

Target Industry Report



Prepared for:

City of Beaverton, Oregon

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Target Industry Report

Identifying opportunities for Beaverton to cultivate a sustainable local economy

I. Introduction

Under the leadership of Mayor Denny Doyle, there is a new focus on economic development for the City of Beaverton. This project for Target Industry Identification/Opportunities is part of a larger economic development program to support local businesses and attract new complimentary companies for long-term sustainable economic growth in Beaverton. Before an action plan for implementation can be developed, it is important to understand Beaverton's target market.

A. What is a Target Industry Analysis?

A target industry analysis is an analytical method to identify a community's best fit with basic industries – those industries that would most benefit from the community's assets and be willing to expand and/or relocate to the area – and those industries that bring value to the community in the form of investment, jobs, payroll and local purchasing.

B. Objectives for Study

The purpose of this report is to document the methodology and conclusions of a target industry analysis to identify favorable industries for Beaverton to pursue for business recruitment. Despite the recent economic downturn, there are industries currently experiencing growth as well as other industries forecasted to grow significantly in the next ten to fifteen years.

It is especially important for cities to understand what industries are most likely to be successful and prosper in your community in order to focus limited resources on recruiting industries that are likely to prosper in your business climate. With limited resources (time, money and personnel), it is important to be strategic in your focus of marketing.

C. Methodology

Our methodology for identifying target industries for involves both quantitative and qualitative evaluation. We focus on basic industries – those industries that bring new wealth into the local economy. Quantitatively, a review of historic industry trends for the City of Beaverton and Portland Metropolitan Statistical Area (MSA) begins the process. For the qualitative approach, we evaluate Beaverton's business climate from the point of view of local businesses as well as external audiences, site location consultants who conduct site searches for companies and real estate professionals. With these assessments, we identify compatible industries that are most likely to be prosperous with Beaverton's assets and less affected by Beaverton's weaknesses. Additionally, we augment the preliminary target industries with niche and emerging industry sectors that represent new opportunities too early to show up on industry trend data.

With a complete list of recommended target industries, research on each proposed industry cluster is provided in order to clarify and inform on the needs for each cluster. Armed with this information, Beaverton's economic development efforts can be more focused on the value proposition that Beaverton offers companies in these target industries.

II. Historic Industry Trends

We begin the target industry analysis with economic baseline information for the City and Portland Metro Area. State data is not analyzed in this study as the Portland region strongly influences state industry trends and would not contribute additional insights relevant to Beaverton’s potential target industries.

Historic industry trends (Appendix A) for the Portland MSA, including Clackamas, Columbia, Multnomah, Washington, Yamhill Counties in Oregon and Clark, Skamania Counties in Washington, present employment growth from 2001 to 2008, number of firm in the region, average wages by industry, as well as national projected growth from 2008 to 2018 for employment and output. Washington County-specific data shows comparison to Beaverton’s immediate vicinity.

For manufacturing industry sectors, national manufacturing capacity utilization is also provided as an indicator of expansion potential. High capacity utilization means there is a need for expansion as current manufacturing facilities are at or near capacity.

A. Growth Industries

It is important to not only look locally for growth industries but also to understand national trends. National High Growth Industries (Appendix B) are analyzed for employment growth as well projected growth in output. For this analysis, we are most interested in basic industries. The leading basic industries encompass:

TABLE 1 - BASIC INDUSTRIES WITH HIGH GROWTH

Basic Industries with National High Growth

High Employment Growth	High Output Growth
Administrative management consulting services	Electronic computer manufacturing
Human resource consulting services	Computer storage device manufacturing
Marketing consulting services	Computer terminal manufacturing
Process and logistics consulting services	Other computer peripheral equipment mfg.
Other management consulting services	Software publishers
Environmental consulting services	Data processing and related services
Other technical consulting services	Internet Publishing, Broadcasting, Web Search Portals
Data processing and related services	Other information services
Internet Publishing, Broadcasting, Web Search Portals	Audio and video equipment manufacturing
Other information services	Securities and commodity exchanges
Industrial design services	Portfolio management
Other specialized design services	Surgical and medical instrument manufacturing
Custom computer programming services	Surgical appliance and supplies manufacturing
Computer systems design services	Dental equipment and supplies manufacturing
Computer facilities management services	Ophthalmic goods manufacturing
Other computer related services	Biotechnology research and development
	Physical and engineering research
	Social science and humanities research

The fastest growing industries in the Portland Metro Area (2001-2008) in terms of absolute job growth include hospitals, HMO medical centers, physician offices, restaurants, clothing and furniture wholesalers, managing offices, colleges and universities, and basic industries of rail transportation, physical and engineering research, telemarketing bureaus, data processing and related services. Each of these industries added between 1,400 and 7,800 jobs during this period. All of these industries have positive growth projections for employment and output at the national level until 2018. Of these leading growth industries, data processing and related services are projected to have the highest percentage growth in employment and output nationally.

B. Regional Specializations

Absolute and percentage job growth were the initial screening criteria in analyzing industry trends, however, the targets should be limited to basic industries in order to yield the greatest economic impact from recruiting such industries. As a result, some of the industries with the highest absolute growth are not necessarily relevant to the final list of targets. One way to determine if industries are basic is to look at location quotients. Location quotients in this analysis measure Washington County’s share of total employment in a particular industry, divided by the share of total employment in that industry nationally. Industries with location quotients greater than one are technically serving customers outside the local area.

Appendix C presents basic industries in Washington County with a location quotient greater than 1.5 and 2008 employment of 50 or more. This analysis reveals industries that are regional specializations in Beaverton and the immediate surrounding area, cluster around the following industries:

Stone Products	Food Processing	Secondary Wood Products and Furniture
Paper Products	Plastic Products	Glass Products
Fabricated Metal and Tools	Industrial Machinery	Electronics
Scientific and Medical instruments	Electrical Equipment	Wholesale Distribution
Information Services Processing	Software	Finance and Insurance Transaction

C. Beaverton's Share

A city level analysis (Figure 1) illustrates Beaverton's share of employment for industries at the two-digit NAICs code level. Beaverton has a high location quotient for wholesale trade, information, administrative and support services, educational services, arts, entertainment and recreation.

FIGURE I- SHARE OF EMPLOYMENT BY INDUSTRY

CITY OF BEAVERTON SHARE OF EMPLOYMENT BY INDUSTRY

NAICS	Description	Metro Portland			Beaverton 2008				Beaverton Location Quotient
		Employment		Firms	Firms	Share	Employment	Share	
		2001	2008	2008					
	Total	837,555	885,213	71,518	3,673	5%	59,577	7%	
11	Agriculture, Forestry, Fishing	12,929	13,755	811	4	0%	15	0%	0.02
23	Construction	53,093	59,500	8,091	230	3%	2,052	3%	0.51
31-33	Manufacturing	137,816	122,869	3,459	128	4%	6,343	5%	0.77
42	<i>Wholesale Trade</i>	<i>55,064</i>	<i>57,536</i>	<i>6,061</i>	<i>374</i>	<i>6%</i>	<i>7,179</i>	<i>12%</i>	<i>1.85</i>
44	Retail Trade	104,313	108,063	6,864	411	6%	7,719	7%	1.06
48-49	Transportation and Warehousing	34,256	34,235	1,583	46	3%	1,578	5%	0.68
51	<i>Information</i>	<i>27,368</i>	<i>24,909</i>	<i>1,383</i>	<i>108</i>	<i>8%</i>	<i>4,165</i>	<i>17%</i>	<i>2.48</i>
52	Finance and Insurance	41,466	42,056	3,985	309	8%	3,302	8%	1.17
53	Real Estate	18,932	18,019	3,441	211	6%	937	5%	0.77
	Services	348,762	401,083	35,348	1,774	5%	25,285	6%	0.94
54	Professional and technical services	47,204	53,748	8,181	481	6%	2,737	5%	0.76
55	Management of companies and enterprises	20,872	24,111	556	44	8%	1,138	5%	0.70
56	<i>Administrative and support services</i>	<i>57,634</i>	<i>57,535</i>	<i>3,706</i>	<i>215</i>	<i>6%</i>	<i>5,225</i>	<i>9%</i>	<i>1.35</i>
61	<i>Educational services</i>	<i>13,870</i>	<i>18,290</i>	<i>950</i>	<i>61</i>	<i>6%</i>	<i>3,697</i>	<i>20%</i>	<i>3.00</i>
62	Health Services	87,178	108,742	6,112	341	6%	4,273	4%	0.58
71	<i>Arts, entertainment, and recreation</i>	<i>12,606</i>	<i>14,417</i>	<i>838</i>	<i>64</i>	<i>8%</i>	<i>1,810</i>	<i>13%</i>	<i>1.87</i>
72	Accommodation and food services	73,205	84,819	5,159	265	5%	4,689	6%	0.82
81	Other services	33,353	35,272	5,210	303	6%	1,716	5%	0.72

Source: IMPLAN ES202 Data for Metro Portland, Oregon Labor Market Information Data for City of Beaverton.
Industries in italics have high locations quotients indicating local specialization.

III. Business Climate Interviews

As part of the qualitative assessment of Beaverton’s assets and barriers to business, Chabin conducted confidential interviews with national site location consultants, real estate brokers in the Portland region, state and regional economic development partners, and most importantly, local employers representing a diverse cross-section of industries and variety of business sizes. Each brings a different perspective of Beaverton’s business climate. Where gaps may surface between local and external perceptions, an opportunity exists in identifying areas for improvement or potential marketing messages.

A. Who Interviewed

In total, forty-two interviews were completed. We appreciate the time and honest feedback from the following who participated in the interviews.

Acrymed, John Calhoun	Planar Systems, Inc, Steve Going	The Austin Company, Don Schjeldahl
Ava Roasteria, Amy Saberiyan	PM Industries, Chris Parks	Austin Consulting, Donald Paslowski
Axiom Electronics, Doug Robertson	Prolofiq, Jim Can Kerkhove	CBRE, John Rocca
Axiom Electronics, Robert Toppel	Reser’s Fine Foods Inc, Paul Leavy	Kate McEnroe Consulting, Kate McEnroe
AXIUM Software, Cathy Mills	Standard Bag Manufacturing Co, Ab Saidi	McCallum Sweeney Consulting, Jeannette Goldsmith
BiAmp Systems, Steve Metzger	Triax Metal Products Inc, Dave Profahl	The Relocation Center, Jan Dickinson
Cipher Systems, John Schlottmann	Triax Metal Products Inc, Jim Randle	The RSH Group, Jim Renzas
Columbia Sportswear, Peter Bragdon	Vernier Software & Technology, Dave Vernier	CRA Realty Trust, Alex MacLean
First Response Inc, David Foglio	Voxel Inc, George Williams	Macadam Forbes, Duncan Walker
Fulfillment Corp of America, Len Lardieri	XpanD, Boyd MacNaughton	Noriss Beggs & Simpson, Scott MacLean
IBM, Jay Memmott	Yakima, Jerry Heinlen	PS Business Parks, Casey Pileggi
IBM, Jayne Nanavaty-Dahl	Beaverton Area Chamber of Commerce, Lorraine Clarno	Specht Development Inc, Todd Sheaffer
Little Busy Bodies/Boogie Wipes, Molly Wright	Oregon Business Development Department, Chad Freeman	
Madden Industrial Craftsmen Inc, Ken Madden	Oregon Business Development Department, Bruce Laird	
Mercer Industries, Mike Fruzzetti		
Nike, John Coburn		

B. Questions

Interview questions revolved around investigation of Beaverton’s strengths and weaknesses from a business’ point of view. All interviews were conversational instead of a disciplined survey approach, in order to foster discovery of authentic issues instead of minor incidents. Confidentiality for the interviews encouraged candid responses that were very helpful in this analysis.

1. Internal

Local employers were asked to rank the top three things of most value to their business as a result of their Beaverton location. We also inquired for the top three issues that negatively affect their operations. Employers were asked how they would describe Beaverton to a colleague that trusts their opinion and to identify how Beaverton differentiates from other communities throughout the United States.

For companies that received incentives for locating their business in Beaverton, we pursued their opinion of the program(s) and ease of use of the incentive program(s) as due diligence for preparation of the economic development strategy to follow on to this target industry report.

2. External

For external contacts, we initially elicited top of mind awareness of Beaverton to understand a starting point for benchmarking Beaverton's marketing. This question was balanced with seeking their opinion of what distinctly differentiates Beaverton positively from the rest of the United States. We also asked their perceptions of leading assets and weaknesses or barriers to business for companies who locate in Beaverton.

All site selectors and real estate brokers were asked about local incentives for any projects they worked with to locate in Beaverton and none had experience with such incentives.

C. Findings

Following, internal and external interview results are presented and then synthesized for overall findings that were then taken into consideration for screening targets for a good match to Beaverton's business climate. Answers to all questions have been summarized in this report to illuminate key issues and leading assets that received the most consistent attention during the interviews.

1. Internal

Leading assets of value to local employers include:

- **Talent Pool:** Employers are privy to a broad and deep pool of high-quality and highly skilled workers with strong technical skills. Loyalty is exceptional, illustrated with low turnover. Due to Beaverton's location and access, employers are able to attract workers from all over the region. Wages for production and entry-level scientific occupations are significantly lower than technical markets of Seattle, San Francisco and other areas of California.
- **Quality of Life/Lifestyle:** Oregon's livability is top-notch. Most commutes are 30-45 minutes, yet less stressful with public transportation. In this ideal climate, there are many activities from coast to the mountains. Beaverton has a small-town feel with good schools. It's safe and clean. A competitive price point for an urban community.
- **Transportation:** Beaverton is very accessible through highways, public transportation (bus and light rail) and international air service. Light rail is leveraged as a positive part of the community.
- **City Government:** There is recognition that the new administration is tuned into business needs, being more cooperative and doing more outreach than other cities in the region. Considered a friendlier city than Seattle, Vancouver, or Portland. Well-managed city with approachable city staff and elected officials. Economic gardening is a commended program by those who have participated in the program.

- **Central location in Portland Metro Area:** Benefits of location are workforce draw, interaction with vendors, customers and resources throughout the region. Proximity to Portland for lifestyle and cultural amenities are of value.
- **Industry Clusters:** Local employers enjoy being located near business partners and customers, especially for technology companies. Outdoor equipment and apparel companies understand the value of the region’s industry presence.
- **Nike:** A leading global company, is Beaverton’s most-well known business.

Local employers are concerned about the following challenges and barriers to business:

- **State Not Business-friendly:** The main frustration is with recent tax increases through initiatives 66 and 67.
- **City Not Business-friendly:** the former mayor’s approach to annexation is still a lingering negative. Permit schedule is slow, although there is an expectation this will improve under the leadership of the new mayor. More critical is the expressed frustration of a heavy regulation approach instead of assistance through the development process. City considered bureaucratic. Perceived that other Oregon cities are more transparent and helpful.
- **Lack of City Outreach to Business:** Lacking city communication with business has led businesses to feel that the city does not appreciate business contributions to the city. Although the new mayor is supportive of business, there is concern for possible disconnect with city council.
- **Traffic Congestion:** Local employers would like to see the City of Beaverton become a significant player in regional solutions for transportation. Concerns about lack of arterial connections and desire for more public transportation stops closer to employment centers were shared. Freight movement is a limiting factor. Although there is one flight to Japan and one to Europe, international air service has limitations for global companies.
- **Lack of Identity:** Although Beaverton is a good business location, there is a desire for a more defined downtown, attractions and entertainment, especially for international customers who visit.

“We have multiple plants throughout the United States and Beaverton is the worst city to work with.”
 – Beaverton employer

2. External

Top of mind characteristics that are memorable to external contacts include:

- **Nike:** provides global recognition not just for the region, but also for Beaverton
- **Highly-educated workforce**
- **Beauty:** trees, green, entire location
- **Ambiguity:** Perception of region but nothing in specific about Beaverton

Note: Many site selectors commented on Beaverton’s assets and liabilities from the perception of the Portland region as a whole, not necessarily with first-hand knowledge of Beaverton.

External perceptions of Beaverton's strengths include:

- **Quality of Life/Lifestyle:** High amenity load for size of city. Considered a healthy community with an active lifestyle; great running trails. All of this contributes positively to the ability to recruit talent to the area. Younger generation of workers wants to live in Oregon.
- **Workforce:** Both for quality and availability, this is a recognized asset of Beaverton. Workers are highly-educated and accustomed to global business.
- **Good corporate neighbors:** cluster of high tech companies and networking among companies for innovation.
- **Smart Growth:** Contributes to better sites and business parks.
- **Lower business costs:** Compared to the West Coast, overall operating costs are lower in Oregon, especially energy costs.
- **Transportation:** Good public transportation infrastructure in region.
- **Asian Gateway:** Time zone benefits and shorter travel.
- **Green:** Portland is known for leading-edge sustainability. Strong state incentive programs for renewable energy. Recognized value that Oregonians have for the environment.
- **People:** Uniquely down to earth.

Site selectors and regional brokers share the following top challenges and barriers to operating a business in Beaverton:

- **Business-unfriendly:** Pacific Northwest not considered a favorable region of United States for business.
- **High cost of doing business:** Workforce and land more expensive. Unionization of manufacturing labor. Lack of competitive incentives at state and local levels.
- **Development Issues:** Limited sites. Planning process leads to potential lack of immediately available sites. Risky timeline for development schedule due to state's reputation for regulation.
- **Workforce Availability:** Portland is a small region dwarfed by Los Angeles, San Diego San Francisco and Seattle as West Coast major metropolitan markets. Is talent pool big enough to accommodate much business growth?
- **Transportation:** Limited commercial air service, especially direct flights. Minimal port activity in comparison to other West Coast ports (also an opportunity).
- **Economic Development Service:** Region not working together. Unsure who to contact with lead for region or Beaverton. Oregon, in general, places more emphasis on government's point of view than approach businesses with customer service for their needs to be met.

3. Gaps

In comparison of internal and external interview findings, there is, for the most part, a strong alignment of assets. This finding is notable and positive because Beaverton can build upon the perceived and real assets in marketing instead of creating awareness from scratch.

Gaps do exist in the fact that other than Nike, all other assets are also true for the Portland Region, as whole. There is a need to dig deeper into Beaverton's community personality to distinguish Beaverton as a desirable location in its own right. The Community Visioning Project is an opportunity to clarify Beaverton's unique differentiators.

Although many external perceptions are focused on government relations and an uncomplimentary approach to working with businesses, there is an opportunity for Beaverton to function differently than other Oregon communities and gain a reputation for business-oriented customer solutions (while abiding by all laws, of course). Suggested approaches will be included in the Economic Development Roadmap.

4. Opportune Message Concepts

The implementation plan, Economic Development Roadmap, will take the findings from the interviews and translate into marketing and outreach tactics. To summarize, unique message concepts that can be utilized in the implementation plan are:

- **Talent Pool** - extensive labor shed of skilled and highly-educated people, accessible through multi-modal transportation system.
- **Transportation** – especially leading-edge public transportation.
- **Livability** – as an essential factor in being a talent destination, even before workers have a job.
- **Sustainable and “green” culture** - embedded in business and government.
- **Nike¹** - symbolizes reputation for quality global company.

¹ Although not located within the Beaverton city limits, Nike is perceived to be located in Beaverton.

IV. Corporate Location Assessment

Led by Austin Consulting, a site location consulting firm who advises corporate clients on expansion and relocation projects, the Corporate Location Assessment is a thorough evaluation of Beaverton's assets and liabilities for attracting potential target industries.

A. Process

A formal Request for Information (RFI) was issued to Beaverton's Economic Development Department for a mock project. Beaverton economic development staff assembled and submitted a proposal based on the RFI, and, after review, Austin Consulting sent a follow-on RFI for a Site Visit, including requests for specific meetings and facilities to tour while visiting Beaverton for one day. For a full-day, Austin Consulting and Chabin consultants toured Beaverton, meeting with city officials, local employers, real estate professionals, workforce development and utility representatives. Several available buildings were toured and assessed for prospective users.

The approach for the Corporate Location Assessment identically resembles Austin Consulting's typical site selection process, except, in this case, (1) only one community is evaluated and (2) Beaverton actually receives feedback which typically is not shared during or after the site search process. This exercise enabled Beaverton to hear what a key target audience - professional site location consultant - thinks of the community. Additionally, the findings will be used in compatibility screening for identifying Beaverton's target industries.

The objective for the Corporate Location Assessment is to understand:

- How competitive is Beaverton for attracting business investment?
- What are Beaverton's assets and liabilities?
- What may constrain a certain industry from locating and growing in Beaverton?

Attractiveness of a business environment is determined by many factors as corporate executives decide where to expand or locate their business. Competitive communities who successfully influence their local economy are prepared and ready for investment before it happens. They rank very high for all of the components depicted in the following graphic. Findings of the Corporate Location Assessment touch on these basic company needs as well as emerging trends for site selection decisions, such as sustainability practices.

FIGURE 2: COMPETITIVE COMMUNITY FACTORS



B. Findings

Based on the proposal response, site visit and additional desktop research, the following is the formal assessment of Beaverton’s competitiveness.

A description of each factor, the assessment rating and comments are presented for educational purposes. Each project and company may rate Beaverton differently depending on their specific needs. This assessment is based on Austin Consulting’s experience working with over 600 site location projects throughout North America.

The rating scale spans from “Very Good, Good, Neutral, and Needs Some Improvement” down to “Needs Much Improvement.” Beaverton did not score below a “Neutral” rating.

TABLE 2 - LOCATION ASSESSMENT

Site Selection Factor	Description of Factor	Rating	Assessment
Community Reception	<p><i>Does the community demonstrate an understanding and support of the project?</i></p> <ul style="list-style-type: none"> ◆ Community knowledge ◆ Cooperative spirit among team members and all community entities 	Good	<ul style="list-style-type: none"> ◆ City of Beaverton was welcoming, prepared and organized ◆ Great welcome package and binder delivered to hotel upon arrival, including personal note cards from Mayor and hosts ◆ Mayor delivered a professional welcome greeting, including “Why Beaverton?” tailored to business ◆ Excellent community overview of history, visioning statement and program, livability and lifestyle ◆ Recommendation for higher rating: <ul style="list-style-type: none"> ▪ Lack off <i>regional overview</i> to illustrate where Beaverton fits in the region, transportation resources for commuters and labor draw from neighboring communities, and relevant assets of the region that contribute to Beaverton’s business case
Available Real Estate (Buildings and Sites for Development)	<p><i>Does the community have available buildings or sites that are “ready to go”?</i></p> <ul style="list-style-type: none"> ◆ Cost – land/buildings and development ◆ Size, dimensions ◆ Infrastructure – utilities and roads in place ◆ Topography, soils ◆ Zoning/setting ◆ Ingress/egress 	Good	<ul style="list-style-type: none"> ◆ Existing available space is diverse: <ul style="list-style-type: none"> ▪ Mix of office, flex, and some light industrial ▪ Diverse – Class A and B ▪ Turnkey opportunities ◆ Limited Greenfield sites for development ◆ Reasonable and negotiable lease rates and terms ◆ Quality business park setting – planning requirements of 15% set aside for green space adds to visually appealing developments ◆ Tenant mix throughout office/business parks ◆ Abundant amenities for employees – child care, fitness centers, restaurants in business parks or nearby to business centers

Site Selection Factor	Description of Factor	Rating	Assessment
			<ul style="list-style-type: none"> ◆ Available buildings and sites have good access to commuter trains/bus stops and highways making them accessible to draw employees from throughout the region
<p>Workforce</p>	<p><i>Does the community have a labor pool in place that is trained, cost effective and available?</i></p> <ul style="list-style-type: none"> ◆ Availability – not just high unemployment; relevant talent and skills present in labor pool ◆ Competitive costs to recruit the desired labor ◆ Work ethic ◆ Training resources ◆ Recruiting service available 	<p>Very Good</p>	<ul style="list-style-type: none"> ◆ Beaverton is a workforce destination and appears to be the center of the Portland region for attracting high tech workers. ◆ The region’s livability attracts many talented workers who come to the area without a job because they want to live here and expect to find a job due to the concentration of companies in Beaverton/Portland region. ◆ Highway access and commuter light rail with integrated bus service allow for commuting from across the region. ◆ Labor comments from company interviews were positive: <ul style="list-style-type: none"> ▪ Good local labor market for desired higher skilled professionals in technology and software development, as well as skills in managerial, customer services, inside sales ▪ No reports of difficulty finding certain types of workers, skills levels ▪ Applicant to opening ratio high (many applicants received for any publicized open position) – this proves available talent and an opportunity for new and expanding businesses ▪ Diversity a plus ◆ Workforce collaboration with Portland Community College, WorkSource Oregon, CLIMB Center and Worksystems Inc an asset for Beaverton <ul style="list-style-type: none"> ▪ Apparent good connection with local and regional businesses, meeting training needs through programs aligned and responsive to industry needs ▪ PCC offers broad course catalogue in technology-related field (80 different tracks) with industry certification in numerous software applications ▪ As a group, workforce professional made a case for “Why Beaverton” is a good fit for the industry and mock project ▪ ‘Best of Class’ presentation demonstrated teamwork and experience working with relevant businesses ◆ Recommendation for higher rating:

Site Selection Factor	Description of Factor	Rating	Assessment
			<ul style="list-style-type: none"> ▪ Labor shed maps by occupation or skill level and corresponding wage levels to illustrate labor shed. ▪ Enhance collaboration between City of Beaverton and workforce partners in reaching out to local employers (part of business retention program)
Utilities/Infrastructure	<p><i>Are all utility services in place and able to support new operations?</i></p> <ul style="list-style-type: none"> ♦ Cost for usage rates and hookup fees ♦ Infrastructure cost ♦ System capacity ♦ Service size ♦ Quality/Reliability ♦ Service provider reputation 	<p>Good</p>	<p>Electric:</p> <ul style="list-style-type: none"> ♦ PGE representative provided overview of company at meeting ♦ Adequate capacity and no issues with servicing the area ♦ High reliability, in fact highest in business satisfaction ♦ PGE has a diverse renewable energy portfolio ♦ PGE offers businesses services related to renewable energy to help companies become more “green”, reduce costs and use in marketing and sales efforts ♦ A sample bill, provided on site visit, demonstrated reasonable energy costs ♦ Recommendations for higher rating: <ul style="list-style-type: none"> ▪ Provide substation service information in writing ▪ Maps of service lines and substations serving proposed properties <p>Water & Sewer:</p> <ul style="list-style-type: none"> ♦ Senior Engineer from Beaverton Public Works Department provided cost and service information in writing. ♦ No connection fees for existing building; fees only apply to new construction. The level of connection fees may be a deterrent to new investment and will depend on type of water/sewer user. ♦ Flood plain maps provided. <p>Telecommunications:</p> <ul style="list-style-type: none"> ♦ Multiple telecom service providers in Beaverton market - Met with Integra and Comcast during site visit. Both companies provided comprehensive overview of their companies, services and specific capabilities for each subject property in the mock project scenario. ♦ Service reliability and redundancy good

Site Selection Factor	Description of Factor	Rating	Assessment
			<ul style="list-style-type: none"> ◆ Maps of telecom lines serving properties provided from one company – need from all companies to be more competitive. <p>Natural Gas:</p> <ul style="list-style-type: none"> ◆ Natural gas was not a requirement for the mock project; Natural gas is not typically a major cost component for office users but may be a factor for R&D operations. ◆ Rates for natural gas in the Portland region are mid-range compared to other areas across the United States.
<p>Transportation</p>	<p><i>Is the Community accessible for business and resident</i></p> <ul style="list-style-type: none"> ◆ Highways/Interstates ◆ Local roads ◆ Air service ◆ Courier services 	<p>Good</p>	<ul style="list-style-type: none"> ◆ Good highway infrastructure serving the city and region ◆ Heard from local employers about traffic congestion but did not experience any during site visit. ◆ Local roads in good condition ◆ Landscaping and appropriate buffers make community appealing. ◆ Observed some local traffic issues with stoplight synchronization, especially where some city and county roads meet. ◆ Good airport access via Portland International Airport, with direct flights to major markets and some international flights – plus airport accessible via light rail ◆ Excellent public transportation system that is promoted and used ◆ Accessible community for pedestrians and cyclists. Observed quality sidewalks and bike paths throughout community
<p>Community Appearance</p>	<p><i>Does the community appearance reflect pride and unity within the community?</i></p> <ul style="list-style-type: none"> ◆ Downtown district ◆ Government offices ◆ Streetscape ◆ Parks ◆ Schools ◆ Housing 	<p>Very Good</p>	<ul style="list-style-type: none"> ◆ Attractive community spaces and public facilities ◆ Streets and sidewalks in good condition ◆ Landscaping adds to appeal ◆ Clean, “green” ◆ “Old town”/downtown has character with opportunity to develop into city center for community ◆ City Hall more than a government building making it more like a Community Center. This approach creates a more accessible city government.

Site Selection Factor	Description of Factor	Rating	Assessment
			<ul style="list-style-type: none"> ◆ Diverse residential areas with well-kept homes and quality multi-family dwellings ◆ Beautiful parks and recreation areas - Tualatin Hills Parks & Recreation Center is award winning. ◆ Mix of new retail with pockets of revitalization ◆ Attractive buildings and developments
Community Stability	<p><i>Does the community support new development now and is the community planning for the future?</i></p> <ul style="list-style-type: none"> ◆ Population ◆ Industrial history and mix ◆ Government support for growth ◆ Public opinion – do people want to grow? ◆ Retention program – retaining current businesses 	<p>Good</p>	<ul style="list-style-type: none"> ◆ Community Visioning process is actively engaging citizens to form the future vision of Beaverton ◆ Community goals to (1) build community, (2) develop a vibrant downtown, (3) enhance livability, (4) provide quality city services, (5) improve mobility ◆ Young population, with average age 35 years old ◆ Population is growing, projected for 110,000 residents by 2020 ◆ People are moving in, especially young professionals and recent college graduates ◆ Local business culture is energetic, creative, tech savvy and indicative of the next generation of business ◆ Mix of industry, including software, technology, finance, apparel design and marketing ◆ New leadership is moving community forward into the future with focus on business attraction and retention, i.e. Mayor’s 10 Point Plan for 2010
Permitting Schedule	<p><i>Does the community promote fast-track development?</i></p> <ul style="list-style-type: none"> ◆ Permitting and approval process ◆ Green building standards in place 	<p>Neutral</p>	<ul style="list-style-type: none"> ◆ Met with building official from City of Beaverton during site visit. Comprehensive packet of information provided ◆ Stated goal of City is to help businesses start operations right away. ◆ No mention of pre-development meeting to help expedite process ◆ No mention of “green” friendly business codes ◆ Unsure of connection and continuity between building and economic development departments at city ◆ Recommendations for higher rating: <ul style="list-style-type: none"> ▪ Provide recent example and timeline of project through process ▪ Develop and provide client with sample pro

Site Selection Factor	Description of Factor	Rating	Assessment
			<p>forma for new versus existing development to better illustrate fee structure</p>
<p>Sustainability</p>	<p><i>How “Green” is the community?</i></p> <ul style="list-style-type: none"> ◆ Community promotes green concepts, permitting and other initiatives ◆ Local energy efficiency programs, recycling and reuse programs ◆ Community/residents embrace “green” culture 	<p>Good</p>	<ul style="list-style-type: none"> ◆ There is a local culture for sustainable and “green” practices. Portland metro has a reputation for this outside of the region. ◆ Despite reputation, discovered no preferences given to green developments to encourage more green developments or existing building retrofits ◆ Unsure if Beaverton is renewable energy “friendly” for installation permit approvals. ◆ Anecdotally discovered some LEED and/or Energy Star certified properties, but no data available from City ◆ Unsure how Beaverton is reaching out to local businesses to help them become more energy efficient or their buildings certified ◆ City recycling programs – need to further document
			<ul style="list-style-type: none"> ◆ Although green practices may be standard, don’t take for granted – it’s a selling point, especially when competing with communities outside the region
<p>Community Support</p>	<p><i>Does the community demonstrate support for the project?</i></p> <ul style="list-style-type: none"> ◆ Local official involvement ◆ Retention program – shoes commitment to support company once they locate in Beaverton ◆ Incentives 	<p>Good</p>	<ul style="list-style-type: none"> ◆ Economic Gardening is a terrific program and resource for some companies. ◆ Unsure about other resources or outreach provided to local businesses formally ◆ Employers indicated hope for good business-city relationship with new administration ◆ Economic development efforts in infancy stages – businesses need to become more connected to City through economic development ◆ Mayor mentioned some local incentives, such as fast permitting processes, fee discounts, tax abatements ◆ Recommendations for higher rating: <ul style="list-style-type: none"> ▪ Regarding incentives, provide prospect with a summary of programs and other incentives (cash and non-cash) ▪ Case studies of success stories, including incentives and other services to win projects

Site Selection Factor	Description of Factor	Rating	Assessment
Intangibles	<p><i>Does the community present itself well through intangible methods during the visit?</i></p> <ul style="list-style-type: none"> ◆ Meeting flow and organization ◆ Weather and creativity – “The Wacky Factor” – can’t control, but how is it combated if bad? ◆ Personal touch 	Good	<ul style="list-style-type: none"> ◆ Staff extremely friendly and welcoming ◆ Nice welcoming bag with local fare and personal hand-written note from Mayor ◆ Quality local restaurants selected for lunch and dinner ◆ Comfortable tour vehicle – 4-doors with plenty of room ◆ Community tour should be expanded to help prospect see all areas of town, if time allows, instead of back-tracking routes ◆ Umbrellas were provided in case of rain showers

V. Identifying Opportunities for Beaverton

In this section, we will utilize the information gleaned from the Historic Industry Trends, Business Climate Interviews and Corporate Location Assessment to identify the most promising industries for Beaverton to target for recruitment. The screens that lead to the recommended industry targets are a combination of quantitative and qualitative analysis based on secondary and primary research.

A. Initial Screen

The initial screen of basic industries provides a universe of potential industries that additional screens can further refine. Guidelines for prioritizing potential industries include:

- 10% or more growth from 2001 to 2008;
- Positive projected output and employment growth;
- Manufacturing capacity utilization of 60% or higher;
- Generally pay average wages above \$40,000; and
- Currently employ 100 or more workers in the metro area.

This screen was applied to all industries in the Portland MSA. The results of this screening process was organized by industry cluster to group interdependent industries together, including primary producers with related suppliers and other support industries. Clusters that have an established presence in the greater Portland Region, even if they are not currently in Beaverton, are important potential targets because there are known talent and support services already in place.

In Figure 3, below, you will find the industries and corresponding NAICS codes that resulted from the initial screen. The comprehensive data used for the screening can be found in Appendix D.

FIGURE 3: INITIAL SCREEN OF BASIC INDUSTRIES BASED ON SECONDARY DATA

NAICS	Description
Food Processing	
311920	Coffee and tea manufacturing
311999	All other miscellaneous food manufacturing
Scientific and Medical Instruments	
325414	Other biological product manufacturing
339113	Surgical appliance and supplies manufacturing
339114	Dental equipment and supplies manufacturing
621511	Medical laboratories
621991	Blood and organ banks
Research and Development	
541380	Testing laboratories
541712	Physical and engineering research
541420	Industrial design services
Software and Information Services	
425110	Business to Business Electronic Markets
518210	Data processing and related services
519130	Internet Publishing, Broadcasting, Web Portals
541512	Computer systems design services
511210	Software publishers
Finance and Insurance	
523930	Investment advice
524291	Claims adjusting

B. Compatibility Screening

Screens based on secondary data, while important, are only one part of the target industry analysis. Historic trends do not take into account the real-time tangible assets and limiting factors to development or business operations. Learning from the interviews and on-site observations of Beaverton’s competitiveness factors, the list of initially screened industries was further edited to match industry needs with Beaverton’s capabilities.

1. Food Processing

The food processing cluster was eliminated due to limited availability of quality industrial buildings of any significant size, lack of ready-to-go sites for development in appropriate zoning locations that are also close to key highway interchanges. Additionally, transportation infrastructure for multiple freight trucks to and from a production facility in Beaverton will experience local traffic congestion. Other communities in the region are more competitive for food processing so it is not a good investment of Beaverton’s resources to pursue.

2. Finance and Insurance

Although substantial growth has occurred in Claims Adjusting and Investment Advice industries within the Portland Metro area, these industries are composed of numerous small offices, which may or may not be independent in nature. As a result, this cluster should be removed since it is difficult to target these industries effectively. Beaverton's lifestyle and sense of community will provide a draw and appeal to these professional firms, regardless of economic development marketing and attraction efforts.

3. Additions

With our primary assessment of Beaverton's assets, several industries were added to the Initial Screen. The Scientific and Medical Instruments Cluster was expanded to include Electromedical Apparatus Manufacturing; Search, Detection and Navigation Instruments; Automatic Environmental Control Manufacturing; and Industrial Process Variable Instruments. Some of these specific industries do not have 100 employees currently in the metro area and/or have slight negative employment growth despite having higher output growth, which is a sign of innovation. The additional industry subsectors to the Scientific and Medical Instruments Cluster broadens opportunities that will fit well in Beaverton, matching talent capabilities. All industries but Dental Equipment and Supplies Manufacturing have high location quotients for Washington County.

Electrical Equipment was added as a new cluster, although closely related to scientific instruments. Originally eliminated in the initial screen due to lower manufacturing capacity utilization, at 51-59% just below the 60% cut, and projected low national employment and output growth, our observations of local assets indicate these to be viable targets for Beaverton. In the next section, we will make a case for how these industries also align to emerging targets in renewable energy.

C. Niche and Emerging Industry Sectors

The following additions as recommended target industries are based on primary research and assessment of Beaverton as well as current experience in site selection that indicates emerging industry trends.

1. Sporting Goods and Apparel

Clearly, from the Business Climate Interviews, there is recognition of the exceptional fit for outdoor apparel and sporting goods in Oregon, especially the Portland Region. Nike is an icon not only for the Portland Region but specifically for Beaverton. Companies are locating in the Portland Region to tap into the specialized labor pool for design, development and marketing talent unique to this field. The climate and terrain is ideal for year-round product testing. Companies desire to be in the middle of this outdoor sports Mecca, recognized worldwide for high-caliber, innovative.

2. Renewable Energy and Smart Grid

There are many niche opportunities within the emerging Renewable Energy and Smart Grid arena. To be competitive, however, communities and regions need to be globally competitive including modern industrial infrastructure, an educated and eager workforce, research and technology support activities, competitive tax structure, quality of life to support attraction of talent, and reasonable operating costs.

Located in the center of Oregon's high tech "Silicon Forest" and an area that draws the best technical skills in the region, Beaverton is well positioned for this opportunity. Companies working in renewable energy want to operate in a community that values sustainability, especially for energy development and distribution. Oregon is a primed market for distributive energy installations and well represented in the push to deploy commercial and residential solar. Oregon has had some of the best incentive programs available in the United States for end users and manufacturers in this industry cluster.

There are some limiting factors in Beaverton that affect potential target industries, including limited manufacturing space. Yet, research and development space, both in laboratory and flex tech space, are abundant and of high quality.

Due to these advantages and constraints, appropriate targets of the renewable energy value chain for Beaverton include:

- **Solar**
 - **R&D and Technical Support** – often these are small operations of 5 to 30 people, highly trained, high wages, in newer and clean spec office/light industrial space. Wet labs and special air handling requirements are not uncommon.
 - **Component Manufacturing** – covers the spectrum from small to large, multi-product/industry oriented (like a job shop) or solar industry focused. For instance, technical machine shops, plastic molding, and metal fabrication, which may not, on the surface, appear to be related to renewable energy. Range of employment could be 5 to 200 and investments range from a few million to 30 million. These companies seek smaller spec industrial space, existing freestanding industrial buildings up to 100,000 sf, or Greenfield sites (2 to 10 acres). For Beaverton, highly specialized small production operations, typically less than 10,000 units, should be the focus.
 - **Smart Grid/Buildings Market Growth** – The efficient distribution and use of electricity is critical to capturing the full benefits of renewable energy. Research into the challenges and opportunities of smart grid and smart building technologies are a common activity within the Portland region. A growing number of companies are producing products and developing services for the Smart Grid market. In addition, power authorities throughout the region, like Portland General Electric are implementing projects – from smart meters to new transmission lines – designed to use less power and incorporate the coming wave of distributed power generation from renewables.

E. Recommended Target Industries for Beaverton Oregon

All of the previous analysis distills down to the final recommendation of targets for Beaverton. The following table presents an overview of why these proposed industry clusters are assuredly recommended as a fit for Beaverton.

FIGURE 4: BEAVERTON'S INDUSTRY TARGETS

INDUSTRY TARGET RECOMMENDATIONS FOR BEAVERTON

Target Cluster	Historic Growth in Portland 2001 to 2008	Number of Establishments in Metro Portland	Number of Establishments in Washington County	Strong Regional Presence ³	Projected Employment Growth ¹	Projected Output Growth ¹	High Wages ²	Diversify Local Economy	Washington County Location Quotient ⁴
Research & Development	2011%	250	83	++	2.29%	4.62%	+++	+	+
Software & Information Services	20%	275	80	+++	3.31%	8.04%	+++	--	+
Scientific & Medical Instruments	129%	23	11	+++	0.62%	4.74%	++	+	++
Electrical Equipment	47%	20	8	+	-1.29%	0.92%	++	+	+++
Sporting Goods & Apparel	44%	39	11	+++	-3.04%	-0.34%	+	+	+++

¹ Based on national projections by industry

² Average local wage above \$75,000 = +++, \$50,000 to \$75,000 = ++, \$35,000 to \$50,000 = +.

³ Over 5,000 employees in Metro Portland = +++, over 2,500 employees = ++, 1,000 to 2,500 = +.

⁴ Location Quotient (Washington County relative to the Portland Metro Area) 1 to 1.5 = +, 1.5 to 2.0 = ++, greater than 2.0 = +++

More extensive detail of each industry cluster and target subsectors is provided in Appendix E.

You will notice that there is no specific cluster for renewable energy. This is intentional as the specific industry opportunities of the renewable energy value chain, manifest across various industry clusters. There is representation in Research and Development; Scientific and Medical Instruments; and Electrical Equipment clusters.

Keep in mind that although these are target industries, Beaverton may still want to respond to inquires from companies not within these target industries. Consider these recommendations for proactive marketing. We suggest that you share the list target industries, and corresponding industry intelligences with Oregon Business Development Department staff so that they may better understand the best-fit industries for Beaverton.

VI. Industry Intelligence

Now that you know the target industries for Beaverton, it will be important to gain insights on each cluster to customize marketing to these industries in an informed and professional way. Each cluster has different drivers for site location and expansion.

The following topics are presented in this section, with more in-depth resources available in the appendix:

- Typical Company Pro Formas
- Industry Importance Factors
- Industry Occupations
- Workforce Training Program Alignment
- Source Geographies
- Additional industry profiles from First Research in the appendices

A. Typical Company Pro Formas

For each target industry cluster the following table presents an overview of a typical company's operation based on employment, facility square feet, building type, capital investment and average wages. These pro formas have been developed in the context of establishments by employment size in the United States. The context data has been included along with the sample pro formas in Appendix F.

FIGURE 5: TARGET INDUSTRY PRO-FORMAS

TARGET INDUSTRY PRO-FORMAS

	Average Employment Level	Average Wage*	Square Footage**	Building Type	Avg Capital Investment**
Scientific & Medical Instruments	70	\$67,941	32,510	Light Mfg Light	\$6,158,643
Research & Development	32	\$85,298	14,935	Mfg/Lab	\$1,942,598
Software & Information Services	17	\$87,208	5,136	Office	\$2,802,340
Electrical Equipment	63	\$55,210	31,479	Light Mfg	\$6,736,053
Sporting Equipment & Clothing Design	25	\$33,700	7,457	Office	\$2,513,943

Source: IMPLAN ES202 Data for 2008; 2007 Economic Census; IRS Statistics of Income, Returns of Active Corporations, 2007.

*Average wage for Washington County

**Based on average firm size for the U.S. as shown.

B. Industry Importance Factors

Every industry has different drivers for their site search. To better understand the differences, a list of priority location factors detailing which factors are most important to each target cluster are found in Appendix G. You will use this information to customize marketing and prospect proposals, showing how Beaverton competitively meets their specific needs.

The following table illuminates factors for site selection of high priority.

TABLE 3 - SITE SELECTION HIGH PRIORITIES

Electrical Equipment	Research & Development	Scientific & Medical Instruments
<ul style="list-style-type: none"> ◆ Cost of transportation services ◆ Energy dependability ◆ Access to intermediate manufacturing products ◆ Operators and assemblers ◆ Effective cost of skilled labor ◆ Effective cost of unskilled labor ◆ Reliability of workforce ◆ Reasonable built space cost ◆ Workers compensation costs ◆ Unemployment insurance costs 	<ul style="list-style-type: none"> ◆ Geographic proximity to industry concentrations ◆ Air transportation ◆ Energy dependability ◆ Professional specialty in workforce ◆ Technical workforce ◆ Reasonable built space cost ◆ Quality of higher education 	<ul style="list-style-type: none"> ◆ Energy dependability ◆ Access to intermediate manufacturing products ◆ Technical workforce ◆ Precision production and repair workers ◆ Operators and assemblers ◆ Effective cost of skilled labor ◆ Effective cost of unskilled labor ◆ Reliability of workforce ◆ Financial capital: debt and venture
Software & Information Services	Sporting Equipment & Apparel	
<ul style="list-style-type: none"> ◆ Telecommunication services ◆ Energy dependability ◆ Technical workforce ◆ Built space availability ◆ Financial capital: debt ◆ Quality of secondary education ◆ Quality of higher education ◆ Personal/property security ◆ Climate/physical environment ◆ Recreation/cultural opportunities ◆ Area image 	<ul style="list-style-type: none"> ◆ Geographic proximity to markets ◆ Executive, administrative and managerial workforce ◆ Professional specialty in workforce ◆ Technical workforce ◆ Built space availability ◆ Built space costs ◆ Climate/physical environment ◆ Recreation/cultural opportunities ◆ Area image 	

C. Industry Occupations

The distribution of occupations has been sourced from the Bureau of Labor Statistics, Industry to Occupation Matrix. When preparing proposals and marketing materials, you will know which occupations are most important to each industry. This occupational demand data should be shared with Portland Community

College, WorkSource Oregon, CLIMB Center and Worksystems Inc. for development of training programs and documentation of relevant workforce strengths.

A list for each target industry cluster is presented in Appendix H.

D. Workforce Training Program Alignment

Access to industry-specific training programs for Beaverton employees and job seekers is quite vast compared to other U.S. communities. Portland Community College (PCC), Oregon Institute of Technology (OIT) and the CLIMB Center of Advancement are assets to Beaverton’s existing businesses as well as a key tool in business recruitment. PCC has industry professionals involved on advisory committees for development of curriculum to ensure it stays current with industry needs for skill development.

Oregon State University, University of Oregon, Portland State University and Oregon Health and Science University programs are of great value but not listed here because such higher-learning institutions are not associated with training programs. Certainly, numerous programs at these universities may apply to Beaverton’s target industries. Research conducted at these institutions should be accounted for in Beaverton’s business case.

TABLE 4 - TARGET INDUSTRY CLUSTERS & RELEVANT DEGREES & CERTIFICATES

Target Industry Cluster	Degrees & Certificates ²
Electrical Equipment	<ul style="list-style-type: none"> ◆ B.S. Renewable Energy Engineering (OIT) ◆ B.S. Electronics Engineering Technology (OIT) ◆ Associate of Applied Science in Electronics Engineering <ul style="list-style-type: none"> ▪ EET Option: Renewable Energy Systems ▪ EET Option: Mechatronics/Automation/Robotics Engineering Technology ◆ One-year Certificate in Electronics Engineering Technology ◆ One-year Certification in EET: Renewable Energy Systems ◆ Associate of Applied Science Degree in Microelectronics ◆ Associate of Applied Science Degree in Solar Voltaic Technology ◆ Certificate of Completion in Solar Voltaic Technology
Research & Development	<ul style="list-style-type: none"> ◆ M.S. Manufacturing Engineering Technology (OIT) ◆ B.S. Manufacturing Engineering Technology (OIT) ◆ B.S. Mechanical Engineering Technology (OIT) ◆ B.S. Electronics Engineering Technology (OIT) ◆ B.S. Renewable Energy Engineering (OIT) ◆ Associate of Applied Science Degree <ul style="list-style-type: none"> ▪ Machine Manufacturing Technology ▪ Mechanical Engineering Technology ▪ Mechanical Engineering Technology: Green Technology and Sustainability ▪ Automated Manufacturing Technology

² Portland Community College unless otherwise indicated.

Target Industry Cluster	Degrees & Certificates ²
	<ul style="list-style-type: none"> ◆ Two-year Certificate for Mechanical Engineering Technology
Scientific & Medical Instruments	<ul style="list-style-type: none"> ◆ B.S. Software Engineering Technology (OIT) ◆ Associate of Applied Science Degree ◆ Two year Certificate in Dental Laboratory Technology ◆ Associate of Applied Science in Machine Manufacturing Technology ◆ CNC Tuning certificate ◆ CNC Milling certificate ◆ Machine Manufacturing certificate
Software & Information Services	<ul style="list-style-type: none"> ◆ B.S. Software Engineering Technology (OIT) ◆ Associate of Applied Science: Computer Information Systems Degree <ul style="list-style-type: none"> ▪ Network administration degree option ◆ One-year certificate : Computer Information Systems ◆ One-year Certificate: Computer Information Systems E-Commerce <ul style="list-style-type: none"> ▪ Design and Development Concentration ▪ Administration Concentration ◆ Less than One-year certificate: Career Pathways: <ul style="list-style-type: none"> ▪ Application Development ▪ Database Career ▪ Network Administration ▪ Network Security ◆ Certifications offered in Cisco, Microsoft, Oracle, and CompTIA
Sporting Equipment & Apparel	<ul style="list-style-type: none"> ◆ Program Award in International Business ◆ Business Administration

Sources: www.pcu.edu, www.pcc.edu/business, and www.oit.edu

Program descriptions are presented in Appendix I.

Of all the target industries, the Sporting Equipment and Apparel Cluster has less training programs. However, most of the relevant occupations for this cluster will be filled with college graduates that may supplement with local training programs. Clothing design and marketing are uncommon for community colleges and mainly pursued at the college or university level. Due to the fact that Beaverton is a workforce destination for the creative class, most of this talent will come from outside the area, if not already in Beaverton instead of heavy reliance on training.

E. Source Geographies

The listing of geographies that have a major presence of each industry cluster has been researched. With this information, you will be able to target your external marketing efforts for each industry cluster in specific areas.

Following is a list of top source geographies for each target cluster. The complete list geographies for every target industry is presented in Appendix J.

TABLE 5 - TARGET INDUSTRY CLUSTERS & RELEVANT SOURCE GEOGRAPHIES

Target Industry Cluster	Top Five Source Geographies ³
Electrical Equipment	<ul style="list-style-type: none"> ◆ Los Angeles-Long Beach, CA ◆ Chicago, IL ◆ Atlanta, GA ◆ Houston, TX ◆ Orange County, CA
Research & Development	<ul style="list-style-type: none"> ◆ Washington, DC-MD-VA-WV ◆ Los Angeles-Long Beach, CA ◆ Boston, MA-NH ◆ New York, NY ◆ San Diego, CA
Scientific & Medical Instruments	<ul style="list-style-type: none"> ◆ Los Angeles-Long Beach, CA ◆ Chicago, IL ◆ Orange County, CA ◆ Washington, DC-MD-VA-WV ◆ Philadelphia, PA-NJ
Software & Information Services	<ul style="list-style-type: none"> ◆ Washington, DC-MD-VA-WV ◆ Los Angeles-Long Beach, CA ◆ Chicago, IL ◆ New York, NY ◆ Atlanta, GA
Sporting Equipment & Apparel	<ul style="list-style-type: none"> ◆ Los Angeles-Long Beach, CA ◆ New York, NY ◆ Orange County, CA ◆ San Diego, CA ◆ Chicago, IL

F. Industry Profiles

In Appendix K, you will find several industry profiles covering subsectors and general industry clusters representative of Beaverton’s target industries. The information has been researched and assembled by First Research (www.firstresearch.com). First Research, the leading provider of market analysis tools, synthesizes hundreds of sources in an easy to read format that help sales and marketing teams perform faster and smarter, to ultimately open doors and close more deals.

Each report covers:

³ Metropolitan Statistical Area based on highest number of firms in target industry.

- Industry Overview – competitive landscape, product operations and technology, sales and marketing, finance and regulations, regional and international issues, human resources, employment growth, earning and wages
- Recent Developments – industry indicators, monthly news, quarterly industry update
- Business Challenges – critical issues
- Trends and Opportunities – business and trends, industry opportunities
- Executive Insight for CEO, CFO, CIO, HR, VP Sales/Marketing
- Call Preparation Questions
- Financial Information
- Industry Forecast
- Web Links & Acronyms

Regular updates are available and recommended for Beaverton to stay on top of industry trends and indicators. In the Economic Development Roadmap there will be specific tactics for maintaining industry research.

APPENDIX

1. PORTLAND HISTORICAL INDUSTRY TRENDS
2. NATIONAL HIGH GROWTH INDUSTRIES
3. BASIC INDUSTRIES IN WASHINGTON COUNTY WITH HIGH LOCATION QUOTIENTS
4. INITIAL SCREENING OF BASIC INDUSTRIES BASED ON SECONDARY DATA
5. RECOMMENDED INDUSTRY TARGETS BASED ON SECONDARY DATA
6. TARGET INDUSTRY PROFORMAS
7. INDUSTRY IMPORTANCE FACTORS
8. OCCUPATIONAL NEEDS
9. TRAINING PROGRAMS
10. SOURCES AREAS BY TOTAL EMPLOYMENT
11. INDUSTRY PROFILES



2515 Ceanothus Suite 100
Chico, CA 95973
Phone: 530-345-0364 | Fax: 530-345-6417
www.chabinconcepts.com



11209 N. Tatum Blvd, Ste 225
Phoenix, AZ 85028
Phone: (602) 765-2400 | Fax (602) 765-2407
www.applieconomics.net