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Clark County Economic Development Plan

Clark County, Washington



Prepared for the Columbia River
Economic Development Council

By TIP Strategies, Inc.

106 East 6th Street, Suite 550 | Austin, Texas 78701

www.tipstrategies.com

ACKNOWLEDGEMENTS

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Project Steering Committee

Phil Bourquin,
Community Development Director, City of Camas

Barbara Bushell
Real Estate Broker

Justin L. Clary
City Manager, City of Ridgefield

Bill Dudley
Attorney at Law, Landerholm, Memovich, Lansverk & Whitesides, P.S.

Mark Feichtinger
Vice President, JH Kelly LLC

Eric Fuller
President, Eric Fuller & Associates

Brent Grening
Executive Director, Port of Ridgefield

Steve Horenstein
Attorney at Law, Miller Nash

Mark Lampton
Commissioner, Port of Camas / Washougal

Robert Maul
Community Development Director, City of Battle Ground

Dale Miller
City Planner, City of La Center

Alisa Pyszka
Business Development Manager, City of Vancouver

Lisa Nisenfeld
Executive Director, Southwest Washington Workforce Development Council

David Ripp
Executive Director, Port of Camas / Washougal

David Scott
City Administrator, City of Washougal

Kelly Sills
County Administrator, Clark County

Curtis Shuck
Director of Facilities, Port of Vancouver

Columbia River Economic Development Council

Bart Phillips, *President*

Jeanie Ashe, *Director of Business Recruitment*

Bonnie Moore, *Director of Business Services*

Diane Dempcy, *Manager of Investor Relations*

Peter Newman, *Research Analyst*

Stephanie Weldy, *Office Manager*

About TIP Strategies

TIP Strategies, Inc. (TIP) is a privately held Austin-based business and economic development consulting firm committed to providing quality solutions for both public and private-sector clients.

Established in 1995, the firm's areas of practice include economic development consulting, strategic planning, site selection, economic impact analysis, regional economic development, target industry analysis, cluster analysis, technology audit, transit-oriented development, workforce analysis, feasibility studies, market analysis, and redevelopment analysis and planning.

Project Team

Jon Roberts, Managing Director
Alex Cooke, Project Director
Kathleen Baireuther, Project Consultant

106 E. 6th Street, Suite 550
Austin, Texas, 78701
512.343.9113 (voice)
512.343.9190 (fax)
contact@tipstrategies.com
www.tipstrategies.com

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EXECUTIVE SUMMARY

On the heels of the worst recession since the Great Depression, and with continuing fears of slow growth, the economic challenges facing Clark County are immense. The changing composition of the workforce, industrial restructuring throughout the Portland-Vancouver metropolitan area, and a slow residential and commercial market are all factors considered by this plan. Nevertheless, there is reason for optimism and a clear sense of opportunity.

The plan itself is structured around guiding principles that lead to specific actions. The fundamental insight is that Clark County must diversify its industry beyond manufacturing and natural resources and embrace Information Technology and expand its higher education opportunities.

To accomplish this, the plan emphasizes the convergence of software and device manufacturing. While we already recognize the impact of this sector in our everyday lives (the growing functionality of our mobile devices), future applications on a systems-level will only continue to grow.

The challenge for the plan was to identify national growth sectors, determine whether there was regional capacity to capitalize on that growth, and then to ensure that Clark County could tap into that capacity. Certainly, IT fit the first two criteria. Clark County, on the other hand, met the capacity need in some important respects but lacked in others. Bringing resources to the point where Clark County could be truly competitive is the larger chore. Doing this requires a vision for growth – which includes knowing what not to do as much as what must be done. And foremost among those challenges is a commitment to a more dynamic and skilled workforce.

The findings of this plan highlight the enormous gap between skilled and educated worker on the one hand, and those without high school or college degrees. In the first case, the unemployment levels never exceeded 5 percent - even during the worst of the Great Recession. Among those without a high

school diploma it reached 15 percent. The reality of these numbers makes it clear that the higher education community as well as workforce agencies are critical components of the county's economic success.

As an additional component of business development is a continuing appreciating of the benefits of foreign direct investment (FDI). The county has done well in this respect, but its efforts cannot be left to chance. An aggressive and determined program is called for.

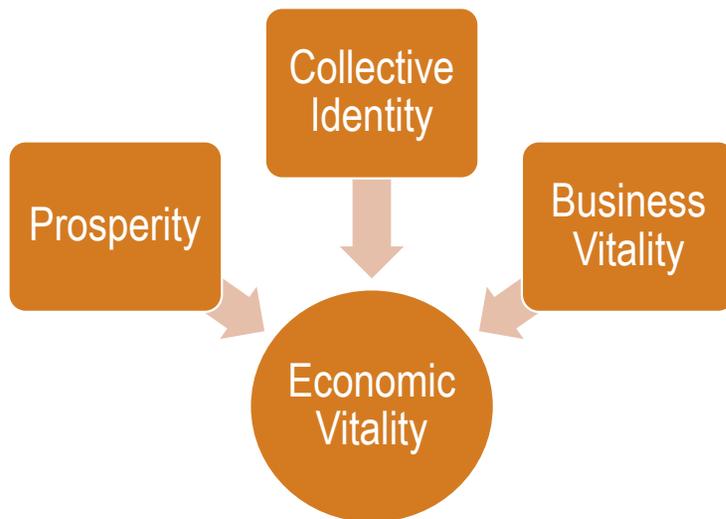
Finally, this plan emphasizes a commitment to “quality of place.” By this we mean not just those quality of life components generic to all communities, but a determined look at what businesses – and creative individuals – seek out when they make location decisions.

To achieve success around such an ambitious approach requires leadership. This one factor, over all others, needs to be brought into play. It means that there are individuals who commit their time, their energy, and their resources to seeing to the implementation of the plan. These leaders must represent their companies and their organization, and must be willing to make commitments and take risks.

The CREDC certainly has a central role to play in the plan's implementation, but in the final analysis this is a plan for the entire county. The CREDC will take the lead on carrying out most of the basic economic development strategies and actions, especially those related to marketing, business retention and expansion, and site development. However, CREDC cannot carry the burden alone. The active support and participation of the county's jurisdictions, organizations, businesses, and institutions will help ensure success.

Guiding Principles

Guiding principles reflect the values of the community. In the context of an economic development plan, they are a set of statements expressing how a community defines economic vitality. The overarching principle is to ensure economic vitality. This approach was arrived at with the support of the project steering committee and encompasses values broadly shared throughout the county, its communities, and its port districts.



Goals

These guiding principles can only become meaningful if goals are established as pillars to support them. The goals must be specific and detailed and will require broad commitment and support. We believe that the following five goals will accomplish that:

- *Goal One: Establish Clark County as a regional center of growth and innovation in the Information Technology sector.*

- *Goal Two: Greatly expand the economic development influence of WSUV and Clark College.*
- *Goal Three: Make Clark County a hub for international investment in the Pacific Northwest.*
- *Goal Four: Enhance business vitality through targeted recruitment, expansion, and entrepreneurship efforts.*
- *Goal Five: Invest in the infrastructure and amenities needed to attract new businesses and talent.*

Priority Strategies

Based on the county's opportunities and challenges, the strategies outlined below represent the highest economic development priorities for Clark County.

- *Build the capacity to attract, absorb, and anchor IT and software companies in Clark County.*
- *Accelerate efforts to develop a Research Park.*
- *Build on the existing international connections of exporters and foreign companies within local economy.*
- *Promote entrepreneurship to enhance cluster development.*
- *Promote efforts to develop a cohesive, unified business and economic development voice within Clark County.*
- *Promote entrepreneurship to enhance cluster development.*
- *Increase the inventory of shovel-ready industrial and commercial office sites in the county.*

INTRODUCTION

On behalf of Clark County's economic development partner jurisdictions, the Columbia River Economic Development Council (CREDC) engaged TIP Strategies Inc. to assist in developing an economic development strategic plan for the county. The county's economic development partners did not embark lightly on an economic development plan. The following recommendations are the result of an eight-month process incorporating input and ideas from key stakeholders and organizations throughout the county. The plan is designed with the overall goal of positioning Clark County for long-term economic vitality.

The Challenge

Historically, Clark County's job market closely tracked that of the greater Portland region. Since 2000, however, Clark County's economy has fallen behind and the unemployment rate in Clark County is now among the highest in the state. Clark County's construction and manufacturing workforce was hit particularly hard by the Great Recession. The recovery from the recession is slow. Scott Bailey (the regional economist for the Washington Employment Security Department) predicts that the prospects for job growth are grim. In fact, he is concerned that there may be very little job recovery over the next five years.

Amid the tough economic environment, the county, municipalities, and ports are facing difficult decisions on where to invest limited public resources to support a growing population. The CREDC is searching for a new direction as it seeks to retain and expand the county's existing business base and competes to attract new investment and jobs. Its mission is made more difficult by an uneven playing field in terms of the resources and tools it can utilize to recruit new employers.

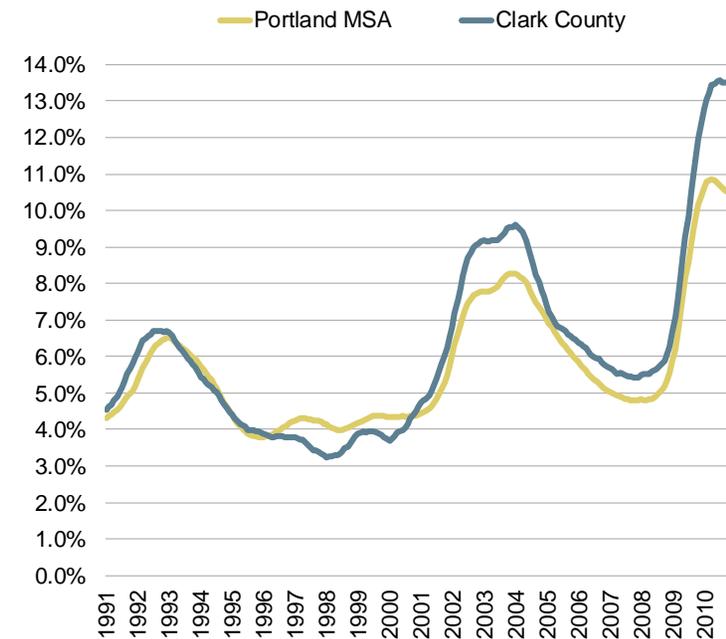
Finally, the challenges and opportunities within Clark County are not uniform. The county is geographically and culturally diverse. As a result, there are distinct economic development interests and priorities among the cities and ports as well as across the county.

The Response

Against this background, it is clear that Clark County's economic development partners cannot afford to be anything but aggressive. Fortunately, there are short- and long-term initiatives that can instill new momentum in the county's economy. There are also opportunities that – if seized now – can provide Clark County with stronger fundamentals for growth and full recovery. For this economic development plan to succeed, however, there must be a wider acceptance that success in one area of the county benefits all. In other words, this study is not intended just for the CREDC, but also for the political entities, businesses and citizens of the county.

Unemployment rates compared

12-month moving average of the seasonally unadjusted jobless rates for the MSA and county



SOURCES: U.S. Bureau of Labor Statistics, LAUS (MSA & county rates)

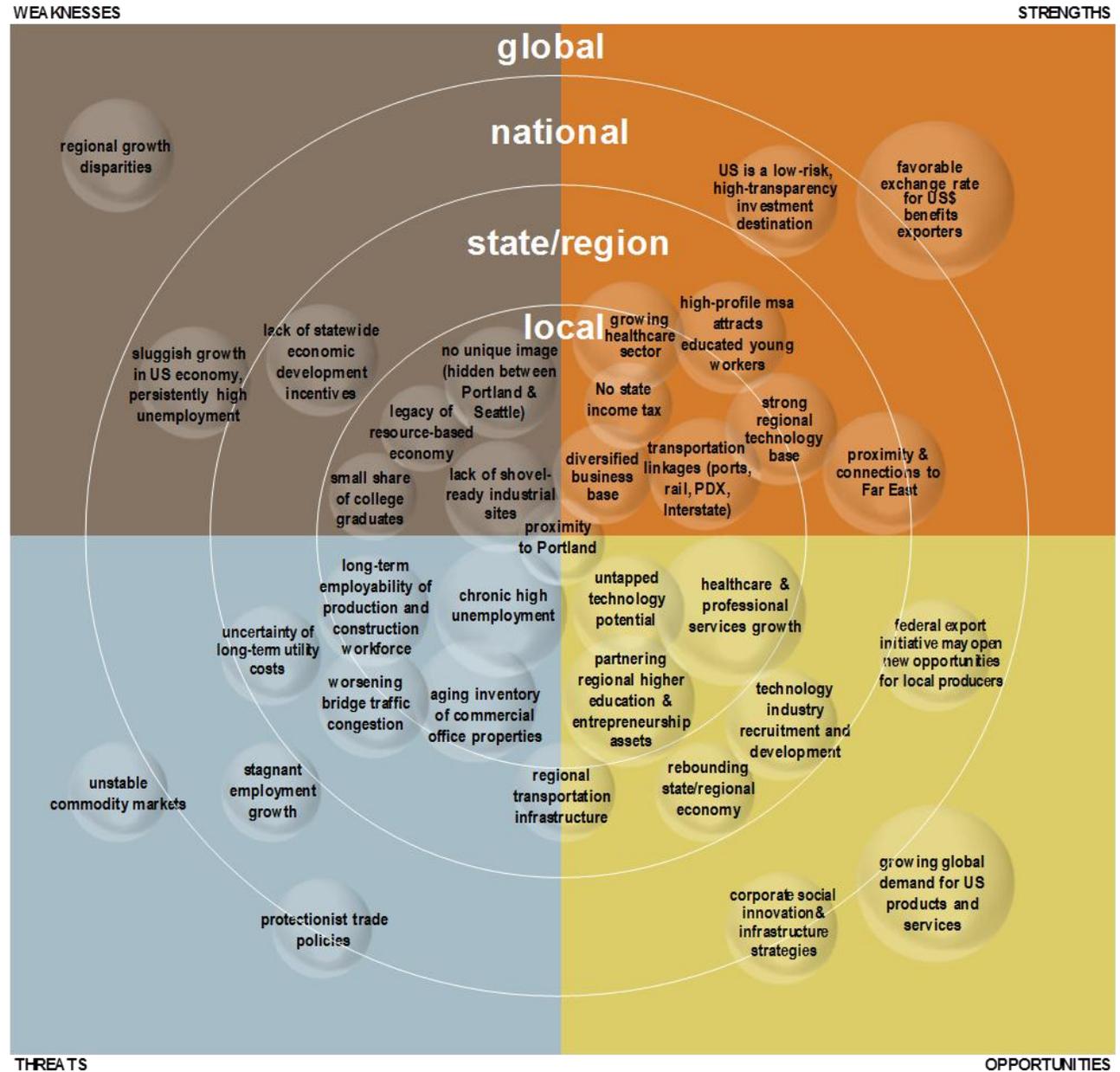
A broader approach to promoting economic vitality must be adopted. Clark County is well positioned to capitalize on positive trends related to IT services, healthcare, higher education, and professional services. Targeting foreign direct investment and supporting entrepreneurship and new business start-ups also go to the heart of this approach.

SWOT Analysis

TIP conducted an economic development SWOT analysis (strengths, weaknesses, opportunities, and threats) for Clark County, based on a review of economic, demographic, and workforce characteristics, interviews with local and regional business as well as community leaders, and our experience working with communities across the country.

The adjacent table captures the major findings from this analysis. The strategies in the economic development plan seek to build upon Clark County's strengths, capitalize upon its opportunities, and address its weaknesses and threats.

The more detailed Economic Assessment is contained in Appendix A.



Guiding Principles

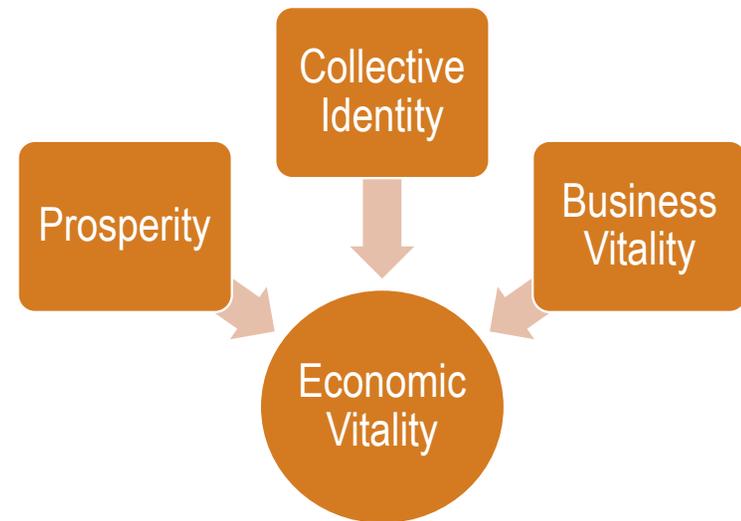
Guiding principles reflect the values of the community. In the context of an economic development plan, they are a set of statements expressing how a community defines economic vitality. The overarching principle for CREDC is to ensure economic vitality. This approach was arrived at with the support of the project steering committee and encompasses values broadly shared throughout the county, its communities, and its port districts.

Based on numerous interviews, as well as the economic assessment conducted for this study, **prosperity** in Clark County was identified as an essential principle. This concept cannot be measured solely by the traditional metric of job creation. In fact, lower wage service sector jobs can imbalance an economy. They are necessary and desirable only as a component of greater gains in overall prosperity – measured by increases in assessed valuation and steadily rising incomes. Another way to make this point is to see that much of Clark County’s employment base prior to the recession was in construction, manufacturing, and retail trade. Going back even further, we see that many of the natural resource industries on which the county depended suffered significant employment losses. These combined factors suggest that an economic restructuring is taking place. This plan acknowledges those changes and seeks to augment the county’s economic base with jobs that promote the overall prosperity of the region.

A separate goal is for **business vitality**. By this we mean a more dynamic private sector measured by new business formation and greater business investment. Cluster concentrations are certainly beneficial, but they risk becoming static. When this happens, they add few new jobs (especially at higher wage levels), fail to spin-off new ideas, and are not in a growth mode. Business vitality in a region suggests a higher level of entrepreneurship, the attraction of rapidly growing businesses, and a business climate more conducive to expansion.

Finally, we want to highlight the importance of a **collective identity** for Clark County. The data analysis reveals what is essentially a suburban county largely tied to Portland, even as the workforce commutes to jobs throughout the region. This is an appeal for a fresh look at marketing and positioning, captured not through tag lines, but through a better understanding of what attracts people to Clark County and what business growth would help keep them local. It also requires the county’s jurisdictions, organizations, and people to project a unified image of Clark County as a premier destination in the Pacific Northwest for high quality talent, jobs, investment, and development.

It should be noted that primary job creation is not mentioned as a specific guiding principle. While it is a desired outcome of the strategic plan, job creation in and of itself does not ensure economic vitality.



Goals

These guiding principles can only become meaningful if goals are established as pillars to support them. The goals must be specific and detailed and will require broad commitment and support. We believe that the following five goals will accomplish that:

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- Goal Five: Invest in the infrastructure and amenities needed to attract new businesses and talent.

Framework

The planning process involved extensive economic analysis, in-depth interviews and focus groups, and regular interaction with the project steering committee and CREDC leadership and staff.

The **Strategic Plan** that follows fleshes out each goal and proposes strategies and actions to achieve these goals. An **Implementation Matrix** assigns responsibility and sets out a time frame for implementing the strategies. We also list **Performance Metrics** that should be tracked to record Clark County's progress towards achieving its economic goals.

The appendices of this document contain a wealth of information to support the strategic recommendations of this plan. **Appendix A** is the Economic Assessment which focuses on understanding the county's demographics, workforce, and economy in both a regional and national context. **Appendix B** presents the SWOT analysis. **Appendix C** contains the Target Industry analysis and profiles. These profiles provide an overview of industry trends and recommendations to assist in launching a recruitment program targeted to these specific industries.

The plan itself needs to be seen not as a static document, but as one that invites revisions and amendments as conditions change. A new director of the CREDC will bring a personal perspective to this report. In addition, economic development targets and initiatives in the Portland area may change and prompt further changes in Clark County's recruitment strategy. For these reasons, TIP encourages the CREDC and its economic development partners to take a dynamic approach to implementing this plan – one that revisits this plan on an annual basis at a minimum.

GOAL ONE: INFORMATION TECHNOLOGY

Establish Clark County as a regional center of growth and innovation in the Information Technology sector.

The Portland-Vancouver metropolitan area has tremendous strength in the technology sector, especially in the semiconductor industry. From the current Intel expansion in Hillsboro to the broad range of semiconductor suppliers in Clark County, the region is one of only a few in the US with a significant employment concentration in this high-wage, high growth sector. Two major economic shocks – the downturn of 2001-2002 and the Great Recession of 2008-2010 – have not dimmed the prospects for continued growth in this sector.

This plan encourages continued support for the semiconductor cluster, as well as for targeted recruitment of related companies. At the same time, TIP recognizes that employment growth in semiconductors is limited. Thus, the emphasis of this goal is on Information Technology (IT) services, specifically software development. This sector is an area with substantial growth potential in the region and in Clark County. Indeed, the development of the software cluster has been identified as a key regional economic strategy for the Portland-Vancouver metro area.

For Clark County to realize greater benefits from the IT sector, a greater focus must be placed on innovation. That innovation must come from the increasing convergence of software services with hardware, telecommunications, mobile devices, and management systems. These types of convergent technologies have cross-platform applicability. Clark County must also focus its resources on attracting and developing industry niches tied to emerging opportunities. Southwest Washington Health System's merger with PeaceHealth and the consolidation of corporate headquarters and shared services in Clark County provides an opportunity to develop the Health Information Management (HIM) sub-sector in the county. Other sub-sectors with local growth potential include semiconductor software, applications for mobile devices, electronic arts, and multimedia.

This strategy should take a three-pronged approach:

- Recruitment of existing companies
- Attraction of established smaller, high growth firms with regional markets
- Support for young, growth-oriented companies

While it will require a long-term effort the goal of making Clark County a center of innovation in the IT sector is achievable. Education and training programs must be created and aligned with recruitment and expansion efforts. Buildings and space must be developed and customized to house such enterprises. Networks, expertise, and capital will be required to accelerate innovation and growth. Amenities and image must be established to attract the creative talent employers will demand.

Finally, this goal is not predicated on attracting companies and individuals from across the river. It is about Clark County embracing a regional economic strategy and building the capacity to economically and socially benefit from it. There are existing assets in Oregon that do not need to be replicated in Clark County. Likewise, there are unrealized opportunities in Clark County that will strengthen the region as a whole.

➔ **STRATEGY 1.1: Identify software and IT services companies already serving or tied to existing industries/companies in Clark County.**

- Meet with and survey existing technology companies in Clark County to identify needs or gaps in IT services and software.
- Inquire about emerging industry trends and the likely upstream and downstream software needs of existing companies, as well as their vendors and customers.
- Develop a database of existing IT/software vendors or potential providers/customers linked to local technology companies.
- Call on any identified companies located in the Portland-Vancouver region to conduct marketing intelligence on industry expansion and relocation factors.
- Begin a targeted electronic marketing campaign (email and newsletter) to companies operating outside the region.

➔ **STRATEGY 1.2: Actively market Clark County to software and IT services companies, especially those in HIM, mobile applications, and multimedia.**

- Develop software marketing brochure (physical and digital).
- Identify relevant regional, state, and national trade associations (e.g., Washington Health Information Management Association <http://www.wshima.org/>) to participate in and join. Consider targeted advertisements in industry trade publications.
- Identify and attend specific industry trade events, conferences, and seminars in the Pacific Northwest.
- Encourage tourism organizations and conference hotels in the county to pursue hosting industry meetings, conferences, and seminars.
- Employ other targeted recruitment and marketing strategies. (see Strategy 4.1)

➔ **STRATEGY 1.3: Build the capacity to attract, absorb, and anchor IT and software companies in Clark County.**

- Explore the feasibility of establishing a business accelerator focused on second-stage IT services and software companies in the Portland-Vancouver metro area.

The goal is not to replicate the Portland State Business Accelerator, which assists start-up technology and science companies (including IT & software) to commercialize ideas into products or services. Rather, TIP recommends a new business accelerator in Clark County focused on turning products and services into marketable and sustainable entities. Ideally, the accelerator would be tied to WSUV College of Business.

- Ideally, the accelerator would be located in the Information Technology Zone and/or a Research Park (See Strategy 2.1). Alternatively, the facility could be located within an existing building in downtown Vancouver or an existing corporate campus such as Sharp Microelectronics or Hewlett-Packard.
- Work with WSUV to conduct a feasibility study and develop a business plan for the concept. (Example: Lane County, OR)
- Solicit the financial support of existing technology companies and public entities in Clark County to fund feasibility study and business plan.
- Designate an Information Technology Zone in the county that includes existing technology-focused developments in Vancouver and Camas. Such a zone may be associated to the Discovery Corridor as well as other technology initiatives in the county.
 - Assess zoning changes to promote new Class A office development.¹
 - Explore creative public-private finance mechanisms to encourage existing building owners to upgrade the IT infrastructure within their properties.
 - Develop a web-based marketing brochure for the zone that economic development partners in the county can link to.
- Pursue resources to encourage the expansion of IT and software education, training, and research programs at WSUV and Clark College.
 - Work with WSUV and Clark College to identify opportunities to expand academic programs related to software development and computer sciences.
 - Visit with faculty at both institutions to discuss industry trends, business development opportunities, and education/training needs.
 - Lobby for additional state funding to support academic program enhancement in these fields.

¹ The Building Owners and Managers Association (BOMA) defines Class A facilities as the "most prestigious buildings competing for premier office users with rents above average for the area." BOMA states that Class A facilities have "high quality standard finishes, state of the art systems, exceptional accessibility and a definite market presence." www.boma.org

EXAMPLE: Technology Zone Initiative**Case Study: E-Elgin (Elgin, Illinois)**

<http://www.cityofelgin.org/documentview.aspx?DID=285>

Introduction: In 2000, the City of Elgin, Illinois, authorized the formation of a Technology Action Team and a partnering grant program for center city commercial property owners and downtown business owners involved in technology-related industries. The e-Elgin incentive program offers assistance to property and business owners for expenses related to technology infrastructure improvements, moving expenses, and advertising costs.

Program Structure: Downtown commercial property owners and downtown business owners can qualify for up to 50 percent of capital costs not to exceed a total expenditure of \$60,000 (\$30,000 maximum City contribution) in funding for technology infrastructure improvements such as upgrading to Category 5 or better wiring, backup power generators for technology equipment, and related hardware upgrades related to infrastructure improvements. Additional incentives are offered to high-tech businesses for installation fees associated with costs for DSL and T-1 service. Downtown commercial property owners are also eligible for up to \$2,500 annually in co-op advertising funds when they promote e-Elgin in their ads.

Outcomes: The e-Elgin program was developed to address declining competitiveness of commercial properties downtown as compared to newer greenfield developments outside of the city center. The City encouraged property owners to upgrade office space downtown by subsidizing the cost of retrofitting historic buildings. The program has been successful in many cases, but could still be considered an underutilized resource.

The Leath Building is an excellent example of how the program has prompted investment by the private sector. The 17,000 square foot former department store was retrofitted with new technology infrastructure in 2003 and 2004, making the building an attractive site for Future Link, an IT firm with 22 employees.

According to the Downtown Neighborhood Association, the program would benefit from additional advertising and marketing. In particular, a branding campaign that highlighted the 'downtown workspace lifestyle' as a more urban work environment suited for young professionals, entrepreneurial firms, and other individuals and businesses associated with the 'creative class.'

GOAL TWO: HIGHER EDUCATION

Greatly expand the economic development influence of WSUV and Clark College.

Higher education is certain to play a central role in the long-term economic vitality of Clark County. There is a growing body of research directly linking higher education to regional and local economic competitiveness. Not only are higher education institutions the foundation of innovation and discovery, they are a primary vehicle for workforce development and a strong magnet for talent. In addition, their physical presence in a community has widespread benefits from job creation to infrastructure development to real estate development. Communities and higher education institutions that embrace each other and seek to strengthen one another can realize competitive advantages that are not possible without this type of town-gown cooperation.

Clark County is fortunate to be home to one of the state's fastest growing university campuses and a respected two-year college serving Southwest Washington. These institutions provide vital education and training opportunities to residents and workers of the county and region, especially those adversely affected by the recent recession and ensuing slow recovery. They also serve as a conduit for bringing creative talent to the area, in the form of both students and faculty. WSUV, in particular, is positioned to attract and develop new ideas, research, innovation, and commercial opportunities in Clark County. To fully realize their potential impact on Clark County's economic competitiveness, these institutions must be deeply woven into the county's economic strategy. This plan recommends strategies for the county's economic development partners to support and leverage higher education for economic development.

"Higher education is a key actor in the revitalization of urban communities, in the development of responses to declining economics in rural areas, and to the competitive strategies of regions, states, and nations."

Eugene P. Trani and Robert D. Holsworth, *The Indispensable University: Higher Education, Economic Development, and the Knowledge Economy* (Lanham, Maryland: Rowman & Littlefield Publishers, 2010), 2.

➤ **STRATEGY 2.1: Accelerate efforts to develop a Research Park.**

- Evaluate other university-owned business parks as development models.
- Review potential business park locations and consider strengths and weaknesses of each location. Determine preferred location and at least one back-up location.
- Conclude donation of real estate (WSUV) or purchase of real estate (others).
- Commission a master site plan.
- Work with Clark County and other public jurisdictions to identify needed infrastructure participation.

- Pursue investment assistance grants from the US Economic Development Administration and the State of Washington.
- Develop a marketing plan and cooperative marketing agreement with CREDC and other economic development entities in the county.

EXAMPLES: University business and research parks

Missouri Research Park

<http://www.umtechparks.com/index.html>

Overview The Missouri Research Park is the result of a vision of a technology corridor and has been the catalyst for high-tech development along the I-64 corridor in St. Charles County. Owned and managed by the University of Missouri, the Missouri Research Park officially opened in 1985. Today, more than 180 acres of land in the park are developed for high-tech and research facilities, and 15 tenant companies and two federal agencies employ approximately 2,000 people within the park.

Success Stories

- MasterCard International built its global technology center at WingHaven, a 1,000-acre development which includes homes, apartments, office buildings, research facilities, day-care center, golf course and a wellness center.
- WorldCom built a 300,000-square-foot campus directly across I-64.
- Citibank has developed a 500,000-square-foot building across I-64
- The corridor has been zoned "high tech" by local municipalities and the county

Western Michigan University Business Technology & Research Park

<http://www.wmich.edu/btr/>

Overview The focus of the Business Technology and Research Park (BTR) is on the development of mutually beneficial relationships that involve resident businesses, the university, and the Kalamazoo community. The private-sector firms that locate at the park are recruited from three key business sectors—life sciences, advanced engineering and information technology. The BTR Park is a high-tech business development that shares WMU's Parkview Campus with the College of Engineering and Applied Sciences. The park's location means partner firms in the life sciences, advanced engineering and information technology will have regular opportunities to interact with the faculty, research staff and students of one of the nation's top public universities.

The Business Technology and Research Park is also home to two important resources:

- Southwest Michigan Innovation Center, a state-of-the-art high-tech/wet lab business incubator, which was launched by the regional economic development agency Southwest Michigan First
- Biosciences Research and Commercialization Center at WMU, which provides commercialization expertise and research support to emerging life sciences ventures

Success Stories In less than five years, up to 30 private-sector businesses have been attracted to the BTR Park — 16 life-science companies, 12 advanced engineering firms and two information technology companies. Of these businesses, eight have constructed their own facilities and 16 have had laboratory and office space in the Southwest Michigan Innovation Center. More than 85 percent of the 137-acre BTR site have been developed, are under construction or are under option. Success Stories:

Central Florida Research Park

<http://www.cfrp.org/index.html>

Overview The Central Florida Research Park is a campus-like environment for business, located adjacent to the University of Central Florida. Businesses that desire a "university relationship" can purchase land in the Research Park on which to construct a facility or can lease space for office, office/lab or light manufacturing uses. Research Park tenants are involved with the University of Central Florida through technology transfer, research, faculty consultations, graduate and undergraduate internships and part-time employment programs. Tenants can also contract with the university for use of computer resources and laboratory facilities, and employees can obtain UCF parking decals and UCF ID cards, which allow for the use of recreational facilities and the UCF library.

Research Park Facts

- 1,027 Acre Campus-Like Office Park
- 116 Companies
- 56 Buildings
- Approximately 9,500 Employees
- More Than 400 UCF Students/Graduates Employed in the Park

- Direct Access to the 408 Expressway
 - On-Site Hotels and Bank
-

➔ **STRATEGY 2.2: Engage in cooperative marketing.**

- CREDC should incorporate information regarding specific academic and training programs at WSUV and Clark College in its economic development marketing materials.
- CREDC will provide updated county-wide information, data, and events to WSUV for inclusion, as appropriate, on its website and in its recruitment materials.
- CREDC, community, port, and other representatives will participate in WSUV student, faculty, and staff recruitment activities or other events of mutual interest.
- CREDC should help promote conferences and events at WSUV connected to existing employers and target industry sectors.

➔ **STRATEGY 2.3: Leverage university instruction and research activities for economic development in Clark County.**

- Support the university's efforts at increasing the number of external research grants and contracts awarded to WSUV.
- Market the education, training, and facility assets offered by the new Engineering and Computer Science building.
- Increase collaboration between county stakeholders and staff and faculty. This collaboration should specifically include the Engineering and Computer Science Department, and should work to identify internship, apprenticeship, and employment opportunities for students and graduates.

➔ **STRATEGY 2.4: Promote opportunities for technology transfer and commercialization.**

- Work with WSUV officials to catalog and publicize R&D efforts that have the greatest potential for local commercialization.
- Identify county stakeholders that might serve as "champions" to support (financially or otherwise) technology transfer efforts.
- Celebrate local success stories (when start-ups are launched or significant contracts are secured) in the local media with press releases and through the alumni newsletter.

➤ **STRATEGY 2.5: Leverage WSU's College of Business Growth Map and other business resources to use institutional expertise to assist existing employers and entrepreneurs in Clark County.**

- Promote a university/business alliance to explore options for leveraging faculty and institutional expertise to assist existing employers, start-ups, and entrepreneurs in Clark County.
- Proactively market the resources of the Small Business Development Center (SBDC) for start-up and entrepreneurial business expansion.
- Foster stronger ties between the WSUV and the county's business community and policy makers through networking activities with university faculty and the business community.
- Utilize job placement programs at WSUV and Clark College (in accordance with the region's workforce programs) to assist current students and recent graduates in finding local career options at local businesses in Clark County.

➤ **STRATEGY 2.6: Expand international student activities and link to CREDC and Clark College.**

- Connect international student recruitment efforts with CREDC investment missions.
- Collaborate with CREDC on joint visitations.
- Hold seminars with foreign companies based in Clark County.
- Support formal and informal student groups at local high schools, Clark College, and WSUV and keep them linked to local business and community events.

➤ **STRATEGY 2.7: Support the region's education, job training, and placement programs.**

- Encourage all county economic development partners to publicize the services available to employers, job seekers, students, and workers in the county.
- CREDC should post an updated profile and links on its website related to WorkSource.
- Charge the Southwest Washington Workforce Development Council (SWWDC) with keeping a pulse on the supply and demand dynamics of workforce education and training and career placement in the county as well as in the metropolitan area.
- Encourage county employers to recruit and hire local students through WorkSource and related programs.

- Work with educators, including the K-12 system, to align strategic directions and resources with the county-wide plan.
- Develop a regional talent management system through the SWWDC to identify professional and technical talent in the metropolitan area through social media and other mechanisms.
- **STRATEGY 2.8: Support the expansion of student enrollment and degree programs for WSUV and Clark College, especially in the Science, Technology, Engineering, and Math (STEM) fields.**
- Advocate with legislators and other supporters on behalf of new degrees as needed by the community.
- Advocate for funding of over-enrollments to provide full funding of degree programs.
- Support WSUV & Clark College with community representation on their campus and academic program advisory boards/committees.
- Mobilize support for specific programs as needed to serve the community (e.g. medical technician, engineering, engineering tech,) with professional, industry or other organizations.

GOAL THREE: INTERNATIONAL INVESTMENT

Make Clark County a hub for international investment in the Pacific Northwest.

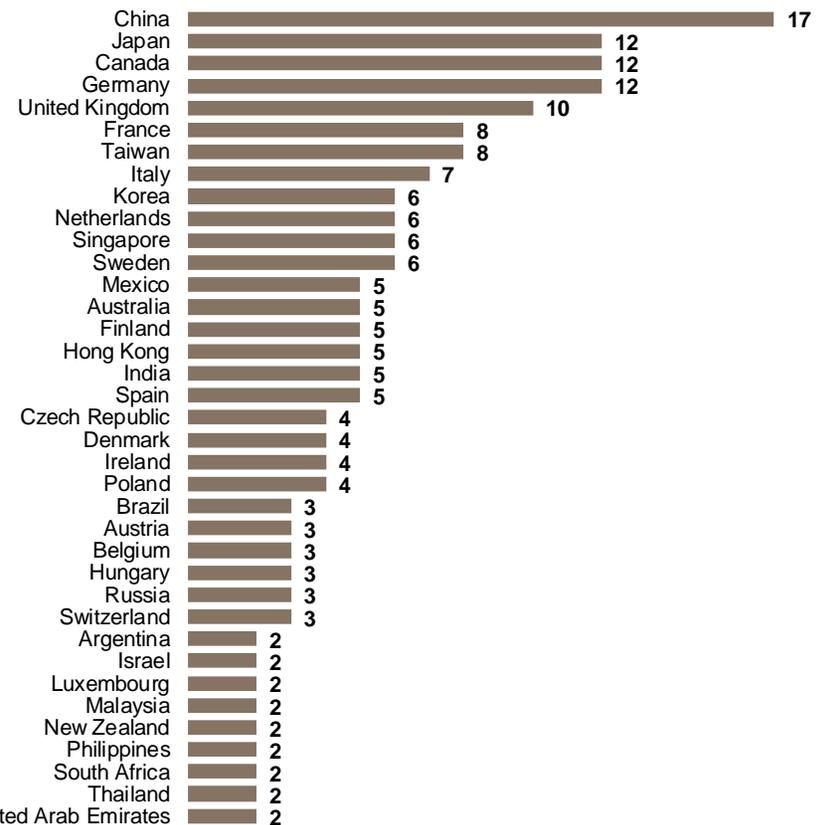
As new domestic investment in plants and equipment by US companies remains tepid, communities and regions are increasingly looking abroad for new investment prospects. Recent fluctuations in currency values, labor costs, supply chains, and energy costs have accelerated international interest in locating new or expanded facilities in the United States.

Clark County already has a strong track record of attracting foreign direct investment, especially in the technology products sector. International companies such as Taiwan Semiconductor, Sharp Labs, and SEH America operate facilities in Clark County. The region and the county are also home to a number of companies with operations abroad. Such inbound and outbound investment connections present Clark County and the wider region with greater opportunity to court new foreign investment. Indeed, a new Portland-Vancouver Metro Regional Economic Strategy is being developed with expanded international recruitment as a main goal. Clark County has a central role to play in such an initiative. To capture this opportunity, CREDC and its partners will need to be more ambitious and creative in identifying international investment prospects and raising awareness of the county and region abroad.

- ➔ **STRATEGY 3.1:** Build on the existing international connections of exporters and foreign companies within local economy.
- As part of Clark County’s Business Retention and Expansion (BRE) survey program, include a section addressing international trade, supplier, and investment linkages. Ask if companies would be willing to assist in the county’s international recruitment efforts.

Regionally based firms with foreign operations by country

Count of local firms with operations in each country listed below



NOTE: At least 22 other countries have attracted investment from at least one locally headquartered firm. We identified 6 such operations in Europe (Croatia, Greece, Norway, Portugal, Slovakia, Slovenia), 5 in Asia Pacific (Indonesia, Macau, Pakistan, Sri Lanka, Vietnam), 6 in the Americas (Bermuda, Cayman Islands, Chile, Costa Rica, Netherlands Antilles, Uruguay), and 5 in the Middle East and Africa (Armenia, Cyprus, Egypt, Lebanon, Turkey).

SOURCES: company 10-K filings with the US Securities and Exchange Commission

- Based on BRE activities and other sources of information, create an inventory of local companies with a foreign connection.
- Build a local international business alliance comprised of companies with international operations, foreign ownership, or trade relations.
- Leverage other international business alliances or related organizations located in the Portland-Vancouver metro area.
- Continue utilizing the overseas relationships of existing companies operating in Clark County, including clients, suppliers, and employees.
- ➔ **STRATEGY 3.2: Aggressively promote Clark County as a center for international business activity.**
- Adopt an international recruitment strategy that considers country-specific international investment trends, target industries, geography, and local strengths.
- Based on the following criteria, recruitment efforts focused on Japan, Germany, and South Korea are likely to yield the highest return.
 - Clark County's geographic proximity to the Far East
 - Recent events in Japan affecting energy reliability, supplier disruptions, and the strengthening of the Yen versus the US Dollar.
 - The strong presence of Asian and German companies in Clark County and the greater Portland metro area.
 - Strong foreign direct investment flows to the US from each country.
 - The comparative strengths of recommended target industries in these countries.
- Attracting Chinese foreign direct investment in the next few years is not likely to yield many successes. Courting Chinese investment is a longer-term endeavor requiring more time to develop relationships and educate investors on the business environment and culture of Clark County.
 - Participate in hosting Chinese business and government delegations to the Portland metro area.
 - Work with regional partners to evaluate the feasibility of cooperatively engaging a Chinese-based business and networking consultant.
 - Reach out to individuals and groups in the state and metropolitan region with strong ties to China (e.g., Ambassador Gary Locke).
- Continue conducting periodic international call trips to target companies.

- Consider utilizing the services of specialized global research and marketing firms for industry research, prospect identification, appointment setting, and other consulting services. (e.g., 310 Ltd. <http://www.310ltd.com/>)
- Strategically attend international industry events and trade shows.
 - Coordinate event schedule and attendance with regional economic development partners.
 - Emphasis should be placed on attending executive-level conferences.
 - At any function, participate in “special access” activities, including sponsorship of receptions, technical seminars, and similar “by invitation only” events.
 - When possible, local companies should be encouraged to attend.
 - Include call visits to specific companies based in the hosting city or region.
- Maintain economic development marketing materials in other languages, including Japanese, Korean, and German.
- Target US companies with manufacturing operations in China and other Asian nations. There is growing evidence of small and medium-sized US manufacturers “onshoring” operations back to the US from low-cost labor nations due to rising transportation costs and concerns over quality control.

Made in America: Small Businesses Buck the Offshoring Trend

By Brendan I. Koerner | February 28, 2011 | 12:00 pm | Wired March 2011



Multinational manufacturers

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May 12th 2011 | NEW YORK | from the print edition

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➤ **STRATEGY 3.3: Participate in regional international recruitment and trade efforts.**

- Influence the development of regional international strategies as part of the Portland-Vancouver Metro Regional Economic Strategy.
- Continue participating in international call trips and trade shows organized by regional economic development organizations.
- Attend international events and conferences hosted by regional partners.

➤ **STRATEGY 3.4: Conduct industry and country-specific research.**

- International Trade Administration (<http://web.ita.doc.gov/td/shared/tdindus.nsf/Industries>) industry specialists are useful in recommending alternative trade publications to fit specific industry interests and pointing out broad trends affecting the industries they cover. While their primary focus is on helping U.S. companies export, these industry specialists can also be useful advisors.
- The Census Bureau's Current Industrial Reports provide national level data on production and value of shipments for selected industries (<http://www.census.gov/manufacturing/cir/index.html>).
- Once specific companies have been identified within an industry, the US Securities and Exchange Commission's EDGAR search tool (<http://www.sec.gov/edgar.shtml>) provides access to filings for publicly traded companies. These filings, such as annual reports, can often provide information about trends affecting performance within a particularly industry.
- *The Economist* magazine is another excellent resource for staying abreast of international issues. In addition to its weekly publication, the Economist Intelligence Unit (EIU) offers an array of products and services for purchase. Notable among the EIU's products are its *Country Reports*. These reports provide an analysis of political and economic trends for nearly 200 countries, including a two-year forecast. An overview of the EIU's offerings is provided at: <http://www.eiu.com/public/>
- Private market research firms (e.g., 310 Ltd. <http://www.310ltd.com/>)
- Trade associations
- Industry publications

➤ **STRATEGY 3.5: Build relationships with other international resources in the Portland-Vancouver metro area.**

- Foreign consulates. Portland hosts 24 foreign consulates (<http://www.oregoncc.us/>). When focusing recruitment and outreach activities on certain countries, CREEDC should network with official diplomatic offices in the region.
- Foreign banks. Loan generation offices for foreign banks (especially European or Japanese) may also provide good contacts. Often these banks are eager to extend their lending process locally to the same companies that they have lending relationships with back home.

- Third parties. In addition to banking relationships, different countries place varying emphases on third parties. For example, Germany places significant emphasis on tax accountants. In the case of Japan, engineering firms and trading companies play a key role in site selection.
- **STRATEGY 3.6: Expand international student activities and link to CREDC. (See Strategy 2.6.)**

GOAL FOUR: BUSINESS DEVELOPMENT

Enhance business vitality through targeted recruitment, expansion, and entrepreneurship efforts.

Every day, thousands of commuters leave Clark County for work in other parts of the region. At the same time, the county continues to suffer from one of the highest unemployment rates in the region. Part of the problem is a skills mismatch - many residents' education and / or skills do not match the jobs available in the county and the region. Still, not enough jobs are being created in the county to meet the demand of the current labor force or to keep pace with population growth.

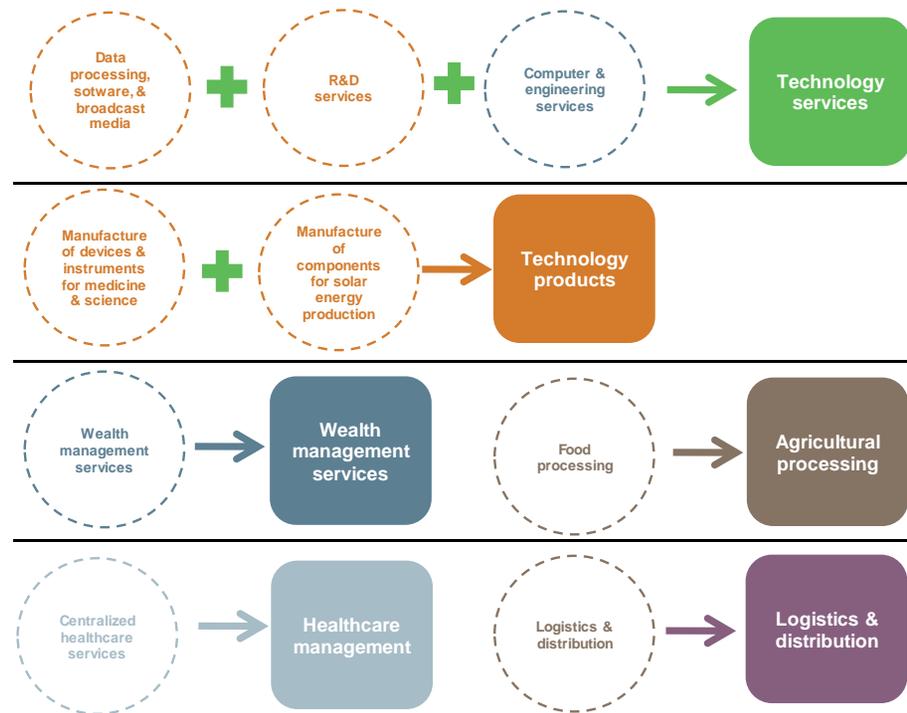
Providing jobs for the county's residents represents a significant opportunity for the county. First, creating jobs will lead to an expansion of the county's commercial tax base. In addition, reducing commuter traffic will reduce congestion and improve air quality. Finally, reducing Clark County's net export of labor by reducing outbound commuters and increasing inbound commuters will increase the county's daytime population. A larger daytime population can support a more vibrant retail sector by capturing employees' daytime expenditures. This, in turn, further strengthens the county's tax base and diversifies its revenue sources. These are just a few of the benefits of successful business development strategies.

Clark County's business development efforts should strive to improve business vitality within the county. Such a strategy will create the conditions to provide Clark County a competitive edge in the business attraction arena. Business vitality refers to a more dynamic private sector measured by new business formation and greater business investment. Cluster concentrations are certainly beneficial, but they risk becoming static. When this happens, they add few new jobs (especially at higher wage levels), fail to spin-off new ideas, and are not in a growth mode. Business vitality in a region suggests a higher level of entrepreneurship and innovation, the attraction of rapidly growing businesses, and a business climate more conducive to expansion.

Through an enhanced business retention and expansion program and well-targeted industry recruitment and entrepreneurship programs, Clark County can grow its economy by adding jobs that are likely to employ its residents.

Proposed target industries

Industries with job growth potential that also suit Clark County's capacity



➤ **STRATEGY 4.1: Continue a domestic targeted industry recruitment and marketing strategy.**

- Build awareness among decision-makers in target industries. TIP identified target industries that are fits for Clark County. These niches were chosen because they leverage the county's competitive strengths and build upon existing local or regional industry clusters. Appendix C provides detailed profiles of each industry and additional information on industry selection.
 - Develop and maintain a database of US and foreign-owned companies in each target industry.
 - Periodically conduct a direct mail and/or digital postcard campaign to companies in each target sector.
 - CREDC should conduct 2-3 domestic call trips per year to regions where target industry concentration is highest. These trips can be conducted separately or in conjunction with the trade shows or other events.
 - Compile and maintain resource information for each target industry sector. This would include identifying associations for each industry sector as well as following industry trends by monitoring trade publications or purchasing industry data and reports from private sources.
 - Track the success of the target industry campaign using a contact management system.
- Build awareness among corporate site selectors.
 - Update and maintain a database of developers, brokers, and site consultants in the Pacific Northwest.
 - Continue to maintain and update information typically of interest to commercial and industrial site selectors on the CREDC website.
 - Economic development staff from the CREDC, the county, municipalities, and the ports should call on site consultants in major metropolitan areas in the Portland-Vancouver metro region and the Puget Sound region.
 - CREDC, the county, cities, and the ports should periodically host events that showcase specific assets, such as available land and buildings or new projects. Local and regional developers, site consultants, and industrial and commercial brokers should be invited to attend.

➤ **STRATEGY 4.2: Pursue new investment from companies in the region seeking to consolidate facilities to the Pacific Northwest.**

- Visit with existing employers in Clark County that operate facilities outside of the county.
 - Determine whether consolidation is a possibility and offer to assist in relocating outside operations to the county.

- Build awareness of Clark County among the corporate base in Portland and the Puget Sound region.
 - Implement a PR campaign targeted at regional companies. Identify key regional publications and send press releases on recent business successes in Clark County.
 - Meet with executives of companies based in the Portland-Vancouver region and in the Puget Sound region to present the benefits of Clark County as a location for future expansion or for consolidation of outside facilities/operations.
 - Engage new partners for lead referral, including local and regional construction firms, real estate brokers, banks and service firms (legal and accounting), and regional industry associations.
- Monitor Portland and Seattle area news outlets for reports of business consolidation and expansion.
 - Identify economic trends, which companies are expanding and contracting in terms of employment and facilities, where satellite facilities are, and how their supply chains are structured.
- ➔ **STRATEGY 4.3: Extend business retention and expansion efforts throughout the county.**
- Continue CREDC's business retention and expansion (BRE) program. CREDC already administers a comprehensive business retention program focused on personal visits, surveys, and special events. These efforts should be coordinated with the other economic development partners in the county.
 - Maintain a database of existing businesses. Publicly available business records, such as tax records, utility hookups, and ownership transfers, can be good sources for information. The communities and ports should share existing inventories to create a master business database for the county.
 - A single Customer Relations Management (CRM) tool should be adopted by all economic development partners to store and update the master database. A protocol should be established for entering and updating the database. Ideally, the CRM program would be a cloud-based program such as Salesforce.com to reduce costs and allow prospect information to be shared among all partners.
 - Administer a regularly scheduled employer survey as a means for keeping in touch with local business and documenting specific needs or expansion plans. The survey could be conducted as a paper survey (mailed and delivered during personal visits) or via the Internet. All economic development partners should adopt a common survey instrument in order to build a consistent county-wide profile of the existing business community.
 - Analyze and synthesize the results of the surveys to produce an annual county-wide report card that summarizes employers' prospects for growth, industry stability, satisfaction with the community and workforce, and primary challenges.

- CREDC should meet its goal of making 75 personal businesses visits per year. The purpose of the visits should be to gauge the ability and needs of local businesses to operate, profit, and possibly expand in Clark County. When possible, economic development representatives from the ports and communities should join CREDC on business visitations.
- CREDC, the county, cities, and the ports should organize a regular roundtable of business executives in the county. The purpose of these meetings is similar to that of the employer survey, but the face-to-face approach often stimulates discussion that a survey cannot. The goal is to engage in candid, solution-seeking discussions focused on executive-level issues.

➔ **STRATEGY 4.4: Encourage innovation among existing businesses.**

- Work closely with WSUV, Clark College, The Columbian (Innovate Clark County), SWWDC, SCORE Ft. Vancouver, and other partners to establish a regional network of business service providers. Such a network would offer enhanced business and technical assistance services to area entrepreneurs and small businesses.
- Encourage companies to pursue federal grants to support innovation, such as the Small Business Innovation Research (SBIR) Program and the Small Business Technology Transfer (STTR) Program.
- Assist companies in identifying other sources of technical assistance, such as the Impact Washington (<http://impactwashington.org/>) – Washington’s Manufacturing Extension Partnership organization.
- Encourage companies to secure local, state, and federal government contracts relative to innovation.

➔ **STRATEGY 4.5: Promote entrepreneurship to enhance cluster development in target industries and accelerate growth-oriented business.**

- Work with partners to expand the services and assets available to start-up entrepreneurs in Clark County.
 - Continue sponsoring Clark County PubTalk. Promote PubTalk events on the CREDC website. Urge regional entrepreneurs, season business professionals, and investors to participate in Clark County PubTalk.

SBIR Program

SBA’s Office of Technology administers the Small Business Innovation Research (SBIR) Program and the Small Business Technology Transfer (STTR) Program. Through these two competitive programs, SBA ensures that the nation’s small, high-tech, innovative businesses are a significant part of the federal government’s research and development efforts. Eleven federal departments participate in the SBIR program; five departments participate in the STTR program awarding \$2 billion to small high-tech businesses. www.sba.gov/sbir

- Work with local investors to establish a formal angel investor network focused on Clark County-based entrepreneurs and start-up companies. Virtually all existing angel networks and funds in the region are concentrated in Oregon, including the Portland Angel Network, Oregon Angel Fund, Angel Oregon, Venture Northwest, Seed Oregon PubTalk, Oregon Growth Account, and the Oregon Entrepreneurs Network Catalyst Fund.
- Connect and communicate assistance available for local entrepreneurs depending on needs. Such assistance should include the Washington Small Business Development Center at WSUV, Ft. Vancouver Chapter of the National SCORE Association, the WSU Business Department's Business Growth Map, and others.
- Support the efforts of peer to peer networking groups such as the Urban Entrepreneurs Network and the Women Entrepreneurs Organization. Such groups offer opportunities for entrepreneurs to share experiences and seek solutions to any issues they face.
- Position Clark County to attract second-stage companies, especially in target industries. Second-stage companies are those that have grown past the start-up stage but have not grown to require a professional management team. They typically have no more than three years of sales and fewer than 30 employees. While these companies have moved beyond commercializing products and ideas, they are still seeking markets. They are also in need of new management expertise to provide stability.
 - Organize conferences and seminars geared to young companies in target industries, especially IT, software, and healthcare management.
 - Create marketing messages and products communicating the value and benefits of growing young companies in Clark County.
 - Link to existing entrepreneur networks in Oregon.
- Explore the feasibility of establishing a business accelerator focused on second-stage IT services and software companies in the Portland-Vancouver metro area. (See Strategy 1.3.)
- CREDC should consider establishing a Revolving Loan Fund (RLF) to provide operating capital for small developing companies in Clark County, especially those engaged in targeted sectors such as information technology. To assist in capitalizing an RLF, CREDC could apply for a grant from the Economic Development Administration (EDA) through the agency's Revolving Loan Fund Program. (<http://www.eda.gov/AboutEDA/RLF.xml>)
- Hold a high-profile regional entrepreneurship conference and expo in Clark County that includes inspiring speakers, a business plan contest linked to regional universities, and a venture conference to connect entrepreneurs with capital.

- Secure a top-class entrepreneur to serve as a keynote speaker and judge for the business plan contest.
- Partner with the WSUV Business College, SWWDC, the cities, and the ports to organize the expo.
- Raise funds through corporate sponsorships to provide prizes for the winners of the business plan competition.
- Invite representatives of regional venture funds and angel networks in Washington and Oregon as part of a venture conference to connect high quality, pre-screened entrepreneurs with venture capitalists.
- Support youth entrepreneurship programs at local school districts to foster a culture of innovation and cultivate an entrepreneurial spirit in the county.
- ➔ **STRATEGY 4.6: Promote efforts to develop a cohesive, unified business and economic development voice within Clark County.**
- Coordinate a public relations effort among all economic development partners in the county to communicate business success stories to the media.
 - Forward all city and port press releases to CREDC for posting to its website.
- Create a brief profile promoting Clark County's positive business environment to be used by area community and business leaders.
- Encourage county businesses to participate in transportation, capital, and legislative committee initiatives and events.
- All economic development information on city, county, and port websites should be integrated, consistent, and linked to the CREDC website.
- Maximize the implementation of existing marketing and branding efforts such as "Land Here Live Here."

GOAL FIVE: INFRASTRUCTURE

Invest in the infrastructure and amenities needed to attract new businesses and talent.

Adequate infrastructure and basic amenities are necessary both for retaining existing employers and residents and for competing in the business attraction game. Without them, a community may not meet the threshold location criteria companies use to identify potential sites. While talented individuals and families may follow a less formal process for choosing a place to relocate, they still value many of the same amenities that employers do – high quality schools, good housing options, dining / entertainment / recreation opportunities, etc. As a result, communities cannot afford to neglect their infrastructure or quality of place amenities.

For these reasons, Clark County must continue investing in the physical infrastructure and amenities needed to attract and retain the companies and skilled workforce essential to its long term economic vitality. One of Clark County's biggest potential strengths is the supply of greenfield sites suitable for industrial and commercial office development. At the same time, many of these sites lack the infrastructure planning and investment necessary for them to be shovel ready. In a competitive environment where CREDC and its partners lack many of the financial incentives available in other parts of the region, it is imperative the county's jurisdictions bring to market a diverse inventory of sites that can readily accommodate new investment prospects. The county must also continue to enhance and expand other critical physical infrastructure such as wastewater, roads, rail, and broadband Internet. In addition, the county's jurisdictions must become more attractive to new residents and businesses by expanding and diversifying options for education, housing, entertainment, dining, retail, and recreation. These investments in infrastructure and amenities must be distributed across the county. No single area of the county is likely to prosper while others remain stagnant or decline.

➤ **STRATEGY 5.1: Increase the inventory of shovel-ready industrial and commercial office sites in the county.**

- Complete near term infrastructure investments on industrial and commercial office sites that are within 18 months of being made shovel ready.
 - Centennial Industrial Park (Vancouver)
 - 199th Street Industrial Area (Battle Ground)
 - Ridgefield Industrial Park (Ridgefield)
 - Discovery Pointe (Ridgefield)
 - Gateway Industrial Park (Port of Vancouver)
 - Camas Meadows (Camas)

- Continue planning and infrastructure investment efforts on industrial and commercial sites requiring more than 18 months to be made shovel-ready.
 - Steigerwald Commerce Center (Washougal)
 - Circle C Properties (La Center Junction)
 - 192/SR 14 Interchange (Vancouver & Camas)
 - 179th Street Interchange
- Protect from rezoning land that is currently zoned or otherwise designated industrial and commercial office.
- The ports in the county should identify a mechanism for assembling and aggregating small properties located outside their existing boundaries.
- Continue inventorying industrial and commercial office sites in the county, including location, size (acreage and net acreage), ownership, zoning, environmental, planning, shovel-readiness, and infrastructure requirements. The inventory should be stored as a master county database by CREDC. Ports and municipalities should regularly provide information to update the database.
- CREDC should enhance its online searchable database of commercial office and industrial properties in the county. Additional property search and GIS mapping capabilities should be incorporated into the tool.
- **STRATEGY 5.2: Accelerate efforts to develop a Research Park, preferably within the Information Technology Zone. (See Strategy 2.1.)**
- **STRATEGY 5.3: Continue planning and implementing the regional sewer program.**
 - Partner agencies should update their respective General Sewer Plans, Comprehensive Plans, and related documents to align with the regional direction.
 - Complete the Regional Business Plan to determine the legal, financial, and operational form for partner agencies to implement regional sewer.
 - Partner agencies should complete all other individual engineering, design, and facilities plans.
- **STRATEGY 5.4: Continue supporting critical local and regional transportation infrastructure investments.**
 - Continue working with regional and state partners to secure funding for a new I-5 bridge across the Columbia River.

- Make needed road infrastructure investments to improve the movement of workforce and goods throughout the county.
 - Improve access to I-5 in northern areas of county.
- Continue investing in freight rail capacity in the county.
 - Chelatchie Prairie Railroad
- Ensure all areas of the county are digitally connected, as well as physically connected.
- **STRATEGY 5.5: Encourage new mixed-use developments along the river offering retail, residential, commercial, office, dining, and entertainment amenities.**
- Support efforts to implement the City of Vancouver’s City Center Vision & Subarea Plan.
 - Work with Columbia Waterfront LLC to complete the final design work for the 35-acre Columbia River Waterfront Development.
 - Promote and market the area to new residents and business involved in information technology, creative industries, healthcare services, and other high value, high growth sectors.
- Work with the City of Washougal, Port of Camas, and private developer to develop the 25-acre Hambleton Lumber Property Waterfront Redevelopment Project.
- Continue pursuing mixed-use waterfront development partners and opportunities at Millers’ Landing on Lake River in the Port of Ridgefield.
- **STRATEGY 5.6: Continue utilizing new and existing economic development tools and incentives available to the county, cities, ports, and CREDC.**
- Development process incentives. To promote new private commercial and industrial development, Clark County should consider extending its “Fee Holiday” program, which expires on its December 31, 2011.
- Expedited permitting. The county and cities should continue streamlining the development review and permitting process.
- Real Estate Excise Tax for Local Capital Projects. The county should allocate proceeds from the tax to fund critical economic development infrastructure in the county. A potential use of the REET funds would be funding infrastructure development at the proposed Research Park.

➤ **STRATEGY 5.7: Maintain a high quality of life and foundation for a skilled workforce through excellent K-12 systems.**

- Support districts' resource needs locally and with the state legislature.
- Encourage greater science, technology, engineering, and math (STEM) achievement throughout the education system.

IMPLEMENTATION

The following guide combines all the goals, strategies, and actions in a single table. It also includes potential partners and allies as well as a recommended time horizon for implementation. The purpose of the implementation matrix is to provide a graphic representation when the actions should realistically be implemented and the most appropriate organizations to carry them out.

ACTIONS	POSSIBLE IMPLEMENTING PARTNERS	TIMEFRAME					
		Ongoing	0 to 6 months	6 to 12 months	13 to 24 months	3 to 5 years	6 to 10 years
Goal One: Establish Clark County as a regional center of growth and innovation in the Information Technology sector.							
STRATEGY 1.1: Identify software and IT services companies already serving or tied to existing industries/companies in Clark County.							
Meet with and survey existing technology companies in Clark County to identify needs or gaps in IT services and software.	CREDC				■		
Inquire about emerging industry trends and the likely upstream and downstream software needs of existing companies, as well as their vendors and customers.	CREDC				■		
Develop a database of existing IT/software vendors or potential providers/customers linked to local technology companies.	CREDC					■	
Call on any identified companies located in the Portland-Vancouver region to conduct marketing intelligence on industry expansion and relocation factors.	CREDC					■	
Begin a targeted electronic marketing campaign (email and newsletter) to companies operating outside the region.	CREDC					■	
STRATEGY 1.2: Actively market Clark County to software and IT services companies, especially those in HIM, mobile applications, and multimedia.							
Develop software marketing brochure (physical and digital).	CREDC				■		
Identify relevant regional, state, and national trade associations to participate in and join. Consider targeted advertisements in industry trade publications.	CREDC					■	
Identify and attend specific industry trade events, conferences, and seminars in the Pacific Northwest.	CREDC					■	
Encourage tourism organizations and conference hotels in the county to pursue hosting industry meetings, conferences, and seminars.	CREDC, Vancouver USA Regional Tourism Office				■		

ACTIONS	POSSIBLE IMPLEMENTING PARTNERS	TIMEFRAME					
		Ongoing	0 to 6 months	6 to 12 months	13 to 24 months	3 to 5 years	6 to 10 years
STRATEGY 1.3: Build capacity to attract, absorb, and anchor IT and software companies in Clark County.							
Explore the feasibility of establishing a business accelerator focused on second-stage IT services and software companies in the Portland-Vancouver metro area.	CREDC, WSUV, Clark College, Cities, Ports, County					■	
Designate an Information Technology Zone in the county that includes existing technology-focused developments in Vancouver and Camas.	CREDC, WSUV, Clark College, Cities, Ports, County					■	
Pursue resources to encourage the expansion of IT and software education, training, and research programs at WSUV and Clark College.	CREDC, WSUV, Clark College, Cities, Ports, County				■	■	
Goal Two: Greatly expand the economic development influence of WSUV and Clark College.							
STRATEGY 2.1: Accelerate efforts to develop a Research Park.							
Evaluate other university-owned business parks as development models.	CREDC, WSUV				■		
Review potential business park locations and consider strengths and weaknesses of each location.	CREDC, Ports, Cities, County, WSUV				■		
Conclude donation of real estate (WSUV) or purchase of real estate (others).	CREDC, Ports, Cities, County, WSUV				■		
Commission a master site plan.	CREDC, Ports, Cities, County					■	
Identify needed infrastructure participation.	County, Ports, Cities, CREDC, WSUV					■	
Pursue investment assistance grants from the US Economic Development Administration and the State of Washington.	County, Ports, Cities, CREDC, WSUV					■	

ACTIONS	POSSIBLE IMPLEMENTING PARTNERS	TIMEFRAME					
		Ongoing	0 to 6 months	6 to 12 months	13 to 24 months	3 to 5 years	6 to 10 years
Develop a marketing plan and cooperative marketing agreement.	County, Ports, Cities, CREDC, WSUV					■	
STRATEGY 2.2: Engage in cooperative marketing.							
CREDC should incorporate information regarding specific academic and training programs at WSUV and Clark College in its economic development marketing materials.	CREDC, WSUV, Clark College				■		
CREDC will provide updated county-wide information, data, and events to WSUV for inclusion, as appropriate, on its website and in its recruitment materials.	CREDC, WSUV			■			
CREDC, community, port, and other representatives will participate in WSUV student, faculty, and staff recruitment activities or other events of mutual interest.	CREDC, WSUV, Cities, Ports, County			■			
Promote conferences and events at WSUV connected to existing employers and target industry sectors.	WSUV, CREDC, Vancouver USA Regional Tourism Office				■		
STRATEGY 2.3: Leverage university instruction and research activities for economic development in Clark County.							
Support the university's efforts at increasing the number of external research grants and contracts awarded to WSUV.	WSUV, CREDC, Cities, Ports, County	■					
Market the education, training, and facility assets offered by the new Engineering and Computer Science building.	WSUV, CREDC, Cities, Ports, County			■			
Increase collaboration between county stakeholders and staff and faculty.	WSUV, CREDC, Cities, Ports, County			■			
STRATEGY 2.4: Promote opportunities for technology transfer and commercialization.							
Work with WSUV officials to catalog and publicize R&D efforts that have the greatest potential for local commercialization.	WSUV, CREDC				■		
Identify county stakeholders that might serve as "champions" to support (financially or otherwise) technology transfer efforts.	WSUV, CREDC, Cities, Ports, County			■			

ACTIONS	POSSIBLE IMPLEMENTING PARTNERS	TIMEFRAME					
		Ongoing	0 to 6 months	6 to 12 months	13 to 24 months	3 to 5 years	6 to 10 years
Celebrate local success stories (when start-ups are launched or significant contracts are secured) in the local media with press releases and through the alumni newsletter.	WSUV, CREDC		■				
STRATEGY 2.5: Strengthen relationships between WSUV and Clark College with the county's business community. (Leverage WSU's College of Business Growth Map and other business resources to use institutional expertise to assist existing employers and entrepreneurs in Clark County.)							
Promote a university/business alliance to explore options for leveraging faculty and institutional expertise to assist existing employers, start-ups, and entrepreneurs in Clark County.	WSUV, CREDC, Cities, Ports, County				■		
Proactively market the resources of the Small Business Development Center (SBDC) for start-up and entrepreneurial business expansion.	WSU SBDC, CREDC, Ports, Cities, County, chambers	■					
Foster stronger ties between the WSUV and the county's business community and policy makers through networking activities with university faculty and the business community.	WSUV, CREDC, Ports, County	■					
Utilize job placement programs at WSUV and Clark College (in accordance with the region's workforce programs) to assist current students and recent graduates in finding local career options at local businesses in Clark County.	WSUV, CREDC, Ports	■					
STRATEGY 2.6: Expand international student activities and link to CREDC and Clark College.							
Connect international student recruitment efforts with CREDC investment missions.	CREDC, WSUV, Clark College				■		
Collaborate with CREDC on joint visitations.	CREDC, WSUV, Clark College				■		
Hold seminars with foreign companies based in Clark County.	CREDC, WSUV, Clark College				■		
Support formal and informal student groups at local high schools, Clark College, and WSUV and keep them linked to local business and community events.	CREDC, WSUV, Clark College				■		
STRATEGY 2.7: Support the region's education, job training, and placement programs.							
Encourage all county economic development partners to publicize the services available to employers, job seekers, students, and workers in the county.	SWWDC, CREDC, Ports, County, Cities, WSUV, Clark College, School Districts		■				

ACTIONS	POSSIBLE IMPLEMENTING PARTNERS	TIMEFRAME					
		Ongoing	0 to 6 months	6 to 12 months	13 to 24 months	3 to 5 years	6 to 10 years
CREDC should post an updated profile and links on its website related to WorkSource.	CREDC		■				
Keep a pulse on the supply and demand dynamics of workforce education and training and career placement in the county as well as in the metropolitan area.	SWWDC	■					
Encourage employers to recruit and hire local students through WorkSource and related programs.	SWWDC, CREDC, Ports, County	■					
Work with educators, including the K-12 system, to align strategic directions and resources with the county-wide plan.	SWWDC, CREDC, Ports, County, Cities, WSUV, Clark College, School Districts			■			
Develop a regional talent management system through the SWWDC to identify professional and technical talent in the metropolitan area through social media and other mechanisms.	SWWDC		■				
STRATEGY 2.8: Support the expansion of student enrollment and degree programs for WSU-V and Clark College, especially in the Science, Technology, Engineering, and Math (STEM) fields.							
Advocate with legislators and other supporters on behalf of new degrees as needed by the community.	CREDC, Ports, County, Cities, WSUV, Clark College	■					
Advocate for funding of over-enrollments to provide full funding of degree programs.	CREDC, Ports, County, Cities, WSUV, Clark College	■					
Support WSUV & Clark College with community representation on their campus and academic program advisory boards/committees.	CREDC, Ports, County, Cities, WSUV, Clark College	■					
Mobilize support for specific programs as needed to serve the community (e.g. medical technician, engineering, engineering tech.) with professional, industry or other organizations.	CREDC, Ports, County, Cities, WSUV, Clark College	■					

ACTIONS	POSSIBLE IMPLEMENTING PARTNERS	TIMEFRAME					
		Ongoing	0 to 6 months	6 to 12 months	13 to 24 months	3 to 5 years	6 to 10 years
Goal Three: Make Clark County a hub for international investment in the Pacific Northwest.							
STRATEGY 3.1: Build on the existing international connections of exporters and foreign companies within local economy.							
As part of Clark County's Business Retention and Expansion (BRE) survey program, include a section addressing international trade, supplier, and investment linkages.	CREDC, Ports, County, Cities			■			
Based on BRE activities and other sources of information, create an inventory of local companies with a foreign connection.	CREDC				■		
Build a local international business alliance comprised of companies with international operations, foreign ownership, or trade relations.	CREDC, Ports, County, Cities				■		
Leverage other international business alliances or related organizations located in the Portland-Vancouver metro area.	CREDC, Ports				■		
Continue utilizing the overseas relationships of existing companies operating in Clark County, including clients, suppliers, and employees.	CREDC, Ports	■					
STRATEGY 3.2: Aggressively promote Clark County as a center for international business activity.							
Adopt an international recruitment strategy that considers country-specific international investment trends, target industries, geography, and local strengths.	CREDC, Ports, Regional Partners				■		
Continue conducting periodic international call trips to target companies.	CREDC, Ports, Regional Partners	■					
Strategically attend international industry events and trade shows.	CREDC, Ports, Regional Partners	■					
Maintain economic development marketing materials in other languages, including Japanese, Korean, and German.	CREDC				■		
Target US companies with manufacturing operations in China and other Asian nations.	CREDC, Ports, Regional Partners				■		
STRATEGY 3.3: Participate in regional international recruitment and trade efforts.							
Influence the development of regional international strategies as part of the Portland-Vancouver Metro Regional Economic Strategy.	CREDC, Ports, County		■				
Continue participating in international call trips and trade shows organized by regional economic development organizations.	CREDC	■					

ACTIONS	POSSIBLE IMPLEMENTING PARTNERS	TIMEFRAME					
		Ongoing	0 to 6 months	6 to 12 months	13 to 24 months	3 to 5 years	6 to 10 years
Attend international events and conferences hosted by regional partners.	CREDC, Ports, County	■					
STRATEGY 3.4: Conduct industry and country-specific research.							
	CREDC			■			
STRATEGY 3.5: Build relationships with other international resources in the Portland-Vancouver metro area.							
	CREDC, Ports			■			
STRATEGY 3.6: Expand international student activities and link to CREDC. (see Strategy 2.6)							
Goal Four: Enhance business vitality through targeted recruitment, expansion, and entrepreneurship efforts.							
STRATEGY 4.1: Continue a domestic targeted industry recruitment and marketing strategy.							
Build awareness among decision-makers in target industries.	CREDC, Ports				■		
Build awareness among corporate site selectors.	CREDC, Ports			■			
STRATEGY 4.2: Pursue new investment from companies in the region seeking to consolidate facilities to the Pacific Northwest.							
Visit with existing employers in Clark County that operate facilities outside of the county.	CREDC, Ports				■		
Build awareness of Clark County among the corporate base in Portland and the Puget Sound region.	CREDC, Ports				■		
Monitor Portland and Seattle area news outlets for reports of business consolidation and expansion.	CREDC, Ports		■				
STRATEGY 4.3: Extend business retention and expansion efforts throughout the county.							
Continue CREDC's business retention and expansion (BRE) program.	CREDC, Ports, Cities, County	■					

ACTIONS	POSSIBLE IMPLEMENTING PARTNERS	TIMEFRAME					
		Ongoing	0 to 6 months	6 to 12 months	13 to 24 months	3 to 5 years	6 to 10 years
STRATEGY 4.4: Encourage innovation among existing businesses.							
Establish a regional network of business service providers.	CREDC, WSUV, Clark College, The Columbian, SWWDC, SCORE					■	
Encourage companies to pursue federal grants to support innovation, such as the Small Business Innovation Research (SBIR) Program and the Small Business Technology Transfer (STTR) Program.	CREDC, WSUV, Clark College, The Columbian, SWWDC, SCORE					■	
Assist companies in identifying other sources of technical assistance.	CREDC, WSUV, Clark College, The Columbian, SWWDC, SCORE					■	
Encourage companies to secure local, state, and federal government contracts relative to innovation.	CREDC, WSUV, Clark College, The Columbian, SWWDC, SCORE					■	
STRATEGY 4.5: Promote entrepreneurship to enhance cluster development in target industries and accelerate growth-oriented business.							
Work with partners to expand the services and assets available to start-up entrepreneurs in Clark County.	CREDC, WSUV, Clark College, The Columbian, SWWDC, SCORE	■					
Position Clark County to attract second-stage companies, especially in target industries.	CREDC					■	
Explore the feasibility of establishing a business accelerator focused on second-stage IT services and software companies in the Portland-Vancouver metro area.	CREDC, WSUV						■
Consider establishing a Revolving Loan Fund (RLF) to provide operating capital for small developing companies in Clark County, especially those engaged in targeted sectors such	CREDC						■

ACTIONS	POSSIBLE IMPLEMENTING PARTNERS	TIMEFRAME					
		Ongoing	0 to 6 months	6 to 12 months	13 to 24 months	3 to 5 years	6 to 10 years
as information technology.							
Hold a high-profile regional entrepreneurship conference and expo in Clark County that includes inspiring speakers, a business plan contest linked to regional universities, and a venture conference to connect entrepreneurs with capital.	CREDC, WSUV, Clark College, The Columbian, SWWDC, Ports, SCORE					■	
Support youth entrepreneurship programs at local school districts to foster a culture of innovation and cultivate an entrepreneurial spirit in the county.	CREDC, WSUV, Clark College, The Columbian, SWWDC, Ports, SCORE					■	
STRATEGY 4.6: Promote efforts to develop a cohesive, unified business and economic development voice within Clark County.							
Coordinate a public relations effort among all economic development partners in the county to communicate business success stories in the county to the media.	CREDC, Ports, Cities, County, ICC			■			
Create a brief profile promoting Clark County's positive business environment to be used by area community and business leaders.	CREDC, Ports, Cities, County, ICC			■			
Encourage county businesses to participate in transportation, capital, and legislative committee initiatives and events.	CREDC, Ports, Cities, County	■					
All economic development information on city, county, and port websites should be integrated, consistent, and linked to the CREDC website.	CREDC, Ports, Cities, County		■				
Maximize the implementation of existing marketing and branding efforts such as "Land Here Live Here."	CREDC, Ports, Cities, County, ICC	■					
Goal Five: Invest in the infrastructure and amenities needed to attract new businesses and talent.							
STRATEGY 5.1: Increase the inventory of CREDC-approved shovel-ready industrial and commercial office sites.							
Complete near term infrastructure investments on industrial and commercial office sites that are within 18 months of being made shovel ready.	Ports, Cities, County				■		

ACTIONS	POSSIBLE IMPLEMENTING PARTNERS	TIMEFRAME					
		Ongoing	0 to 6 months	6 to 12 months	13 to 24 months	3 to 5 years	6 to 10 years
Continue planning and infrastructure investment efforts on industrial and commercial sites requiring more than 18 months to be made shovel-ready.	CREDC, Ports, Cities, County					■	■
Protect from rezoning land that is currently zoned or otherwise designated industrial and commercial office.	CREDC, Ports, Cities, County	■					
Identify a mechanism for assembling and aggregating small properties located outside their existing boundaries.	Ports					■	
Continue inventorying industrial and commercial office sites in the county, including location, size (acreage and net acreage), ownership, zoning, environmental, planning, shovel-readiness, and infrastructure requirements. The inventory should be stored as a master county database by CREDC.	CREDC, Ports, Cities, County	■					
CREDC should enhance its online searchable database of commercial office and industrial properties in the county. Additional property search and GIS mapping capabilities should be incorporated into the tool.	CREDC				■		
STRATEGY 5.2: Accelerate efforts to develop a Research Park, preferably within the Information Technology Zone. (See Strategy 2.1.)							
STRATEGY 5.3: Continue planning and implementing the regional sewer program.							
Partner agencies should update their respective General Sewer Plans, Comprehensive Plans, and related documents to align with the regional direction.	County, Cities, Ports,	■					
Complete the Regional Business Plan to determine the legal, financial, and operational form for partner agencies to implement regional sewer.	County, Cities, Ports,	■					
Partner agencies should complete all other individual engineering, design, and facilities plans.	County, Cities, Ports,	■					
STRATEGY 5.4: Continue supporting critical local and regional transportation infrastructure investments.							
Continue working with regional and state partners to secure funding for a new I-5 bridge across the Columbia River.	CREDC, Ports, Cities, County, ICC	■					
Make needed road infrastructure investments to improve the movement of workforce and goods throughout the county.	CREDC, Ports, Cities, County, ICC	■					■
Continue investing in freight rail capacity in the county.	Cities, County, Ports	■					

ACTIONS	POSSIBLE IMPLEMENTING PARTNERS	TIMEFRAME					
		Ongoing	0 to 6 months	6 to 12 months	13 to 24 months	3 to 5 years	6 to 10 years
STRATEGY 5.5: Encourage new mixed-use developments along the Columbia River offering retail, residential, commercial, dining, entertainment, and office amenities.							
Support efforts to implement the City of Vancouver's City Center Vision & Subarea Plan.	Vancouver, CREDC, Port of Vancouver	■					
Work with the City of Washougal, Port of Camas, and private developer to develop the 25-acre Hambleton Lumber Property Waterfront Redevelopment Project.	Washougal, Port of Camas, CREDC	■					
Continue pursuing mixed-use waterfront development partners and opportunities at Millers' Landing on Lake River in the Port of Ridgefield.	Port of Ridgefield	■					
STRATEGY 5.6: Continue utilizing new and existing economic development tools and incentives available to the county, cities, ports, and CREDC.							
<u>Development process incentives.</u> To promote new private commercial and industrial development, Clark County should adopt a development fee waiver incentive.	County				■		
<u>Expedited permitting.</u> The county and cities should continue streamlining the development review and permitting process.	County, Cities				■		
<u>Real Estate Excise Tax for Local Capital Projects.</u> The county should allocate proceeds from the tax to fund critical economic development infrastructure in the county.	County				■		
<u>Local Revitalization Financing.</u> Authorized in 2009 by the Washington legislature, Local Revitalization financing provides a state contribution for public infrastructure projects in "revitalization areas" designed to encourage private investment and economic development. It is a form of tax increment financing ("TIF") to finance public infrastructure supporting private development.	Cities, County				■		
STRATEGY 5.7: Maintain a high quality of life and foundation for a skilled workforce through excellent K-12 systems.							
Support districts' resource needs locally and with the state legislature.	CREDC, Ports, County, Cities, School Districts	■					
Encourage greater science, technology, engineering, and math (STEM) achievement throughout the education system.	SWWDC, CREDC, Ports, County, Cities, WSUV, Clark College, School Districts	■					

PERFORMANCE METRICS

An important piece of any strategic plan is developing the metrics by which the success of the plan's implementation will be measured and tracked. While it is difficult to directly connect the success of any economic development plan to local-level macro-economic statistics (e.g., median household income), tracking some economic indicators provides a general understanding of the relative economic vitality of Clark County. In addition, CREDC, port, and county economic development offices should track, compile, and report on the outcomes of their own activities and successes. TIP recommends Clark County use the following indicators to measure program effectiveness and economic growth in the county.

SUGGESTED METRIC	DATA SOURCE
Assessed value of developed land	County tax assessor
Amount of new business investment	Business interviews, surveys, media, and business license records
Number of private establishments	U.S. Bureau of Labor Statistics - Quarterly Census of Employment & Wages
Number of new businesses formed/attracted in target sectors	Business interviews, surveys, media, and business license records
Jobs and investment resulting from new business formation and attraction in target sectors	Business interviews, surveys, media, and business license records
Average annual pay	U.S. Bureau of Labor Statistics- Quarterly Census of Employment & Wages
Median family income	U.S. Census - American Community Survey
Population over 25 with a Bachelor's degree or higher	U.S. Census - American Community Survey
Per Capita Income	U.S. Census - American Community Survey
Population over 25 with an Associate's degree	U.S. Census - American Community Survey

APPENDIX A: ECONOMIC ASSESSMENT

To provide a common framework for our recommendations, TIP began by compiling demographic and economic data on Clark County. This analysis is expressed in the context of Clark County compared to the Portland-Vancouver MSA and the nation. The purpose is to understand the county's relative economic position and highlight its competitive advantages and disadvantages.

About the data

We based our findings on the following elements:

A review of relevant studies, plans, and other material provided by the Columbia River Economic Development Council and others;

A review of economic and demographic data from primary and secondary sources, including the US Census Bureau, the Internal Revenue Service, the US Bureau of Labor Statistics, and Economic Modeling Specialists Inc. (EMSI).

The data and analysis is organized within five categories: demographics, migration and mobility, income and housing, economy, and workforce.



Summary of Data Findings

DEMOGRAPHICS

Long-term population growth in Clark County has been relatively stable. Since 1970, the county has added about 100,000 new residents per decade and may be home to 600,000 residents by 2030. Like the nation as a whole, the age composition of the county is growing older. The share of Clark County residents enrolled in some form of educational program is similar to the overall US percentage and is slightly higher than the MSA average. Overall, Clark County and the Portland MSA are ethnically and racially less diverse than the US average.

MIGRATION & MOBILITY

Until recently, net domestic in-migration accounted for the largest portion of the county's population growth. According to the IRS records that track changes in the number and location of income tax exemptions, the gross number of people moving into Clark County has been leveling off since the late 1990s while the gross number of people leaving the county has slightly increased. As a result, net annual migration into the county has narrowed. Multnomah County is by far the largest source of Clark County's in-migration, followed by Washington and Clackamas Counties. Clark's major population losses from out-migration are predominantly to Cowlitz County, Washington.

More than 90,000 commuters leave Clark County each day for work in other areas, while about 35,000 commute into the county for work. Outbound commuting from Clark County characterizes nearly every sector of the economy. The heaviest outbound commuting is concentrated in manufacturing, wholesale trade, retail, and transportation/warehousing.

INCOME & HOUSING

Clark County's median household income outpaces the nation and the MSA. In terms of income distribution, Clark County has a slightly larger bulge of middle-income households than the nation overall and fewer households at or below the poverty threshold. Housing affordability in the county is better than the MSA overall, but lags the national benchmark for affordability.

ECONOMY

The range of Clark County's jobless rate has been particularly volatile over time. While not at its 20-year high, the county's unemployment rate sits at more than 2 full points above the MSA and nearly 3 points above the national figure. The mid-to-late 1990s was the only period in the past 20 years when Clark County's job market tightened more than the MSA. Job losses in the current recession have pushed Clark County's employment base in 2010 back down to the levels last seen in 2006.

Government, healthcare, and retail trade are the county's largest employment sectors, which is consistent for most suburban counties across the nation. Suburban and urban satellite counties typically distinguish themselves by the sectors that follow retail, healthcare, and government. In Clark County, these sectors are professional services and manufacturing. Clark County is home to about 14 percent of the jobs in the MSA. Since the recession, the construction and manufacturing sectors have suffered the most significant job losses. The finance/insurance, professional services, and personal services sectors have actually added more jobs in Clark County during the recession than during the expansion. Employment growth in the county's healthcare sector is projected to outpace national performance.

WORKFORCE

Clark County's educational attainment levels reflect a workforce with mid-level skill preparation. The county is home to a relatively small share of college-educated adults compared to the US and MSA averages as well as a relatively small share of adults at the lower margins of attainment (i.e., no high school diploma or GED).

Skilled healthcare workers in Clark County draw higher salaries than other occupational groups. However, in most occupational groups, the median wage rate in Clark County falls near the middle or in the bottom half of the national wage range. More than one-quarter of Clark County's workers are employed in occupations that involve sales or office administration, which is a typical occupational pattern in satellite urban areas like Clark County. Blue-collar jobs in construction, production, transportation, and repair services have suffered substantial losses over the past four years. However, jobs in business, healthcare, education, and computers have eked out gains over at least three of the past four years (if not all four).

DEMOGRAPHICS

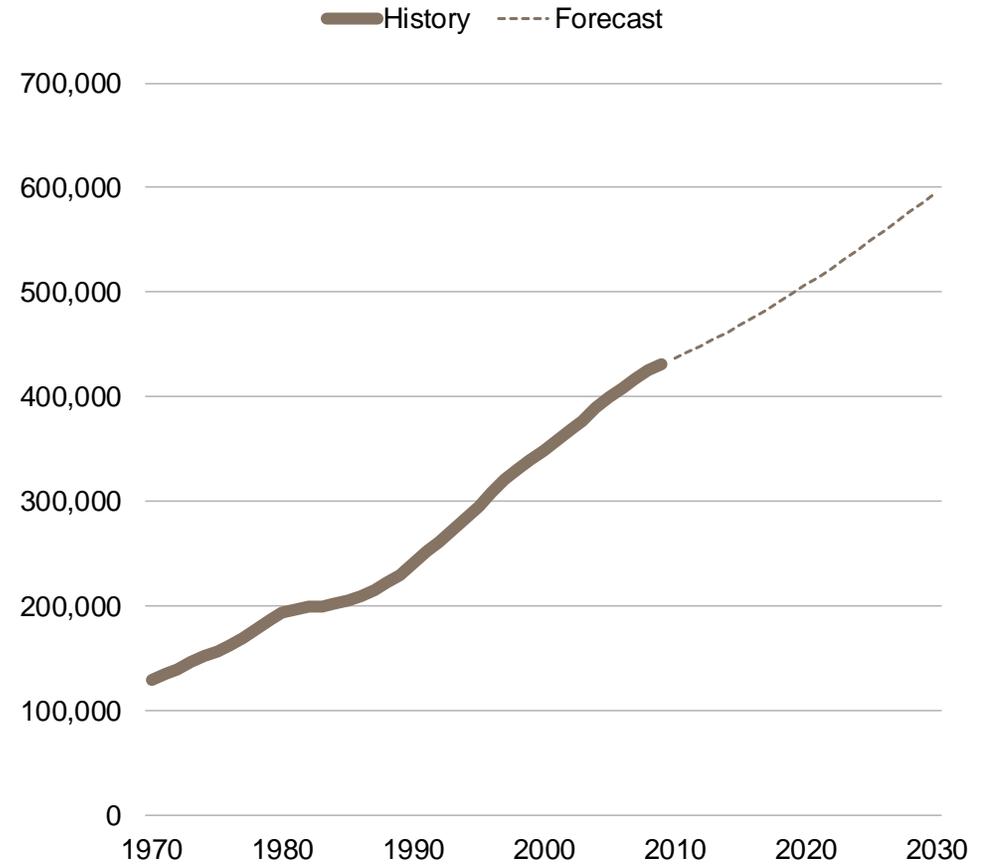
Figure 1

Viewed over the long term, Clark County's population growth has been relatively steady.

Clark County adds about 100,000 new residents per decade. Its total population passed 200,000 in the 1980s, 300,000 in the 1990s, and 400,000 in the past decade.

Projections show that Clark County could reach a half-million by the end of this decade and will approach 600,000 by 2030.

Clark County population



SOURCES: US Census Bureau; Moody's Analytics

DEMOGRAPHICS

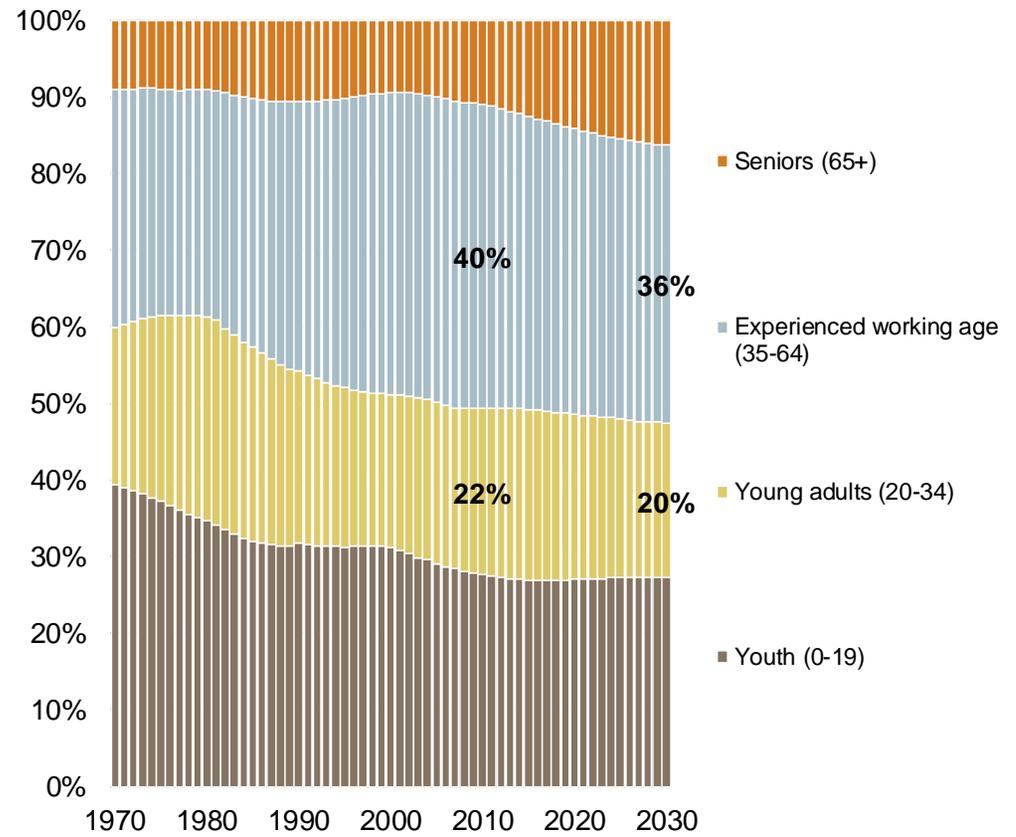
Figure 2

While the population of the county is growing, its age composition is growing older much like the rest of the nation.

As of 2010, about 62 percent of the county's population falls within the working age range of 20-64. Within a generation, this working-age share will be cut to just 56 percent of the total population.

As baby boomers retire and leave the workforce, they will push the senior share of the population higher. Meanwhile, children and adolescents will remain a relatively stable share of the overall county population.

Clark County's population distribution by age



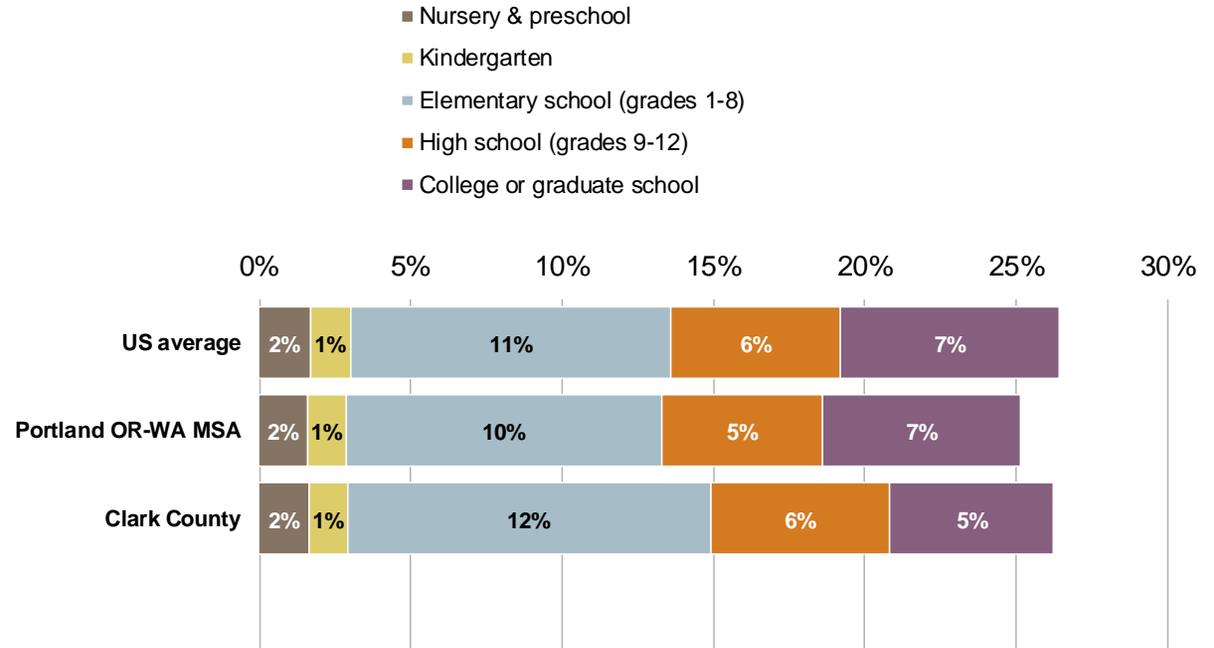
SOURCES: US Census Bureau; Moody's Analytics

DEMOGRAPHICS

Figure 3

About 26 percent of Clark County's residents are enrolled in some form of educational program ranging from preschool to graduate school. This is similar to the overall US share and is slightly higher than the MSA average. As Washington State University Vancouver continues expanding its programs and enrollment, Clark County's student population should also rise.

Current enrollment status of the population



SOURCES: U.S. Census Bureau (American Community Survey, 2009)

DEMOGRAPHICS

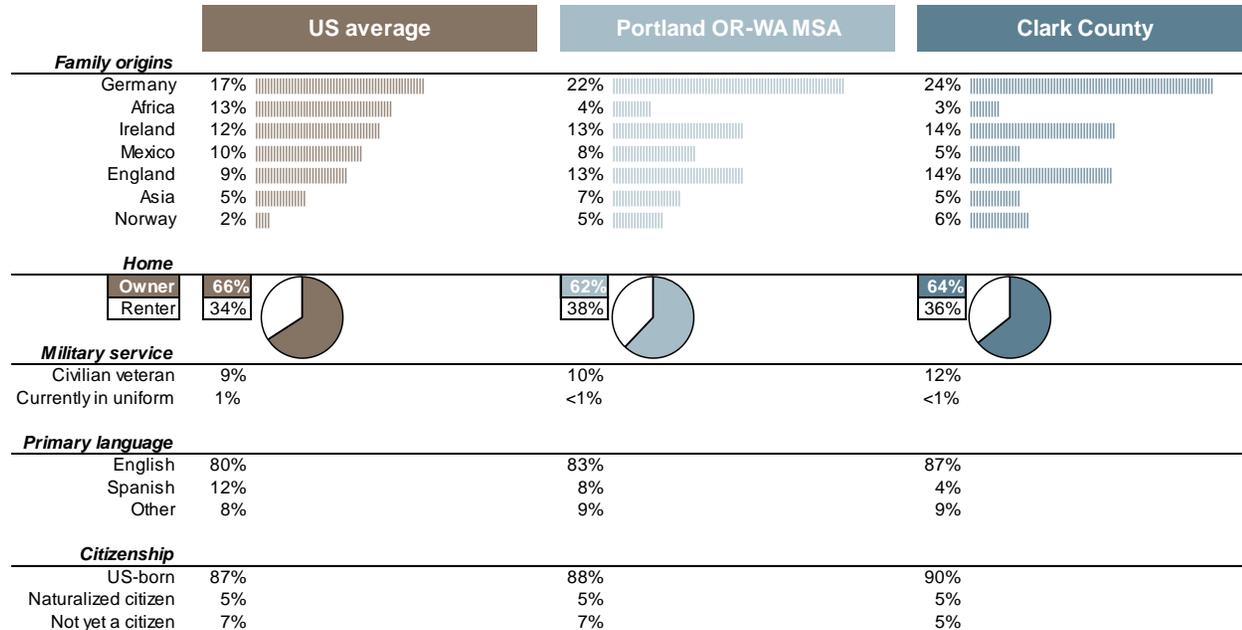
Figure 4

The average Clark County resident is three times more likely to trace a genetic path back to Norway than the average American. Overall, however, Clark County and the Portland MSA are ethnically and racially less diverse than the US average. The county is also home to a higher percentage of primary English speakers than the MSA and the nation.

Clark County residents are about as prone to own a home as the average American household. The county's households, however, are slightly more likely to include military veterans, US-born citizens, and native English speakers.

Demographic comparison

Ancestry, homeownership, military service, language, & citizenship



NOTE: "Family origins" is calculated from Census tabulations across multiple categories, including ancestry, race, & ethnicity; "Military service" is calculated on the population age 18 or older
 SOURCES: U.S. Census Bureau (American Community Survey, 2009)

MIGRATION & MOBILITY

Figure 5

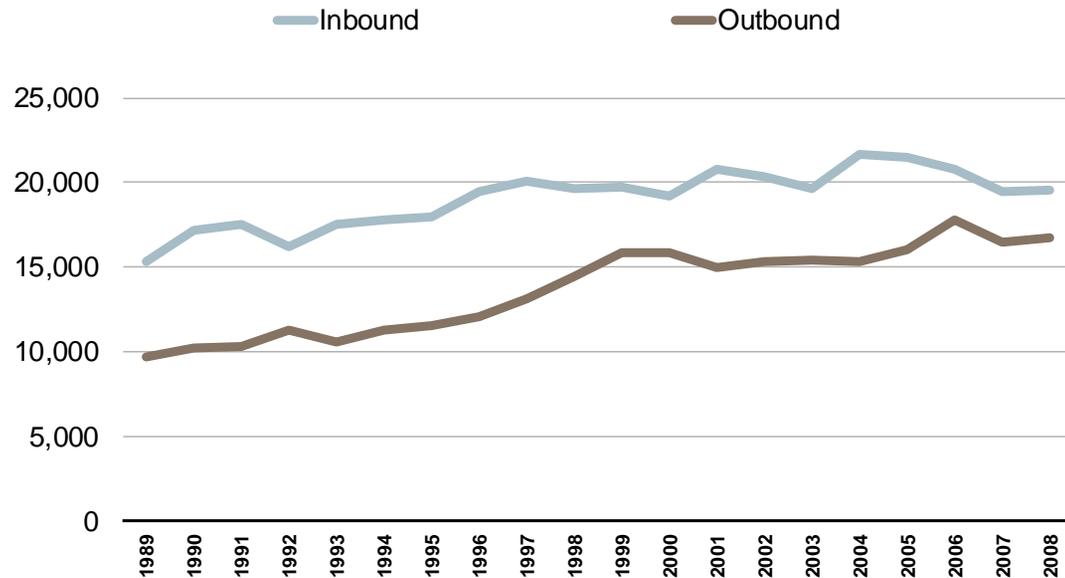
According to the IRS records that track changes in the number and location of income tax exemptions, the gross number of people moving into Clark County began to level off in the late 1990s at about 20,000 annually.

Meanwhile, the gross number of people leaving the county has inched up marginally during this same period.

The result is a gradual narrowing of the net annual migration into the county. This pattern correlates strongly with Census estimates showing similar structural changes over time.

Clark County migration patterns

Annual changes in county-of-residence showing inbound versus outbound movers



SOURCES: US Internal Revenue Service, county-to-county migration flows; Moody's Analytics

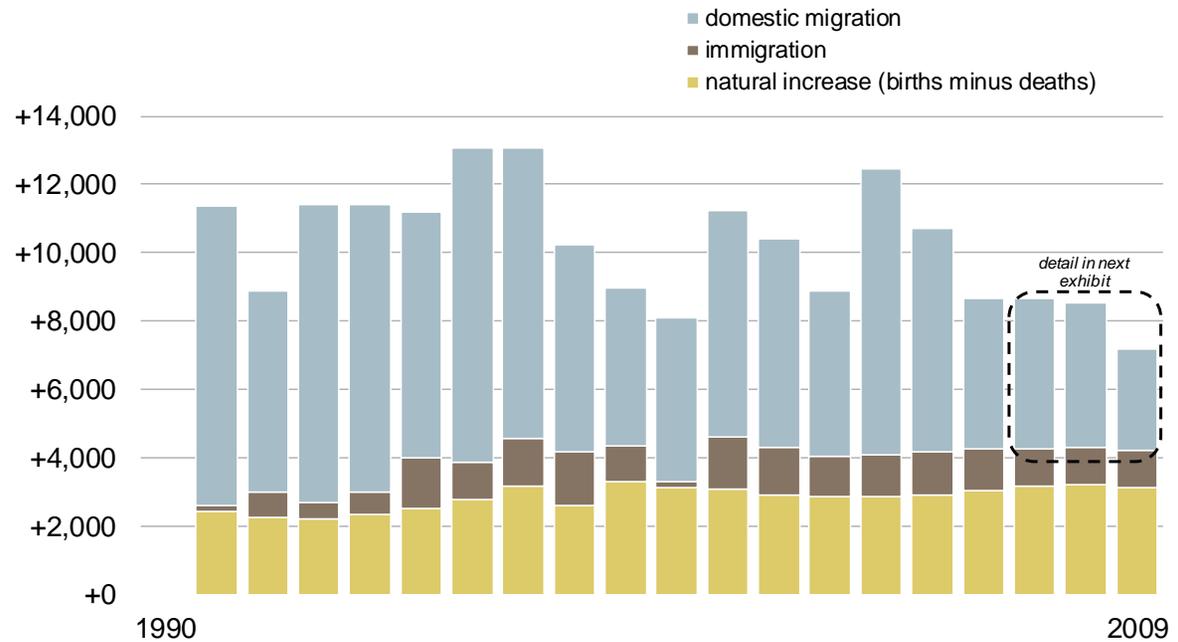
MIGRATION & MOBILITY

Figure 6

Natural increase and immigration have proven stable, steady contributors to Clark County's population growth, but in past years they were never the main drivers. Until recently, net domestic in-migration accounted for the largest portion of the county's population growth.

In 2009, net domestic migration lagged natural increase as the county's main population driver for the first time in a generation. While part of this trend was recession-driven, it is also part of a broader, long-term trend. Net domestic migration has been slowly waning since the mid-1990s. While Clark County is still positioned to grow at about 100,000 per decade just as it has in the past, this population growth will be slower in percentage terms.

Components of growth in the 5-county region



SOURCES: U.S. Bureau of the Census; Moody's Analytics

MIGRATION & MOBILITY

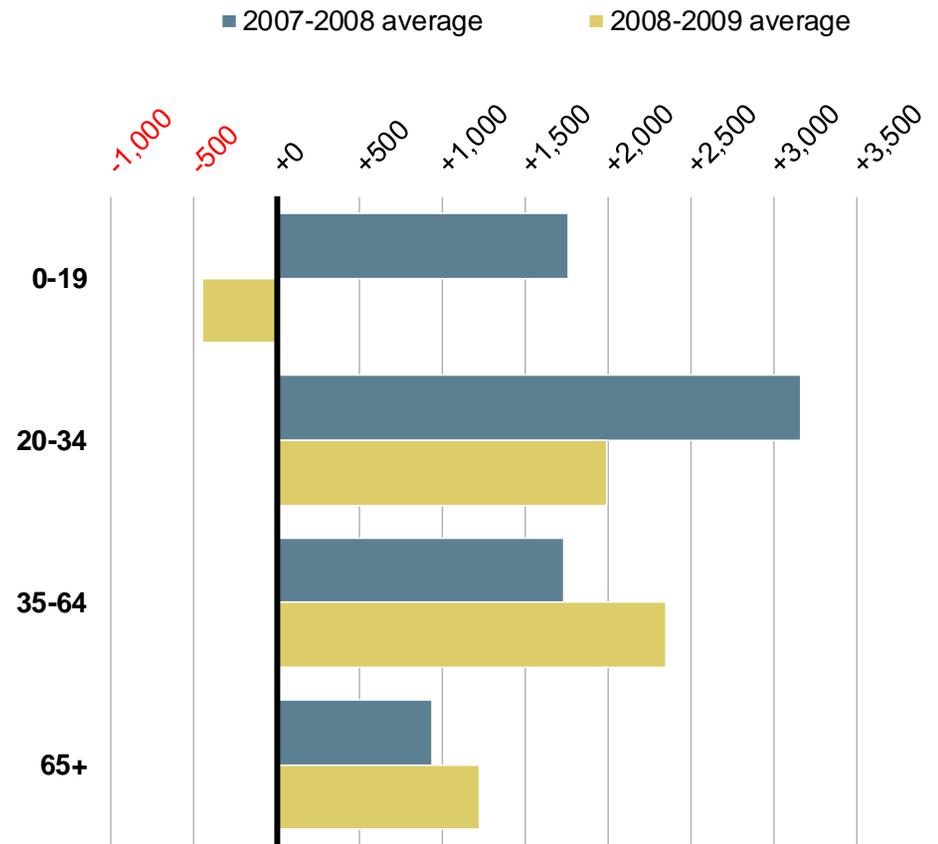
Figure 7

A snapshot of the changing composition of Clark County's net migration can be found in the US Census Bureau's most recent American Community Survey (ACS) project.

Conclusions should be drawn only with caution since ACS is survey data with a large standard error, and not directly comparable to the Census Bureau's annual population estimates, nor to IRS migration records.

During the recent recession (2008-2009) a broad snapshot of ACS data reveals that in-migration into Clark County has continued among those over age 35. However, for those younger singles and families below age 35, the pace of in-migration slowed as the economy collapsed.

Clark County migration estimates by broad age cohort



SOURCE: U.S. Census Bureau, American Community Survey, single year data for 2007, 2008, and 2009

MIGRATION & MOBILITY

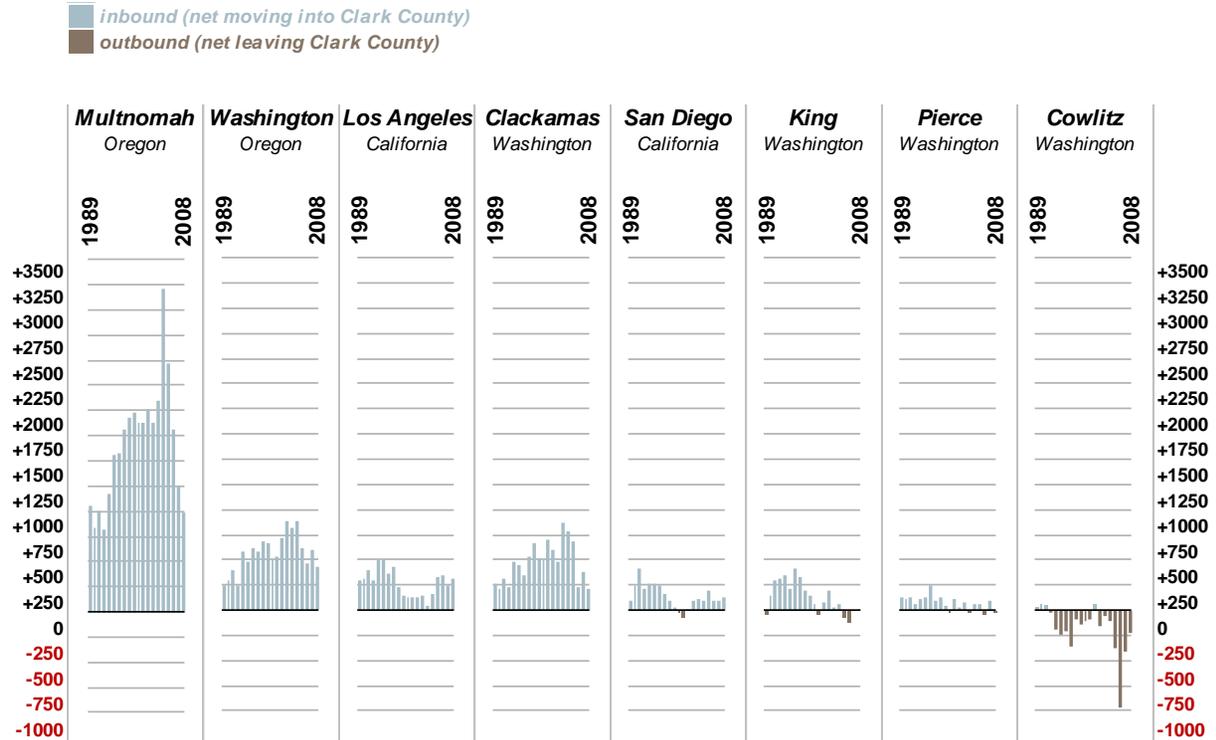
Figure 8

According to IRS filings, Multnomah County is by far the largest source of Clark County's in-migration. Clark County's dependence on in-migrants from Multnomah peaked in 2004, but had fallen by more than half by 2008. Two of Portland's suburban counties (Washington and Clackamas) also provide ample sources of net in-migration. In addition, Clark County attracts migrants from Los Angeles, San Diego, and Seattle.

Clark's major population losses from out-migration are predominantly to Cowlitz County, Washington.

Counties with historically high migration patterns with Clark County

Annual net migration into (out of) Clark County from the selected counties



SOURCES: US Internal Revenue Service, county-to-county migration flows; Moodys Analytics

MIGRATION & MOBILITY

Figure 9

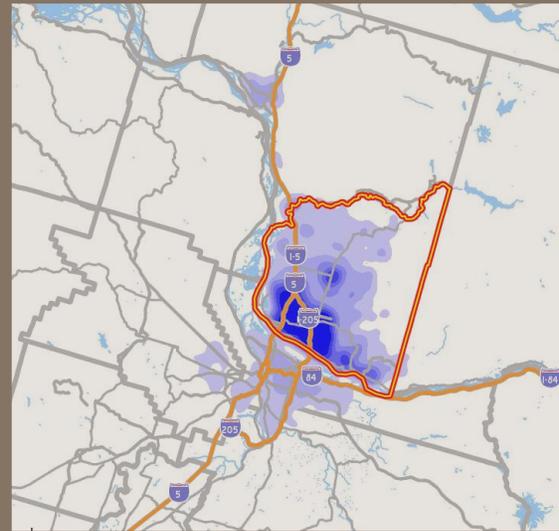
Inbound commuters to Clark County arrive mainly from the Oregon side of the Portland MSA, but also from Longview, Washington, in Cowlitz County.

Not surprisingly, the county's outbound commuters are mostly destined for Portland and suburban areas on the Oregon side of the state line.

Commuting patterns to and from Clark County

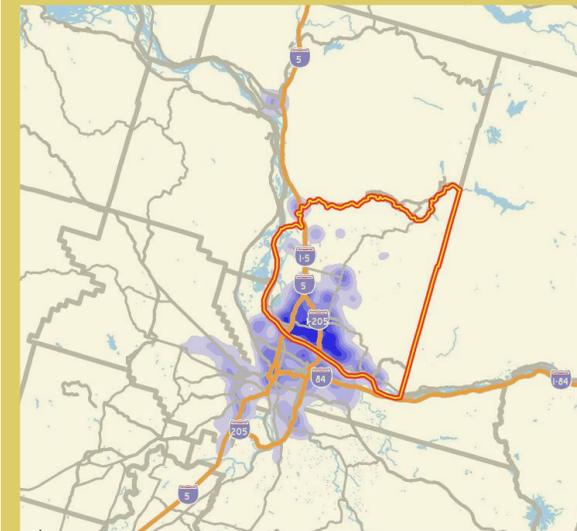
Labor shed (inbound)

Where workers live who commute into Clark County



Commuter shed (outbound)

Where Clark County residents work



SOURCES: U.S. Bureau of the Census, Local Employment Dynamics (LED) database, 2008

MIGRATION & MOBILITY

Figure 10

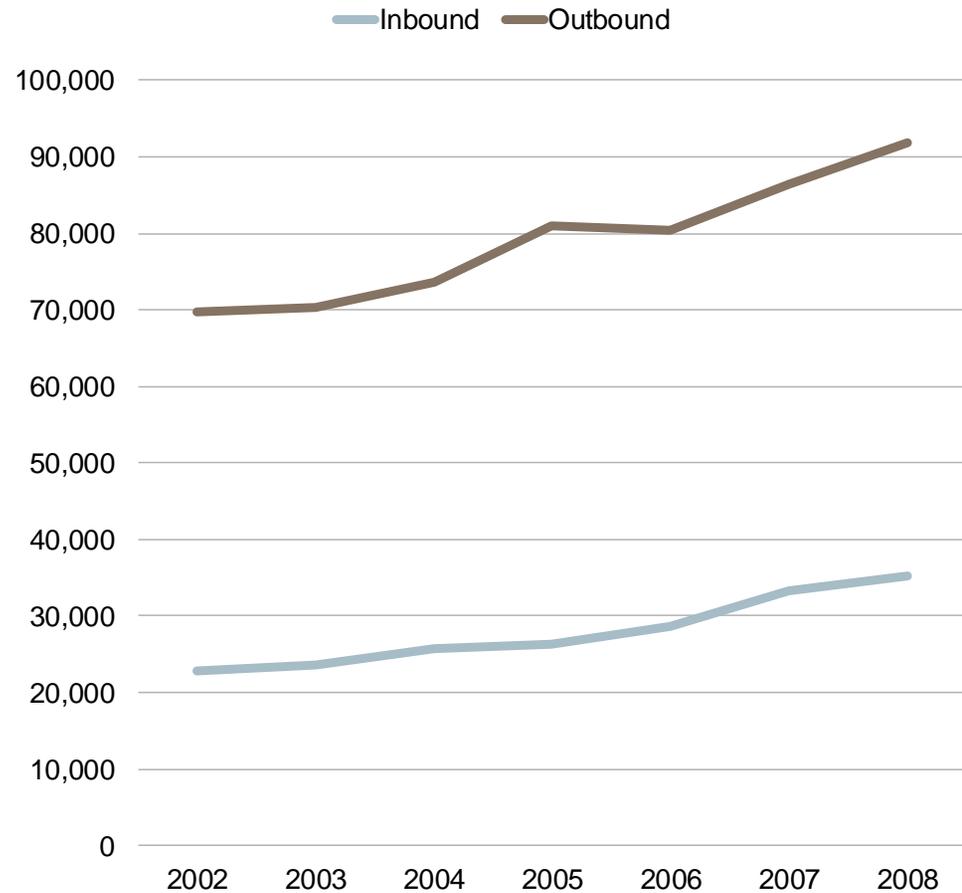
To measure and analyze commuting patterns, TIP utilized the US Census Bureau's Local Employment Dynamics (LED) database. LED integrates existing data from state-supplied administrative records on workers and employers with existing censuses, surveys, and other administrative records. A primary LED source is the Quarterly Census of Employment and Wages (QCEW) program, which publishes a quarterly count of employment and wages reported by employers covering 98 percent of U.S. jobs. To estimate commuting flows, Census uses the quarterly data employers report comparing the zip code of the employer (workplace) to the home zip code of each employee.

According to LED estimates, more than 90,000 commuters leave Clark County each day for work in other areas. Meanwhile, about 35,000 commute into Clark County for work.

The net ratio of outbound over inbound commuters is nearly 3-to-1. This ratio remained relatively constant over the decade, during both growth and recessionary periods.

Net daily commuter flow to and from Clark County

For every person commuting into Clark County, three commute out



SOURCES: U.S. Bureau of the Census, Local Employment Dynamics (LED) database, 2002-2008

MIGRATION & MOBILITY

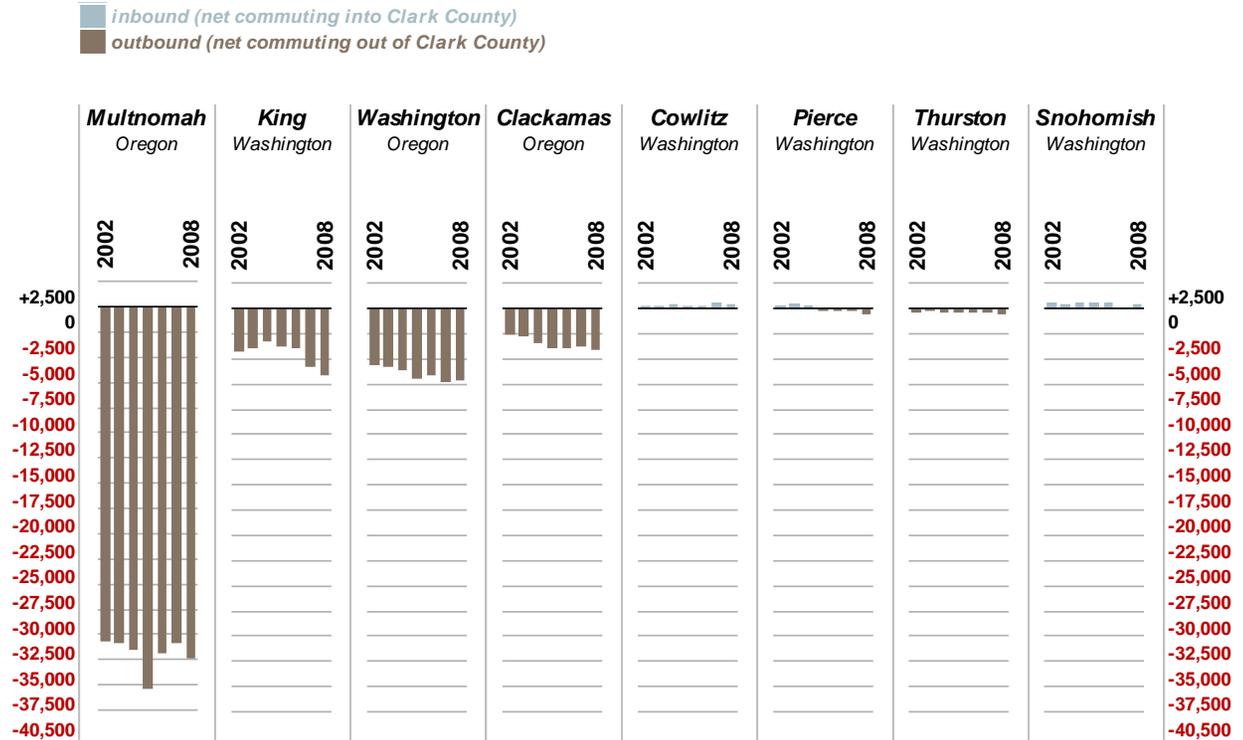
Figure 11

Most commuters who leave Clark County are headed to work in Portland or its suburbs on the Oregon side of the border.

A surprisingly large number of Clark County residents commute as far as Seattle to work. It is not possible to determine from the LED dataset what is driving the outflow to King County. However, due to distance most are not likely workers driving to work every day. These commuters may include people who work from home part time, work non-standard hours or shifts, or work in floating or free-agent positions such as sales and account reps.

Net daily commuter flow between Clark County and other counties

Net outbound flows from Clark County mostly to Oregon, but some flows to Seattle, too



SOURCES: U.S. Bureau of the Census, Local Employment Dynamics (LED) database, 2004-2008

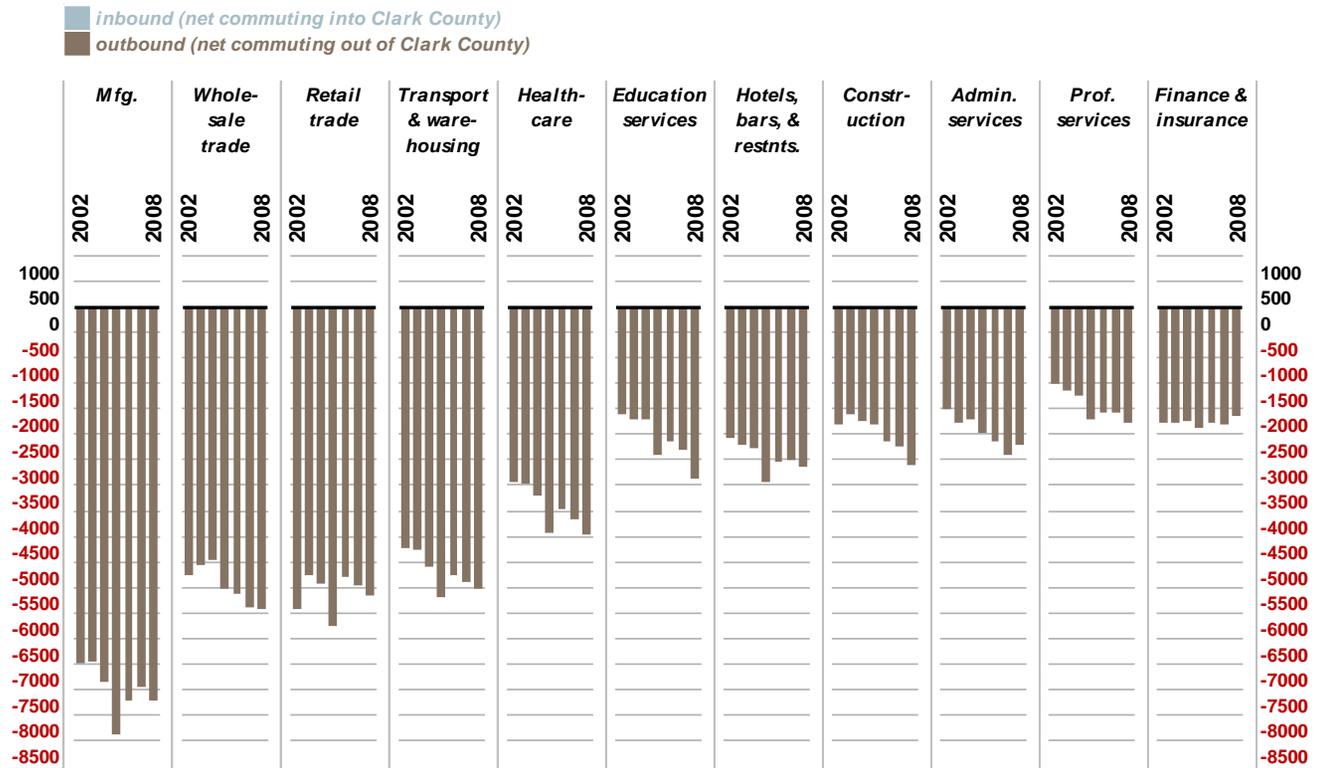
MIGRATION & MOBILITY

Figure 12

Net daily commuter flow to/from Clark County by economic sector

Outbound commuting from Clark County characterizes nearly every sector of the economy.

The heaviest outbound commuting is concentrated in manufacturing, wholesale trade, retail, and transportation/warehousing. In addition to construction, all of these job sectors were highly vulnerable to the recession.



SOURCES: U.S. Bureau of the Census, Local Employment Dynamics (LED) database, 2002-2008

INCOME & HOUSING

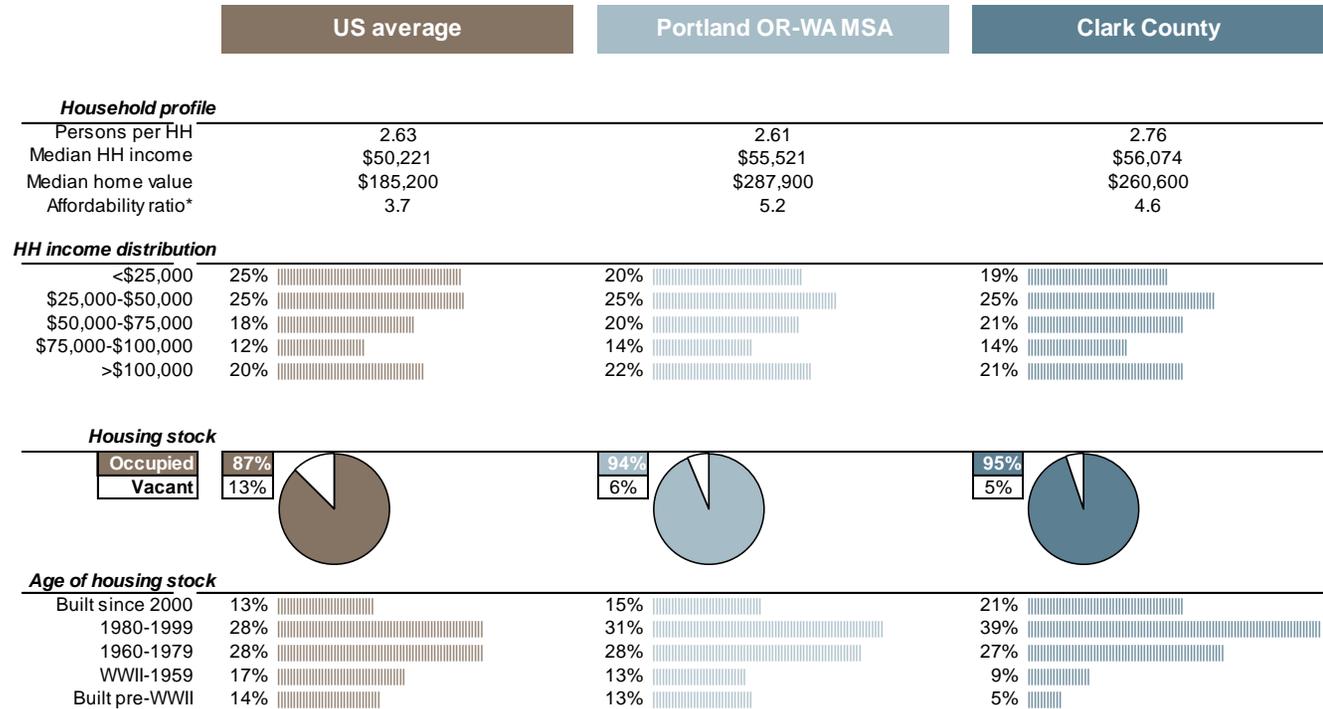
Figure 13

Clark County's median household income outpaces the nation and the MSA. Housing affordability in the county is better than the MSA overall, but lags the national benchmark for affordability.

About 60 percent of Clark County's housing stock has been built since 1980. In comparison, just over 40 percent of the nation's housing stock was constructed after 1980.

Household comparison

Household size, income, and housing stock



*NOTE: The affordability ratio is the median home value divided by the median household income. The "ratio" equates the home prices to raw earning potential (expressed in years of gross income needed to pay for the home). The lower the number, the more affordable the housing.

SOURCES: U.S. Census Bureau (American Community Survey, 2009)

INCOME & HOUSING

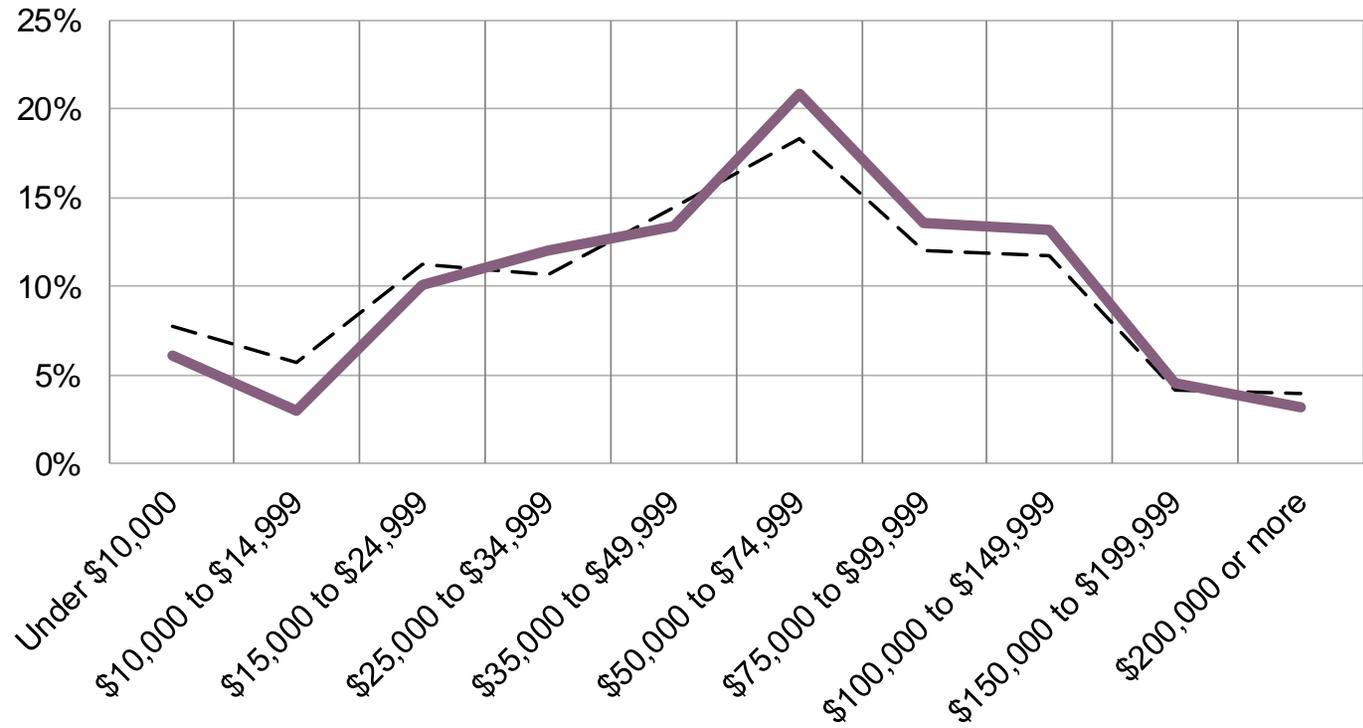
Figure 14

Income distribution in Clark County closely parallels the national average and is actually healthier in low and middle income levels. The county has a slightly larger bulge of middle-income households than the nation overall and fewer households at or below the poverty threshold.

Distribution of household income

Share of total households by income level

— US average — Clark County



SOURCES: U.S. Census Bureau (American Community Survey, 2009)

INCOME & HOUSING

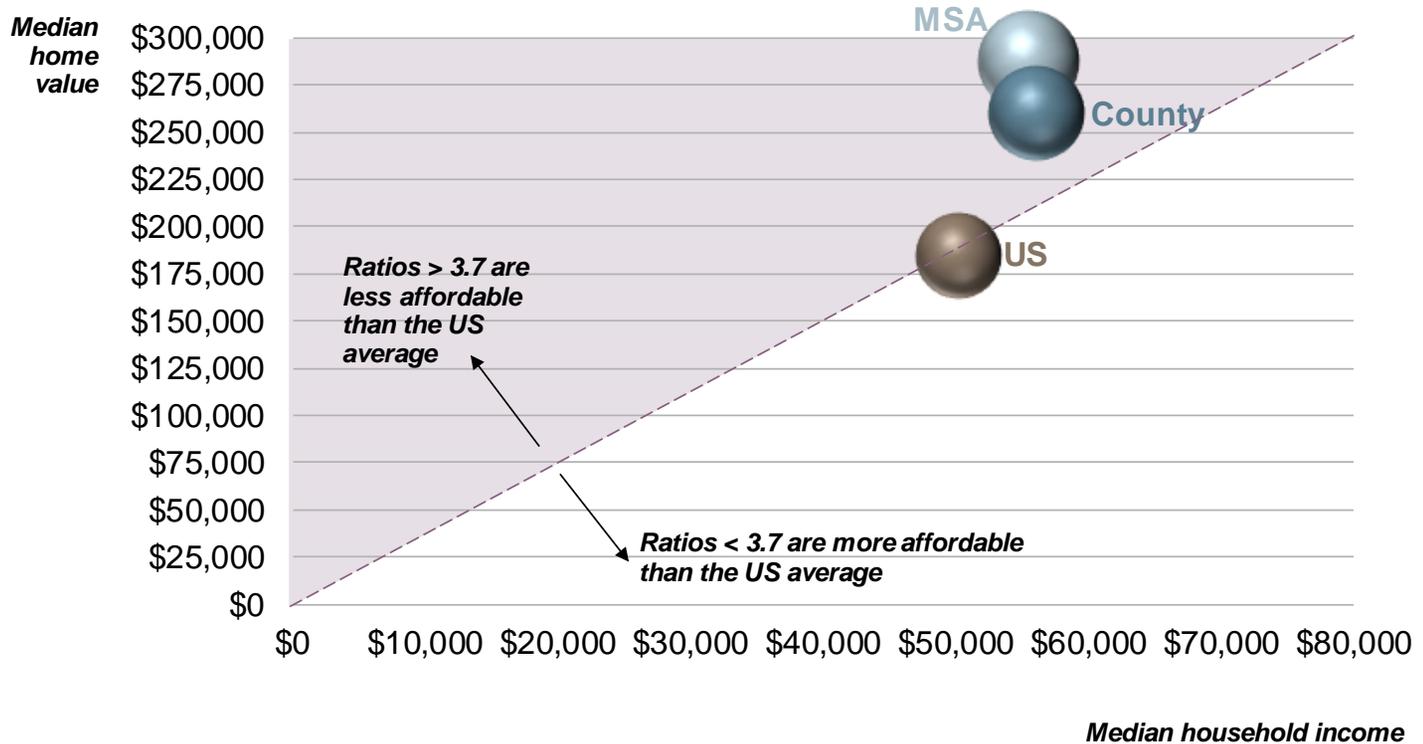
Figure 15

The easy rule-of-thumb for measuring housing affordability is the ratio of median home price to median household income. This ratio is essentially the number of years needed to pay for a median housing unit if, in theory, 100 percent of income were applied to the principal until it was paid off.

Clark County's index (4.6) is less affordable than the national average (3.7), but compares well to the Portland MSA overall (5.2).

Housing affordability ratios

Clark County's housing is less affordable than the nation, but a better value than the MSA overall



NOTE: Bubble sizes reflect relative affordability: Clark County (4.6), Portland, OR-WA MSA (5.2), US average (3.7)
 SOURCES: U.S. Census Bureau (American Community Survey, 2009)

ECONOMY

Figure 16

Unemployment rates nationwide have pushed near their all-time highs.

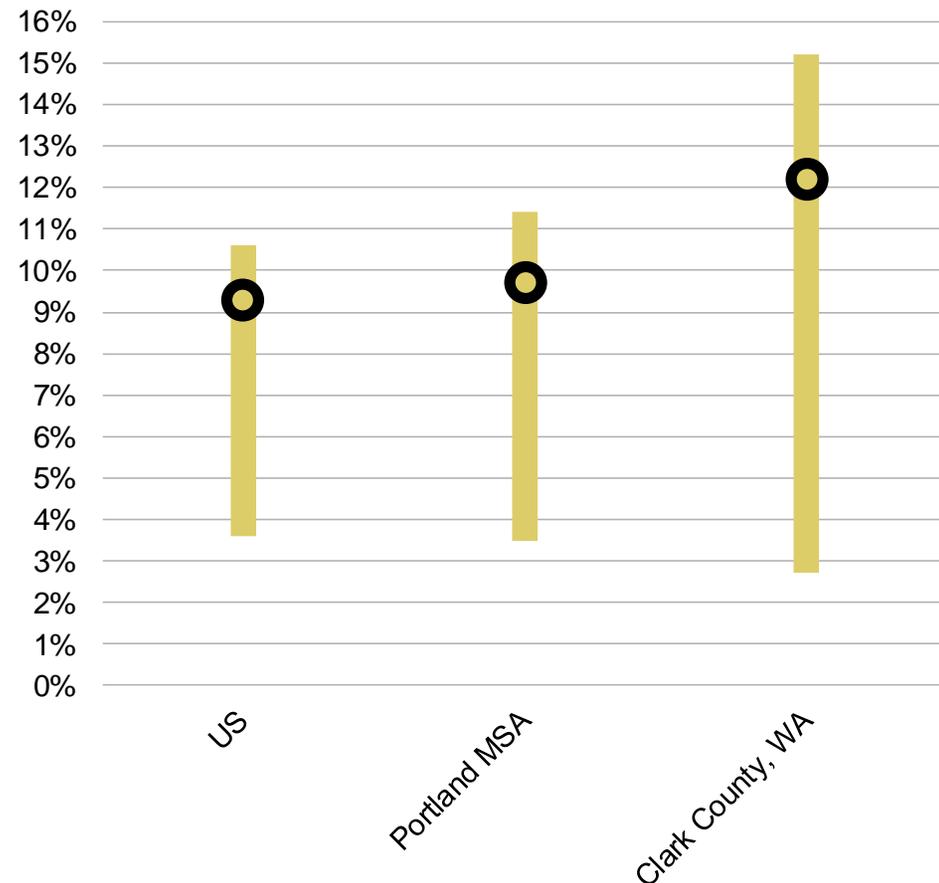
The range of Clark County's jobless rate has been particularly volatile over time. In the past 20 years it has fallen slightly below the MSA's lowest point, but it has also shot much higher than the MSA, too.

Recently, the county's unemployment rate registered at more than 2 full points above the MSA and nearly 3 point above the national figure.

Average annual unemployment rate, 1990-2010 (%)

Latest 2010 unemployment rate relative to the historical 20-year range

- = 20-year unemployment range
- = latest unemployment rate



NOTE: Because seasonal adjustment is not available for all jurisdictions, none of the rates shown (including comparables) are seasonally adjusted
 SOURCES: U.S. Bureau of Labor Statistics, CPS (US rate) and LAUS (MSA & county rates)

ECONOMY

Figure 17

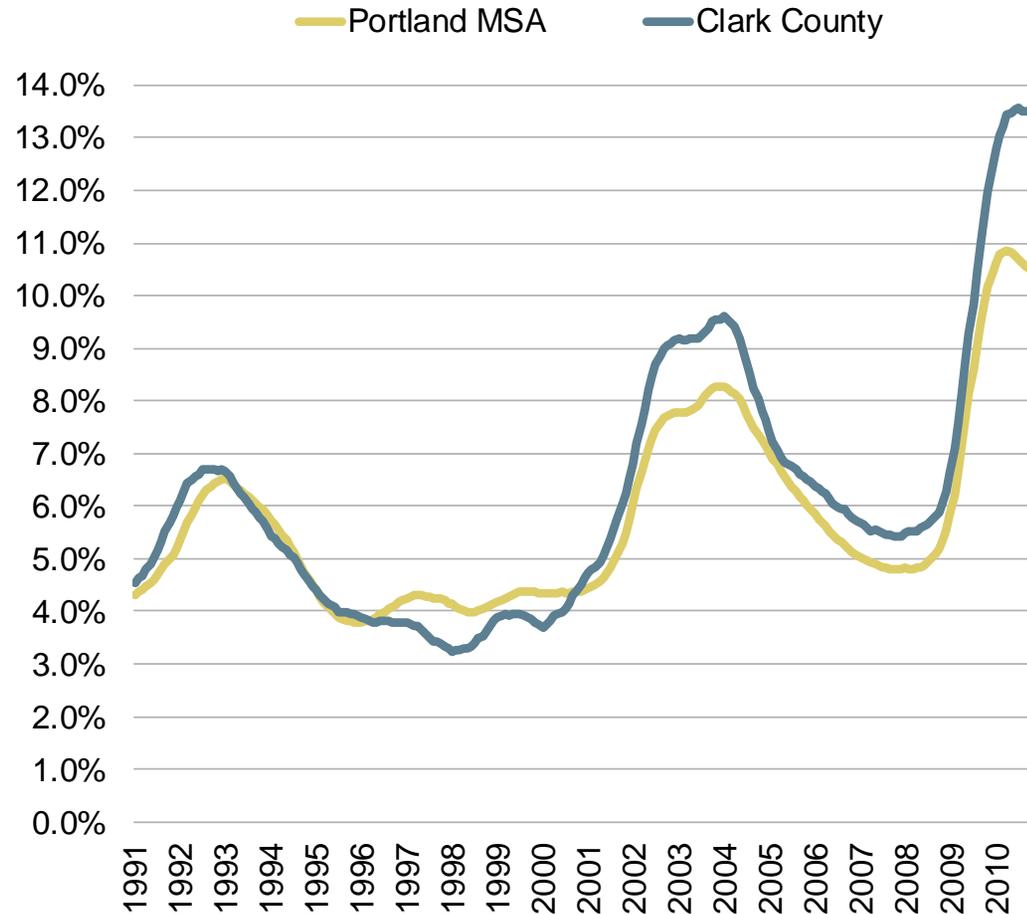
To put the unemployment range in context, Figure 17 charts average annual unemployment rates for the county and the MSA over the past 20 years.

The mid-to-late 1990s was the only period in the past 20 years when Clark County's job market tightened more than the MSA. These years represent the height of the dot com era.

Over the past decade—and especially during the recessionary peaks of 2003 and 2010—Clark County's jobless rate moved well above the MSA average.

Unemployment rates compared

12-month moving average of the seasonally unadjusted jobless rates for the MSA and county



SOURCES: U.S. Bureau of Labor Statistics, LAUS (MSA & county rates)

ECONOMY

Figure 18

Clark County's unemployment rolls began to grow sharply in late 2008, and this growth continued at a relentless pace throughout most of 2009.

In 2010, Clark County's job market began to stabilize. By the latter half of the year, the county's unemployment rolls were finally beginning to decrease.

The unemployment rolls

Unemployment trends of Clark County residents over the past three years

Monthly unemployment numbers are not seasonally adjusted, so they can only be compared to the same month in the previous year

Year	Month	Number Unemployed	Rolling 12-month Net Change	
2010	Oct	26,489	-812	
	Sep	26,676	+1,011	
	Aug	29,292	-221	
	Jul	28,070	-1,443	
	Jun	27,109	+727	
	May	27,954	+1,292	
	Apr	29,879	+1,532	
	Mar	33,279	+5,181	
	Feb	31,071	+3,662	
	Jan	32,385	+6,616	
	2009	Dec	29,960	+8,282
		Nov	29,163	+12,542
Oct		27,301	+12,798	
Sep		25,665	+12,683	
Aug		29,513	+13,666	
Jul		29,513	+16,157	
Jun		26,382	+14,100	
May		26,662	+15,035	
Apr		28,347	+16,125	
Mar		28,098	+14,776	
Feb		27,409	+14,015	
Jan		25,769	+12,064	
2008	Dec	21,678	+10,405	
	Nov	16,621	+5,871	
	Oct	14,503	+4,810	
	Sep	12,982	+2,587	
	Aug	15,847	+2,764	
	Jul	13,356	+1,857	
	Jun	12,282	+1,368	
	May	11,627	+1,392	
	Apr	12,222	+1,459	
	Mar	13,322	+685	
	Feb	13,394	+183	
	Jan	13,705	+998	
2007	Dec	11,273	+1,825	
	Nov	10,750	+108	

NOTE: LAUS survey data reflect local household employment, i.e., the job status of *employed residents*. This is not the same as the local *job base*.

SOURCES: U.S. Bureau of Labor Statistics, LAUS program

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ECONOMY

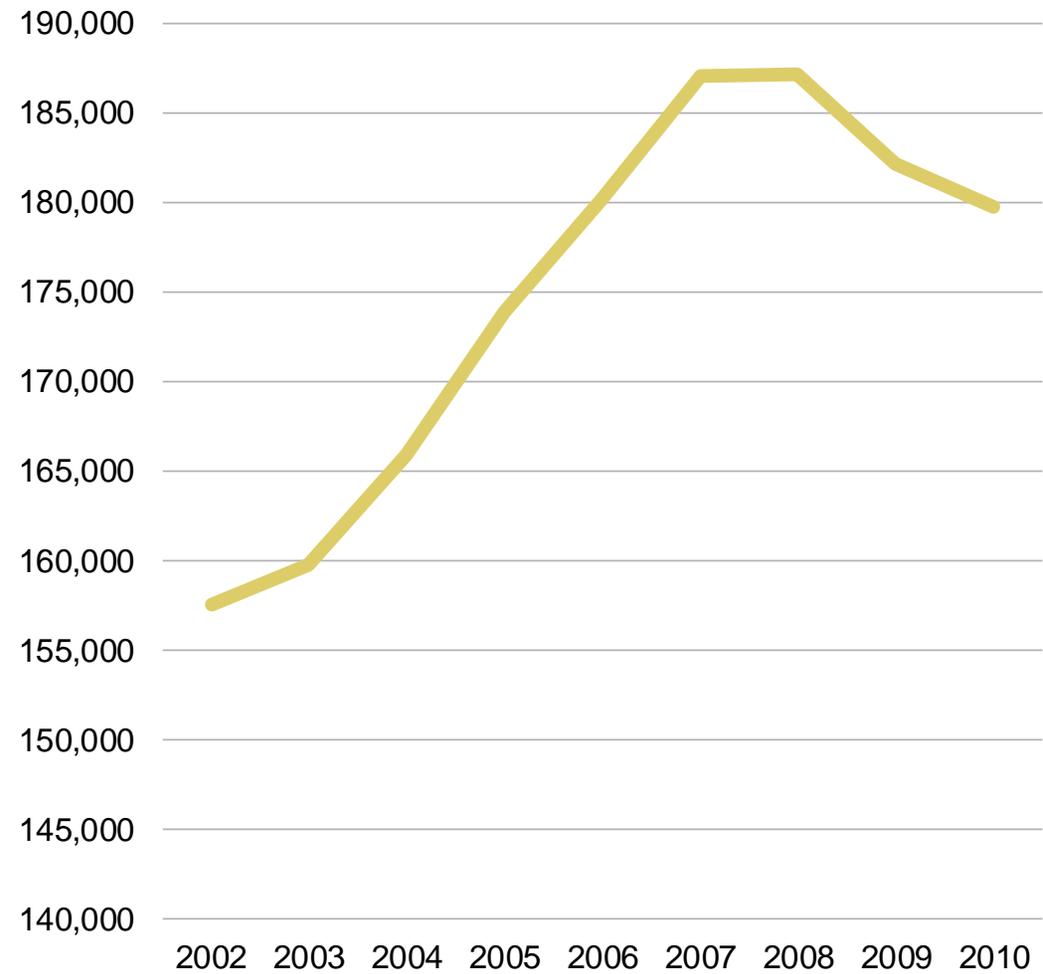
Figure 19

Job losses in the current recession have pushed Clark County's employment base in 2010 back down to the levels last seen in 2006.

Despite the recession, there are still about 33,000 more jobs in the county now than in 2002.

The job base in Clark County

Back to 2006 levels



SOURCE: EMSI Complete Employment - 4th Quarter 2010

ECONOMY

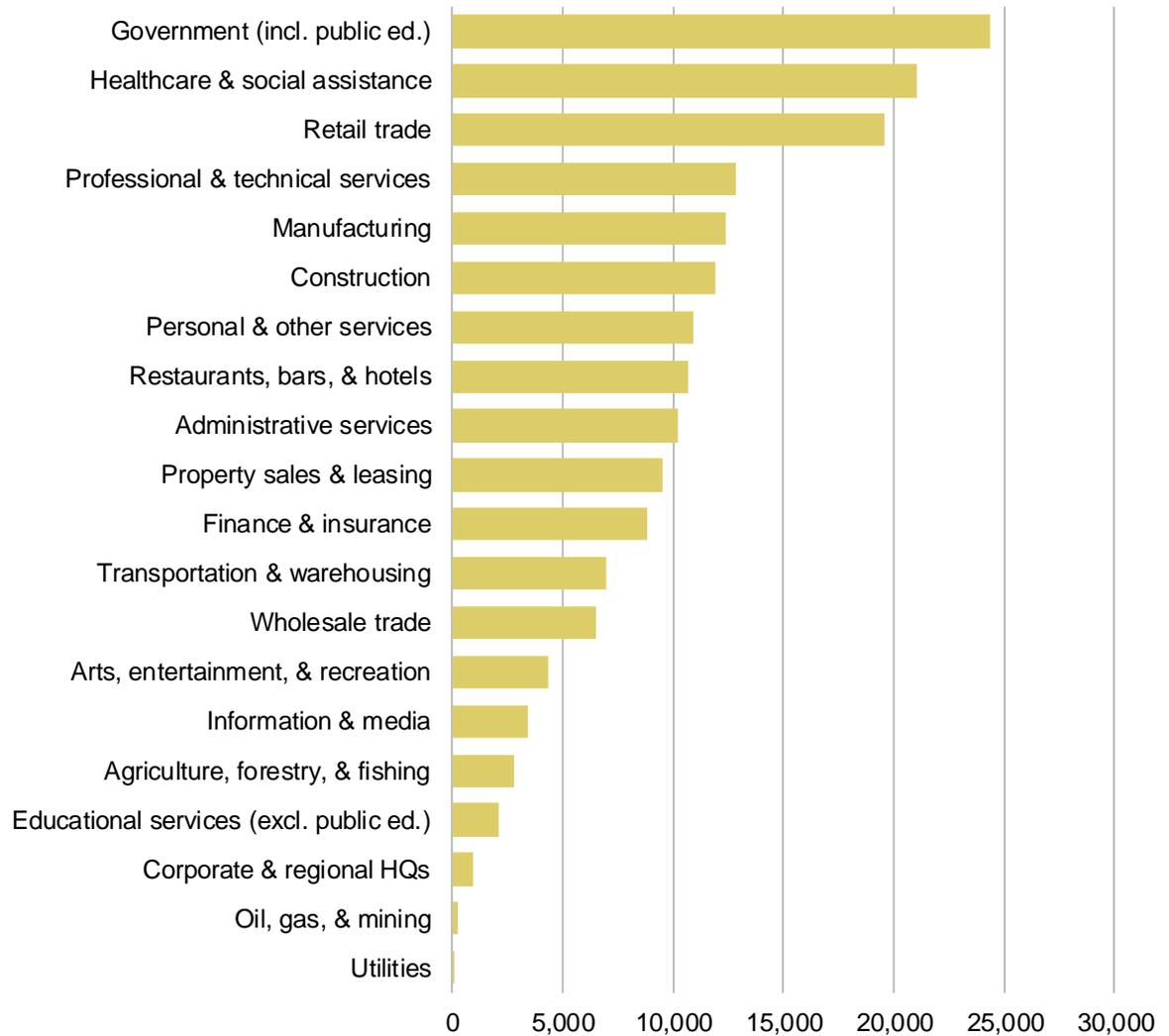
Figure 20

Three sectors typically lead the job markets of suburban counties—retail trade, healthcare, and government (which includes public schools and local services). Clark County fits this pattern as well.

Suburban and urban satellite counties typically distinguish themselves by the sectors that follow the "big three" of retail, healthcare, and government. In Clark County, these sectors are professional services and manufacturing.

On the bottom end, Clark County is relatively weak in corporate and regional headquarters jobs. However, the planned relocation of the PeaceHealth headquarters to Clark County should improve this figure.

Job base by industry sector in Clark County, 2010



SOURCE: EMSI Complete Employment - 4th Quarter 2010
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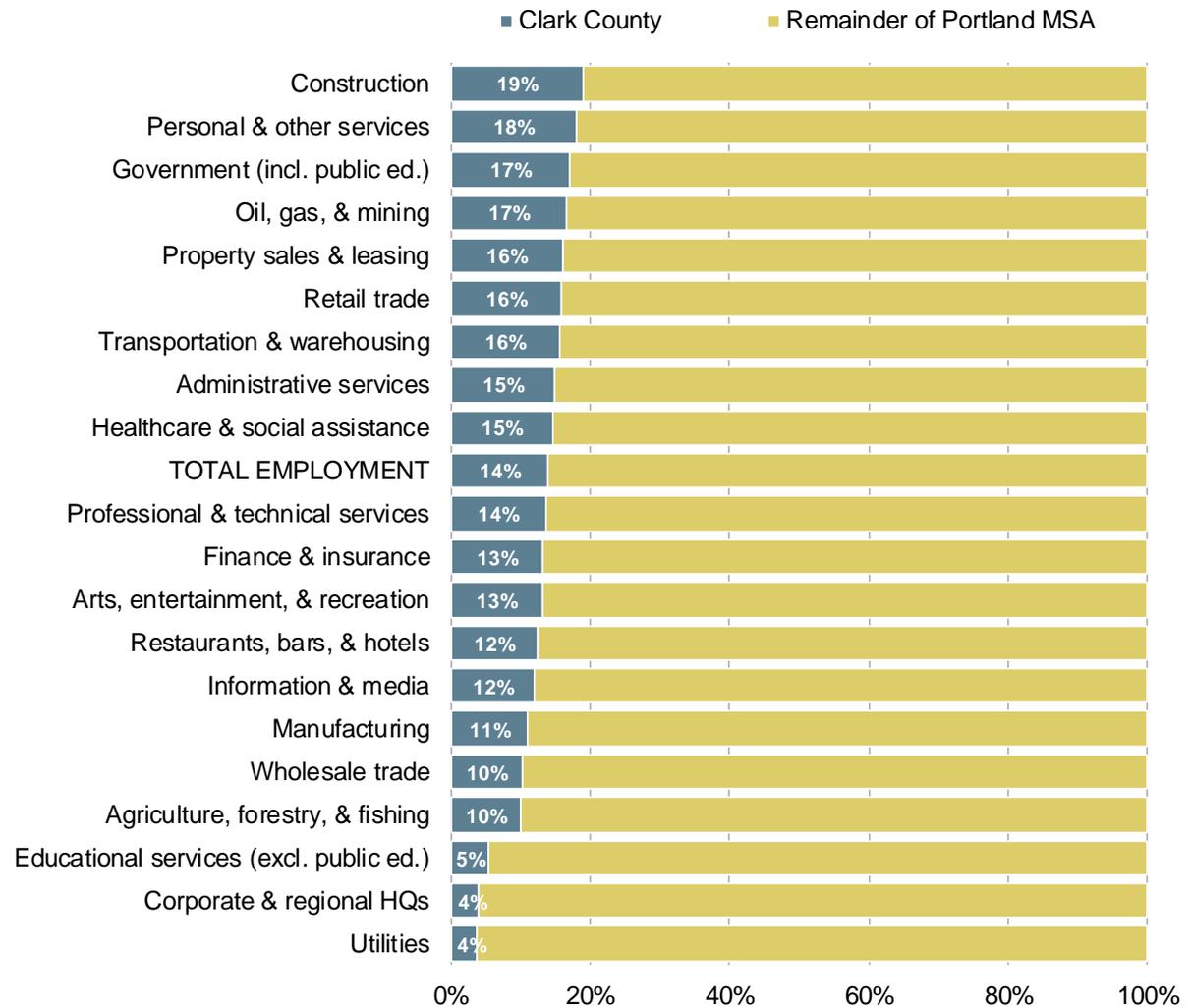
ECONOMY

Figure 21

Clark County is home to about 14 percent of the jobs in the MSA. Some sectors (e.g., construction, personal services, government, and healthcare) employ an even larger share than this. Sectors that lag this average include information and media, manufacturing, and corporate headquarters.

Despite the lack of a sales tax in Oregon, Clark County's job base appears to be amply served by retail sector, with 16 percent of the region's employment. However, accommodation and food services (i.e., restaurants, bars, and hotels) lag the average with just 12 percent of the MSA's jobs.

Distribution of jobs within the MSA as of 2010



ECONOMY

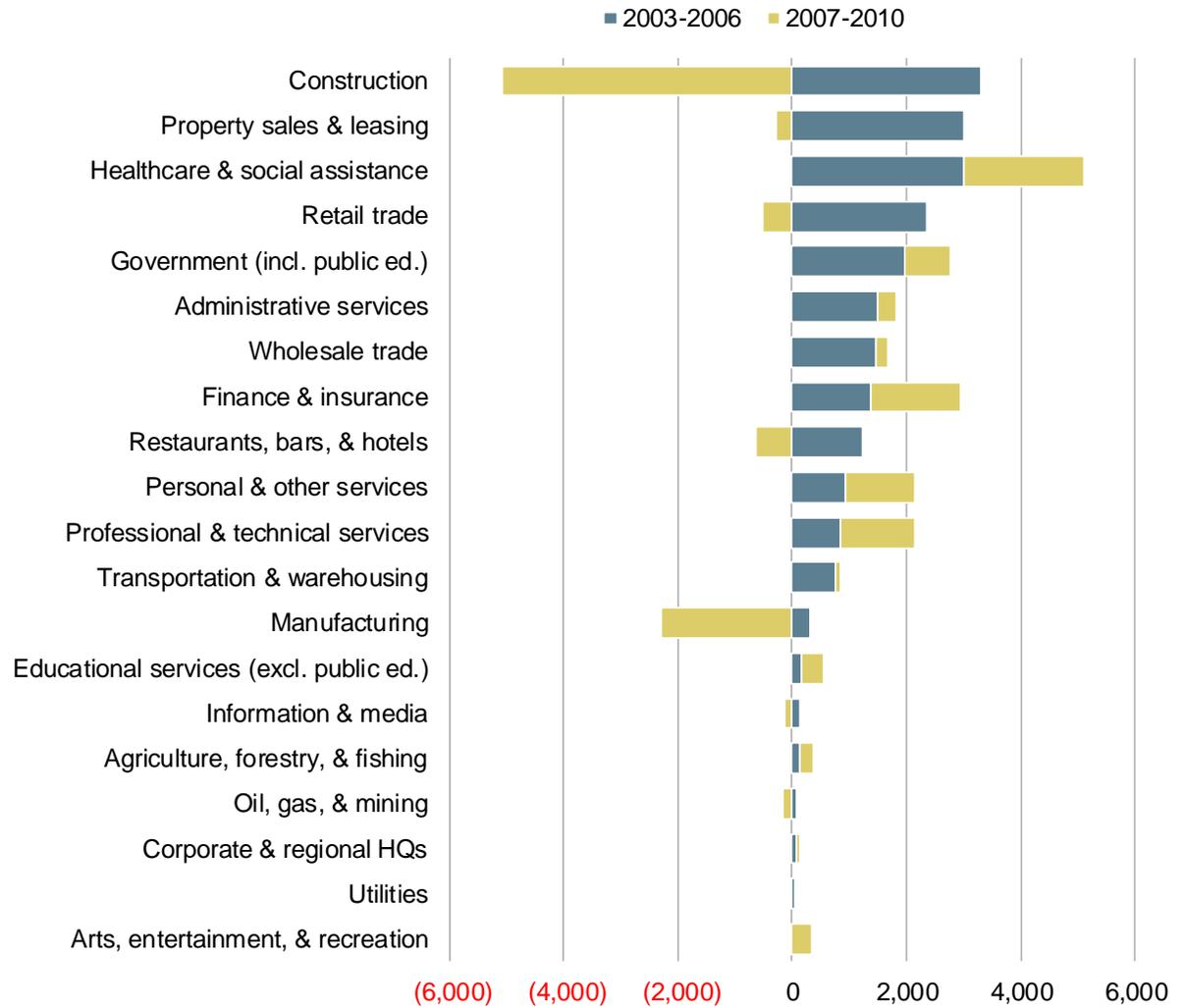
Figure 22

This chart compares Clark County's four years of job growth (2003 through 2006) with the subsequent four years of losses (2007 through 2010).

On a sector-by-sector basis, construction has been highly volatile, with other significant losses occurring in manufacturing. All of the job gains in these two sectors during 2003-2006 were wiped out during the recession years of 2007-2010.

Healthcare has proven highly resilient through the downturn, and a few smaller sectors (finance/insurance, professional services, personal services) have added more jobs during the recession than during the expansion.

Job growth by industry sector in Clark County since 2002



SOURCE: EMSI Complete Employment - 4th Quarter 2010

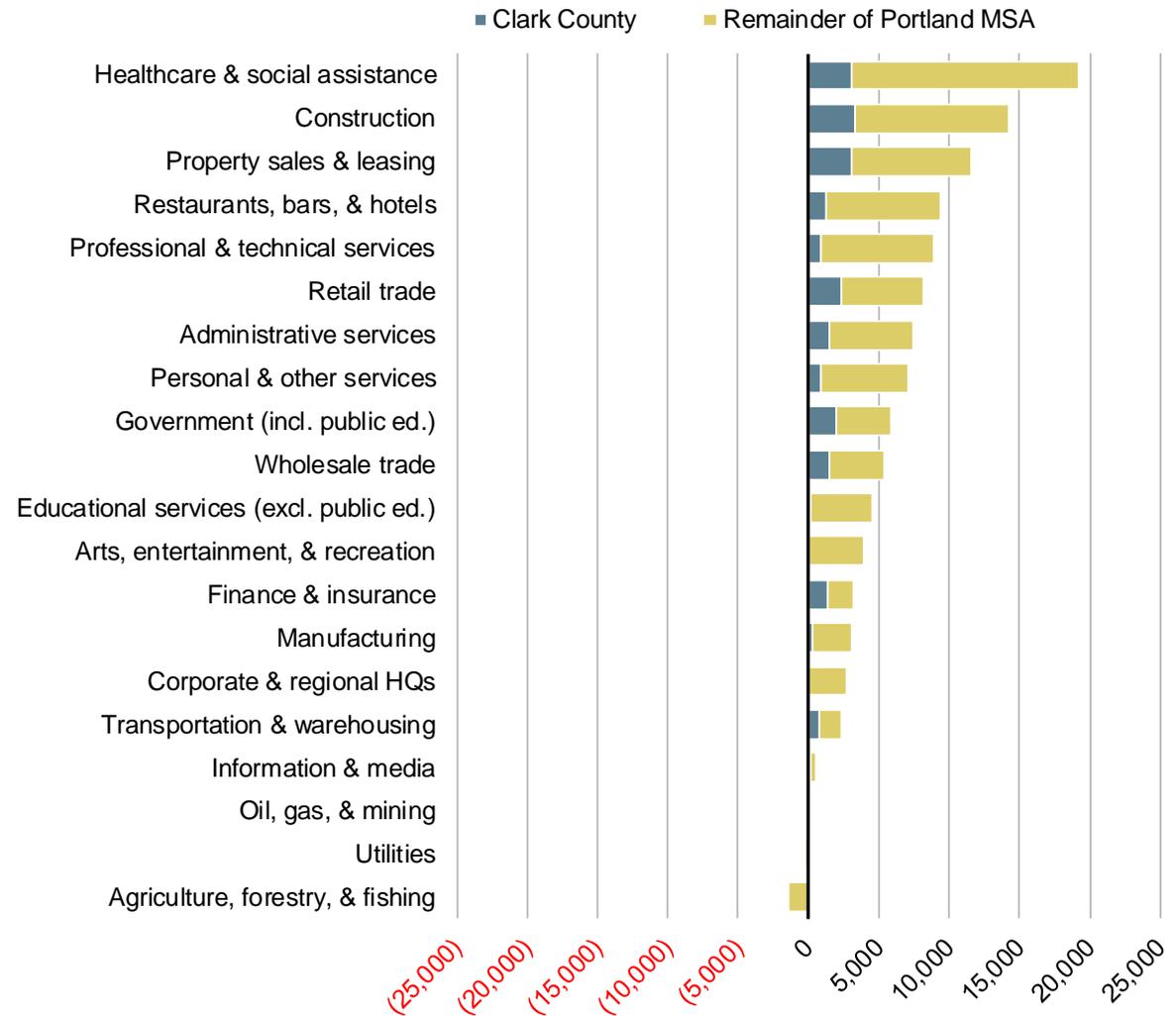
ECONOMY

Figure 23

This chart puts Clark County's gains during the expansion in context with the rest of the MSA.

Between 2003 and 2006, the county captured about 3,000 jobs each in healthcare, construction, and property sales & leasing. These sectors were the top three job gainers in the MSA as well. But, in percentage terms, Clark County's capture rate was much lower for healthcare jobs.

Job growth within the MSA in the expansion, 2003-2006...



SOURCE: EMSI Complete Employment - 4th Quarter 2010

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ECONOMY

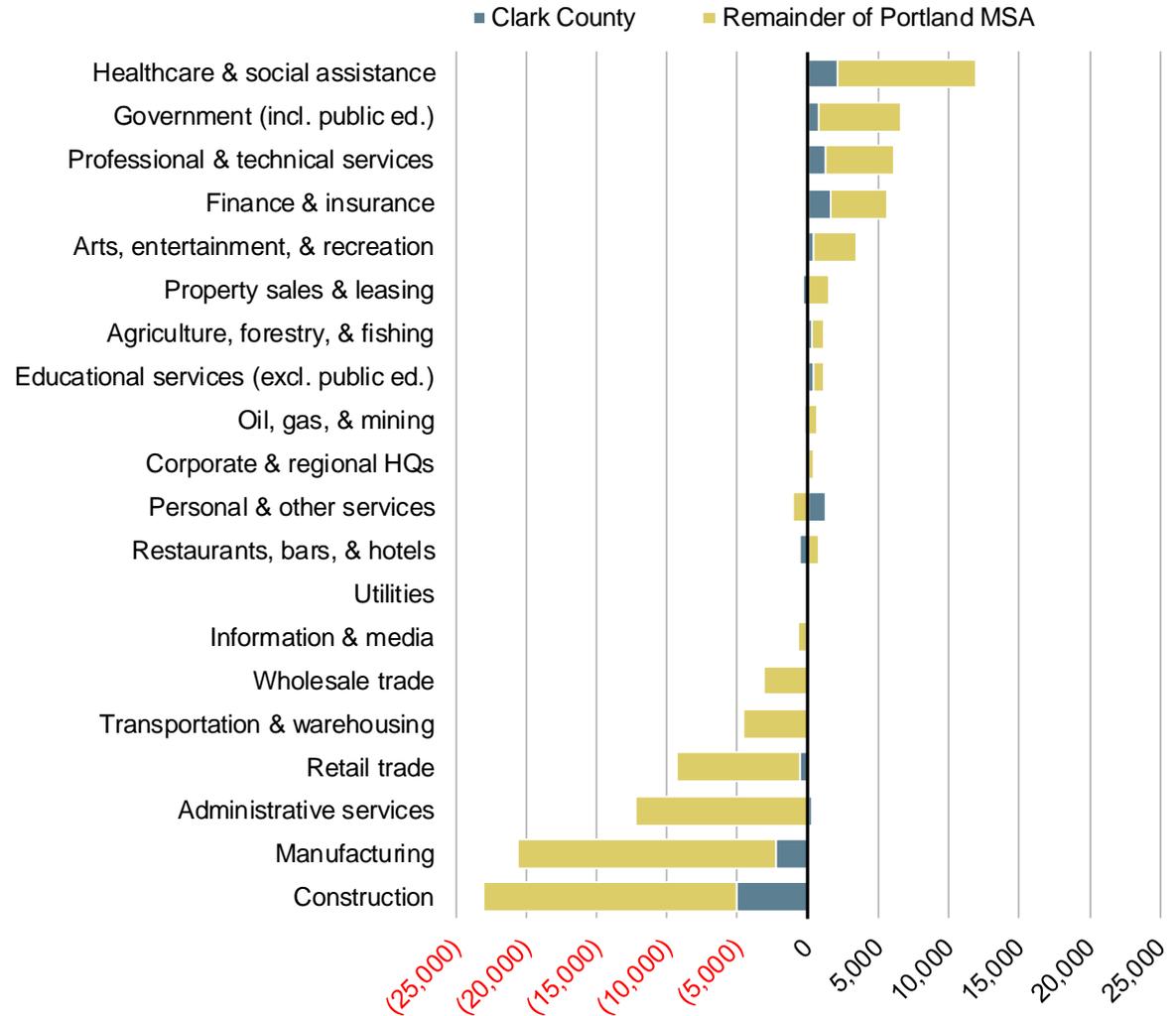
Figure 24

The MSA's overall job performance from 2007 through the present has been quite different.

About half of all industry sectors have lost jobs, with construction and manufacturing accounting for the greatest declines.

The remaining sectors have shown gains over this four-year period. Healthcare, government, professional services, and finance/insurance have all gained at least 5,000 jobs in the MSA overall. These four sectors have also added jobs in Clark County.

...and during the recession, 2007-2010



SOURCE: EMSI Complete Employment - 4th Quarter 2010
Final Edition 9/2011

ECONOMY

Figure 25

Location quotients show a local area's strengths and weaknesses in various industries relative to national employment patterns. For example, an LQ of 2.00 means that for every person in the nation employed in that sector, two people are employed locally.

Construction is the only industry sector in Clark County with a location quotient that could be considered above average (i.e., greater than 1.25).

Most industry LQs fall in the "average" range of 0.75 to 1.25. Only a few industries (e.g., utilities, oil/gas/mining, corporate headquarters, and private educational services) employ a relatively small number of workers, according to LQ analysis.

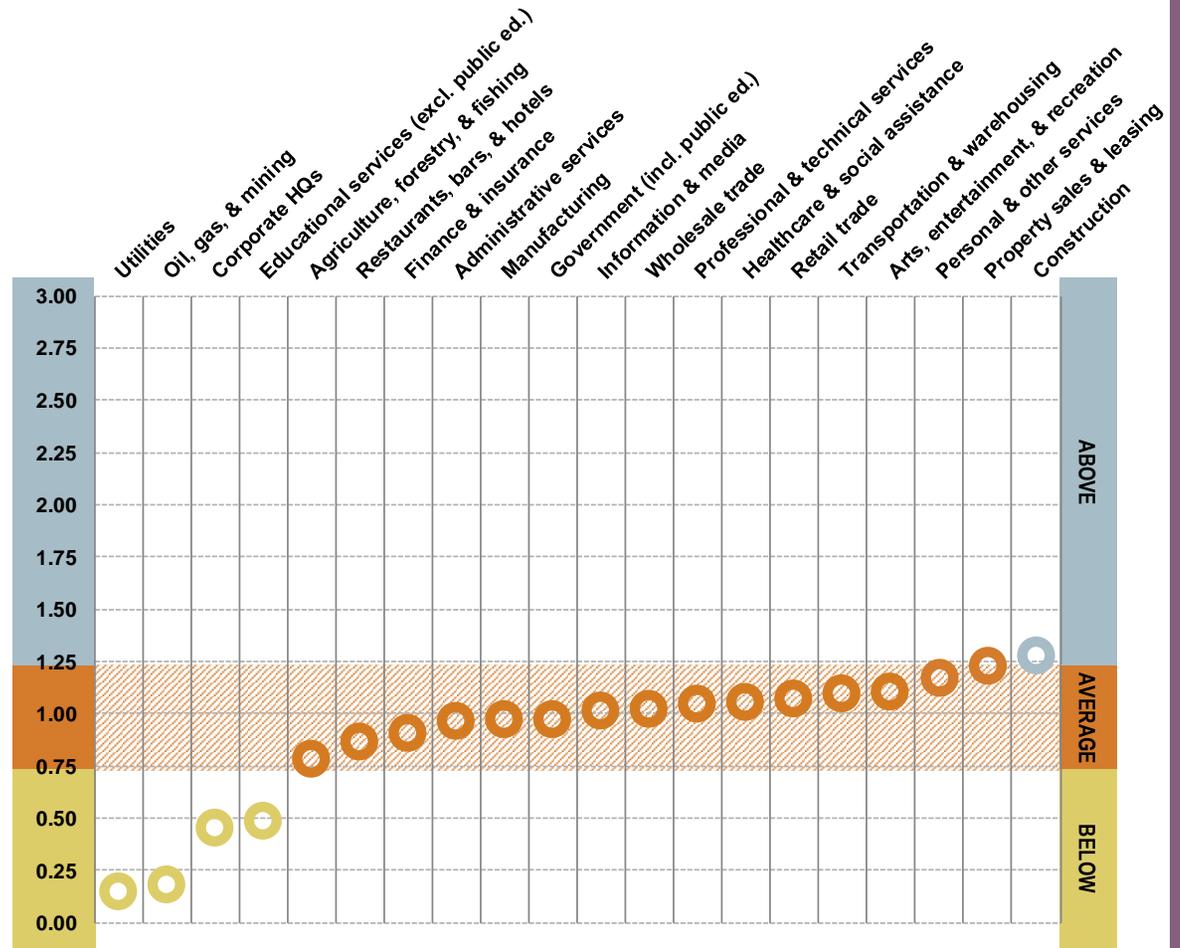
Clark County industry sector strengths relative to the US

Location quotient analysis

US average for each industry = 1.00

regional strength > 1.25

regional weakness < 0.75



SOURCE: EMSI Complete Employment - 4th Quarter 2010

Final Edition 9/2011

ECONOMY

Figure 26

The adjoining figure narrows LQs for Clark County to the 3-digit NAICS industry classification level. It presents the top 40 3-digit LQs for the county and the accompanying LQs for the Portland-Vancouver MSA.

Two 3-digit sectors registered extremely high LQs: rail transportation and paper manufacturing. Not surprisingly, several other transportation & warehousing and manufacturing sectors have high or above-average LQs in Clark County.

Industry sector strengths relative to the US

Location quotients for Clark County and the Portland-Vancouver MSA at the 3-digit NAICS level

Location quotient descriptions:

- extremely high (> 3.00)
- above average (>1.25)
- average (between 0.75 and 1.25)
- below average (<0.75)

NAICS Classification		Location Quotients	
Broad sector	3-digit code & description	County	MSA
Transportation & warehousing	482 Rail Transportation	3.21	0.84
Manufacturing	322 Paper Manufacturing	3.15	1.32
Manufacturing	334 Computer & Electronic Product Manufacturing	2.32	3.90
Transportation & warehousing	483 Water Transportation	2.31	0.90
Personal & other services	814 Private Households	2.10	0.85
Information & media	517 Telecommunications	1.79	0.86
Retail trade	454 Nonstore Retailers	1.71	1.17
Construction	237 Heavy & Civil Engineering Construction	1.65	0.79
Manufacturing	313 Textile Mills	1.65	0.27
Transportation & warehousing	484 Truck Transportation	1.65	1.01
Retail trade	452 General Merchandise Stores	1.46	0.91
Wholesale trade	425 Wholesale Electronic Markets & Agents & Brokers	1.36	1.84
Manufacturing	321 Wood Product Manufacturing	1.35	1.34
Arts, entertainment, & recreation	713 Amusement, Gambling, & Recreation Industries	1.35	0.98
Retail trade	453 Miscellaneous Store Retailers	1.27	0.97
Property sales & leasing	531 Real Estate	1.26	1.08
Construction	238 Specialty Trade Contractors	1.25	0.95
Healthcare & social assistance	621 Ambulatory Health Care Services	1.25	0.99
Transportation & warehousing	488 Support Activities for Transportation	1.23	1.39
Administrative services	562 Waste Management & Remediation Services	1.22	0.91
Personal & other services	811 Repair & Maintenance	1.17	0.99
Construction	236 Construction of Buildings	1.16	1.01
Agriculture, forestry, & fishing	113 Forestry & Logging	1.15	1.44
Manufacturing	332 Fabricated Metal Product Manufacturing	1.14	1.16
Wholesale trade	423 Merchant Wholesalers, Durable Goods	1.12	1.22
Government (incl. public ed.)	930 Local government	1.11	0.95
Healthcare & social assistance	623 Nursing & Residential Care Facilities	1.08	1.05
Government (incl. public ed.)	911 Federal government, civilian, except postal service	1.07	0.85
Finance & insurance	522 Credit Intermediation & Related Activities	1.05	1.01
Manufacturing	333 Machinery Manufacturing	1.04	0.92
Retail trade	444 Building Material & Garden Equipment & Supplies Dealers	1.04	0.81
Finance & insurance	523 Securities, Commodity Contracts, & Other Financial Investme	1.04	0.82
Property sales & leasing	532 Rental & Leasing Services	1.04	1.11
Professional & technical services	541 Professional, Scientific, & Technical Services	1.04	1.08
Agriculture, forestry, & fishing	114 Fishing, Hunting & Trapping	1.03	0.70
Healthcare & social assistance	624 Social Assistance	1.01	1.25
Retail trade	447 Gasoline Stations	1.00	0.71
Retail trade	451 Sporting Goods, Hobby, Book, & Music Stores	1.00	1.27
Administrative services	561 Administrative & Support Services	0.95	0.90
Arts, entertainment, & recreation	711 Performing Arts, Spectator Sports, & Related Industries	0.94	1.40

ECONOMY

Figure 27

Figure 27 narrows the industry analysis further by presenting LQs at the 4-digit NAICS level. This level of detail reveals very specific industry specializations and industry concentrations within the county and the region.

For example, in the previous figure computer and electronic product manufacturing (334) scored an above-average LQ of 2.32 in Clark County. At the 4-digit level, semiconductor & other electronic manufacturing (3344) registered the highest LQ for both the county (6.05) and the region (8.99). Given the presence of such employers as WaferTech, SHE America, and Intel these results are expected.

Again, many traditional manufacturing and transportation sectors ranked among the highest 4-digit LQs for the county.

Industry sector strengths relative to the US

Location quotients for Clark County and the Portland-Vancouver MSA at the 4-digit NAICS level

Location quotient descriptions:

■	extremely high (> 3.00)
■	above average (>1.25)
■	average (between 0.75 and 1.25)
■	below average (<0.75)

NAICS Classification		Location Quotients	
Broad sector	4-digit code & description	County	MSA
Manufacturing	3344 Semiconductor & Other Electronic Component Manufacturing	6.05	8.99
Transportation & warehousing	4832 Inland Water Transportation	5.53	1.49
Agriculture, forestry, & fishing	1132 Forest Nurseries & Gathering of Forest Products	4.83	2.69
Manufacturing	3332 Industrial Machinery Manufacturing	4.70	2.97
Arts, entertainment, & recreation	7132 Gambling Industries	4.51	0.92
Transportation & warehousing	4883 Support Activities for Water Transportation	4.43	2.44
Manufacturing	3221 Pulp, Paper, & Paperboard Mills	4.09	1.67
Manufacturing	3132 Fabric Mills	3.42	0.49
Transportation & warehousing	4821 Rail Transportation	3.21	0.84
Manufacturing	3211 Saw mills & Wood Preservation	3.11	2.32
Manufacturing	3222 Converted Paper Product Manufacturing	2.77	1.18
Healthcare & social assistance	6233 Community Care Facilities for the Elderly	2.60	2.15
Manufacturing	3212 Veneer, Plywood, & Engineered Wood Product Manufacturing	2.44	1.05
Manufacturing	3333 Commercial & Service Industry Machinery Manufacturing	2.33	1.64
Healthcare & social assistance	6214 Outpatient Care Centers	2.31	1.65
Manufacturing	3119 Other Food Manufacturing	2.23	1.87
Construction	2373 Highway, Street, & Bridge Construction	2.17	0.68
Personal & other services	8141 Private Households	2.10	0.85
Agriculture, forestry, & fishing	1153 Support Activities for Forestry	2.08	1.77
Finance & insurance	5223 Activities Related to Credit Intermediation	2.08	1.72
Professional & technical services	5417 Scientific Research & Development Services	2.04	0.79
Healthcare & social assistance	6212 Offices of Dentists	2.03	1.36
Manufacturing	3366 Ship & Boat Building	2.00	1.21
Retail trade	4533 Used Merchandise Stores	1.95	1.14
Manufacturing	3323 Architectural & Structural Metals Manufacturing	1.88	1.05
Information & media	5171 Wired Telecommunications Carriers	1.87	1.04
Information & media	5172 Wireless Telecommunications Carriers (except Satellite)	1.86	0.53
Manufacturing	3312 Steel Product Manufacturing from Purchased Steel	1.81	0.72
Retail trade	4529 Other General Merchandise Stores	1.79	1.04
Manufacturing	3254 Pharmaceutical & Medicine Manufacturing	1.78	0.52
Retail trade	4543 Direct Selling Establishments	1.76	1.14
Construction	2379 Other Heavy & Civil Engineering Construction	1.74	0.90
Retail trade	4541 Electronic Shopping & Mail-Order Houses	1.71	1.37
Transportation & warehousing	4841 General Freight Trucking	1.66	1.03
Manufacturing	3369 Other Transportation Equipment Manufacturing	1.62	1.28
Transportation & warehousing	4842 Specialized Freight Trucking	1.61	0.96
Personal & other services	8112 Electronic & Precision Equipment Repair & Maintenance	1.53	0.90
Retail trade	4442 Lawn & Garden Equipment & Supplies Stores	1.52	1.09
Healthcare & social assistance	6242 Community Food & Housing, & Emergency & Other Relief Ser	1.51	2.01
Construction	2372 Land Subdivision	1.50	0.83

ECONOMY

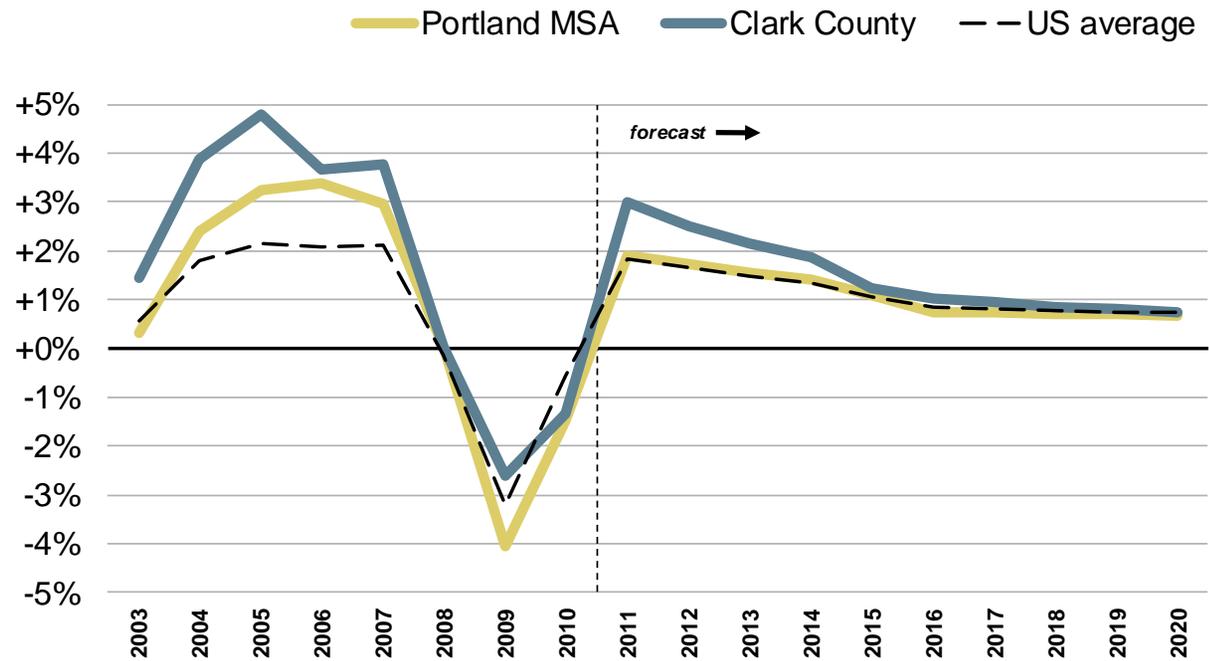
Figure 28

Mid-decade job growth in Clark County outperformed both the MSA and the national average. The depth of job decline at the bottom of the recession was also lighter than the MSA overall.

It's important to note that this outperformance in job growth occurred even as the county's unemployment rate exceeded the MSA. This is because the jobless rate captures all county residents (many of whom are commuters) while the employment data reflect jobs located in the county.

Three scenarios of job performance: national, regional, local

Employment growth history (2003-2009) and forecast (2010-2020)



SOURCE: EMSI Complete Employment - 4th Quarter 2010

ECONOMY

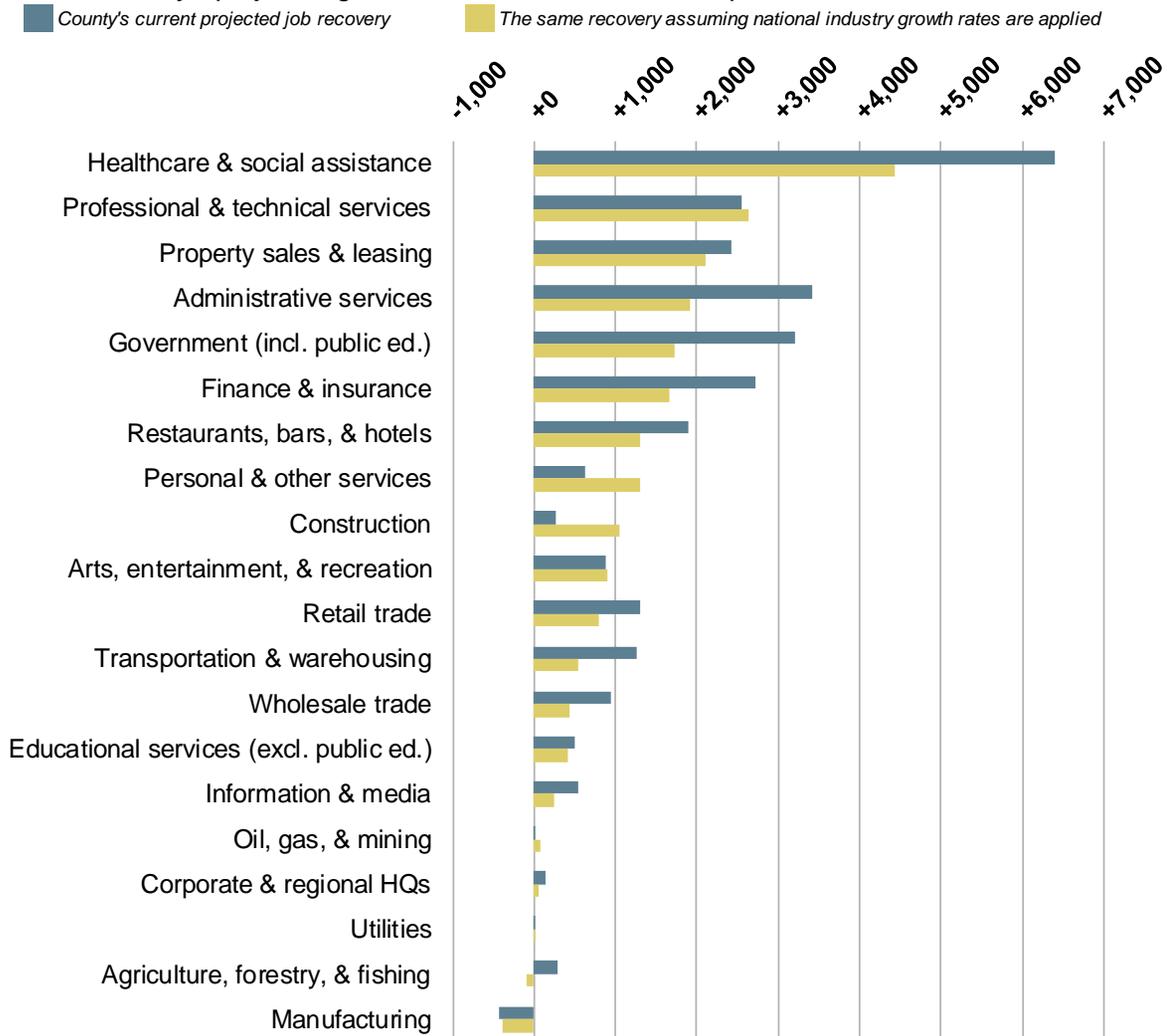
Figure 29

Clark County's forecast is based in part on its relative past job performance in individual industries which are expected to continue showing outperformance in the coming decade, which is displayed by the blue bar in the adjacent chart.

The yellow bar applies the forecast for national industry growth rates to Clark County's existing industry mix. Healthcare is an industry with a relatively strong local forecast, but not all of the county's industries are expected to outpace national performance to this degree. A few (construction, personal services) may be relatively slow to revive. Others (professional services, manufacturing) look similar under both scenarios.

What if local industries grew at national rates, 2010-2020?

Clark County's projected growth under two different assumptions



SOURCE: EMSI Complete Employment - 4th Quarter 2010
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ECONOMY

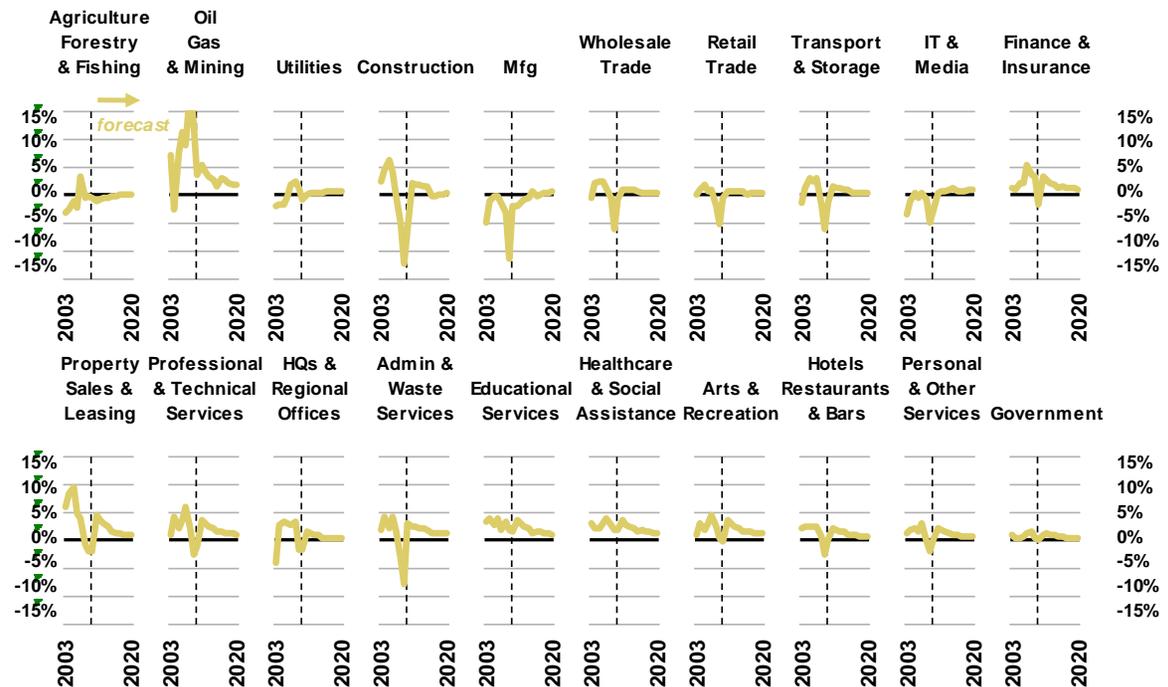
Figure 30

Healthcare and education have been among the least volatile sectors in the recent US recession. Both of these sectors will continue to add jobs at a steady pace over the next decade.

The boom-and-bust sectors of the past decade such as construction are unlikely to see job growth rates rebound to previous peaks during the next 10 years. Until recently, this gloomy outlook applied to manufacturing as well, but a devaluing of the US dollar and federal push to expand exports have positioned this sector for a faster recovery than previously thought.

US outlook by economic sector

National job growth history (2003-2010) and forecast (2011-2020)



SOURCE: EM SI Complete Employment - 4th Quarter 2010

WORKFORCE

Figure 31

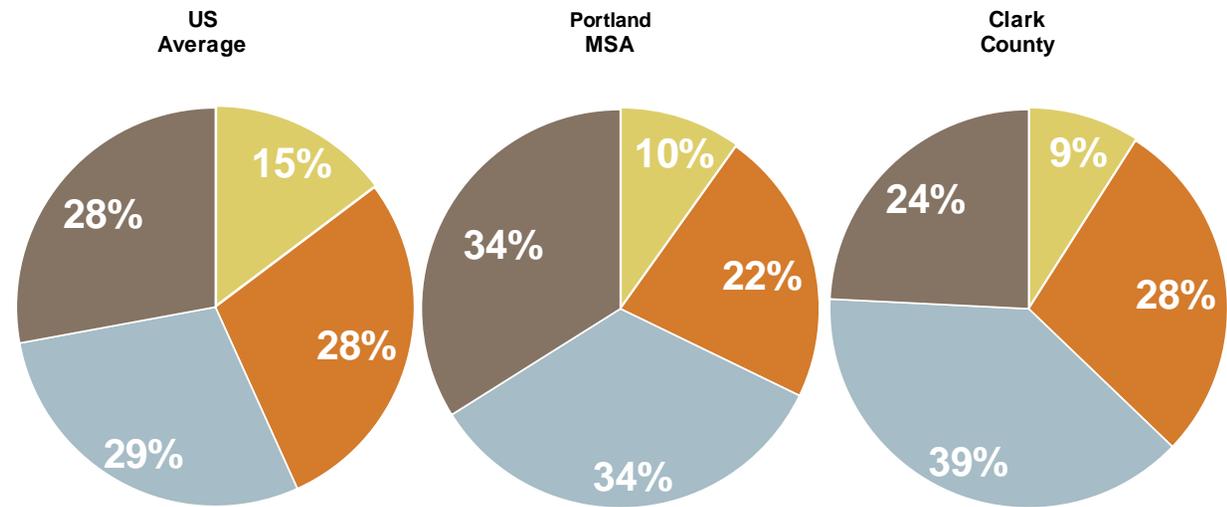
Clark County's educational attainment levels reflect a workforce with mid-level skill preparation. This is because the county has a relatively small share of college-educated adults compared to the US and MSA averages as well as a relatively small share of adults at the lower margins of attainment (i.e., no high school diploma or GED).

A full two-thirds of Clark County's adults fall in the middle ground of skill readiness. They have high school diplomas in hand, with perhaps some college coursework or even a 2-year degree, but this group falls just short of a full 4-year degree.

Educational attainment

Highest level of education achieved by the population age 25 or older

- no high school diploma
- high school diploma or GED
- some college but less than a 4-year degree
- bachelor's degree or higher



SOURCES: U.S. Census Bureau (American Community Survey, 2010 average)

WORKFORCE

Figure 32

Skilled healthcare workers in Clark County draw higher salaries than other occupational groups.

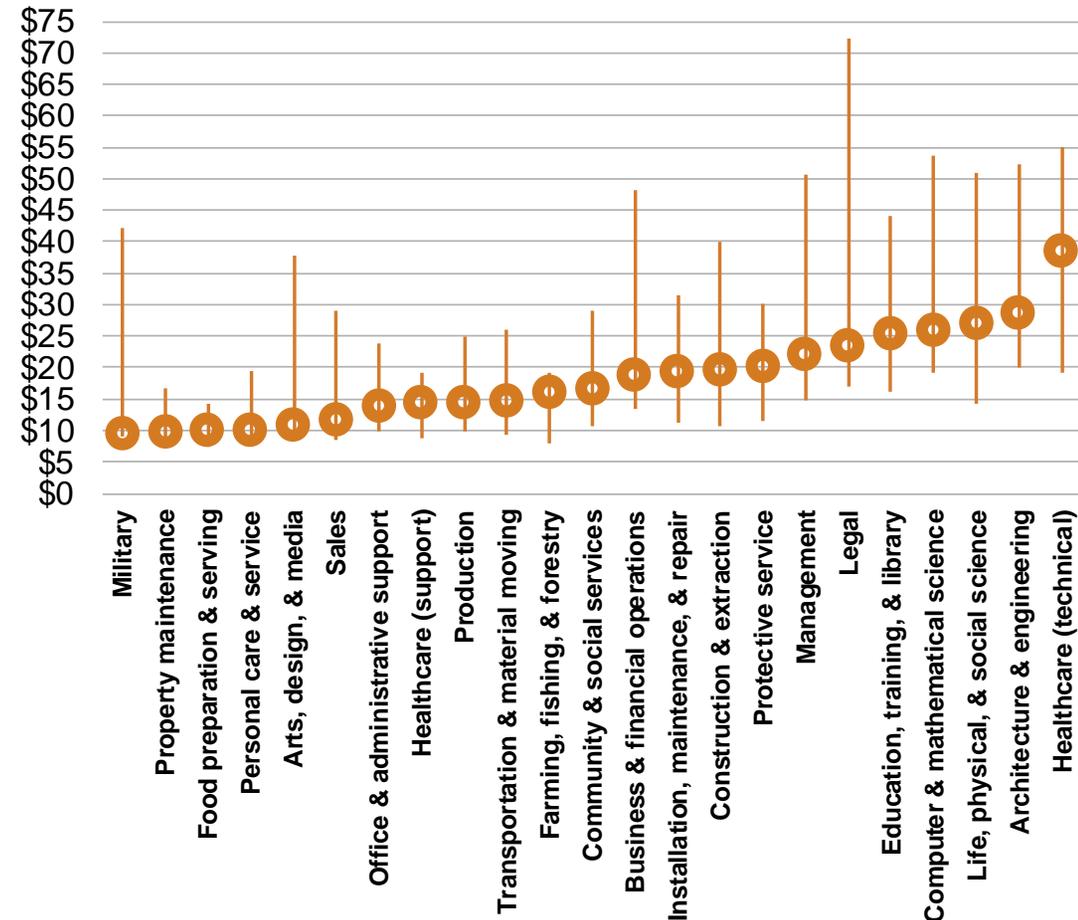
In most occupational groups, the median wage rate in Clark County falls near the middle or in the bottom half of the national wage range.

However, there are a few exceptions. Healthcare is one sector where pay is relatively substantial. Both professional and support workers in the healthcare sector draw high wages relative to national levels. So do protective services workers (police, fire, etc.) and agricultural workers (includes farming, forestry, and fishing).

Median hourly wage rate by occupational group

County median wage presented in the context of the national wage range

Circle represents the county median; line represents the national range between the 10th and 90th percentiles



SOURCE: EM SI Complete Employment - 4th Quarter 2010

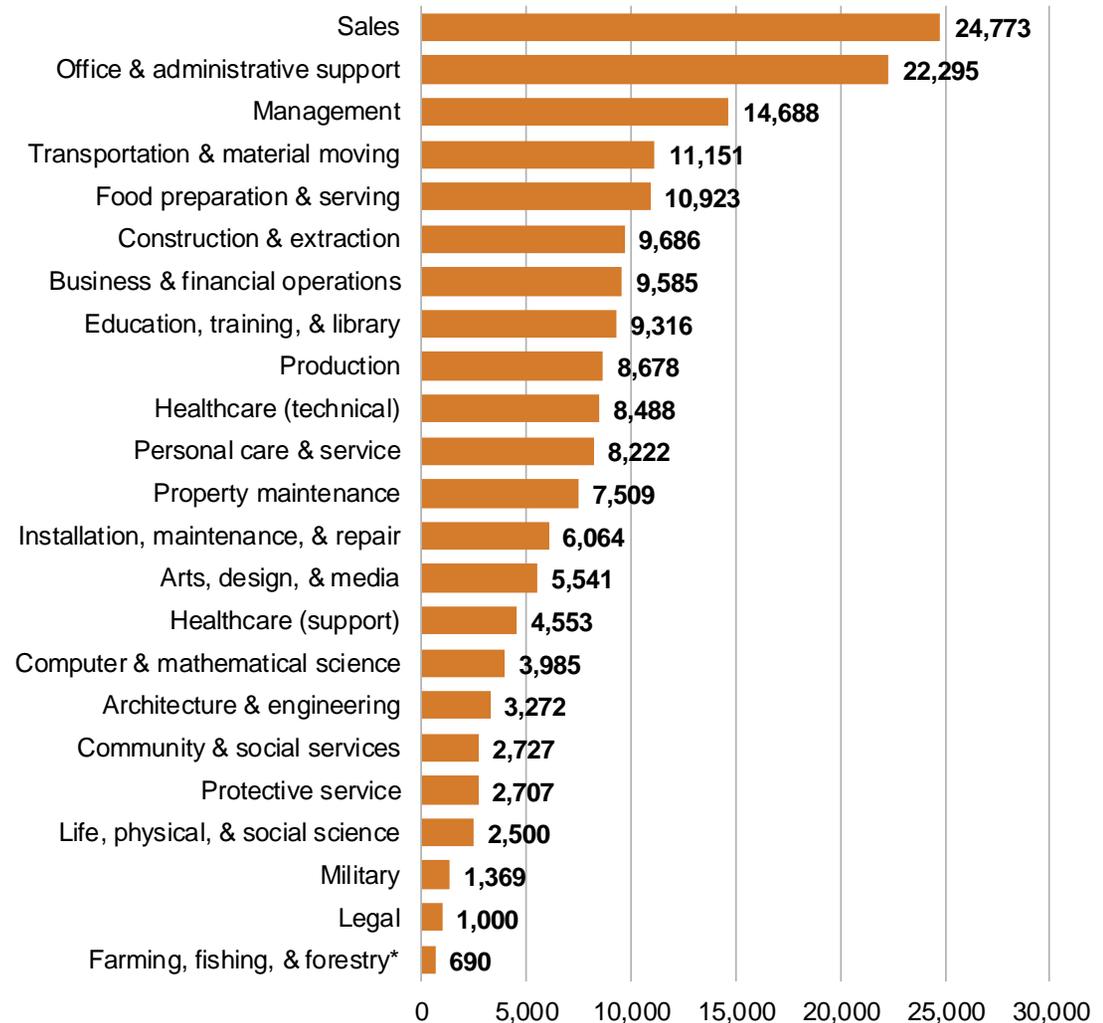
WORKFORCE

Figure 33

More than one-quarter of Clark County's workers are employed in occupations that involve sales or office administration. This is not an unusual occupational pattern in a satellite urban area like Clark County.

While the healthcare sector employs more than 20,000 workers in Clark County (see Exhibit 20), the technical and support occupations in healthcare total only about 13,000 jobs. The other one-third of jobs in this sector are filled by other occupations, including managers, office support workers, and other professionals.

Clark County's 2010 job base by occupational group



*NOTE: Self-employed agricultural workers are often classified as "farm managers" and may be classified separately as management occupations.

SOURCE: EMSI Complete Employment - 4th Quarter 2010

WORKFORCE

Figure 34

Even though Clark County supports only about 2,500 science-related jobs and 3,200 engineering-related jobs, the county's location quotients for these occupational groups are relatively high.

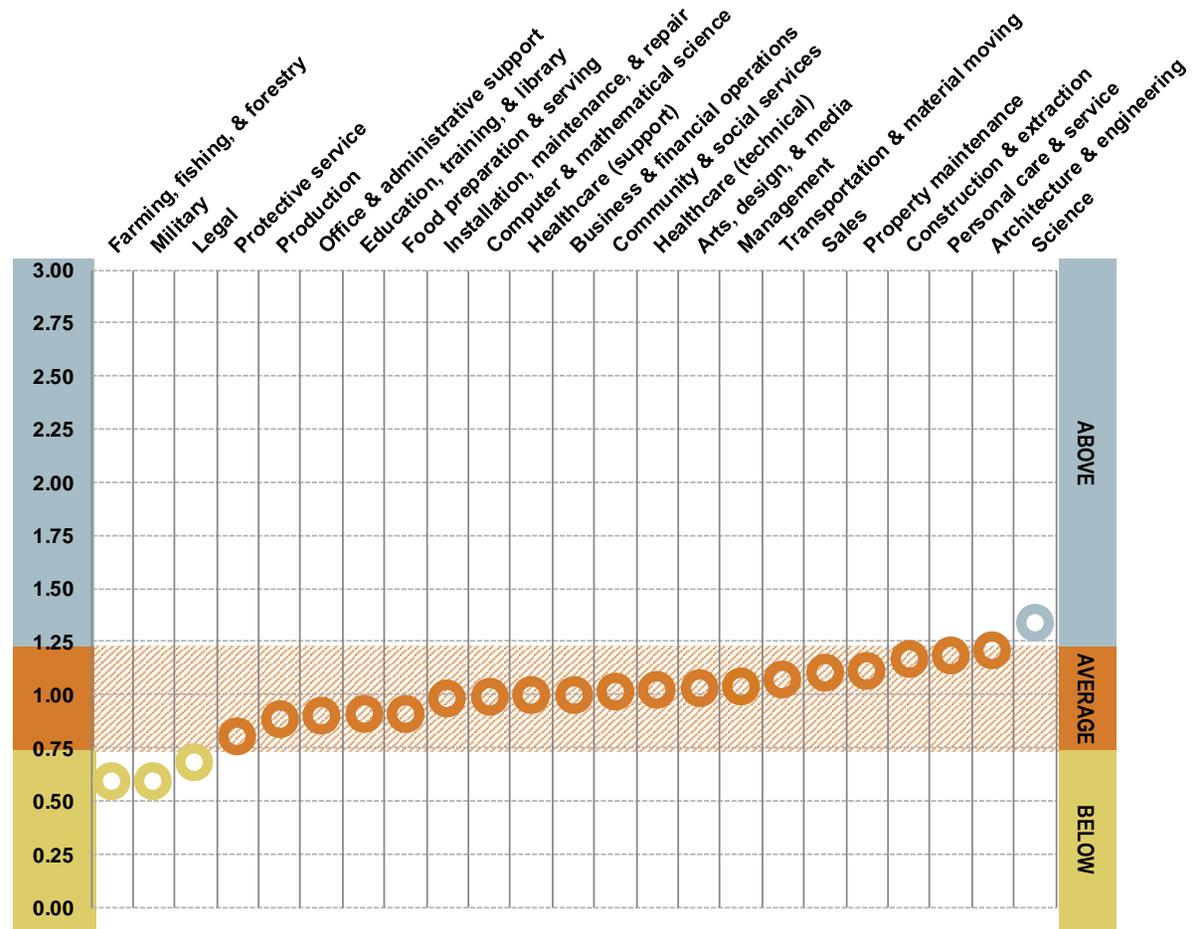
Note that the science occupational group encompasses a wide range of occupations in the life, physical, and social sciences. Occupations in the group range from traditional lab scientists to environmental workers to school psychologists to market researchers and urban planners.

While the above-average LQ in sciences doesn't necessarily point to a specific industry specialty in Clark County, it along with the healthy architecture and engineering LQ indicates a pool exists of relatively well educated people with technical degrees and training work in Clark County.

Clark County's occupational group concentrations

Location quotient analysis

US average for each industry = 1.00
 Regional strength > 1.25
 Regional weakness < 0.75



SOURCE: EMSI Complete Employment - 4th Quarter 2010

WORKFORCE

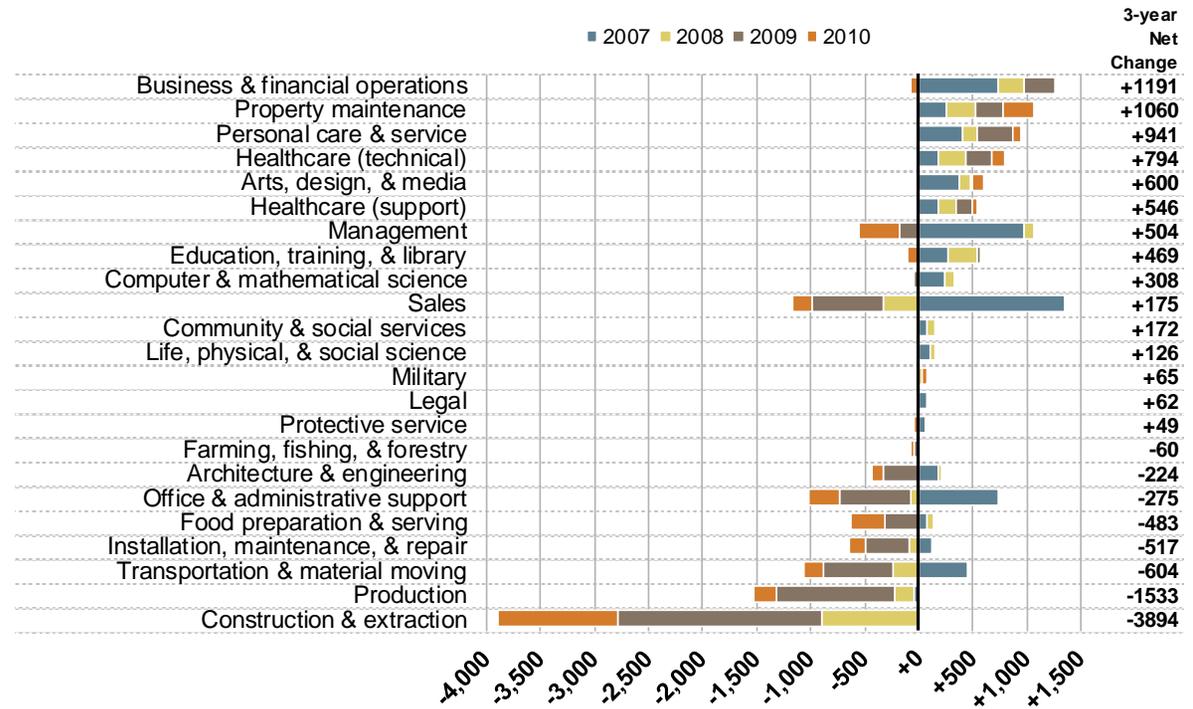
Figure 35

Clark County's job performance over the past four years has differed sharply across occupational groups. Blue-collar jobs in construction, production, transportation, and repair services have suffered substantial losses.

Other occupations have held up well during tough times. Jobs in business, healthcare, education, and computers have eked out gains over at least three of the past four years (if not all four).

Clark County's occupational job trends, 2007 through 2010

A wide gap in the types of jobs gained and lost



SOURCE: EMSI Complete Employment - 4th Quarter 2010

WORKFORCE

Figure 36

To better understand the economic development opportunities hidden within the MSA's 10-year employment forecast, TIP reviewed the best job outlooks within three key occupational groups: computer science, engineering, and production jobs.

Of these three groups, the outlook tends to be better for the higher skilled jobs in computers and engineering than for the semi-skilled work in production.

Only five occupations are expected to add more than 500 jobs across the entire MSA, and all five of these are in the computer science field.

Selected high growth jobs, Portland MSA, 2010-2020

Occupations specific to computers, engineering, and production

High-growth occupations defined as projected MSA-wide job gains of 10% of more over 10 years, with net gains of at least 50 new jobs

Job code	Computer & mathematical occupations	MSA job gains projected, 2010-2020
15-1031	Computer software engineers, applications	1,564
15-1081	Network systems & data analysts	1,175
15-1051	Computer systems analysts	750
15-1071	Network & computer systems administrators	604
15-1041	Computer support specialists	537
15-1032	Computer software engineers, systems software	467
15-1061	Database administrators	139
15-2031	Operations research analysts	71

Job code	Architecture & engineering occupations	MSA job gains projected, 2010-2020
17-2051	Civil engineers	497
17-2112	Industrial engineers	396
17-1011	Architects, except landscape & naval	382
17-3026	Industrial engineering technicians	99
17-2081	Environmental engineers	77
17-3022	Civil engineering technicians	72
17-1021	Cartographers & photogrammetrists	68
17-2011	Aerospace engineers	62
17-2131	Materials engineers	50

Job code	Production occupations	MSA job gains projected, 2010-2020
51-4011	Computer-controlled machine tool operators	222
51-3092	Food batchmakers	122
51-8031	Water & liquid waste treatment plant operators	103
51-9122	Painters, transportation equipment	69
51-9071	Jewelers & precious stone & metal workers	67
51-9041	Extruding, forming, & pressing machine operators	58
51-9195	Molders, shapers, & casters	54
51-9012	Separating, filtering, & clarifying machine operators	54
51-9123	Painting, coating, & decorating workers	53

SOURCE: EMSI Complete Employment - 4th Quarter 2010

WORKFORCE

Figure 37

Within the occupational groups examined, the jobs that are expected to be most plentiful are also the ones that tend to pay more.

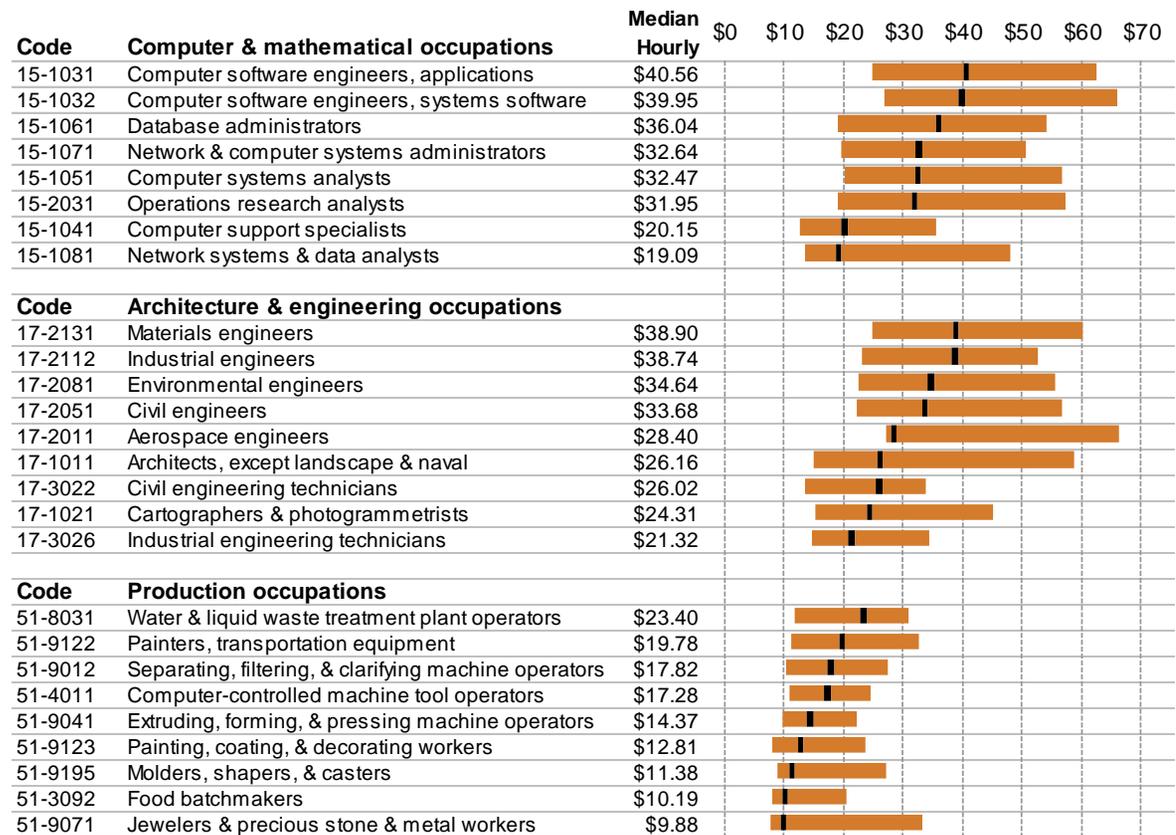
Of the computer and engineering jobs, only one draws a median wage rate below \$20/hour.

By comparison, all of the production jobs examined but one draw wages below \$20/hour.

Median wages for the selected occupations

MSA median wage presented in the context of the national wage range

Dark shading represents the local median; yellow bar represents the national range between the 10th and 90th percentiles



SOURCE: EMSI Complete Employment - 4th Quarter 2010

WORKFORCE

Figure 38

With only a few exceptions, most of the jobs examined show location quotients that are at least average (i.e., 0.75 to 1.25) if not above average (i.e., above 1.25).

Occupations with average or above average location quotients indicate adequate-to-strong skill clusters within the metropolitan region. Such clusters are an important draw for industries that recruit these specific skill types.

LQs for the selected high growth jobs, Portland MSA

Occupations specific to computers, engineering, and production

High-growth occupations defined as projected MSA-wide job gains of 10% or more over 10 years, with net gains of at least 50 new jobs

Code	Computer & mathematical occupations	MSA location quotient for this occupation
15-1031	Computer software engineers, applications	1.87
15-1041	Computer support specialists	1.28
15-1071	Network & computer systems administrators	1.15
15-1081	Network systems & data analysts	1.12
15-1061	Database administrators	1.03
15-1051	Computer systems analysts	0.99
15-1032	Computer software engineers, systems software	0.77
15-2031	Operations research analysts	0.68

Code	Architecture & engineering occupations	MSA job gains projected, 2010-2020
17-1021	Cartographers & photogrammetrists	3.25
17-2131	Materials engineers	2.28
17-2051	Civil engineers	1.66
17-1011	Architects, except landscape & naval	1.61
17-3026	Industrial engineering technicians	1.35
17-2112	Industrial engineers	1.31
17-3022	Civil engineering technicians	1.07
17-2081	Environmental engineers	0.88
17-2011	Aerospace engineers	0.69

Code	Production occupations	MSA job gains projected, 2010-2020
51-4011	Computer-controlled machine tool operators	1.71
51-9123	Painting, coating, & decorating workers	1.49
51-9195	Molders, shapers, & casters	1.36
51-9012	Separating, filtering, & clarifying machine operators	1.33
51-9122	Painters, transportation equipment	1.22
51-3092	Food batchmakers	0.98
51-9071	Jewelers & precious stone & metal workers	0.86
51-9041	Extruding, forming, & pressing machine operators	0.68
51-8031	Water & liquid waste treatment plant operators	0.58

SOURCE: EM SI Complete Employment - 4th Quarter 2010

WORKFORCE

Figure 39

Higher paying jobs correlate strongly with skills and educational preparedness.

This exhibit shows the minimal educational or training requirements needed for employment in each occupation.

Almost all of the jobs in computer and engineering-related fields require at least four years of post-secondary education.

Minimum training levels for the selected occupations

More training needed for higher paying, higher skilled jobs

The colored squares represent the 11 levels of standard skills/training as defined by the U.S. Bureau of Labor Statistics

Code	Occupation	Minimum required Training/skill level		
		Low	High	
Computer & mathematical occupations				
15-2031	Operations research analysts	■ ■ ■ ■ ■ ■ ■ ■ ■ ■	□ □	Master's degree
15-1031	Computer software engineers, applications	■ ■ ■ ■ ■ ■ ■ ■ ■ ■	□ □ □ □	Bachelor's degree
15-1071	Network & computer systems administrators	■ ■ ■ ■ ■ ■ ■ ■ ■ ■	□ □ □ □	Bachelor's degree
15-1081	Network systems & data analysts	■ ■ ■ ■ ■ ■ ■ ■ ■ ■	□ □ □ □	Bachelor's degree
15-1061	Database administrators	■ ■ ■ ■ ■ ■ ■ ■ ■ ■	□ □ □ □	Bachelor's degree
15-1051	Computer systems analysts	■ ■ ■ ■ ■ ■ ■ ■ ■ ■	□ □ □ □	Bachelor's degree
15-1032	Computer software engineers, systems software	■ ■ ■ ■ ■ ■ ■ ■ ■ ■	□ □ □ □	Bachelor's degree
15-1041	Computer support specialists	■ ■ ■ ■ ■ ■ ■ ■ ■ ■	□ □ □ □ □ □	Associate's degree
Architecture & engineering occupations				
17-1021	Cartographers & photogrammetrists	■ ■ ■ ■ ■ ■ ■ ■ ■ ■	□ □ □ □ □ □	Bachelor's degree
17-2131	Materials engineers	■ ■ ■ ■ ■ ■ ■ ■ ■ ■	□ □ □ □ □ □	Bachelor's degree
17-2051	Civil engineers	■ ■ ■ ■ ■ ■ ■ ■ ■ ■	□ □ □ □ □ □	Bachelor's degree
17-1011	Architects, except landscape & naval	■ ■ ■ ■ ■ ■ ■ ■ ■ ■	□ □ □ □ □ □	Bachelor's degree
17-2112	Industrial engineers	■ ■ ■ ■ ■ ■ ■ ■ ■ ■	□ □ □ □ □ □	Bachelor's degree
17-2081	Environmental engineers	■ ■ ■ ■ ■ ■ ■ ■ ■ ■	□ □ □ □ □ □	Bachelor's degree
17-2011	Aerospace engineers	■ ■ ■ ■ ■ ■ ■ ■ ■ ■	□ □ □ □ □ □	Bachelor's degree
17-3026	Industrial engineering technicians	■ ■ ■ ■ ■ ■ ■ ■ ■ ■	□ □ □ □ □ □ □ □	Associate's degree
17-3022	Civil engineering technicians	■ ■ ■ ■ ■ ■ ■ ■ ■ ■	□ □ □ □ □ □ □ □	Associate's degree
Production occupations				
51-9071	Jewelers & precious stone & metal workers	■ ■ ■ ■ ■ ■ ■ ■ ■ ■	□ □ □ □ □ □ □ □	Postsecondary vocational award
51-9122	Painters, transportation equipment	■ ■ ■ ■ ■ ■ ■ ■ ■ ■	□ □ □ □ □ □ □ □	Long-term on-the-job training
51-8031	Water & liquid waste treatment plant operators	■ ■ ■ ■ ■ ■ ■ ■ ■ ■	□ □ □ □ □ □ □ □	Long-term on-the-job training
51-4011	Computer-controlled machine tool operators	■ ■ ■ ■ ■ ■ ■ ■ ■ ■	□ □ □ □ □ □ □ □	Moderate-term on-the-job training
51-9195	Molders, shapers, & casters	■ ■ ■ ■ ■ ■ ■ ■ ■ ■	□ □ □ □ □ □ □ □	Moderate-term on-the-job training
51-9012	Separating, filtering, & clarifying machine operator	■ ■ ■ ■ ■ ■ ■ ■ ■ ■	□ □ □ □ □ □ □ □	Moderate-term on-the-job training
51-9041	Extruding, forming, & pressing machine operators	■ ■ ■ ■ ■ ■ ■ ■ ■ ■	□ □ □ □ □ □ □ □	Moderate-term on-the-job training
51-9123	Painting, coating, & decorating workers	■ ■ ■ ■ ■ ■ ■ ■ ■ ■	□ □ □ □ □ □ □ □	Short-term on-the-job training
51-3092	Food batchmakers	■ ■ ■ ■ ■ ■ ■ ■ ■ ■	□ □ □ □ □ □ □ □	Short-term on-the-job training

SOURCES: U.S. Bureau of Labor Statistics; EMSI Complete Employment - 4th Quarter 2010

APPENDIX B: SWOT

Figure 41

TIP conducted an economic development SWOT analysis (strengths, weaknesses, opportunities, and threats) for Clark County, based on a review of economic, demographic, and workforce characteristics, interviews with local and regional business and community leaders, and our experience working with communities and regions across the country. The following table captures the major findings from this analysis:



APPENDIX C: TARGET INDUSTRY ANALYSIS

STRATEGIC ANALYSIS

The selection of target sectors is traditionally bound to an assessment of only a few determinant factors, such as access to an available workforce, industrial sites, and incentives. Our target industry recommendations are not based solely on these factors, but also on conversations with the region's business leaders to better understand potential opportunities and challenges that might not be readily identifiable through secondary data sources alone. The TIP team also brings to bear its understanding of broader macroeconomic and social trends, such as consumption patterns/consumer spending, emerging markets/international trade, and demographic shifts/aging workforce to better understand long-term recruitment and development prospects. TIP also strongly takes into consideration how the potential targets might fit within the overall strategic framework of the economic development plan, as well as how each might affect Clark County's attractiveness to existing and future residents. Finally, TIP assessed the local development potential of possible industry targets within the context of the greater Portland-Vancouver region. In sum, TIP identified target sectors for the county, using a three-pronged approach: quantitative, qualitative, and strategic.



TIP examined both traditional and nontraditional target opportunities for Clark County. Traditional targets represent the types of industries that have historically been marketed to by economic development organizations. These might typically include traditional manufacturing sectors as well as other related industrial and/or transportation activities. Traditional targets often represent the first tier of economic opportunity. While a number of such economic activities take place in Clark County, nationally the number of traditional industrial investment prospects is limited. This is not to suggest there will be no manufacturing, transportation, and distribution opportunities for the county. Indeed, Clark County has succeeded in attracting high-quality traditional employers in recent years. However, the county has also experienced success in attracting and developing non-industrial employers, especially in professional services and healthcare. As a result, the TIP team considered a number of other non-traditional targets to assist in diversifying the county's economy in higher growth sectors.

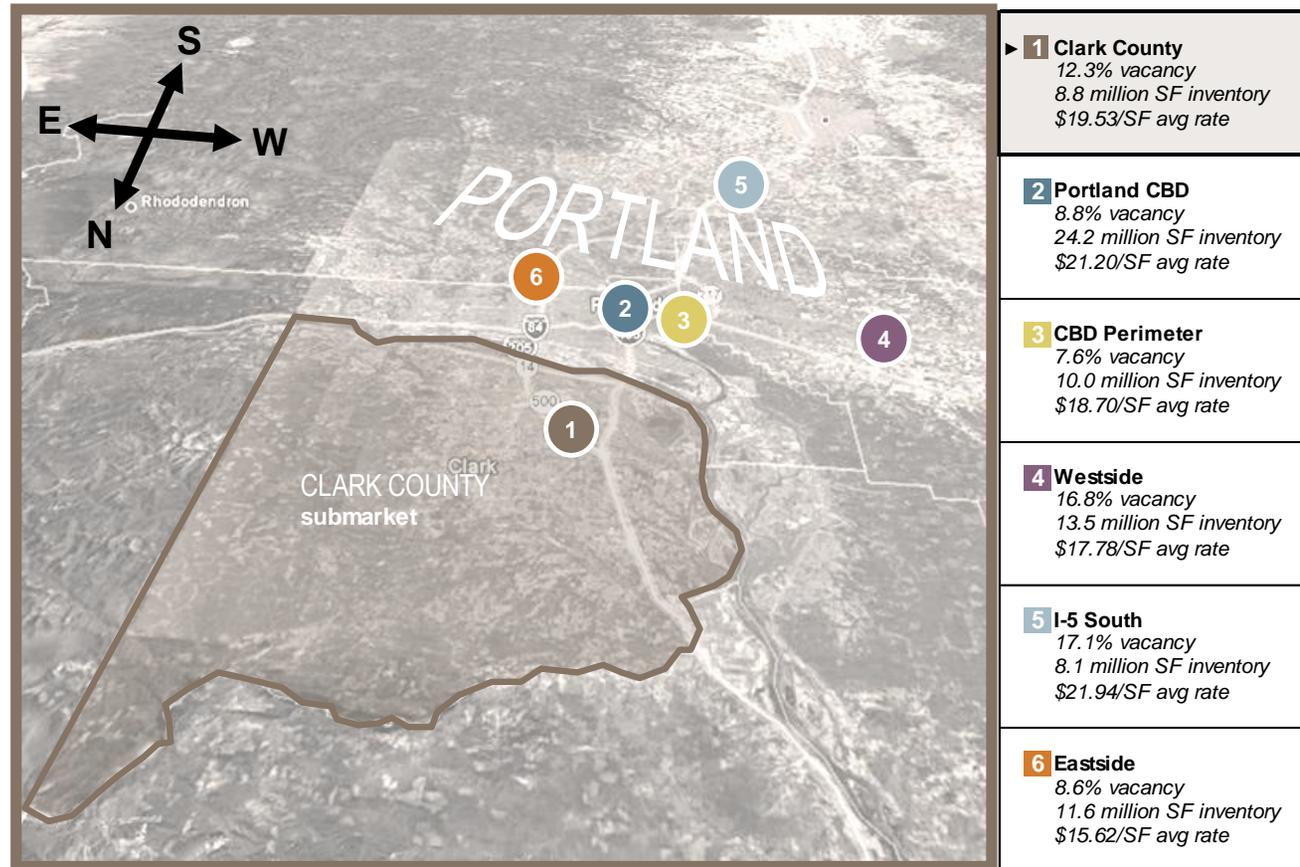
STRATEGIC ANALYSIS

Figure 42

This chart presents year-end 2010 vacancy, inventory, and price data for commercial office real estate in the six Portland sub-markets.

Clark County falls in the middle of the six markets in terms of vacancy and price. Only the I-5 South submarket has a lower inventory of commercial office space than Clark County; yet it has the highest vacancy rate.

The Portland area office market at year-end 2010



SOURCE: Colliers, Portland Office Market Overview, Fourth Quarter 2010

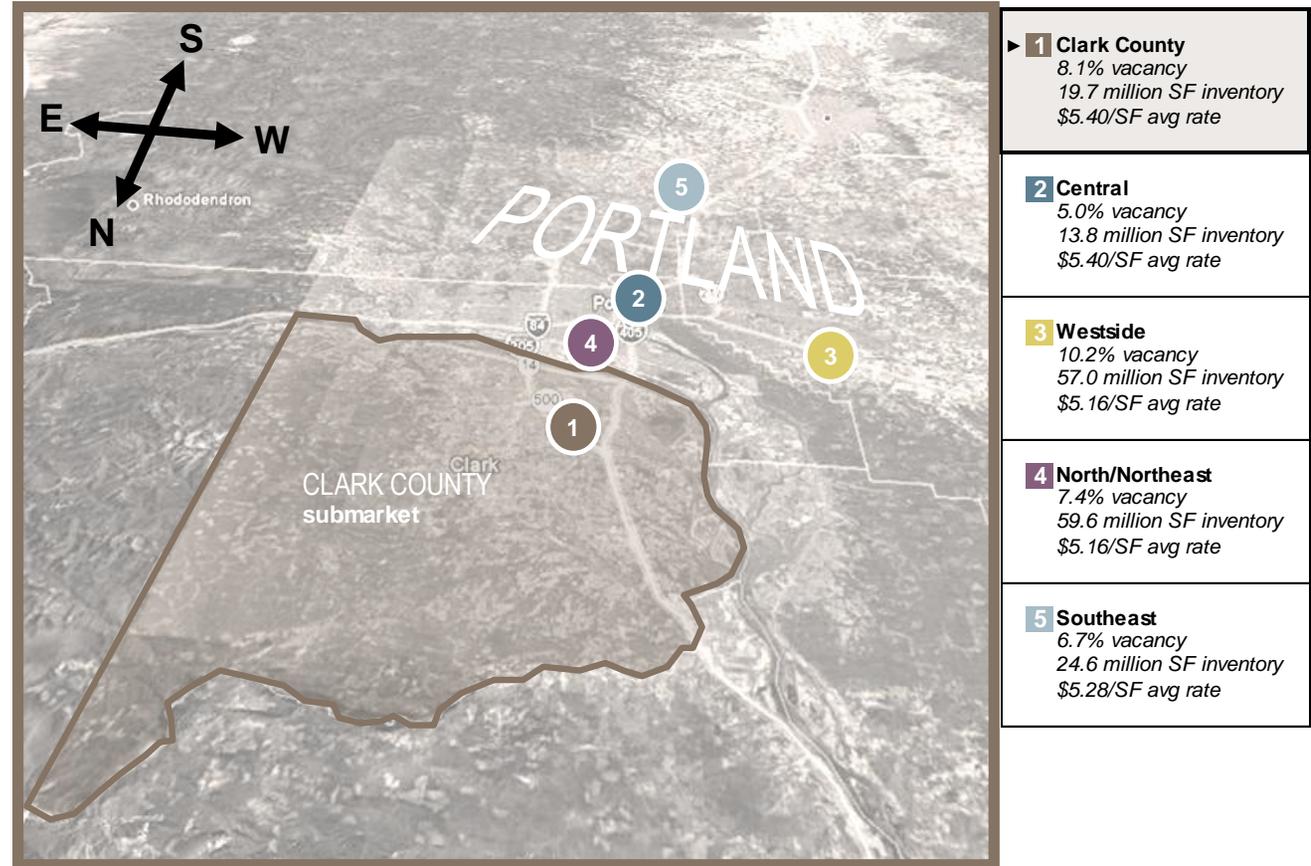
STRATEGIC ANALYSIS

Figure 43

The Portland area industrial market at year-end 2010

For industrial property, Colliers defines five submarkets in the Portland region.

For the 4th quarter 2010, Clark County and the Central registered the highest average rate per square foot (\$5.40).



SOURCE: Colliers, Portland Office Market Overview, Fourth Quarter 2010

STRATEGIC ANALYSIS

Figure 44

We identified 25 publicly traded companies (including two in Clark County) that are headquartered in the Greater Portland-Vancouver MSA and hold foreign property or have foreign subsidiaries.

These multinational companies reflect the strengths of the regional urban economy: health & fitness gear & equipment, IT components, and industrial products.

Among the 25 local firms we identified, we counted 98 operations in Europe, 78 in the Asia Pacific region, and 39 more in the rest of the world (including Canada and Mexico).

Firms headquartered in the region with operations abroad

Firms based in the Portland-Vancouver MSA with foreign operations

			Europe	Asia Pacific	Americas	Middle East & Africa
Blount International	Portland, OR	Outdoor products & equipment	1	2	2	
Calypte Biomedical	Portland, OR	Vitro diagnostic tests		2		
Cascade	Fairview, OR	Materials handling devices	8	6	1	1
Cascade Microtech	Beaverton, OR	Engineering products	1	4		
Columbia Sportswear	Portland, OR	Outdoor apparel & equipment	15	4	2	
CUI Global	Tualatin, OR	Thermal cooling technology	1	1		
Electro Scientific Industries	Portland, OR	Semiconductor mfg equipment	3	6		
FEI Company	Hillsboro, OR	Nanoelectronics	2	5		
Flir Systems	Wilsonville, OR	Thermal imaging systems	3		1	1
Lacrosse Footwear	Portland, OR	Footwear & apparel	1	2		
Lattice Semiconductor	Hillsboro, OR	Programmable logic devices		2		
McCormick & Schmick's	Portland, OR	Seafood restaurant chain			1	
Mentor Graphics	Wilsonville, OR	Electronic design automation	13	6	2	3
Nautilus	Vancouver, WA	Health & fitness equipment	4	1	1	
Nike	Beaverton, OR	Footwear & apparel	23	16	7	6
Northwest Pipe	Vancouver, WA	Steel pipeline systems			1	
Pixelworks	Portland, OR	Digital video components		3		
Planar Systems	Beaverton, OR	Electronic display systems	3	2		
Precision Castparts	Portland, OR	Metal components & products	10	7	3	
Radisys	Hillsboro, OR	Embedded computer products	2	3	1	
Rentrak	Portland, OR	Data collection & processing	4	1	2	
Schmitt Industries	Portland, OR	Laser measurement systems	1		1	
The Greenbrier Companies	Lake Oswego, OR	Rail equipment	1		2	
Triquint Semiconductor	Hillsboro, OR	Telecom components	1	3	1	
Williams Controls	Portland, OR	Electronic controls for vehicles	1	2		
			<u>98</u>	<u>78</u>	<u>28</u>	<u>11</u>

STRATEGIC ANALYSIS

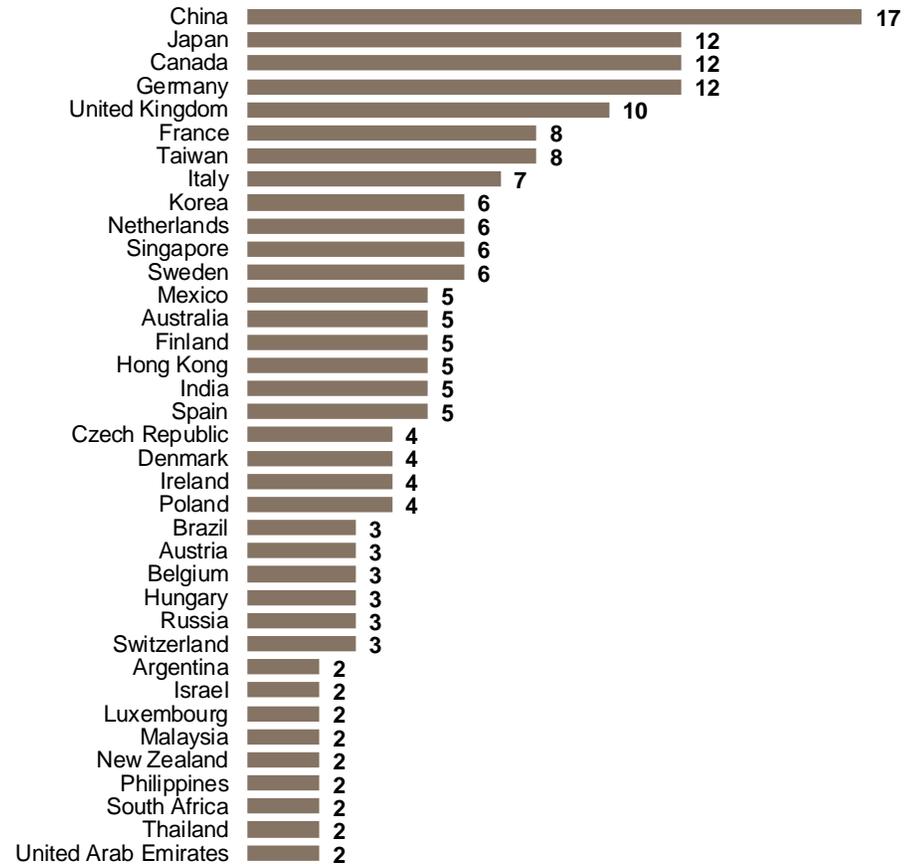
Figure 45

The foreign operations of firms based in the Greater Portland-Vancouver MSA are spread across 59 countries. Of these 59, at least 37 countries have attracted the attention of more than one local company.

Mainland China (excluding Hong Kong and Macau) is the most popular destination for local firms investing abroad, but local companies also have significant footholds in Japan, Canada, and Germany.

Locally based firms with foreign operations by country

Count of local firms with operations in each country listed below



NOTE: At least 22 other countries have attracted investment from at least one locally headquartered firm. We identified 6 such operations in Europe (Croatia, Greece, Norway, Portugal, Slovakia, Slovenia), 5 in Asia Pacific (Indonesia, Macau, Pakistan, Sri Lanka, Vietnam), 6 in the Americas (Bermuda, Cayman Islands, Chile, Costa Rica, Netherlands Antilles, Uruguay), and 5 in the Middle East and Africa (Armenia, Cyprus, Egypt, Lebanon, Turkey).

SOURCES: company 10-K filings with the US Securities and Exchange Commission

STRATEGIC ANALYSIS

Figure 46

The depth of local connections to foreign markets can best be seen by examining the overseas business reach of local firms.

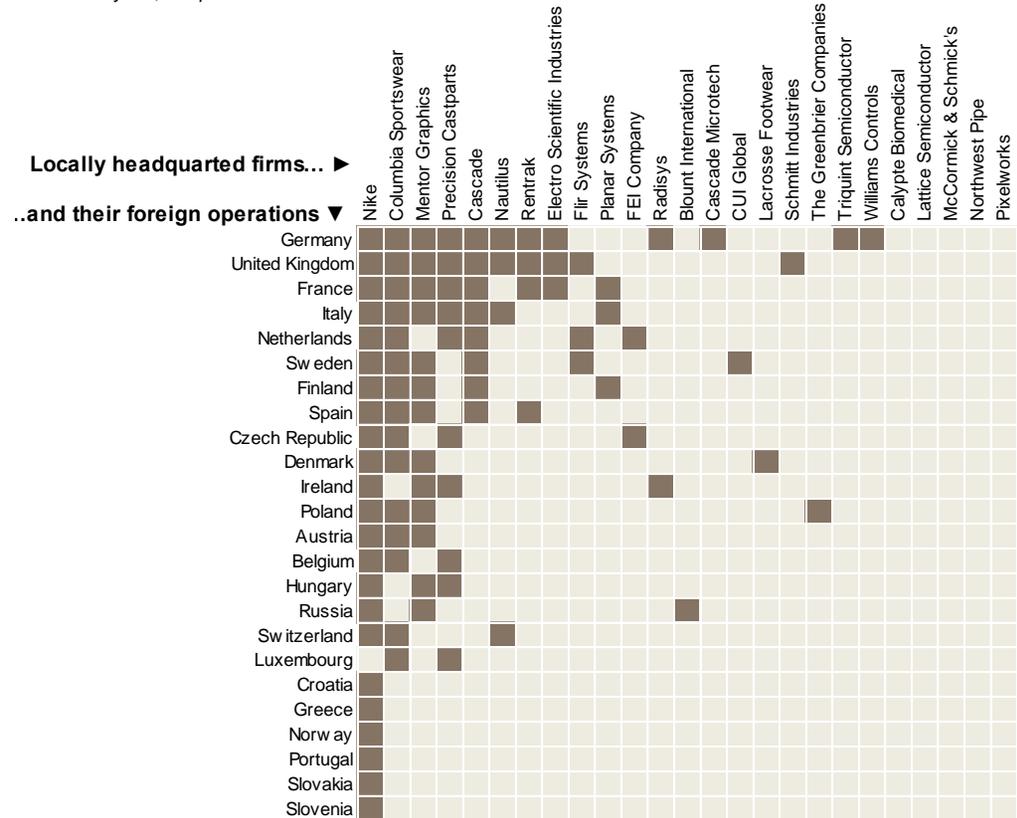
Of the 25 publicly traded companies we identified in the Portland-Vancouver MSA with a foreign footprint, 20 of them (80%) are involved in Europe.

Germany is the preferred destination in Europe. At least 12 local firms have operations there.

European operations of locally based firms

Where firms from the Portland-Vancouver MSA are active

Countries by row; companies in columns



SOURCES: company 10-K filings with the US Securities and Exchange Commission

STRATEGIC ANALYSIS

Figure 47

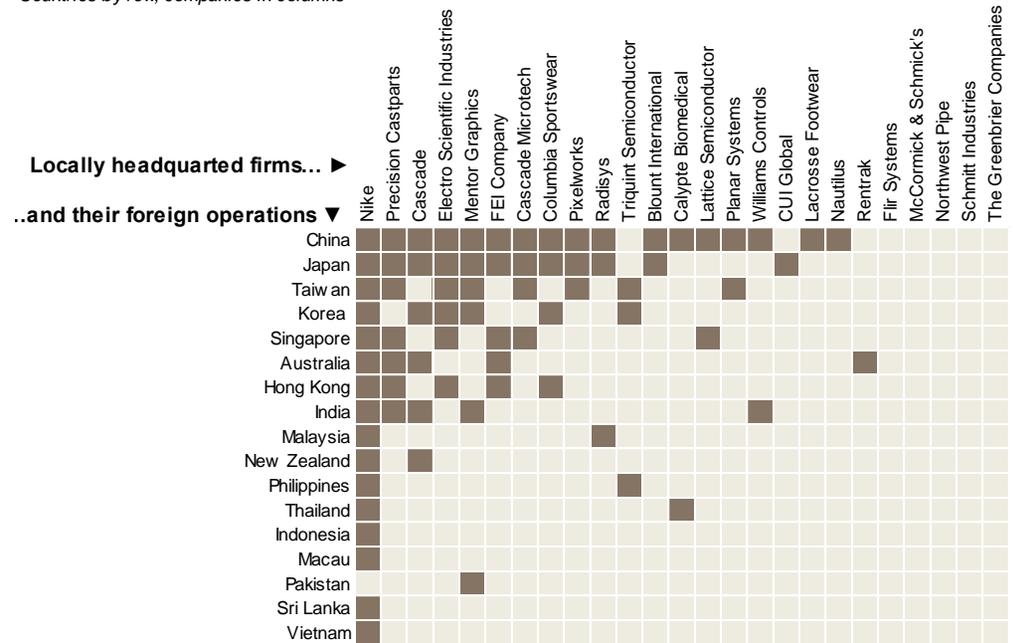
Of the 25 publicly traded companies we identified in the Portland-Vancouver MSA with a foreign footprint, 20 of them are involved in the Asia Pacific region.

China is the preferred destination in Asia (and worldwide). At least 17 local firms have operations there.

Asia Pacific operations of locally based firms

Where firms from the Portland-Vancouver MSA are active

Countries by row, companies in columns



SOURCES: company 10-K filings with the US Securities and Exchange Commission

STRATEGIC ANALYSIS

Figure 48

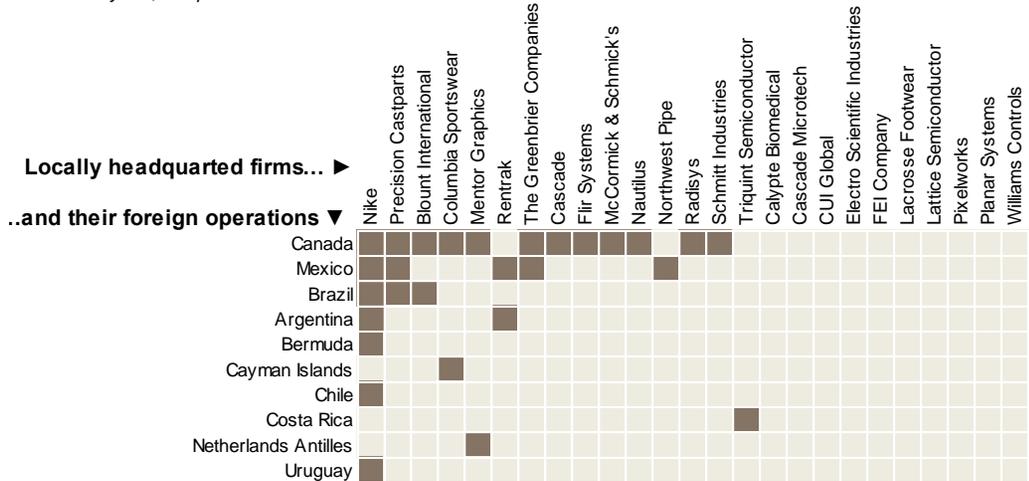
Fewer firms from the Portland-Vancouver MSA have operations in the Western Hemisphere than in Europe or Asia Pacific. Of the 25 publicly traded local companies we identified with a foreign footprint, only 15 (60%) have operations in Canada, the Caribbean, or Latin America.

Canada and Mexico are the preferred destinations in North America while Brazil is the top destination in South America.

Western Hemisphere operations of locally based firms

Where firms from the Portland-Vancouver MSA are active

Countries by row, companies in columns



SOURCES: company 10-K filings with the US Securities and Exchange Commission

STRATEGIC ANALYSIS

Figure 49

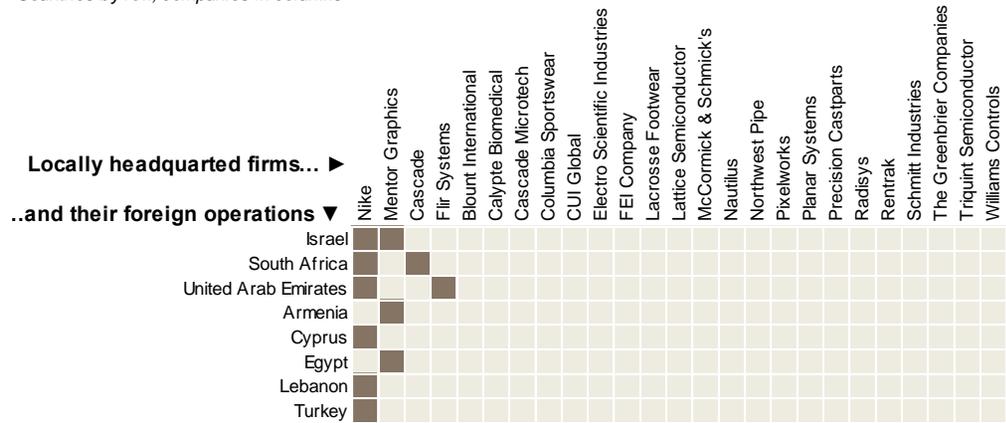
With only a few exceptions like Turkey and Israel, the Middle East and Africa tend to attract investment in oil, gas, & mining. It is not surprising then that there are relatively few firms from the Portland-Vancouver MSA with operations in this region. Of the 25 publicly traded local companies we identified with a foreign footprint, we found only 4 with operations in this region.

For technology companies in general, relationships with Israel are becoming increasingly important.

Middle East & African operations of locally based firms

Where firms from the Portland-Vancouver MSA are active

Countries by row; companies in columns



SOURCES: company 10-K filings with the US Securities and Exchange Commission

INDUSTRY OUTLOOK

Figure 50

The CREDC currently pursues four target industries for recruitment and development.

Existing target industries in Clark County

1 Technology

2 Manufacturing

3 Professional services

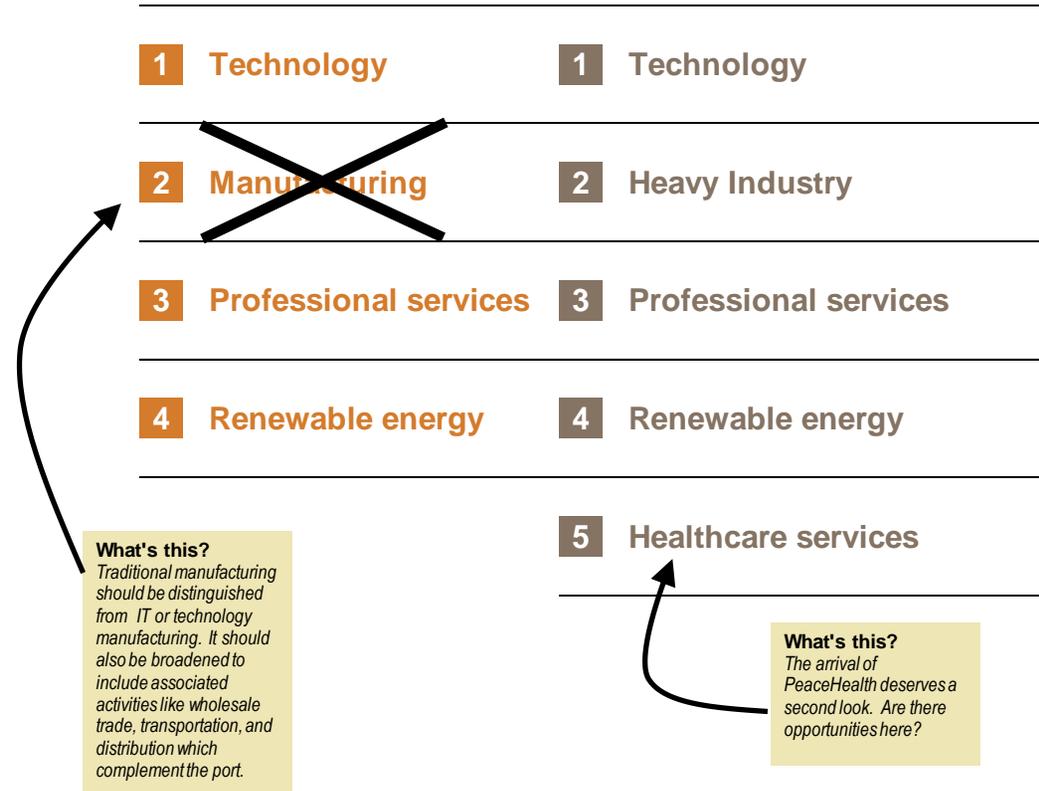
4 Renewable energy

INDUSTRY OUTLOOK

Figure 51

For this analysis, TIP adjusted the existing list of targets to further refine and broaden the manufacturing sector and add healthcare services.

Intital adjustments to Clark County's target industries



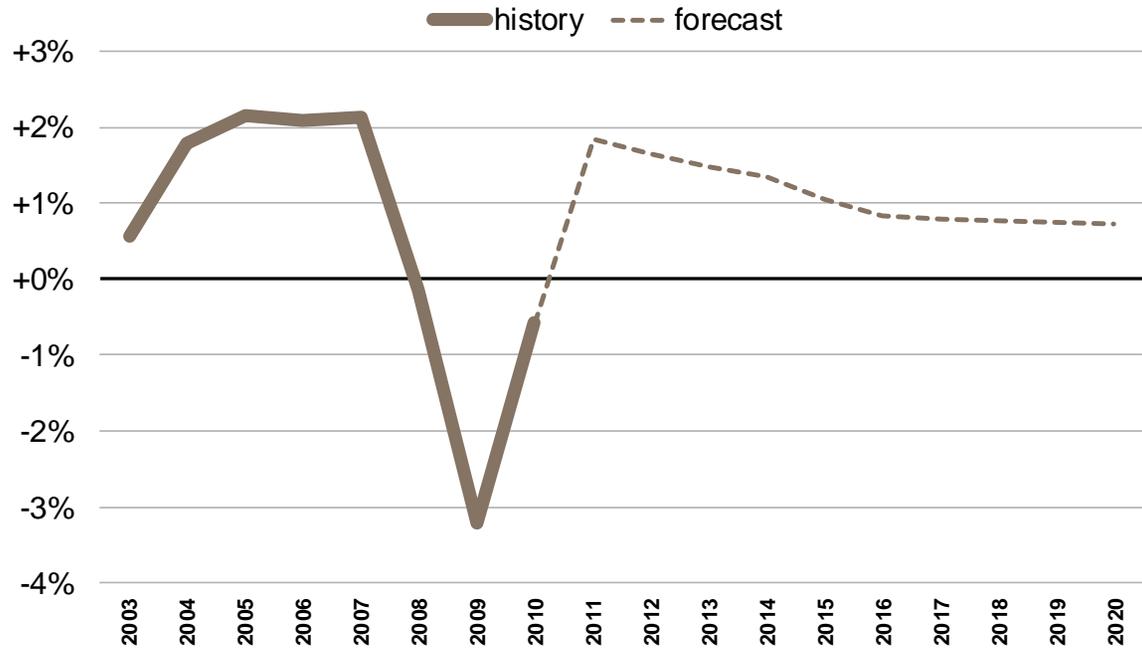
INDUSTRY OUTLOOK

Figure 52

US job growth is expected to return in 2011, but the pace of growth will be less than the previous expansion.

The US outlook for jobs

Employment growth history (2003-2010) and forecast (2011-2020)



SOURCES: EMSI Complete Employment - 4th Quarter 2010

INDUSTRY OUTLOOK

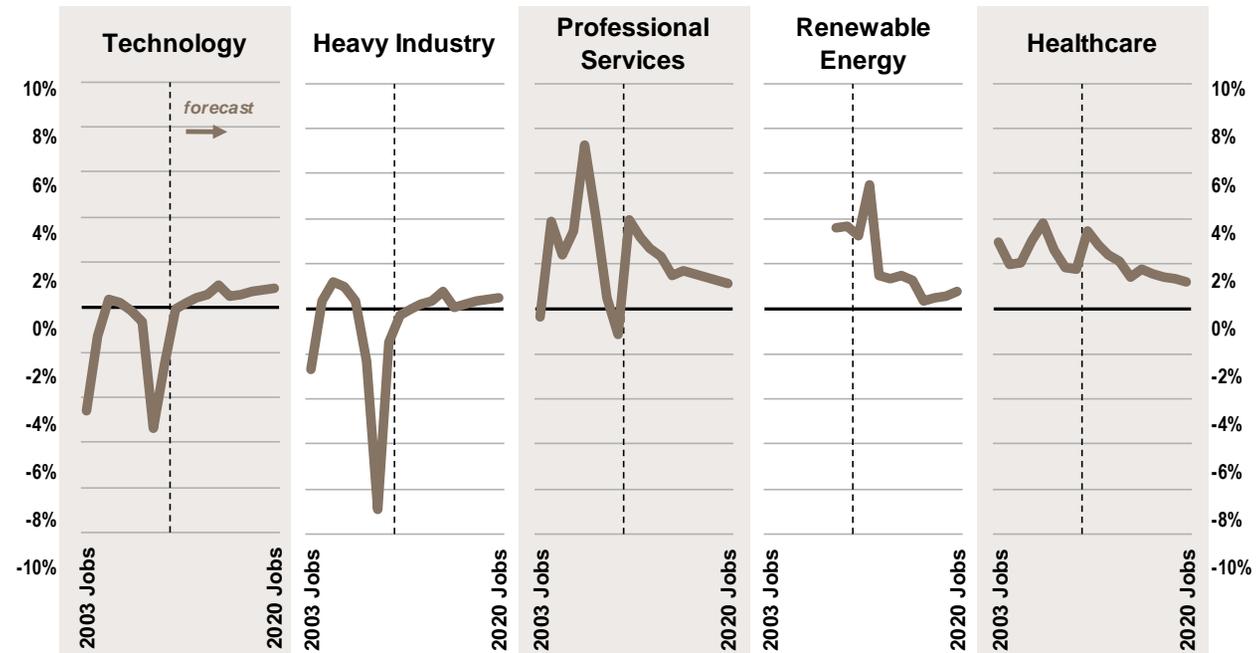
Figure 53

Healthcare remained a steady job generator throughout the recession, even as other sectors like heavy industry and technology suffered sharp downturns.

Renewable energy is enjoying a spike in activity as a result of higher oil prices as well as ample stimulus spending. Future job growth, however, is expected to fall more in line with the rest of the overall economy.

US outlook for the potential target industries

National job growth history (2003-2009) and forecast (2010-2020)



NOTE: Technology is defined by NAICS as 334, 335, 3391 (manufacturing), 51 (media), and 5417 (R&D). Heavy industry is defined as NAICS 31-33 (manufacturing, less the technology codes 3254, 334, 335, 3391) plus wholesale trade, transportation, and distribution (42, 48-49). Professional services is defined as NAICS 54 plus financial investments (523) and corporate/regional administration (55) but less R&D (5417) which is included with technology. Renewable energy jobs are estimated using the USEIA annual forecast for megawatts with appropriate job multipliers applied using MTC estimates). Healthcare is defined as NAICS 62.

SOURCES: EMSI Complete Employment - 4th Quarter 2010; Massachusetts Technology Collaborative; and U.S. Energy Information Administration

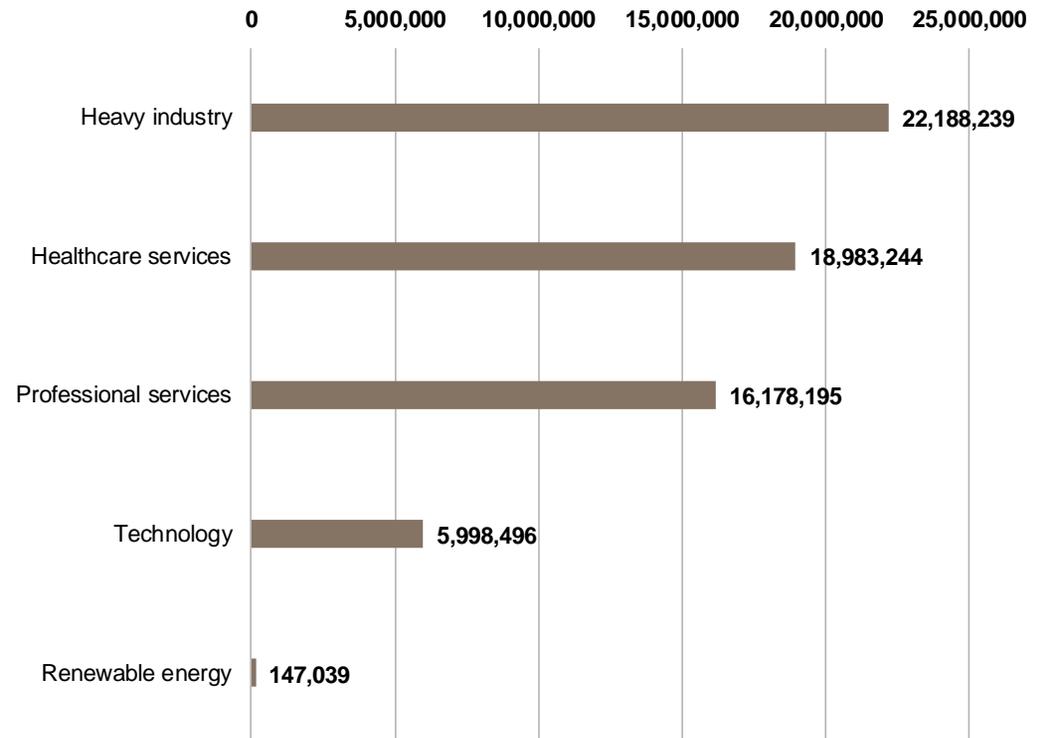
INDUSTRY OUTLOOK

Figure 54

Despite the importance of technology in today's economy, much of the weight of this sector comes from productivity gains, not job gains. Heavy industries (i.e., traditional manufacturing and distribution of goods), healthcare, and professional services employ at least three times more workers in the US than technology.

Renewable energy, narrowly defined here as production and maintenance, employs relatively few stable jobs. Incentivized activities in the sector, such as renewable construction and installation, are unlikely to be permanent.

Current size of the target industries under consideration
Estimated number of jobs in the US (in millions) as of 2010



NOTE: *Technology* is defined by NAICS as 334, 335, 3391 (manufacturing), 51 (media), and 5417 (R&D). *Heavy industry* is defined as NAICS 31-33 (manufacturing, less the technology codes 3254, 334, 335, 3391) plus wholesale trade, transportation, and distribution (42, 48-49). *Professional services* is defined as NAICS 54 plus financial investments (523) and corporate/regional administration (55) but less R&D (5417) which is included with technology. *Renewable energy* jobs are estimated using the USEIA annual forecast for megawatts with appropriate job multipliers applied using MTC estimates). *Healthcare* is defined as NAICS 62.

SOURCES: EMSI Complete Employment - 4th Quarter 2010; Massachusetts Technology Collaborative; and U.S. Energy Information Administration

INDUSTRY OUTLOOK

Figure 55

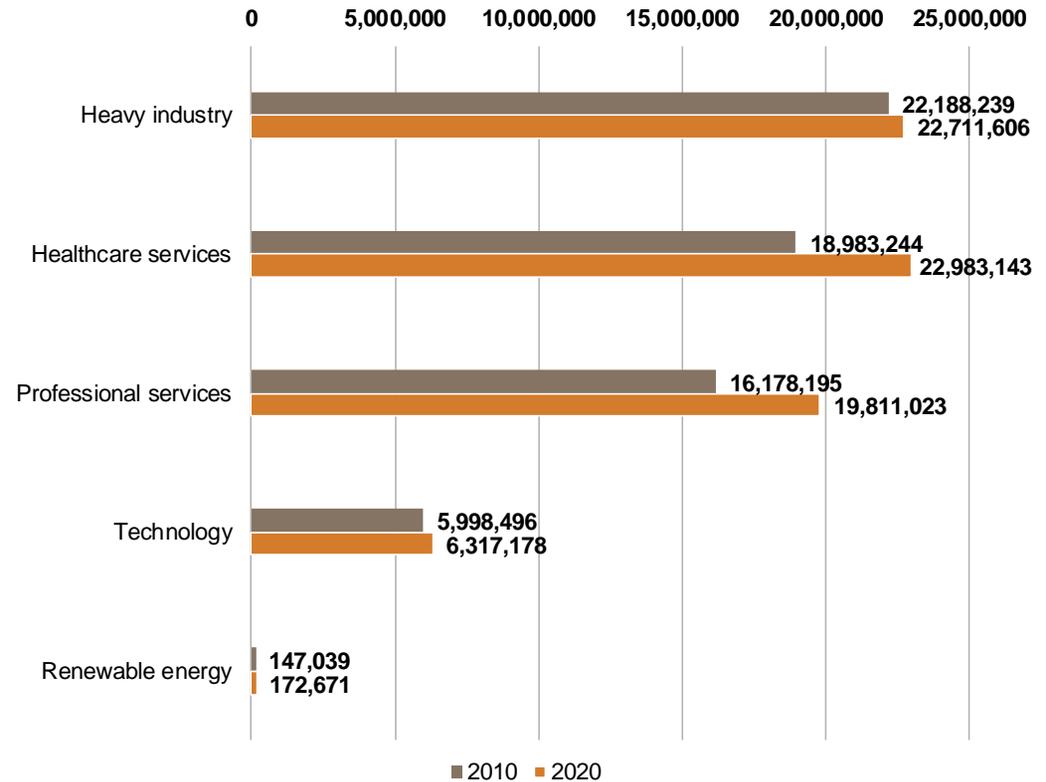
Heavy industry and technology (both of which have manufacturing components) will eke out narrow US job gains over the next decade.

More significant gains will be in professional and healthcare services. Each of these sectors will add 3-4 million new jobs.

As subsidies and stimulus funding for renewable energy wind down, jobs involving construction and installation will dwindle. Job growth is more likely to focus on the operation and maintenance of installed megawatts. This may be good for some types of manufacturing (e.g., solar components) but perhaps not for others (e.g., wind turbines).

Potential size of the target industries under consideration

Estimated and project number of jobs in the US (in millions)



NOTE: *Technology* is defined by NAICS as 334, 335, 3391(manufacturing), 51(media), and 5417 (R&D). *Heavy industry* is defined as NAICS 31-33 (manufacturing, less the technology codes 3254, 334, 335, 3391) plus wholesale trade, transportation, and distribution (42, 48-49). *Professional services* is defined as NAICS 54 plus financial investments (523) and corporate/regional administration (55) but less R&D (5417) which is included with technology. *Renewable energy* jobs are estimated using the USEIA annual forecast for megawatts with appropriate job multipliers applied using MTC estimates). *Healthcare* is defined as NAICS 62.

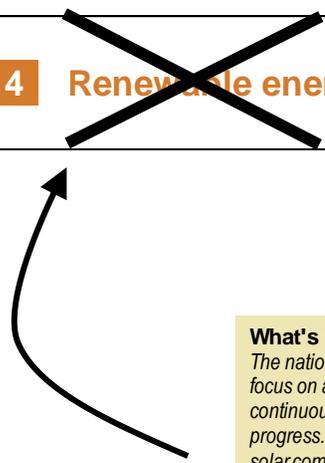
SOURCES: EM SI Complete Employment - 4th Quarter 2010; Massachusetts Technology Collaborative; and U.S. Energy Information Administration

INDUSTRY OUTLOOK

Figure 56

Intital adjustments to Clark County's target industries

1	Technology	1	Technology
2	Manufacturing	2	Heavy Industry
3	Professional services	3	Professional services
4	Renewable energy	4	Solar energy
		5	Healthcare services



What's this?
The national jobs outlook for renewable energy should focus on areas where manufacturing can provide continuous long-term job stability and technological progress. As subsidies and stimulus spending expire, solar components and technologies will be better positioned for long-term job growth than other aspects of the renewables industry.

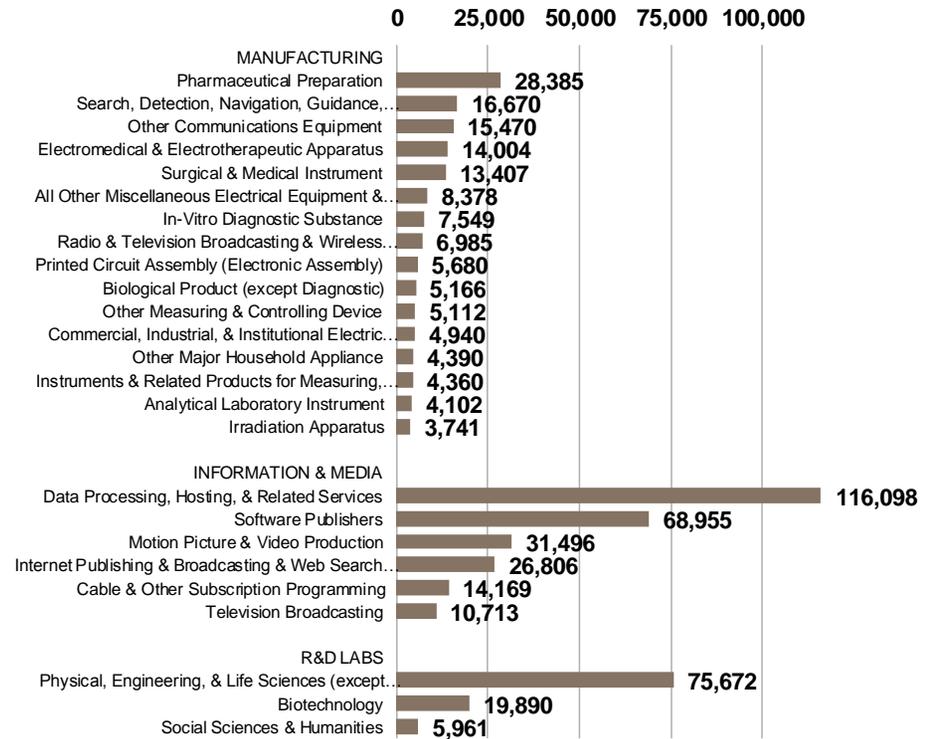
INDUSTRY OUTLOOK

Figure 57

US job creation in technology manufacturing will fall more narrowly toward devices, & lab equipment used for R&D, defense, transportation, medicine, etc. Electronic components and measuring devices also encompass the expanding array of technologies used in solar components.

Most technology jobs will be added in non-manufacturing areas, especially data processing, software, broadcast services, and scientific R&D.

Selected technology industries with growth potential
Estimated number of jobs to be added in the US, 2010-2020



NOTE: *Technology* is defined as NAICS 334, 335, 3391 (manufacturing), 51 (media), and 5417 (R&D); these NAICS codes include solar technologies and components. *Heavy industry* is defined as NAICS 31-33 (manufacturing, less the technology codes 3254, 334, 335, 3391) plus wholesale trade, transportation, and distribution (42, 48-49). *Professional services* is defined as NAICS 54 plus financial investments (523) and corporate/regional administration (55) but less R&D (5417) which is included with technology. *Healthcare* is defined as NAICS 62.

SOURCES: EMSI Complete Employment - 4th Quarter 2010

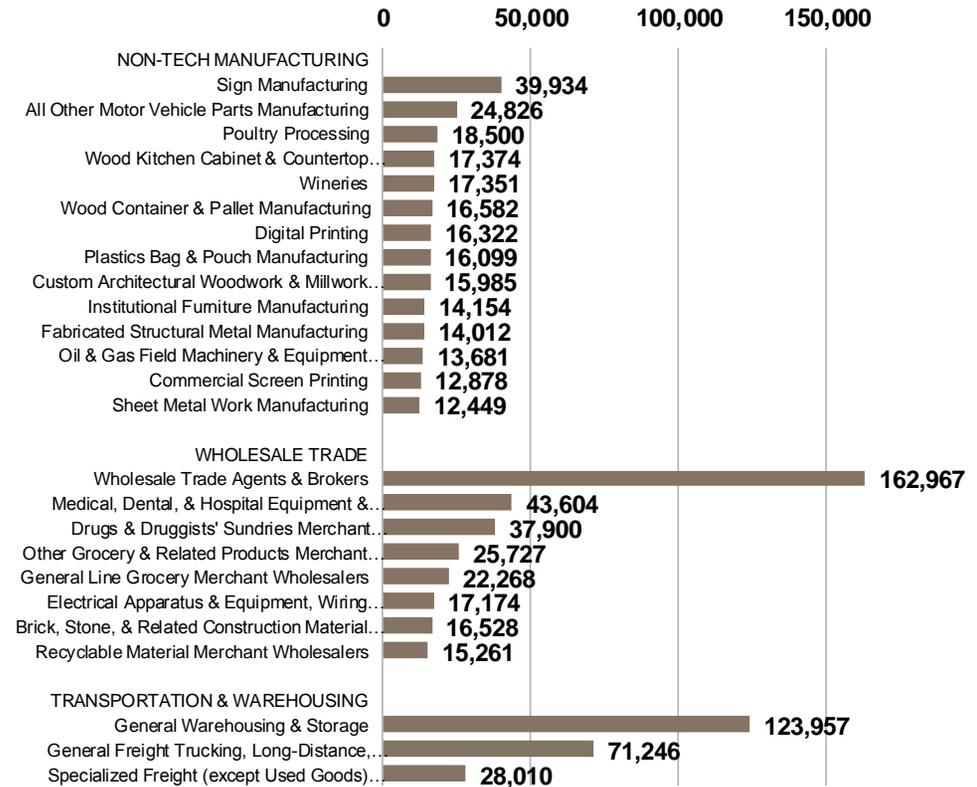
INDUSTRY OUTLOOK

Figure 58

US job creation in non-technology manufacturing will include food processing and the gradual return of construction materials to the market. New forms of manufacturing related to marketing and advertising (e.g., signs, digital printing, commercial screen printing) will also be a job generator.

Jobs in distribution activities will focus heavily on healthcare and food and (eventually) construction materials again. Most of these goods will move by ground transportation, especially trucks.

Selected heavy industries with growth potential
Estimated number of jobs to be added in the US, 2010-2020



NOTE: *Technology* is defined as NAICS 334, 335, 3391 (manufacturing), 51 (media), and 5417 (R&D); these NAICS codes include solar technologies and components. *Heavy industry* is defined as NAICS 31-33 (manufacturing, less the technology codes 3254, 334, 335, 3391) plus wholesale trade, transportation, and distribution (42, 48-49). *Professional services* is defined as NAICS 54 plus financial investments (523) and corporate/regional administration (55) but less R&D (5417) which is included with technology. *Healthcare* is defined as NAICS 62.

SOURCES: EMSI Complete Employment - 4th Quarter 2010

INDUSTRY OUTLOOK

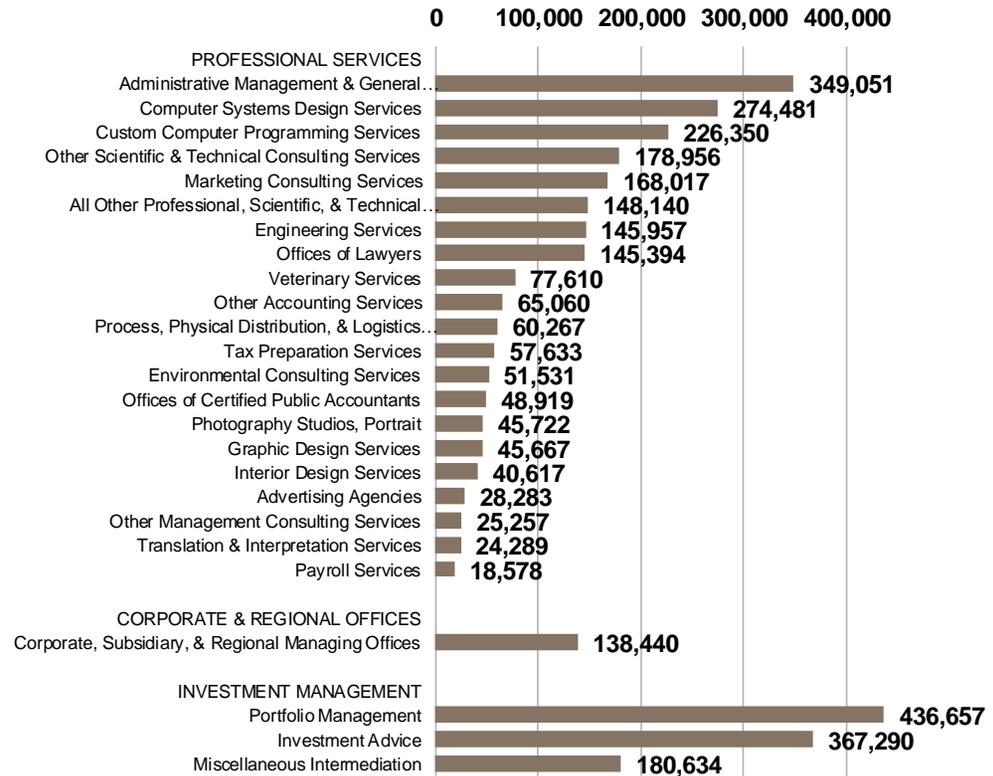
Figure 59

Some professional services like accounting and general consulting will be spread fairly evenly across the US. The cluster opportunities will be in the specialized services for computers, science, and engineering. These will be among the biggest job gaining services of the next decade.

Wealth management will continue to be a job generator. As investment banks and financial management firms rationalize their operations, they will continue to seek out affordable urban areas with a large supply of young, educated graduates who can staff back office operations.

Selected professional services with growth potential

Estimated number of jobs to be added in the US, 2010-2020



NOTE: **Technology** is defined as NAICS 334, 335, 3391 (manufacturing), 51 (media), and 5417 (R&D); these NAICS codes include solar technologies and components. **Heavy industry** is defined as NAICS 31-33 (manufacturing, less the technology codes 3254, 334, 335, 3391) plus wholesale trade, transportation, and distribution (42, 48-49). **Professional services** is defined as NAICS 54 plus financial investments (523) and corporate/regional administration (55) but less R&D (5417) which is included with technology. **Healthcare** is defined as NAICS 62.

SOURCES: EMSI Complete Employment - 4th Quarter 2010

INDUSTRY OUTLOOK

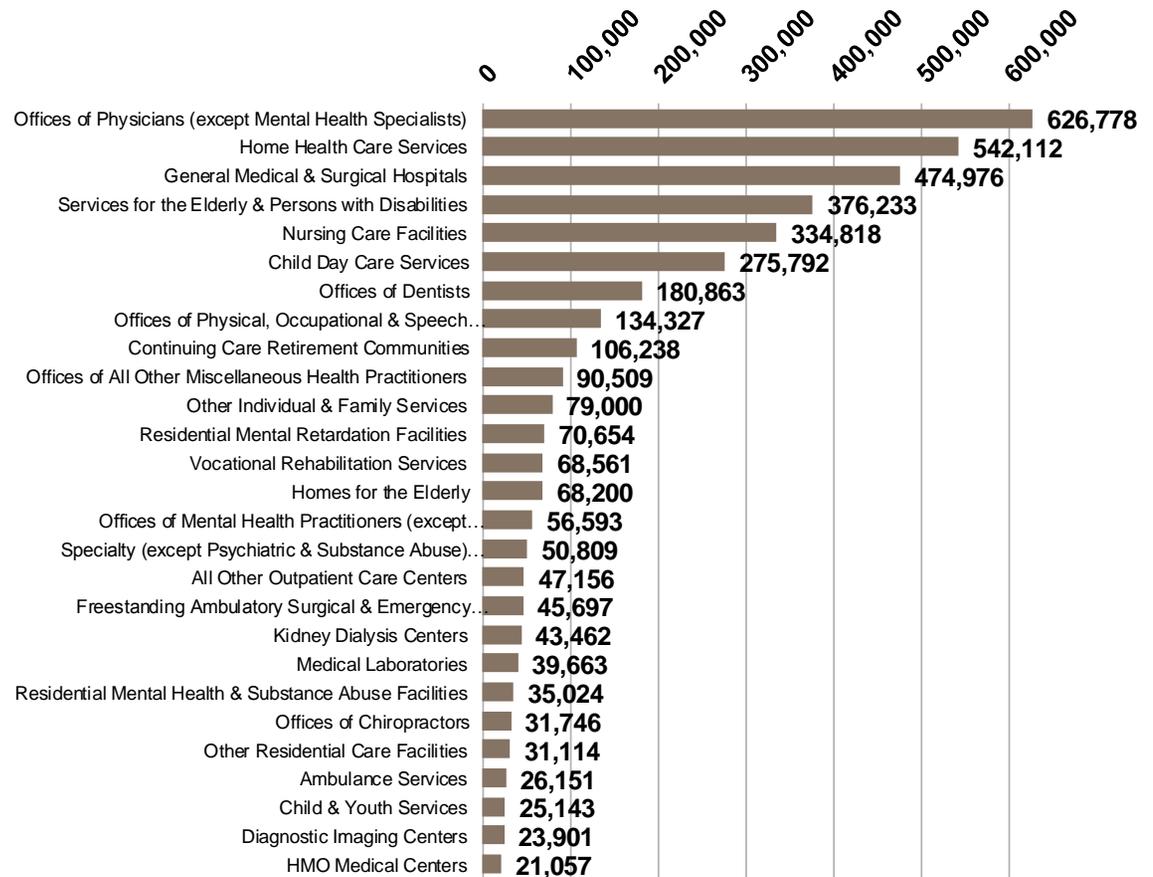
Figure 60

Most job growth in healthcare services will be evenly spread across the country. Areas with older populations will require more services and will thus be more likely to add jobs faster.

Niche opportunities may emerge, however, as new federal regulations trigger restructuring in the healthcare industry. Initiatives to reign in healthcare costs may inevitably lead to more consolidation and centralization of healthcare services. Opportunities to locally capture these new economies of scale may occur when regional healthcare providers such as PeaceHealth are located and based in the community.

Selected healthcare services with growth potential

Estimated number of jobs to be added in the US, 2010-2020



NOTE: *Technology* is defined by NAICS as 334, 335, 3391 (manufacturing), 51 (media), and 5417 (R&D). *Heavy industry* is defined as NAICS 31-33 (manufacturing, less the technology codes 3254, 334, 335, 3391) plus wholesale trade, transportation, and distribution (42, 48-49). *Professional services* is defined as NAICS 54 plus financial investments (523) and corporate/regional administration (55) but less R&D (5417) which is included with technology. *Wind energy* jobs are estimated using the USEIA annual forecast for wind megawatts with appropriate job multipliers applied using MTC estimates). *Healthcare* is defined as NAICS 62.

SOURCES: EMSI Complete Employment - 4th Quarter 2010

INDUSTRY OUTLOOK

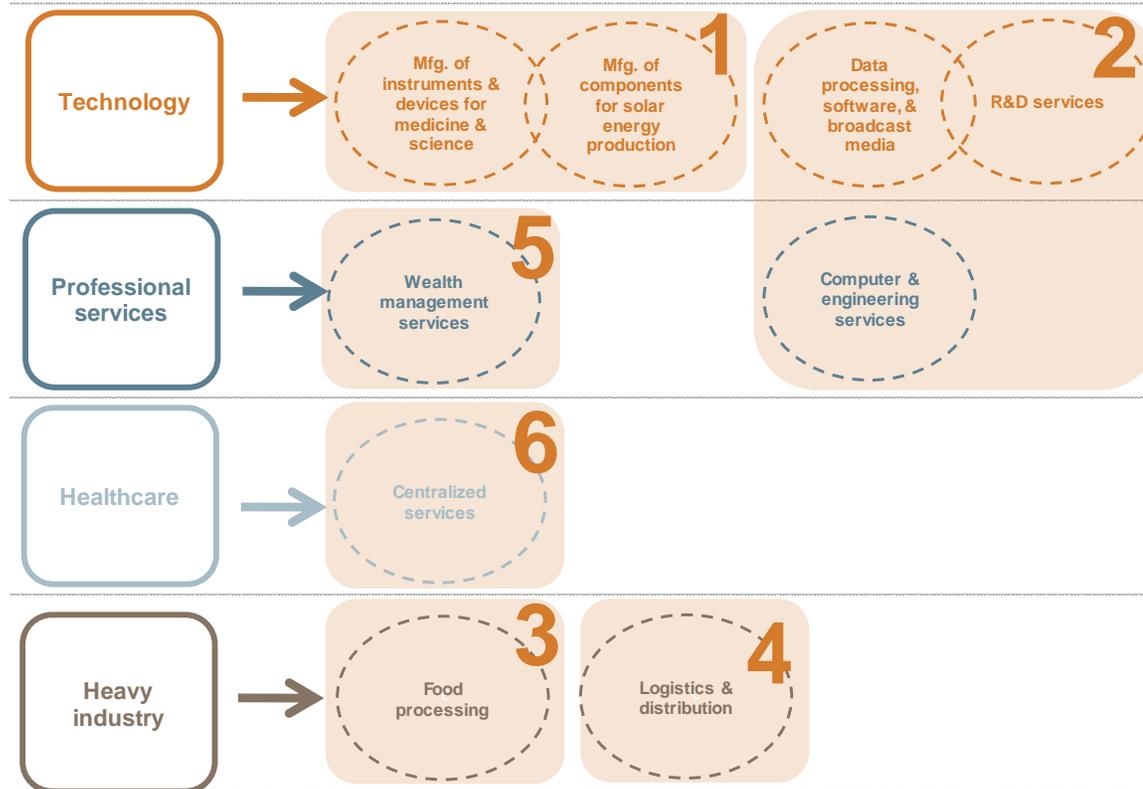
Figure 61

Proposed target industries

Industries with job growth potential that also suit Clark County's capacity

From 4 Broad Sectors...

...6 Opportunity Areas Emerge

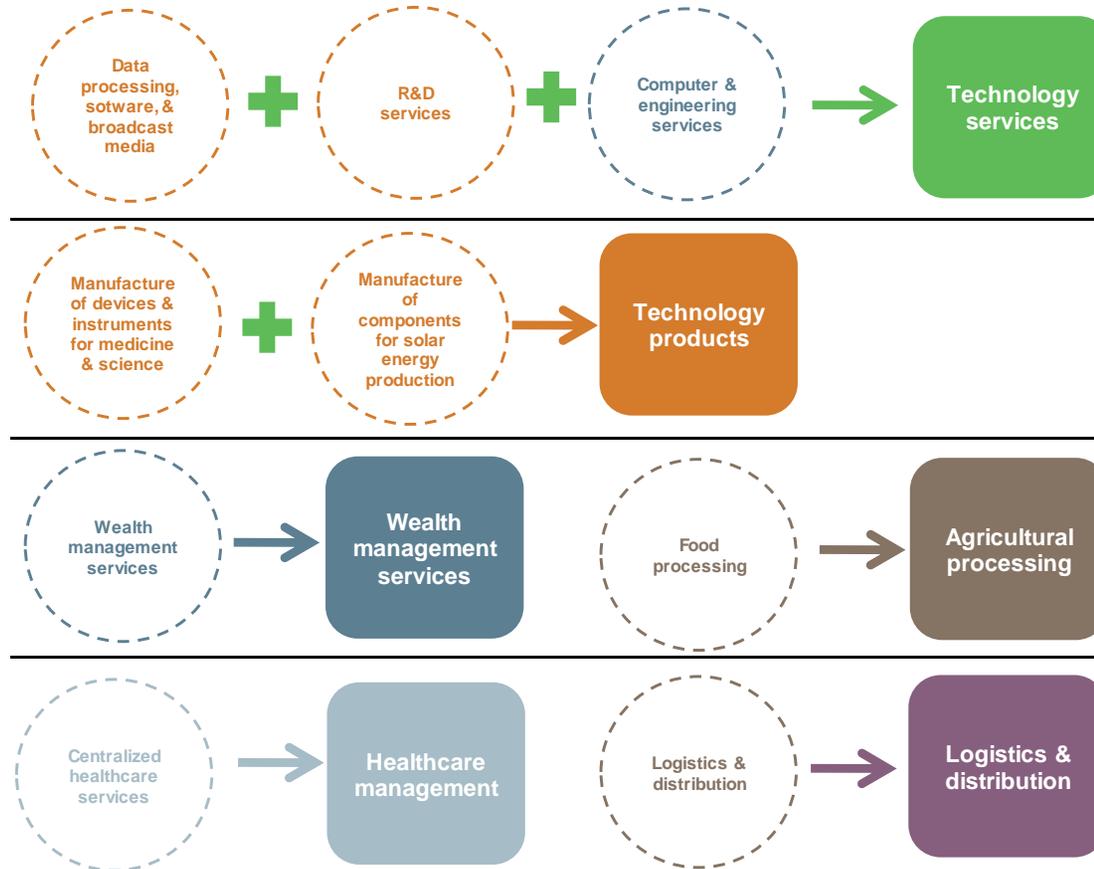


INDUSTRY OUTLOOK

Figure 62

Proposed target industries

Industries with job growth potential that also suit Clark County's capacity



TARGETS PROFILED

Figure 63

Industry **Technology products**

US job growth 2010-2020 **-22,344**

Description High-technology products typically include a wide range of manufacturing activities like consumer electronics, personal computing, and handheld devices. Many of these products saw rapid manufacturing expansion in the 1980s and 1990s, but their outlook for job growth in the US has dimmed in recent years, with considerable production now occurring offshore. Not all technology products face such dim prospects for job growth. Within this sector are a smaller group of companies that produce high-performance instrumentation, (especially communications and defense-oriented devices) as well as medical instruments as analytical and lab-related activities. These companies will face better prospects for job growth in the years ahead according to most forecasts.

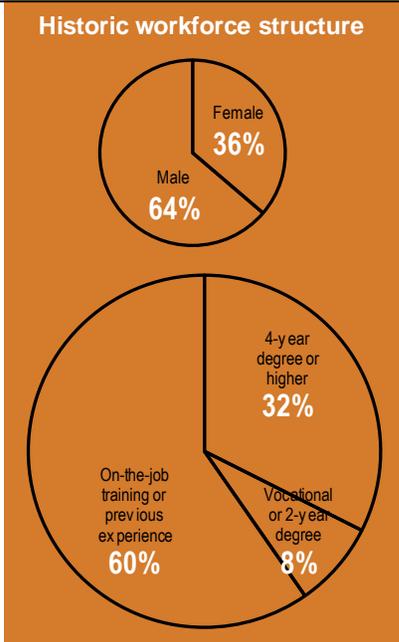
Trends to watch Technology products with strong US job growth potential fall into three groups. The first is pharmaceuticals. These drugs include mass-produced generics as well as the cutting-edge part of the industry we often refer to as biotech or life science. These companies are especially dynamic. Biotechs usually take the risks of developing new drugs and bringing them to market. Established biotechs are often then acquired by larger drug firms (like Johnson & Johnson or Pfizer), who integrate and market the product lines. The second technology product of note is medical equipment and supplies. Some of the devices -- electronic heart monitors or synthetic hip replacements -- are technologically advanced. Others are as prosaic as toothbrushes and contact lenses. The final area with strong growth potential is instrumentation. These are sophisticated analytical devices and components are applied to a wide range of products, including media, communication, defense, and healthcare.

A fourth opportunity is also worth noting. Even though a great deal of semiconductor work has moved overseas, much innovation still takes place in the US, including niches like solar and photovoltaic components. Some companies that supply the semiconductor industry are heavily involved in these new solar applications.

While technology product manufacturing may lose jobs as a whole over the next decade, these niche opportunities will face better prospects. This cluster, however, is subject to a wide range of unpredictable variables, especially federal spending for defense equipment and energy and medical research.

NAICS codes to emphasize

- Pharmaceuticals & Medicines**
| 3254 |
- Computers, Electronics, Telecom, & Instruments**
| 334 |
- Electrical Equipment & Components**
(including solar components)
| 335 |
- Medical Equipment & Supplies**
| 3391 |



TARGETS PROFILED

Figure 64

Industry	Technology products
<p>Local prospects</p> 	<p>Site considerations</p> <p><i>Access to skilled labor</i> <i>R&D/investment tax incentives</i> <i>Availability of land/modern facilities</i> <i>Regional R&D activities</i> <i>Water & wastewater capacity</i></p>
<p>Challenges</p>	<p>[1] Competitive commercial pressures limit growth prospects for some aspects of the cluster, especially electronic components which is a major employer in the region. It will be important to transition the region's existing workforce toward newer technology industries as employment stabilizes among the more established technology companies.</p> <p>[2] Uncertain federal budgets for USDOD, USDOE, and NIH in the years ahead may limit expansion prospects in this cluster.</p>
<p>Opportunities</p>	<p>[1] The Portland area has existing advantages in the broadly defined cluster of high-tech products. A highly skilled regional labor pool presents a competitive advantage for Clark County and the rest of the region.</p> <p>[2] Export opportunities exist for certain types of instrumentation and medical equipment. A weaker US dollar could further benefit US exporters in this sector.</p> <p>[3] The global market for instrumentation, medical equipment, and solar components is expanding worldwide. Aggressive attempts by US companies to enter foreign markets (and supported by muscular US policy and promotion) could pay off in the longer term.</p> <p>[4] The multiplier effect (1.95) for high-tech products is particularly strong.</p> <p>Examples of industry players</p> <p><i>Alcon Switzerland</i> Bausch & Lomb USA <i>Corning USA</i> Boston Scientific USA <i>Essilor International France</i> Medtronic USA <i>Olympus Japan</i> <i>Nippon Electric Glass Japan</i> Thermo Fisher Scientific USA</p> <p>Economic multiplier</p> <p>1.95</p> <p>Industry networking</p> <p>American Solar Energy Society Analytica Expo (int'l trade fair in Germany) Assn of Electrical & Med Imaging Equip Mfrs CIA (int'l trade fair in Singapore) Japan Assn for Advancement of Med. Equip. Japan Federation of Medical Devices Assns Japanese Society of Med. Instrumentation Medical Device Manufacturers Association Solar Energy Industries Association</p>

TARGETS PROFILED

Figure 65

LABOR AVAILABILITY

Industry	Technology products			Existing Jobs at 2010 year end		Minimal training level for an interview
	NAICS ▶	3345	3344	3342	Portland	
SOC ▼	Primary occupations required ▼	Estmated potential demand for a new 1,000-job facility	NAICS ▶	NAICS ▶	NAICS ▶	
		NAICS ▶	3345	3344	3342	
		Industry ▶	Instrm	Electr	Comm	
			Mfg	Cmpnt	Equip	
			Mfg	Mfg	Mfg	
51-2022	Electrical & electronic equipment assemblers		59	137	95	597 6,465 Short-term on-the-job training
51-2092	Team assemblers		59	54	33	451 4,441 Moderate-term on-the-job training
15-1032	Computer softw are engineers, systems softw are		36	14	47	253 2,366 Bachelor's degree
17-2071	Electrical engineers		36	29	31	175 1,527 Bachelor's degree
17-2112	Industrial engineers		29	28	18	222 2,054 Bachelor's degree
17-2141	Mechanical engineers		29	12	16	243 1,945 Bachelor's degree
51-2023	Electromechanical equipment assemblers		29	13	15	39 383 Short-term on-the-job training
17-2072	Electronics engineers, except computer		28	38	30	298 2,407 Bachelor's degree
17-3023	Electrical & electronic engineering technicians		27	39	35	269 2,393 Associate degree
11-9041	Engineering managers		27	21	25	236 2,034 Bachelor's or higher degree, plus work experience
15-1031	Computer softw are engineers, applications		24	16	30	741 7,471 Bachelor's degree
51-9061	Inspectors, testers, sorters, samplers, & weighers		23	42	23	401 3,591 Moderate-term on-the-job training
17-2199	Engineers, all other		22	8	6	203 1,550 Bachelor's degree
51-1011	First-line supervisors/managers of production & operatir		19	28	20	576 4,871 Work experience in a related occupation
11-1021	General & operations managers		18	13	21	1,509 12,294 Bachelor's or higher degree, plus work experience
13-1023	Purchasing agents, except w wholesale, retail, & farm pro		18	14	16	322 2,656 Work experience in a related occupation
41-4011	Sales representatives, w wholesale & manufacturing, tech		18	8	15	523 4,030 Moderate-term on-the-job training
51-4041	Machinists		16	10	11	337 2,600 Long-term on-the-job training
43-4051	Customer service representatives		16	8	15	1,613 14,676 Moderate-term on-the-job training
43-6011	Executive secretaries & administrative assistants		14	8	12	1,050 8,346 Moderate-term on-the-job training
17-2011	Aerospace engineers		13	0	18	53 383 Bachelor's degree
43-5071	Shipping, receiving, & traffic clerks		12	12	14	554 5,262 Short-term on-the-job training
43-5061	Production, planning, & expediting clerks		12	11	10	244 2,313 Short-term on-the-job training
13-1199	Business operation specialists, all other		12	9	8	1,279 10,473 Bachelor's degree
11-3051	Industrial production managers		11	11	9	169 1,528 Work experience in a related occupation
13-2011	Accountants & auditors		11	10	14	1,534 11,387 Bachelor's degree
43-9061	Office clerks, general		11	7	8	2,444 19,071 Short-term on-the-job training
43-3031	Bookkeeping, accounting, & auditing clerks		11	8	11	2,379 17,916 Moderate-term on-the-job training
51-2099	Assemblers & fabricators, all other		10	8	14	295 3,059 Moderate-term on-the-job training
17-3026	Industrial engineering technicians		10	12	10	67 655 Associate degree
41-4012	Sales representatives, w wholesale & manufacturing, exc		9	7	16	1,466 14,076 Moderate-term on-the-job training
15-1041	Computer support specialists		9	5	12	582 5,343 Associate degree
53-7062	Laborers & freight, stock, & material movers, hand		9	8	9	1,748 15,251 Short-term on-the-job training
11-3031	Financial managers		8	6	7	850 5,387 Bachelor's or higher degree, plus work experience
11-2021	Marketing managers		8	6	10	262 2,645 Bachelor's or higher degree, plus work experience

■ = fewer trained workers available locally than anticipated job openings for this occupation

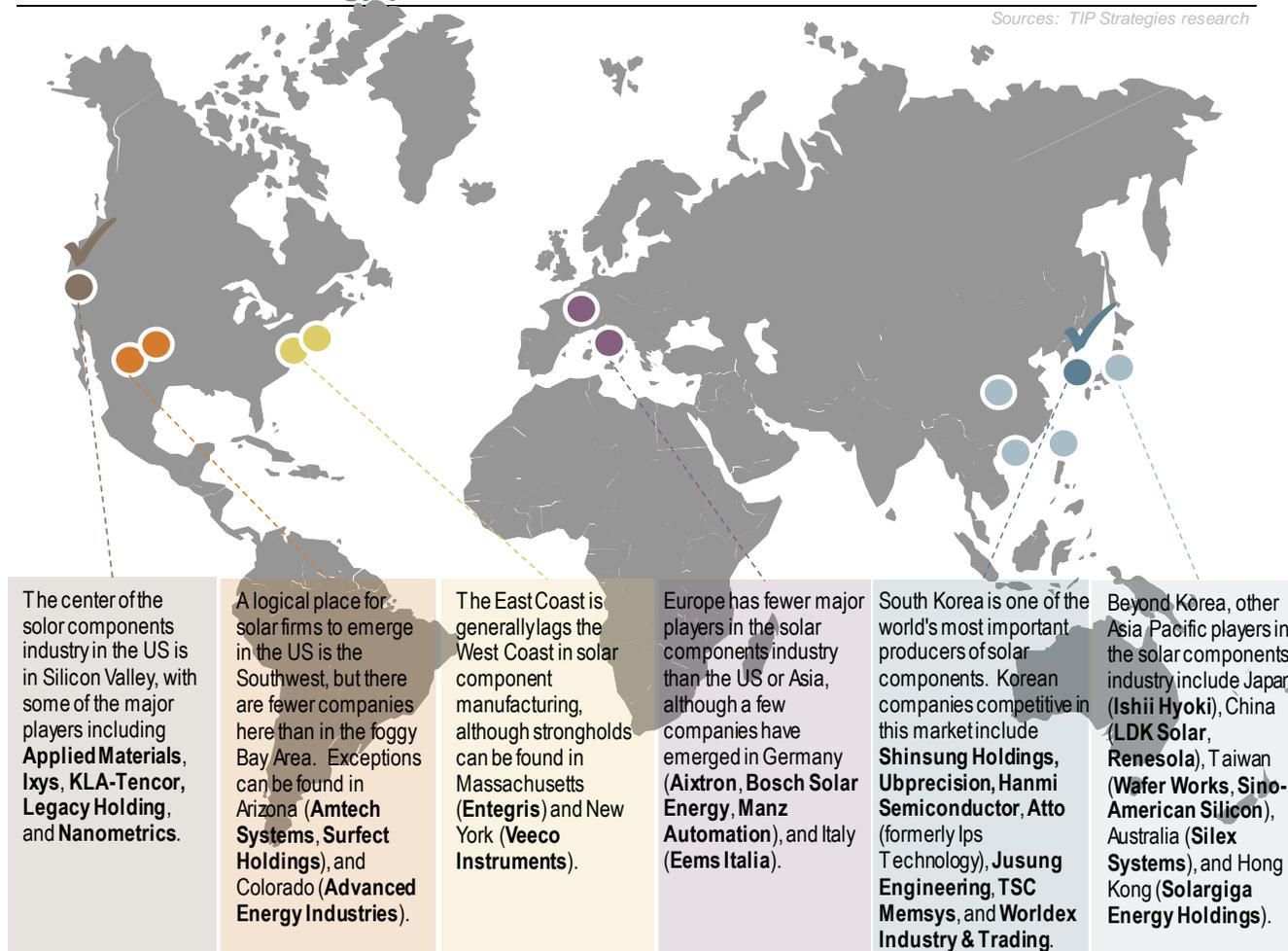
TARGETS PROFILED

Figure 66

SOLAR SPOTLIGHT

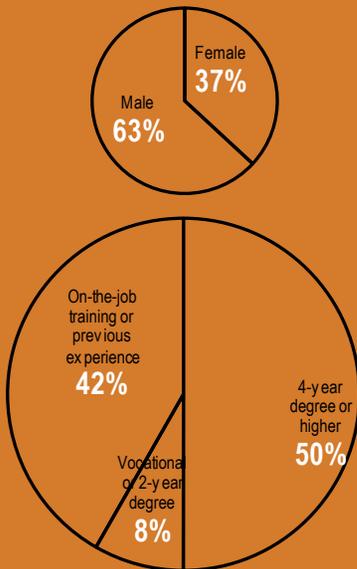
Industry Technology products

Sources: TIP Strategies research



TARGETS PROFILED

Figure 67

<p>Industry Technology services</p>															
<p>US job growth 2010-2020 +825,666</p>	<p>NAICS codes to emphasize</p> <p>Information & Media 51 </p> <p>Computer Systems Design & Related Services 5415 </p> <p>Scientific Research & Development Services 5417 </p>														
<p>Description Technology services covers a broad range of activities from broadcasting to software to R&D to data processing services. Job growth in this sector will be quite high over the coming decade. Many of those trained in computer science in the late 20th century may have expected to work in technology manufacturing. In the decades ahead, those trained in the same fields will be more likely to apply their skillsets within the services sector.</p>															
<p>Trends to watch</p> <p>Technology services are less capital intensive than technology product manufacturing and thus not a major generator of property taxes. The upside, however, is that this cluster is a major job generator. More than 800,000 US jobs will be added in technology service-related activities over the coming decade.</p> <p>TIP's analysis shows that the gender composition of this cluster tends to be lopsided in favor of males by a ratio of about 2-to-1. About half the jobs require at least a 4-year degree.</p> <p>Some technology services firms can be sizable electricity users. Companies may seek affordable rates in buildings offering ample specialized amenities suited to their needs. Modern buildings with large floorplates and under-floor wiring are often in short supply, and these requirements are sometimes difficult to achieve by retrofitting existing structures.</p>	<p>Historic workforce structure</p>  <table border="1"> <caption>Gender Composition</caption> <tr> <th>Gender</th> <th>Percentage</th> </tr> <tr> <td>Male</td> <td>63%</td> </tr> <tr> <td>Female</td> <td>37%</td> </tr> </table> <table border="1"> <caption>Education Requirements</caption> <tr> <th>Education Level</th> <th>Percentage</th> </tr> <tr> <td>4-year degree or higher</td> <td>50%</td> </tr> <tr> <td>On-the-job training or previous experience</td> <td>42%</td> </tr> <tr> <td>Vocational or 2-year degree</td> <td>8%</td> </tr> </table>	Gender	Percentage	Male	63%	Female	37%	Education Level	Percentage	4-year degree or higher	50%	On-the-job training or previous experience	42%	Vocational or 2-year degree	8%
Gender	Percentage														
Male	63%														
Female	37%														
Education Level	Percentage														
4-year degree or higher	50%														
On-the-job training or previous experience	42%														
Vocational or 2-year degree	8%														

TARGETS PROFILED

Figure 68

Industry	Technology services	
Local prospects		<p>Site considerations</p> <p><i>Highly skilled labor force</i> <i>Affordable, reliable electricity</i> <i>Buildings with large floor plates</i> <i>Buildings with under-floor utilities</i> <i>Regional R&D activities</i> <i>Competitive tax environment</i></p>
Challenges	<p>[1] Corporate search criteria may include specific requirements for utility costs and reliability, location security, and building construction.</p> <p>[2] The increasingly interconnected nature of the global economy has increased the competitive playing field in technology services, especially R&D facilities.</p>	
Opportunities	<p>[1] Certain types of technology services will be a major job generator in the decade ahead.</p> <p>[2] Because of its quality of life, the greater Portland region is one of the nation's magnets for young college graduates. A steady supply of high-skilled labor is one of the region's biggest draws for potential employers, especially in this cluster.</p>	
<p>Examples of industry players</p> <p>Activision <i>Blizzard USA</i> Adobe Systems <i>USA</i> BMC Software <i>USA</i> Check Point Software Technologies <i>Israel</i> Electronic Arts <i>USA</i> Intuit <i>USA</i> Liberty Media <i>USA</i> Oracle <i>USA</i> SAP <i>Germany</i></p>		
<p>Economic multiplier</p> <p>1.68</p>		
<p>Industry networking</p> <p>American Council for Trade in Services Business Software Alliance Data Interchange Standards Association Information Technology Assn of America Information Technology Industry Council International Trade Data Users National Association of Personnel Services Telecommunications Industry Association US Coalition of Services Industries</p>		

TARGETS PROFILED

Figure 69

LABOR AVAILABILITY

Industry	Technology services			Existing Jobs at 2010 year end			Minimal training level for an interview
	NAICS ▶	5112	5182	5417	Clark	MSA	
		Estimated potential demand for a new 1,000-job facility			= fewer trained workers available locally than anticipated job openings for this occupation		
	Industry ▶	Soft-ware	Process Services	Scntfc R&D	Portland		
SOC ▼	Primary occupations required ▼						
19-1042	Medical scientists, except epidemiologists	0	0	60	250	993	Doctoral degree
19-4021	Biological technicians	0	0	36	312	1,268	Associate degree
43-6011	Executive secretaries & administrative assistants	13	13	34	1,050	8,346	Moderate-term on-the-job training
15-1032	Computer software engineers, systems software	103	46	32	253	2,366	Bachelor's degree
13-1199	Business operation specialists, all other	22	18	30	1,279	10,473	Bachelor's degree
19-2031	Chemists	0	0	24	75	290	Bachelor's degree
17-2141	Mechanical engineers	1	0	23	243	1,945	Bachelor's degree
11-1021	General & operations managers	22	19	23	1,509	12,294	Bachelor's or higher degree, plus work experience
15-1031	Computer software engineers, applications	150	48	20	741	7,471	Bachelor's degree
43-9061	Office clerks, general	11	31	19	2,444	19,071	Short-term on-the-job training
11-9121	Natural sciences managers	0	0	18	114	488	Bachelor's or higher degree, plus work experience
11-9199	Managers, all other	7	6	18	2,937	18,309	Work experience in a related occupation
19-1021	Biochemists & biophysicists	0	0	17	19	67	Doctoral degree
19-4099	Life, physical, & social science technicians, all other	0	0	17	83	494	Associate degree
17-2071	Electrical engineers	1	0	15	175	1,527	Bachelor's degree
11-9041	Engineering managers	2	1	14	236	2,034	Bachelor's or higher degree, plus work experience
43-6014	Secretaries, except legal, medical, & executive	5	5	14	1,865	13,789	Moderate-term on-the-job training
15-1051	Computer systems analysts	41	72	13	508	4,405	Bachelor's degree
17-2011	Aerospace engineers	0	0	13	53	383	Bachelor's degree
17-2199	Engineers, all other	1	0	12	203	1,550	Bachelor's degree
19-4031	Chemical technicians	0	0	12	49	196	Associate degree
13-1111	Management analysts	16	24	12	1,080	7,654	Bachelor's or higher degree, plus work experience
13-2011	Accountants & auditors	16	14	12	1,534	11,387	Bachelor's degree
17-2072	Electronics engineers, except computer	1	1	11	298	2,407	Bachelor's degree
17-2112	Industrial engineers	1	2	11	222	2,054	Bachelor's degree
19-2099	Physical scientists, all other	0	0	11	49	264	Bachelor's degree
19-4061	Social science research assistants	0	0	11	22	178	Associate degree
11-3021	Computer & information systems managers	37	33	10	330	3,117	Bachelor's or higher degree, plus work experience
15-1071	Network & computer systems administrators	24	30	9	341	3,006	Bachelor's degree
19-2012	Physicists	0	0	8	13	64	Doctoral degree
17-3023	Electrical & electronic engineering technicians	1	0	8	269	2,393	Associate degree
15-1021	Computer programmers	70	38	8	317	2,685	Bachelor's degree
43-1011	First-line supervisors/managers of office & administrative support workers	7	23	8	1,236	9,225	Work experience in a related occupation
43-3031	Bookkeeping, accounting, & auditing clerks	12	17	8	2,379	17,916	Moderate-term on-the-job training
15-1041	Computer support specialists	68	51	7	582	5,343	Associate degree

TARGETS PROFILED

Figure 70

Industry **Agricultural processing**

US job growth 2010-2020 **+52,598**

Description Food and beverage manufacturers process essentially two things: plants and animals, or in more industry-specific terms, crops and livestock. There are big names in the industry like Unilever, Kraft, and ADM. The industry is served by firms specializing in food distribution (more on this in the logistics profile). Less known are the specialty foods that process, manufacture, distribute, market, and/or sell niche market foodstuffs for consumption. Their products include candy and confections, canned and frozen foods, dairy products, edible oils, fish and seafood, grains, meat products, sauces and condiments, snack foods, and sugar and other sweeteners.

Trends to watch It is no secret that manufacturing has been shedding jobs in fits and starts for decades. Only a few niches, including certain high-tech products and food and beverage manufacturing, manage to eke out job growth. This trend will continue in the decade ahead as food processing firms in the US increase their payrolls by as much as 50,000 jobs. In an industry that employs 1.7 million, this is not much of a gain (only about 3% over 10 years), but any gain at all is better than persistent manufacturing job losses.

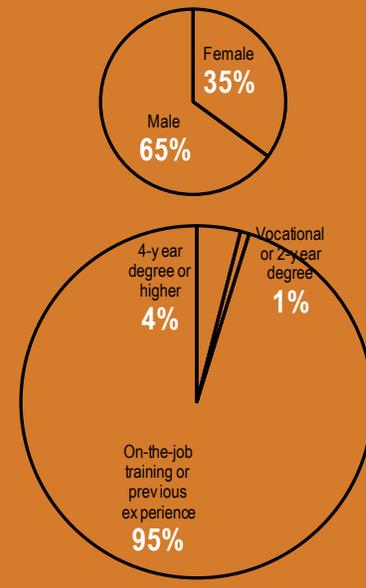
Like other manufacturing industries, food processing employs more men than women by about a 2-to-1 ratio. The gender balance is not expected to change significantly over the next decade, nor is the skill composition in the industry. In fact, the persistence of the skill composition (see graph) may be the reason that food processing manages to eke out consistent job gains. The nature of the work requires either labor intensive human activity (e.g., meatpacking) or was fully automated long ago (e.g., bottling).

The real changes at work involve consumer tastes. The homogenous marketplace of monolithic labels of the 1950s has yielded shelf space to specialty brands and ethnic foods. Add to this an increased consumption of prepackaged foods and an obsession with our pets, including their diets.

NAICS codes to emphasize

- Food Manufacturing**
| 311 |
- Beverage Manufacturing**
| 3121 |

Historic workforce structure



TARGETS PROFILED

Figure 71

Industry Agricultural processing	
Local prospects	<div style="display: flex; align-items: center;"> <div style="width: 15px; height: 15px; background-color: #336699; margin-right: 5px;"></div> <div style="width: 15px; height: 15px; border: 1px solid #ccc; margin-right: 5px;"></div> <div style="width: 15px; height: 15px; border: 1px solid #ccc; margin-right: 5px;"></div> <div style="width: 15px; height: 15px; border: 1px solid #ccc; margin-right: 5px;"></div> <div style="width: 15px; height: 15px; border: 1px solid #ccc;"></div> </div>
Challenges	<p>[1] Water access for high volume beverage production would have to be sourced from on-site wells)</p> <p>[2] Schedule and permitting risks associated with proposed the wastewater solution may not be workable.</p> <p>[3] Food price inflation worldwide could impact production of certain types of foods.</p>
Opportunities	<p>[1] Food and beverage processing leverages existing, regional agricultural strengths for more value-added products and processes.</p> <p>[2] Foods and beverages are considered nondurable manufactured goods. In the past, this made them less suitable for export, but the greater use of refrigerated storage has made exporting possible. Even US poultry production now sees 10% of its output exported. The growth of the highly segmented specialty food market could increase the opportunities for export-oriented food production.</p> <p>[3] Livestock processing carries environmental externalities. This means that some producers may prefer to locate production away from major population centers, though still within easy one-day trucking.</p> <p>[4] Pet food is a growing segment of the US market and is often overlooked as a subtarget within the food processing sector.</p>
	<p>Site considerations</p> <p><i>Access to skilled labor</i></p> <p><i>Access to markets/customers</i></p> <p><i>Regional R&D activities</i></p> <p><i>Quality of transport infrastructure</i></p> <p><i>Competitive utility prices</i></p> <p><i>Water & wastewater capacity</i></p>
	<p>Examples of industry players</p> <p><i>Nestlé Switzerland</i></p> <p><i>Unilever UK</i></p> <p><i>Kraft Foods USA</i></p> <p><i>JBS Brazil</i></p> <p><i>Archer Daniels Midland USA</i></p> <p><i>Cargill USA</i></p> <p><i>Groupe Danone France</i></p> <p><i>Diageo UK</i></p> <p><i>Bunge USA</i></p>
	<p>Economic multiplier</p> <p>2.59</p>
	<p>Industry networking</p> <p>American Frozen Food Institute</p> <p>Food Products Association</p> <p>Grocery Manufacturers of America</p> <p>Institute of Food Technologies</p> <p>Nat'l Assn for Specialty Food Trade</p> <p>Pet Food Institute</p> <p>Snack Food Association</p>

TARGETS PROFILED

Figure 72

LABOR AVAILABILITY

Industry		Agricultural processing			Existing Jobs at 2010 year end			Minimal training level for an interview
		Estimated potential demand for a new 1,000-job facility			Portland			
NAICS ▶		3111	3114	3121	Clark	MSA		
Industry ▶		Pet Foods	Fr & Veg Spcilty Foods	Bev / Drinks				
SOC ▼	Primary occupations required ▼							
51-9111	Packaging & filling machine operators & tenders	63	132	120	218	1,842	Short-term on-the-job training	
51-9012	Separating, filtering, clarifying, precipitating, & still machi	7	7	63	44	373	Moderate-term on-the-job training	
41-4012	Sales representatives, w wholesale & manufacturing, excu	31	8	59	1,466	14,076	Moderate-term on-the-job training	
53-7051	Industrial truck & tractor operators	56	61	48	669	5,693	Short-term on-the-job training	
53-7062	Laborers & freight, stock, & material movers, hand	50	41	47	1,748	15,251	Short-term on-the-job training	
53-3031	Driver/sales w orkers	2	1	46	593	4,935	Short-term on-the-job training	
41-2031	Retail salespersons	6	0	37	4,884	35,989	Short-term on-the-job training	
53-3033	Truck drivers, light or delivery services	17	2	37	953	6,610	Short-term on-the-job training	
53-3032	Truck drivers, heavy & tractor-trailer	79	8	35	2,662	14,716	Moderate-term on-the-job training	
49-9041	Industrial machinery mechanics	23	37	24	283	2,235	Long-term on-the-job training	
51-1011	First-line supervisors/managers of production & operatir	38	28	23	576	4,871	Work experience in a related occupation	
49-9042	Maintenance & repair w orkers, general	28	30	21	1,160	8,390	Moderate-term on-the-job training	
51-9023	Mixing & blending machine setters, operators, & tenders	101	18	15	57	381	Moderate-term on-the-job training	
51-9061	Inspectors, testers, sorters, samplers, & weighers	12	24	15	401	3,591	Moderate-term on-the-job training	
43-5081	Stock clerks & order fillers	5	6	15	1,407	9,937	Short-term on-the-job training	
41-9011	Demonstrators & product promoters	0	0	14	238	1,698	Moderate-term on-the-job training	
49-9091	Coin, vending, & amusement machine servicers & repair	0	0	14	50	283	Moderate-term on-the-job training	
27-1026	Merchandise displays & window trimmers	0	0	14	186	1,451	Moderate-term on-the-job training	
11-1021	General & operations managers	21	10	14	1,509	12,294	Bachelor's or higher degree, plus work experience	
43-3031	Bookkeeping, accounting, & auditing clerks	18	7	13	2,379	17,916	Moderate-term on-the-job training	
43-4051	Customer service representatives	12	4	12	1,613	14,676	Moderate-term on-the-job training	
43-5071	Shipping, receiving, & traffic clerks	13	13	12	554	5,262	Short-term on-the-job training	
35-3031	Waiters & waitresses	0	0	10	1,632	14,603	Short-term on-the-job training	
43-9061	Office clerks, general	20	6	10	2,444	19,071	Short-term on-the-job training	
51-9198	Helpers--Production w orkers	18	57	10	250	2,225	Short-term on-the-job training	
53-1031	First-line supervisors/managers of transportation & mate	5	3	9	243	1,828	Work experience in a related occupation	
11-3051	Industrial production managers	11	8	8	169	1,528	Work experience in a related occupation	
43-6011	Executive secretaries & administrative assistants	8	3	7	1,050	8,346	Moderate-term on-the-job training	
37-2011	Janitors & cleaners, except maids & housekeeping clear	8	16	7	2,386	15,329	Short-term on-the-job training	
11-2022	Sales managers	3	2	7	347	3,011	Bachelor's or higher degree, plus work experience	
41-1012	First-line supervisors/managers of non-retail sales w ork	2	0	7	1,450	9,072	Work experience in a related occupation	
43-6014	Secretaries, except legal, medical, & executive	10	2	7	1,865	13,789	Moderate-term on-the-job training	
49-1011	First-line supervisors/managers of mechanics, installers	5	8	7	394	2,806	Work experience in a related occupation	
51-3092	Food batchmakers	30	76	7	76	750	Short-term on-the-job training	
49-3031	Bus & truck mechanics & diesel engine specialists	5	1	6	331	2,218	Postsecondary vocational training	

■ = fewer trained workers available locally than anticipated job openings for this occupation

TARGETS PROFILED

Figure 73

Industry **Logistics & distribution**

**US job growth
2010-2020** **+598,175**

Description Logistics and supply chain establishments provide materials-handling services and manage the flow of goods as they move from supplier to manufacturer to retailer and final consumer. These companies use information technology to manage inventory control and costs. For some firms, especially chain retailers, this is done in-house. For others, third-party logistics, or 3PL, provide many of these services, including assembling and repackaging materials, consolidating orders and shipments, physically delivering goods to customers, processing returned items, and handling e-commerce fulfillment operations. 3PLs typically serve a number of clients from a single facility.

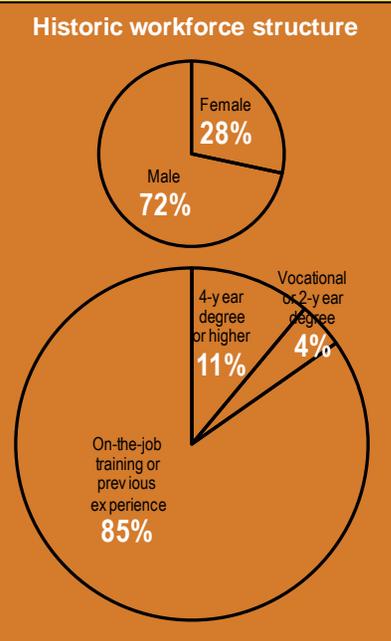
Trends to watch The days of manually moving bulk cargo are gone. Cranes and hydraulic equipment move heavy cargo today, and the truckers and delivery persons who transport it from one location to the next are increasingly as likely to be women as men. For every 4 persons employed in this industry, one is now a woman and there is no reason to believe this shift toward more gender balance in the industry will not continue.

For an industry that pays reasonably well, the skill requirements for employment are still basic. Truckers and delivery persons who make up the bulk of the workforce can participate with less training and technical preparation than those who choose a manufacturing path.

The logistics/distribution sector employs a large labor force nationwide. More than 7.3 million work in this industry. Over the coming decade, projections indicate that this job base will expand by more than 8%, adding nearly 600,000 jobs. In the US, a good deal of the action will be centered on the West Coast as trade expands with the Asia Pacific basin. This is an expanding pie and most West Coast port locations should benefit in one way or another, regardless of the expansion of the Panama Canal. Pacific Northwest ports hold the advantage of being closer to Asia (in shipping days) than ports further down the coast.

It's also important to note that the scale of distribution centers is growing. IKEA, for example, manages its distribution in the western half of the US from a 1.7 million square foot facility it built in Kern County, California, a few years ago.

NAICS codes
Wholesale Trade
 | 42 |
Support Activities for Rail, Water, & Road Transportation
 | 4882 | 4883 | 4884 |
Freight Transportation Arrangement
 | 4885 |
Other Transportation Support Activities
 | 4889 |
Warehousing & Storage
 | 493 |



TARGETS PROFILED

Figure 74

Industry	Logistics & distribution	
Local prospects		Site considerations
Challenges	<p>[1] The recent recession left a glut of distribution space in the US. As of mid-2010, the national brokerage Grubb & Ellis estimated the industrial vacancy rate above 10% for the fifth consecutive quarter. In Clark County, it's not much better. Collier's estimates the local industrial vacancy rate at 8.1% as of year-end.</p> <p>[2] The industry's exemplary efficiency standards means that large capital investments may sometimes yield relatively few jobs.</p> <p>[3] The bottleneck for crossing the Columbia River is a problem.</p>	
Opportunities	<p>[1] Labor force availability is a plus.</p> <p>[2] Intermodal transportation provides the infrastructure for the logistics/distribution industry to function, and Clark County has ground options (highway, rail, port) well covered.</p> <p>[3] Ample supplies of industrial-zoned land with good transportation connections are necessary. Many logistics facilities today exceed 1 million square feet, with sites generating high volumes of ingress and egress.</p> <p>[4] A steady, uninterrupted supply of affordable electricity is needed to support large climate-controlled facilities with IT networks operating 24/7.</p> <p>[5] Food and beverage processing (also a target) shares strong overlaps with the logistics/distribution sector. Some beverage firms, for example, manage their own distribution activities through franchises. Meanwhile, a number of third-party logistics providers specialize in food, grocery, and restaurant distribution.</p>	
	Major industry players <ul style="list-style-type: none"> UPS USA FedEx USA YRC Worldwide USA JB Hunt Transport USA Schneider National USA Con-Way USA Swift Transportation USA Arkansas Best USA Werner Enterprises USA 	
	Economic multiplier <p style="text-align: center; font-size: 1.2em;">1.40</p>	
	Industry networking <ul style="list-style-type: none"> American Short Line & Regional RR Assn American Trucking Association Association of American Railroads Industrial Truck Association Intermodal Association of North America International Assn of Plastics Distributors Int'l Assn of Refrigerated Warehouses Int'l Warehouse Logistics Assn Material Handling Industry of America 	

TARGETS PROFILED

Figure 75

LABOR AVAILABILITY

Industry		Logistics & distribution			LABOR AVAILABILITY			
SOC ▼	Primary occupations required ▼	Estimated potential demand for a new 1,000-job facility			Existing Jobs at 2010 year end		Minimal training level for an interview	
		NAICS ▶ Industry ▶	4244 Grocery Whole- salers	4841 Gen'l Freight Trucking	4931 Ware- house & Stor	Clark		MSA
53-7062	Laborers & freight, stock, & material movers, hand		96	72	223	1,748	15,251	Short-term on-the-job training
53-7051	Industrial truck & tractor operators		36	18	126	669	5,693	Short-term on-the-job training
43-5081	Stock clerks & order fillers		60	3	81	1,407	9,937	Short-term on-the-job training
53-7064	Packers & packagers, hand		30	3	66	482	4,387	Short-term on-the-job training
43-5071	Shipping, receiving, & traffic clerks		24	4	51	554	5,262	Short-term on-the-job training
53-3032	Truck drivers, heavy & tractor-trailer		93	598	50	2,662	14,716	Moderate-term on-the-job training
53-1021	First-line supervisors/managers of helpers, laborers, & r		9	7	31	124	1,139	Work experience in a related occupation
43-4051	Customer service representatives		16	12	19	1,613	14,676	Moderate-term on-the-job training
53-3033	Truck drivers, light or delivery services		48	38	18	953	6,610	Short-term on-the-job training
49-9042	Maintenance & repair w orkers, general		9	5	18	1,160	8,390	Moderate-term on-the-job training
43-9061	Office clerks, general		21	20	16	2,444	19,071	Short-term on-the-job training
37-2011	Janitors & cleaners, except maids & housekeeping clear		8	2	13	2,386	15,329	Short-term on-the-job training
43-1011	First-line supervisors/managers of office & administrativ		10	6	13	1,236	9,225	Work experience in a related occupation
53-1031	First-line supervisors/managers of transportation & mate		12	23	12	243	1,828	Work experience in a related occupation
11-3071	Transportation, storage, & distribution managers		5	8	10	149	1,062	Work experience in a related occupation
11-1021	General & operations managers		16	11	10	1,509	12,294	Bachelor's or higher degree, plus work experience
51-2092	Team assemblers		5	0	10	451	4,441	Moderate-term on-the-job training
43-4151	Order clerks		11	1	9	218	1,932	Short-term on-the-job training
43-5061	Production, planning, & expediting clerks		3	2	8	244	2,313	Short-term on-the-job training
41-4012	Sales representatives, w wholesale & manufacturing, excu		125	4	8	1,466	14,076	Moderate-term on-the-job training
51-9061	Inspectors, testers, sorters, samplers, & weighers		3	0	8	401	3,591	Moderate-term on-the-job training
43-5111	Weighers, measurers, checkers, & samplers, recordkee		4	1	7	82	722	Short-term on-the-job training
43-3031	Bookkeeping, accounting, & auditing clerks		18	11	7	2,379	17,916	Moderate-term on-the-job training
51-9111	Packaging & filling machine operators & tenders		14	0	7	218	1,842	Short-term on-the-job training
41-2031	Retail salespersons		5	1	6	4,884	35,989	Short-term on-the-job training
13-1081	Logisticians		1	1	5	71	615	Bachelor's degree
53-3031	Driver/sales w orkers		94	4	5	593	4,935	Short-term on-the-job training
33-9032	Security guards		1	1	4	863	5,641	Short-term on-the-job training
43-6011	Executive secretaries & administrative assistants		6	5	4	1,050	8,346	Moderate-term on-the-job training
43-6014	Secretaries, except legal, medical, & executive		8	9	4	1,865	13,789	Moderate-term on-the-job training
51-1011	First-line supervisors/managers of production & operatir		4	0	4	576	4,871	Work experience in a related occupation
51-9198	Helpers--Production w orkers		0	0	4	250	2,225	Short-term on-the-job training
53-7121	Tank car, truck, & ship loaders		0	2	3	42	235	Moderate-term on-the-job training
43-5032	Dispatchers, except police, fire, & ambulance		3	28	3	266	1,805	Moderate-term on-the-job training
13-1199	Business operation specialists, all other		4	1	3	1,279	10,473	Bachelor's degree

■ = fewer trained workers available locally than anticipated job openings for this occupation

TARGETS PROFILED

Figure 76

<p>Industry Wealth management</p>															
<p>US job growth 2010-2020 +1,331,807</p>	<p>NAICS codes</p> <p>Securities & Financial Investments 523 </p> <p>Management of Companies & Enterprises 55 </p>														
<p>Description</p> <p>The wealth management sector includes investment banking & corporate management. The 1.3 million jobs forecast nationwide over the next decade makes this an appealing option for Clark County. The region's supply of talented young college graduates who are often underemployed makes this urban area a ripe location for investment banks that are consolidating back-office operations into regional service centers. These are not call centers. These are specialized operations often requiring highly skilled workforces that operate at reasonable salaries.</p>															
<p>Trends to watch</p> <p>The 2008 financial crisis & the recently passed federal legislation of financial reform imply that the years ahead will be a period of industry restructuring, which could include consolidation, mergers, acquisitions, and relocations. Opportunities will emerge as the financial services sector reorganizes. New federal financial regulations could feasibly impact the industry's physical reorganization & rationalization of activities; as for how that plays out, it is still too early to tell. The fallout could take years to unfold. It is good to remember in general, however, that large banking and insurance companies often consolidate and move back-office operations to less expensive, remote locations whenever possible. Examples include New York-based JP Morgan Chase's back-office activities in Tampa. Boston-based Fidelity does the same thing in the suburbs of Providence, Rhode Island, & Fort Worth, Texas. Capital One, headquartered in Northern Virginia, just outside Washington, DC, locates most of its support activities in the suburbs just north of Richmond, Virginia.</p>	<p>Historic workforce structure</p> <table border="1"> <caption>Gender Distribution</caption> <tr> <th>Gender</th> <th>Percentage</th> </tr> <tr> <td>Male</td> <td>60%</td> </tr> <tr> <td>Female</td> <td>40%</td> </tr> </table> <table border="1"> <caption>Education/Training Distribution</caption> <tr> <th>Category</th> <th>Percentage</th> </tr> <tr> <td>4-year degree or higher</td> <td>52%</td> </tr> <tr> <td>On-the-job training or previous experience</td> <td>44%</td> </tr> <tr> <td>Vocational or 2-year degree</td> <td>4%</td> </tr> </table>	Gender	Percentage	Male	60%	Female	40%	Category	Percentage	4-year degree or higher	52%	On-the-job training or previous experience	44%	Vocational or 2-year degree	4%
Gender	Percentage														
Male	60%														
Female	40%														
Category	Percentage														
4-year degree or higher	52%														
On-the-job training or previous experience	44%														
Vocational or 2-year degree	4%														

TARGETS PROFILED

Figure 77

Industry	Wealth management	
Local prospects		<p data-bbox="1146 386 1373 412">Site considerations</p> <p data-bbox="1104 526 1415 613"><i>Access to skilled labor</i> <i>Affordable labor rates</i> <i>Competitive tax environment</i></p>
Challenges	<p data-bbox="331 477 1062 535">[1] The PST timezone may be a disadvantage for attracting the back office operations of East Coast investment houses.</p>	
Opportunities	<p data-bbox="331 748 1062 872">[1] It is unclear so far what type of industry re-organization and rationalization may fall out of new federal financial legislation, but there may be opportunities as companies rethink the locations of various activities.</p>	
<p data-bbox="1094 756 1423 782">Examples of industry players</p> <p data-bbox="1115 797 1402 1013"> BNY Mellon USA Discover Financial Services USA Franklin Resources USA Goldman Sachs USA Legg Mason USA Merrill Lynch USA Northern Trust USA State Street USA TD Ameritrade USA </p>		
<p data-bbox="1146 1026 1373 1052">Economic multiplier</p> <p data-bbox="1230 1073 1289 1099">2.05</p>		
<p data-bbox="1146 1128 1373 1154">Industry networking</p> <p data-bbox="1094 1169 1423 1284"> American Bankers Association Financial Services Forum Geneva Association Reinsurance Association of America Security Industry Association </p>		

TARGETS PROFILED

Figure 78

LABOR AVAILABILITY

Industry	Wealth management			Existing Jobs at 2010 year end			Minimal training level for an interview
	NAICS ▶	5231	5239	5511	Clark	MSA	
SOC ▼	Primary occupations required ▼	Estimated potential demand for a new 1,000-job facility			Portland		
		Equity Mgmt	Other Invest Mgmt	Corp HQs	Clark	MSA	
41-3031	Securities, commodities, & financial services sales agen	262	78	5	1,339	7,452	Bachelor's degree
43-4011	Brokerage clerks	82	27	2	23	249	Moderate-term on-the-job training
13-2052	Personal financial advisors	80	154	2	1,489	8,156	Bachelor's degree
43-4051	Customer service representatives	58	39	44	1,613	14,676	Moderate-term on-the-job training
13-2051	Financial analysts	51	110	15	410	2,729	Bachelor's degree
43-9061	Office clerks, general	50	48	29	2,444	19,071	Short-term on-the-job training
43-6011	Executive secretaries & administrative assistants	43	73	31	1,050	8,346	Moderate-term on-the-job training
11-3031	Financial managers	42	44	25	850	5,387	Bachelor's or higher degree, plus work experience
43-1011	First-line supervisors/managers of office & administrativ	25	19	23	1,236	9,225	Work experience in a related occupation
13-2011	Accountants & auditors	21	47	39	1,534	11,387	Bachelor's degree
43-3031	Bookkeeping, accounting, & auditing clerks	19	26	43	2,379	17,916	Moderate-term on-the-job training
11-1021	General & operations managers	17	24	35	1,509	12,294	Bachelor's or higher degree, plus work experience
13-2099	Financial specialists, all other	15	16	7	148	1,292	Bachelor's degree
43-6014	Secretaries, except legal, medical, & executive	14	32	15	1,865	13,789	Moderate-term on-the-job training
13-1111	Management analysts	13	10	17	1,080	7,654	Bachelor's or higher degree, plus work experience
15-1051	Computer systems analysts	9	10	20	508	4,405	Bachelor's degree
43-3071	Tellers	9	4	4	473	3,727	Short-term on-the-job training
11-3021	Computer & information systems managers	8	9	14	330	3,117	Bachelor's or higher degree, plus work experience
15-1041	Computer support specialists	8	9	16	582	5,343	Associate degree
13-1041	Compliance officers, except agriculture, construction, he	7	7	5	280	1,841	Long-term on-the-job training
41-1012	First-line supervisors/managers of non-retail sales work	7	5	4	1,450	9,072	Work experience in a related occupation
13-1199	Business operation specialists, all other	7	15	34	1,279	10,473	Bachelor's degree
11-2022	Sales managers	6	6	13	347	3,011	Bachelor's or higher degree, plus work experience
15-1021	Computer programmers	6	5	9	317	2,685	Bachelor's degree
13-2061	Financial examiners	6	4	1	15	120	Bachelor's degree
43-4141	New accounts clerks	5	0	1	62	486	Work experience in a related occupation
15-1071	Network & computer systems administrators	5	7	13	341	3,006	Bachelor's degree
19-3021	Market research analysts	5	7	9	230	1,970	Bachelor's degree
43-4171	Receptionists & information clerks	5	11	6	1,124	7,565	Short-term on-the-job training
13-2072	Loan officers	5	6	6	515	3,494	Bachelor's degree
11-3011	Administrative services managers	4	4	7	165	1,317	Bachelor's or higher degree, plus work experience
13-2041	Credit analysts	4	4	4	32	371	Bachelor's degree
13-1073	Training & development specialists	4	2	8	204	1,874	Bachelor's degree
43-4071	File clerks	3	3	2	165	1,220	Short-term on-the-job training
23-1011	Lawyers	3	6	7	583	5,754	First professional degree

■ = fewer trained workers available locally than anticipated job openings for this occupation

TARGETS PROFILED

Figure 79

Industry **Healthcare administration**

**US job growth
2010-2020** **+596,945**

Description While the US economy is expected to remain sluggish over the next several years, one sector -- healthcare -- will continue to plod forward at a rapid clip. Over the next decade, hospital-related activities will add nearly 600,000 jobs (and these jobs form just a fraction of the much broader healthcare industries which also includes physician offices, senior care centers, and health insurance). Much of this growth will occur naturally through demand forces as American baby boomers begin to cross the threshold into their senior years.

NAICS codes to emphasize

Medical & Diagnostic Laboratories

| 6215 |

Hospitals

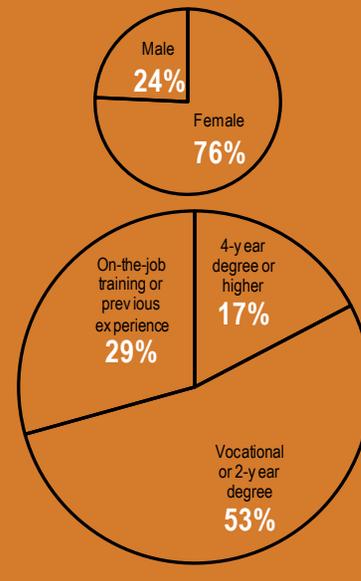
| 622 |

**Trends to
watch**

Activities associated with hospitals provided nearly 5 million US jobs at year-end 2010. This total rose from 4.3 million jobs in 2002, as substantial employment gains occurred despite tough economic times during much of this period. Recent US economic forecasts show that this cluster could gain another 600,000 jobs over the coming decade. Another plus: hospital-related activities require a wide range of skillsets, offering job opportunities that meet the diverse capacities of most local workforces. Traditionally, this cluster tends to employ women at about three times the rate of men. This ratio helps to counterbalance the more male-leaning workforce structures of the other targets.

Clark County should find opportunities to build upon the expansion of PeaceHealth. The county may offer an ample test bed for clinical trials and research. Or perhaps the county can find ways to accommodate further consolidation of PeaceHealth's regional services. [ALEX: CAN YOU EXPAND ON THIS?]

Historic workforce structure



TARGETS PROFILED

Figure 80

Industry	Healthcare administration	
Local prospects		<p>Site considerations</p> <p><i>Access to skilled labor</i> <i>Access to markets/customers</i> <i>Availability of land/modern facilities</i> <i>Regional R&D activities</i> <i>Regional teaching hospitals</i> <i>R&D/investment tax incentives</i></p>
Challenges	<p>[1] There may be some limits to the degree and speed with which PeaceHealth can consolidate regional services. For instance, there is still some uncertainty regarding the number of existing PeaceHealth employees who will relocate to Clark County. Hiring potentially hundreds of skilled employees locally may create some turmoil both within the company and within the labor market.</p> <p>[3] Clinical trials and research are typically associated with medical schools and teaching hospitals.</p>	
Opportunities	<p>[1] An aging US population translates to inevitable growth in the healthcare sector. This is a major national trend that will impact the industry in general.</p> <p>[2] Hospital-related activities are relatively well insulated from economic cycles. During the recent recession, healthcare and education were among the few sectors of the economy to continue growing.</p> <p>[3] By targeting healthcare administration, Clark County can bring more gender balance to its industry targets. Healthcare also provides jobs across a wide range of skill levels.</p> <p>Examples of industry players</p> <p>Community Health Systems USA Medco Health Solutions USA Kindred Healthcare USA Healthsouth USA Lifepoint Hospitals USA Lincare Holdings USA Universal Health Services USA Omnicare USA Quest Diagnostics USA</p> <p>Economic multiplier</p> <p>1.71</p> <p>Industry networking</p> <p>Advanced Medical Technology Assn American Healthcare Association American Hospital Association Health Insurance Association of America</p>	

