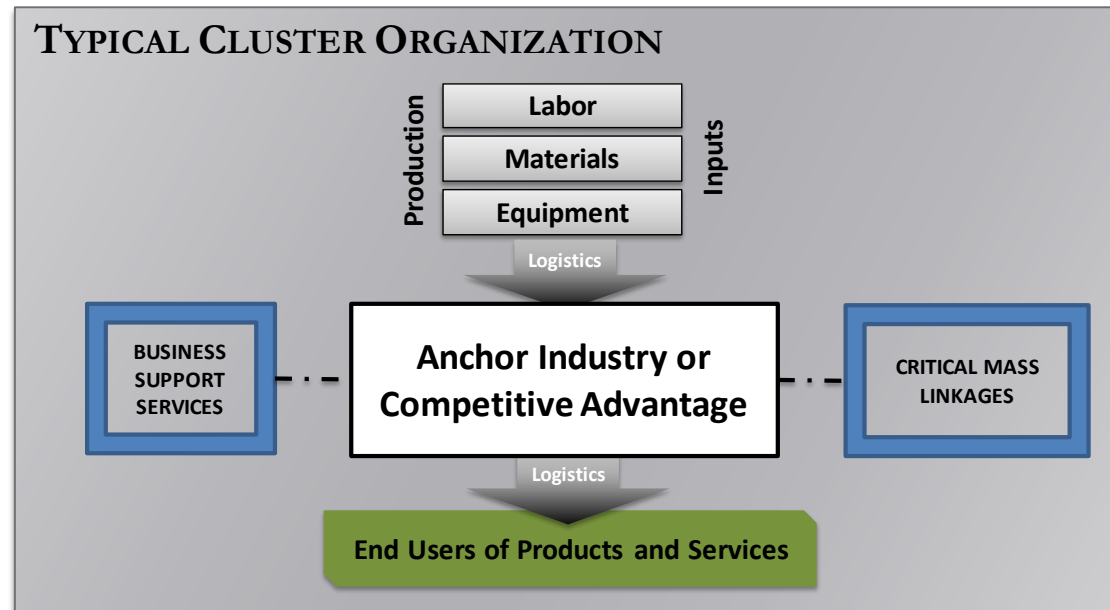
Target Industry Analysis

Industry Clusters vs. Targeted Industries

Sound regional economies are best organized around a healthy set of **industry clusters**—similar and related businesses and industries that are mutually supportive, regionally competitive, attract capital investment, and encourage entrepreneurship. Generally, clusters develop as an agglomeration of businesses in a geography that holds an innate competitive advantage in that industry—whether it is natural resources, human capital, political policies, or geography. For example, Oregon’s oldest industries—namely forestry and agriculture, emerged from physical and environmental attributes such as its climate, trees, soils, and access to shipping and distribution networks. In turn, these industries spawned interrelated clusters that include Food Processing & Manufacturing, Wood Product Manufacturing, Wholesaling & Distribution, Machinery Manufacturing, and host of other industries. In many local economies, we find also that a large firm or group of firms can often anchor a local cluster—the most obvious examples in Milwaukie being Blount and PCC Structurals anchoring the Metals and Machinery manufacturing cluster.

While specialization is a critically important factor, it is important for communities to understand that a cluster goes beyond a high concentration of employment or output within a given sector or group of similar sectors. Rather, it is the vertical integration of supply chains, distribution, wholesaling, or even the horizontal linkage between formally unrelated industries that share common inputs such as materials and trained labor. Clusters can organize around natural resources, training institutions, a particular firm or group of firms, among many other factors.

Targeted industries, in contrast, are industries within those clusters where a particular community may have a competitive advantage. For example, an industry that fills an existing gap in the supply chain network, or a completely unrelated industry that has similar labor demands. Further, a targeted industry does not have to be part of an existing cluster network, or even be present in the local economy. In this analysis we identify some “aspirational” industries with emerging opportunities for the City to use its economic development “toolbox” to target.



The distinction between targeted industries and industry clusters is commonly lost in economic development, with the two terms often used synonymously. We make the

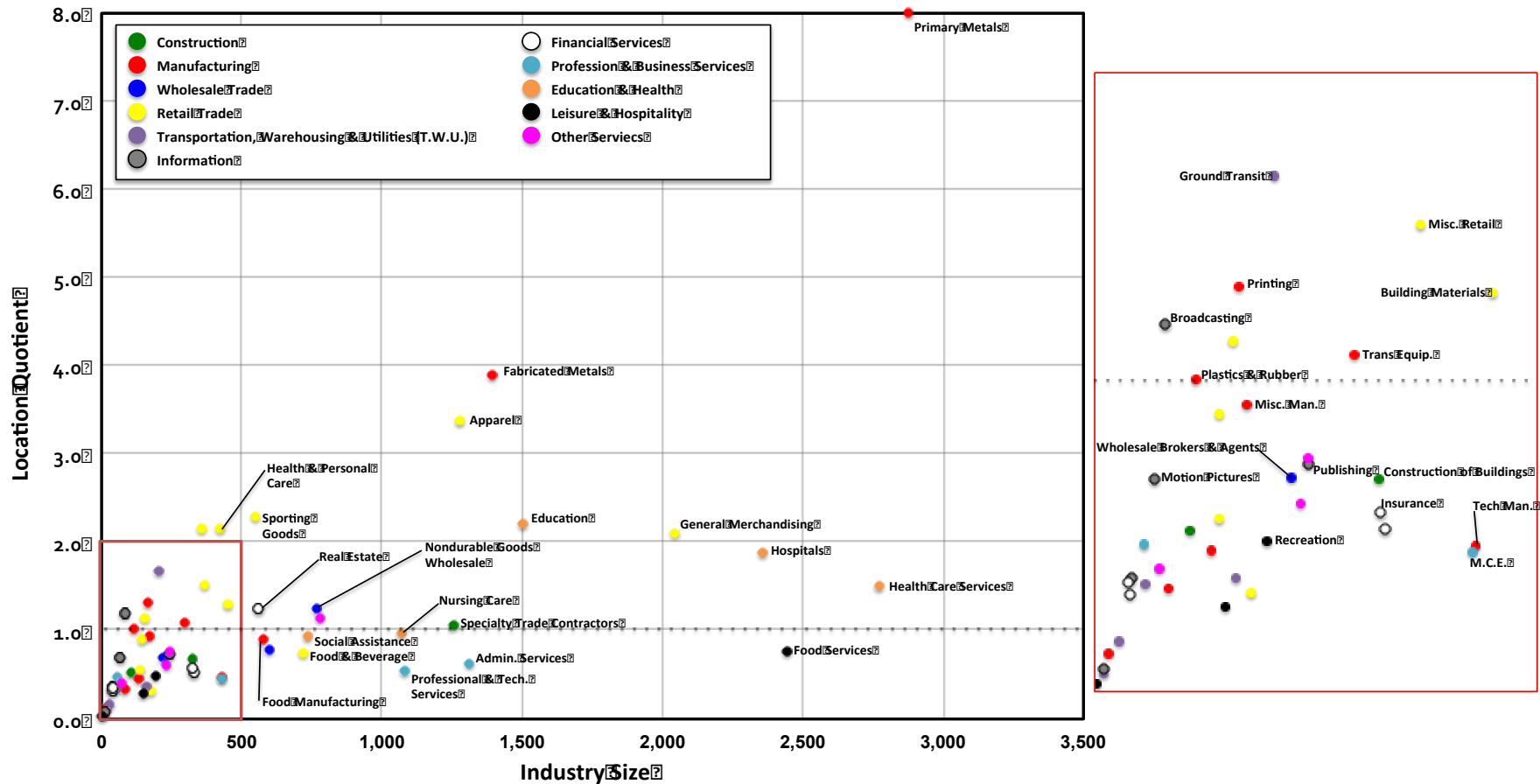
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Target Industry Analysis

Economic Specialization

The most common analytical tool to evaluate economic specialization is a location quotient analysis. This metric compares the concentration of employment in an industry at the local level to a larger geography. For example, a location quotient of 1.50 for widget manufacturing would indicate that the share of employment in widget manufacturing locally was 50% higher than the national average. Generally, 1.50 is a common threshold indicating a relatively high specialization. Large industries are also obviously considerable components of the local economy and should also be considered when evaluating economic specialization. The graphics below indicate the location quotients of industries in the Milwaukie UGMA using 2014 QCEW data. When we plot these industries graphically by size, specialization, and sector, we can begin to see some patterns in the data.



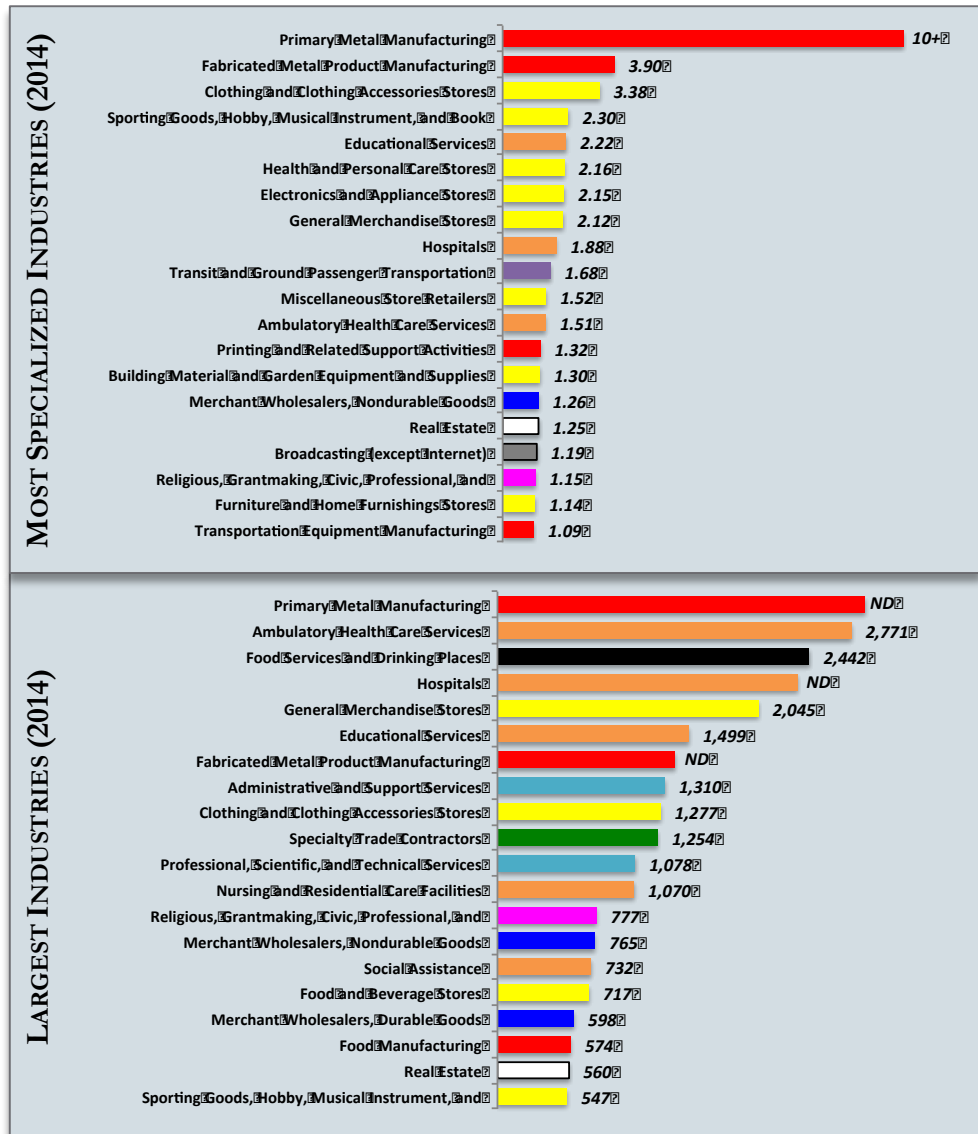
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Target Industry Analysis

Economic Specialization—Milwaukie UGMA’s Largest and Most Concentrated Industries

- The 20 most specialized industries (highest location quotient) in the study area account for over 57 percent of all employment in the economy.
- Metals manufacturing is clearly a critical industry locally. Combined, primary and fabricated metals manufacturing locally is nearly eight times more concentrated than the national average. This segment employs one out of every eight workers in the economy.
- The study area has an abundance of retail services. However, this can largely be attributed to the inclusion of Clackamas Town Center in the study area. Without Clackamas Town Center retail concentrations are more in line with typical averages.
- Due to disclosure reasons¹, computer and electronics manufacturing does not show up as a top industry because it has been combined with another segment. However, the study area does have measurable high-tech employment, albeit limited to a few firms.
- Health care is by far the largest segment of the economy, accounting for 20 percent of the economy with an above average specialization.
- The study area has a strong foundation in the construction sector, where all three subsectors combine to account for nearly 1,700 jobs.
- Service industries in professional, technical, and information services are not highly concentrated in the study area, but still represent a measurable share of the economy.
- Wholesaling and transportation is a final economic segment that has both an above average concentration and top share of the economy. This segment is generally tied to existing production operations in the study area.



¹ State law prohibits the disclosure of employment information about a particular industry when information about a specific firm can be ascertained from the data. For this reason industries are commonly aggregated to avoid disclosing confidential information

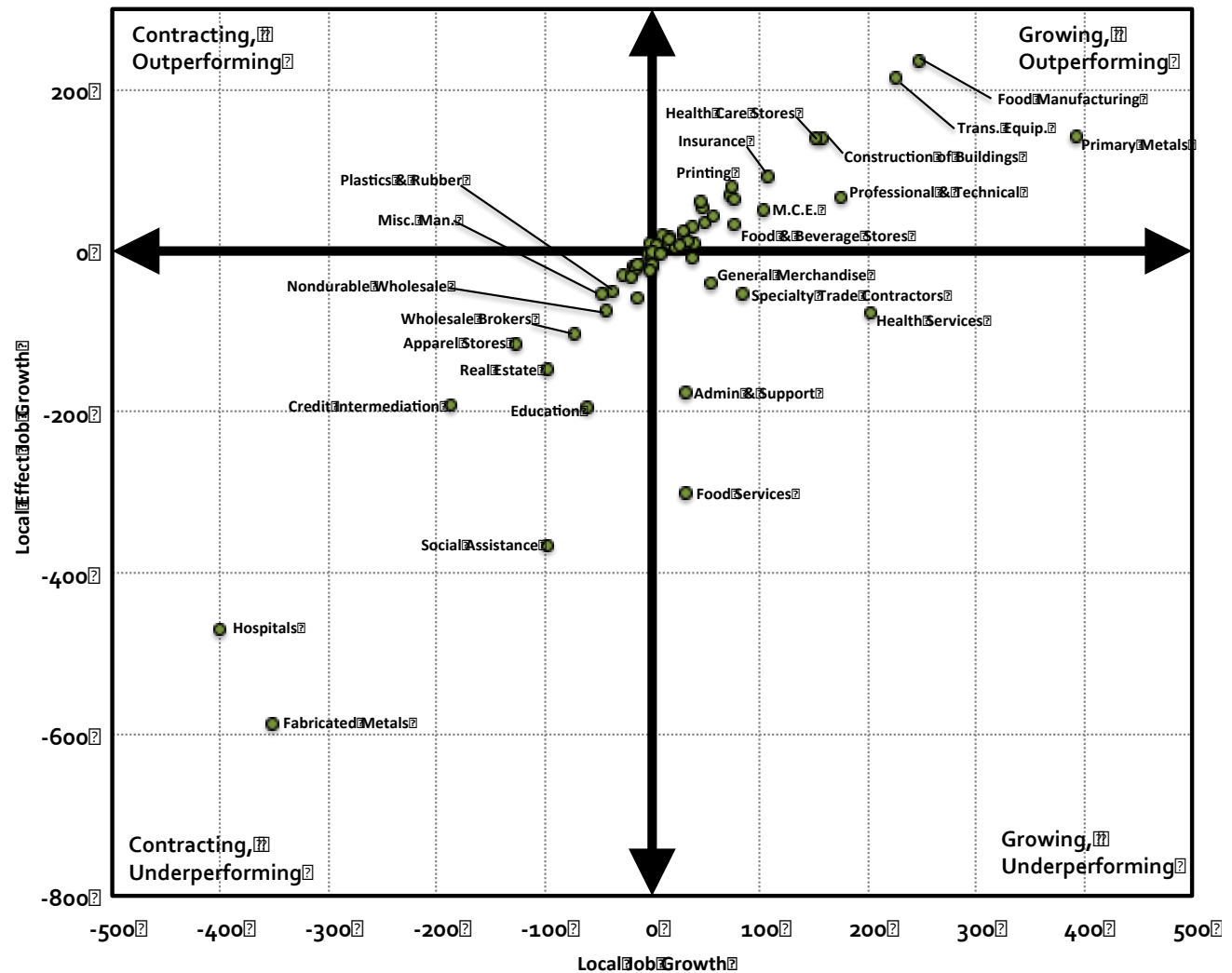
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Target Industry Analysis

Economic Drivers—Shift-Share Analysis

The identification of the unique and shifting economic drivers of a local or regional economy are critical in informing the character and nature of future employment, and by extension land demand over a planning cycle. To this end, we employ a shift-share analysis of the local economy emerging out of the current expansion cycle. A shift-share analysis is an analytical procedure that measures local effect of economic performance within a particular industry or occupation. The process considers local economic performance in the context of national economic trends—indicating the extent to which local growth can be attributed to unique regional competitiveness or simply growth in line with broader trends. For example, consider that Widget Manufacturing is growing at a 1.5% rate locally, about the same rate as the local economy. On the surface we would consider the Widget Manufacturing industry to be healthy and contributing soundly to local economic expansion. However, consider also that Widget Manufacturing is booming across the country, growing at a robust 4% annually. In this context, local widget manufactures are struggling, and some local or regional condition is stifling economic opportunities.



Target Industry Analysis

Economic Drivers—Champions and Challenges in the Milwaukie Economy

- With the exception of a select few industries (contractors, health services, restaurants, administration services), the economic direction of most industries locally is in line with national trends. Not a single industry is contracting locally but performing better than the national average.
- The balance between industries that are outperforming and underperforming sectors locally represents net economic expansion during the cycle. Champions are pulling the economy forward while challenging industries are draw growth down. Challenging sectors can reverse course over the duration of a cycle and turn positive, but champions are finding local competitive advantages in a growth market.
- It is clear that balanced, low volatility is the norm across most industries, with high volatility in several key sectors. Large local effect losses in fabricated metals and hospitals are largely isolated to large key employers, however some firm departures in fabricated metals have occurred.
- Contraction and underperformance across all three wholesaling subsectors is also cause for concern. Firms in these industries are facing local structural challenges.
- Conversely, it is encouraging for an economy with a large manufacturing base to exhibit three manufacturing sectors atop its champion sectors.
- Additional strength in professional services, construction, and high-tech manufacturing are also positive signs for expansion.

LOCAL EFFECT JOB GROWTH (2010 – 2014)

<i>Food Manufacturing</i>	237
<i>Transportation Equipment Manufacturing</i>	214
<i>Primary Metal Manufacturing</i>	142
<i>Health and Personal Care Stores</i>	141
<i>Construction of Buildings</i>	141
<i>Insurance Carriers and Related Activities</i>	92
<i>Printing and Related Support Activities</i>	81
<i>Heavy and Civil Engineering Construction</i>	68
<i>Professional, Scientific, and Technical Services</i>	66
<i>Nonstore Retailers</i>	63
<i>Private Households</i>	61
<i>Computers, Electronics, and Appliances</i>	54
<i>Management of Companies and Enterprises</i>	51
<i>Personal and Laundry Services</i>	42
<i>Truck Transportation</i>	35
<i>Miscellaneous Manufacturing</i>	-53
<i>Specialty Trade Contractors</i>	-54
<i>Merchant Wholesalers, Durable Goods</i>	-57
<i>Merchant Wholesalers, Nondurable Goods</i>	-74
<i>Ambulatory Health Care Services</i>	-77
<i>Wholesale Electronic Markets and Agents and Brokers</i>	-101
<i>Clothing and Clothing Accessories Stores</i>	-116
<i>Real Estate</i>	-148
<i>Administrative and Support Services</i>	-176
<i>Credit Intermediation and Related Activities</i>	-191
<i>Educational Services</i>	-193
<i>Food Services and Drinking Places</i>	-301
<i>Social Assistance</i>	-366
<i>Hospitals</i>	ND
<i>Fabricated Metal Product Manufacturing</i>	ND

Target Industry Analysis

Target Industry Identification—Clackamas County and Regional Context

The profiles identified on the following pages represent an assessment of potential target industries derived from the analysis above. However, as we have already established that Milwaukie functions as part of a regional economy, our approach considers this broader economic context.

As a component of its on-going “Economic Landscape” project, Clackamas County tracks countywide conditions across a range of identified industry targets. Clackamas County’s Comprehensive Plan further identifies additional industry targets including destination retail/hospitality, tourism, and specialty agriculture.

In a metro-wide context, the Greater Portland 2020 initiative identified key sectors influencing growth in targeted industries for the Portland region, several of which are directly applicable to Milwaukie and Clackamas County.

Future Refinement

This assessment of potential industry targets is a preliminary draft. Prior to development of economic forecasts, this analysis will be refined and improved upon through coordination with City officials, stakeholders, and interviews within the business community.

GREATER PORTLAND TARGETED INDUSTRIES



Clean Tech

Athletic &
Outdoor

Metals &
Machinery

Health
Science &
Tech

Software &
Media

Computers &
Electronics

SOURCE: Greater Portland Inc.

CLACKAMAS COUNTY TARGETED INDUSTRIES

PROFESSIONAL & BUSINESS SERVICES

HEALTH CARE

WHOLESALE TRADE

METALS & MACHINERY MANUFACTURING

HIGH-TECH MANUFACTURING

NURSERIES & GREENHOUSES

TRUCKING & DISTRIBUTION

FOOD & BEVERAGE PROCESSING

WOOD PRODUCTS MANUFACTURING

AGRICULTURE & FOOD PRODUCTION

SOURCE: Clackamas County Economic Landscape Report (June 2012)

Target Industry Analysis

Food Processing & Storage

Food Processing in Milwaukie is organized around several large employers, and can be considered an extension of a regional food processing cluster that extends across I-205 and into the Clackamas Industrial Area.

While commercial brewing does not show up in the state employment data (the employer most likely claims it's employment at another location), Breakside Brewing's commercial operations and taproom have become a staple of the Milwaukie Expressway industrial corridor.

Food manufacturing was identified as the leading driver of growth in the economy since 2010, with the combined industries identified here growing by 29 percent over the same period.

Looking forward, an infusion of capital from recent acquisitions and investments should facilitate expanded markets for existing firm. However, real opportunities for growth exist for smaller craft firms and startups, which are surprisingly absent in the market (see Maker Manufacturing Profile for additional information).



ANCHOR TARGET INDUSTRIES

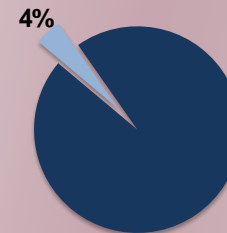
- Commercial Baking
- Flour Milling
- Grocery Merchant Wholesalers
- Alcohol Merchant Wholesalers
- Commercial Printing
- Specialty/Craft Manufacturers

MAJOR EMPLOYERS

- Bob's Red Mill**
- Dave's Killer Bread**
- Breakside Brewing**
- Alpine Foods**
- Unified Grocers**
- Core Mark International**
- Craftsman Label**

IMPACT ON ECONOMY

Share of Local Economy



The Food Processing & Storage industry in Milwaukie employs an estimated 1,483 workers, paying an average annual wage of \$57,700.

TRENDS AND EVENTS

- Dave's Killer Bread becomes best selling organic bread in the U.S. Is acquired by Flower Foods for \$275 million.
- Breakside Brewery opens 30-barrel production facility and tasting room. Expands to a second brewpub in NW Portland.
- Bob's Red Mill sales expand rapidly on strong export growth.
- Uncertainty around the U.S. Export-Import Bank threatens export growth for small businesses.

Target Industry Analysis

Metals, Machinery, & Transportation Equipment

Metals and Machinery Manufacturing is a legacy industry in Clackamas County, having been a mainstay of the economy for decades. In Milwaukie, the majority of metals manufacturing activities are tied to the machinery or transportation equipment industries, specifically aerospace. Recent landmark acquisitions signal change on the horizon at the industry level, as several of the region's largest firms reorganize and position for a new generation of products.

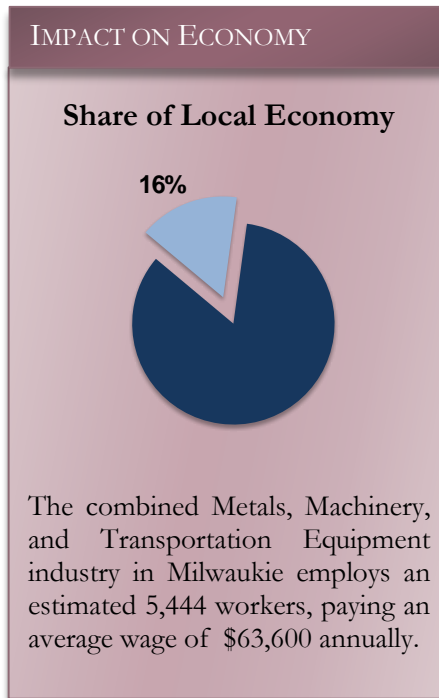
The future is likely to bring increased integration of microelectronics, software, and optics into transportation and equipment systems, creating opportunities for horizontal pivots into new industries outside of metals. Successful firms in this industry will be those that adapt well to new additive manufacturing practices and overcome labor challenges associated with replacement workers.

The study area also has an established network of associated wholesalers. Ancillary industries that support this group include construction and maintenance of buildings, systems, and equipment.



ANCHOR TARGET INDUSTRIES
➤ Primary & Fabricated Metals
➤ Machinery
➤ Transportation Equipment
➤ Metals and Equipment Wholesalers
➤ Testing & Calibration Labs
➤ Computer & Electronic Systems for Aerospace
➤ Software & R&D

MAJOR EMPLOYERS
Miles Fiberglass
PCC Structurals
Blount
Grovtech
American Metal Specialties
Warn Industries
Ran-Tech Engineering
OECO



TRENDS AND EVENTS

- Blount International struggles to maintain export growth in light of currency headwind. Is acquired by American Securities and P2 Capital Partners for \$855 million. Company will be taken private.
- Precision Castparts and its subsidiaries are acquired by Berkshire Hathaway for \$37 billion in one of the largest acquisitions in U.S. History, signaling Warren Buffet's company is banking on growth in the aerospace industry.
- The industry will continue to shift toward increased automation and adoption of advanced practices.
- Companies pivoting to advanced materials will have a competitive advantage.

Target Industry Analysis

Health Services and Continuing Care

Health Care and Health Services is the single largest sector of the study area economy, accounting for one out of every five jobs. Despite continued growth in the Health Service sector at the regional and even national level, growth among local companies has been stagnating. The sector is well balanced across subsectors, with considerable employment in hospital, health services, and continuing care. However, Milwaukie's health sector is largely population-serving health care services. The economy does not have much activity in medical manufacturing, laboratories, research, or biotechnology.

Looking forward, demographics and policy will continue to drive need for these types of health services, specifically continuing care. The extent to which the local economy can capitalize on anticipated regional growth in biotechnology research/development remains to be seen. Workforce characteristics may be favorable but an anomalous/catalytic event would likely be required to see the cluster expand beyond population serving functions.

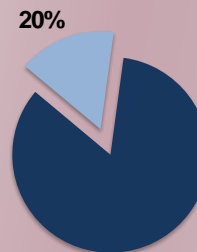


TRENDS AND EVENTS

- The OHSU Knight Cancer Challenge offers opportunity to put Oregon “on the map” for bio-tech research.
- The Affordable Care Act is passed, likely leading to permanent increases in demand for health services. The ACA is broadly expected to lead to market consolidation in the hospital and insurance industry.
- Over the next 20 years nearly one million Baby Boomers in Oregon will be entering their retirement years and beyond. An estimated five to eight percent of Boomers will age in multi-family retirement and care facilities⁹⁹.

IMPACT ON ECONOMY

Share of Local Economy



The Health Services industry in Milwaukie employs an estimated 7,129 workers, paying an average wage of \$70,000 annually.

ANCHOR TARGET INDUSTRIES

- Hospitals
- Offices of Physicians, Dentists, and Specialists
- Kidney Dialysis Centers
- HMO Medical Centers
- Nursing and Residential Care
- Pharmacy Services

MAJOR EMPLOYERS

Sunnyside Hospital
Providence
Kaiser
Consonus
American Medical Response
Rehab Specialists
Willamette View

Target Industry Analysis

Warehouse & Distribution

Businesses in Warehousing and Distribution include those involved in the wholesale, storage, or movement of goods and services. Warehousing and Distribution is generally an ancillary economic function in the economy. That is, W&D firms agglomerate in proximity to the firms they serve. In some instances, geographic location (proximity to markets) and site advantages (multi-modal transit linkages) attract regionally serving distribution and logistics activities exogenous of local industry. In Milwaukie, it would appear most of this sector's impact is driven by local business factors.

Over the last several years, the industry has declined slightly in the local market. However, the region is currently in a development cycle for W&D space, largely locating on greenfield sites.



ANCHOR TARGET INDUSTRIES

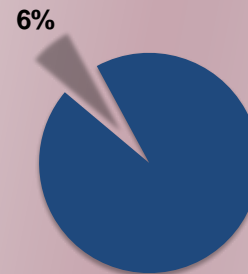
- Durable Goods Wholesale
- Nondurable Goods Wholesale
- Wholesale Trade Agents & Brokers
- Truck Transportation
- Warehousing & Storage
-

MAJOR EMPLOYERS

Unified Grocers
Core Mark International
Cross Point NW
Norlift
Titan Freight
HD Supply Management

IMPACT ON ECONOMY

Share of Local Economy



The Warehouse & Distribution industry in Milwaukie employs an estimated 2,041 workers, paying an average wage of \$58,000 annually.

TRENDS AND EVENTS

- In 2014-2015 over three million square feet of industrial space in the Portland Metro Area had been delivered or is under development. The majority is for distribution uses.
- Large distribution center tenants are announced in Gresham, Tualatin, and the Columbia Corridor.
- Emerging trends in distribution and logistics include a growing influence of e-commerce, greater reliability on information technology, decentralization & nearshoring, and investments in automation.

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Target Industry Analysis

Business, Professional, and Information Services

Business and Professional Services industries are expected to make up the lion's share of regional growth over the next 20-years. These businesses include a range of services from creative design, computer programming, technical engineering, call centers and financial services.

They are industries that more commonly require more traditional office space, but some sectors locate in either creative office or flex business parks. New applications in business technology (IT) and strong corporate profits provide a rosy outlook for businesses in this sector. Specifically, Professional and Technical Services is expected to expand by over 26% over the next ten years. Increasing rents for Class A office space in the Central Business District will increasingly drive small and medium sized firms into secondary locations. Milwaukie currently has a below average supply businesses in these industries.



ANCHOR TARGET INDUSTRIES

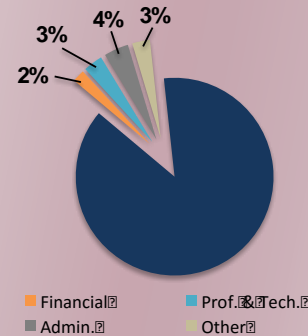
- Software/Computer Programming
- Specialized Design
- Engineering & Technical Consulting
- Financial, Legal, & Real Estate Services.
- Temporary Help Services
- Enterprise Headquarters
- Administration Services
- Back Office Functions

MAJOR EMPLOYERS

- Princeton Prop. Management**
- Active Telesource**
- Moda Health**
- Crossmark**
- Pacific marketing**
- K & B Engineering**
- Advantis Credit Union**
- Warehouse Demo Services**

IMPACT ON ECONOMY

Share of Local Economy



The Business Services industry in Milwaukie employs an estimated 4,124 workers, paying an average wage of \$46,000 annually.

TRENDS AND EVENTS

- The Oregon Employment Department forecasts Professional & Technical Services will be Clackamas County's 2nd fastest growing sector over the next ten years, led by Computer Systems Design.
- Information Technology and Cloud based business systems will continue to permeate through all facets of industry.
- The Portland Metropolitan Region has emerged as a hotbed for software development and computer programming talent.

Target Industry Analysis

Maker Manufacturing & Amenity Retail/Hospitality

In addition to the aforementioned sector based targeted industries, Milwaukie should prioritize recruitment and development in the following areas. These industry groups have community-wide ancillary impacts ranging from a positive influence on property values to attracting new residents and tenants. These industries often influence the culture and character of districts within a community.

MAKER/CRAFT INDUSTRIAL

In Portland's Central City, the Central Eastside Industrial District has undertaken a considerable transition over the last ten years. The district emerged as a low cost incubator district, with some of the region's most successful businesses starting up in the area. However, the district has transitioned in recent years as space costs have increased markedly. The recent SE Quadrant Plan changed zoning in parts of the district to accommodate higher intensity uses. The lack of affordability will increasingly displace niche and incubating firms. As a part of the SE Quadrant process, areas of the Central Eastside—including Milwaukie, were identified as likely outlets for future incubating activity.

Support for these industry types represents a targeted opportunity for Milwaukie to establish a new generation of future businesses to grow and thrive in the community.

PUBLISHING & SOFTWARE

COFFEE ROASTING/BAKING/FOOD PRODUCTS

BREWING/VINTING/DISTILLING

CRAFT MANUFACTURING/CUSTOM FABRICATION

SPECIALTY AGRICULTURE

APPAREL/JEWELRY/RECREATION EQUIP.

AMENITY RETAIL/HOSPITALITY

Quality retail, restaurant, recreation, and hospitality tenants make a community an attractive place to live and work. Studies have shown that amenity based supportive uses have a positive impact on housing values and attract residents and businesses alike. This is a growing phenomenon in the context of emerging consumer preferences observed across Millennial and Boomer generations. Attraction of these types of businesses offers Milwaukie to raise its amenity profile and work toward becoming a true 18-hour community where people gather to work as well as recreate.

SPECIALTY FOOD/GROCERY

COFFEE/CAFÉ

BREW PUB/WINE OR BOTTLE SHOPS

FULL SERVICE LOCAL RESTAURANTS

FOOD CART PODS

BOOKSTORES AND BOUTIQUES

WELLNESS AND SPA SERVICES