

# PDC

## PORTLAND DEVELOPMENT COMMISSION

**DATE:** November 9, 2011  
**TO:** Board of Commissioners  
**FROM:** Patrick Quinton, Executive Director  
**SUBJECT:** Report Number 11-73  
Update on the Entrepreneurship Strategy

### EXECUTIVE SUMMARY

#### BOARD ACTION REQUESTED

None – information only.

#### SUMMARY

Supporting entrepreneurship has been identified by the Portland Development Commission (PDC) and the City of Portland (City) as a priority to support job creation, innovation, and competitiveness. In the City's Economic Development Strategy, "entrepreneurship" is identified as a key objective of the Neighborhood Business Vitality and target industry cluster strategies, as well in specific neighborhood and central city projects. In 2010, PDC sought to define and clarify the role of entrepreneurship as an economic driver in Portland through the development of the State of Entrepreneurship Report (see Attachment A).

Most recently, PDC's Leadership Team explicitly identified Innovation & Entrepreneurship as a key outcome to achieve in PDC's revised 2010 – 2014 Strategic Plan, which will be going to the Board for review in early December.

At the Board meeting, staff will provide information on the impact of entrepreneurship on Portland's economy, summarize key findings from the State of Entrepreneurship Report, highlight recent entrepreneurship events and outline PDC's entrepreneurship action plan and scorecard.

### BACKGROUND

Entrepreneurship is one component of PDC's small business development activities. PDC's entrepreneurial efforts are cross-industry, focused on fast-growing traded sector firms – the type that typically utilize advanced technologies and are attracted to investment capital. Through the City's target cluster strategy, PDC interfaces with entrepreneurs and has the ability to document ongoing needs and opportunities for collaboration.

Entrepreneurship drives job growth and economic vitality. Portland's prosperity depends on developing the small, scalable, entrepreneurial firms that create jobs and economic opportunity. Recent studies have shown that most new jobs are created by a subset of small, young, and

fast-growing firms. The State of Entrepreneurship Report (Report) reinforces that these trends apply to Portland. The Report and action plan identified Portland's strengths and weaknesses in supporting entrepreneurship and calls for strategic investments and activities to further Portland's competitiveness as an entrepreneurial center. See Attachment A.

The Report also includes a "scorecard" to measure Portland's entrepreneurial health annually.

#### Key Findings from the State of Entrepreneurship Report:

1. The Portland economy has a disproportionate share of small businesses;
2. Most new jobs are created from young, small, and fast growing firms;
3. Fortune 500 firms result from entrepreneurship and locally-grown companies;
4. Immigrants and minorities help drive entrepreneurial activity and help drive the creation of high-tech businesses;
5. Real estate that is affordable and encourages collaboration is important for firm development;
6. Portland lags in access to venture capital;
7. Venture capital is not a primary driver of regional job growth, but important to certain high-growth sectors and an indicator of entrepreneurial health;
8. Portland lags top innovative regions in university research and commercialization activity;
9. Tax policy affects investment activity and entrepreneurial ecosystem; and
10. Portland lags in ability to scale startups due to lack of executive talent and targeted mentoring.

#### Strategy for Entrepreneurial Support

The objective of PDC's entrepreneurship strategy is to support jobs, accelerate the creation of new products/services, and enhance the success rate of technologically-advanced and innovation-led industries and firms.

#### Objectives for Entrepreneurial Support

1. Work to create a cohesive, concentrated system to support scalable startup business in Portland;
2. Attract outside investment, increase local access to capital and retain businesses in Portland by creating a more favorable investment environment;
3. Create a culture of entrepreneurship and collaboration around technology commercialization and university-based startups in the Portland by partnering with Oregon universities and research centers; and
4. Monitor the health of Portland's entrepreneurial economy through the publication of an annual scorecard and interaction with the local entrepreneurial community.

#### Recent Activities to Support Portland's Entrepreneurs: Entrepreneurship 1.0

- Sponsored Oregon Entrepreneurs Network, Angel Oregon, and Venture NW (\$15,000);
- Lead investment and creation of the Portland Seed Fund (\$540,000);
- Sponsored Pivotal Leaders, which identifies clean technology business leaders (\$15,000);

- Supported Portland 10, an intensive boot camp for Portland start-ups (\$35,000); and
- Made a \$1,500,000 investment in the PSU wet lab, a start-up facility for life science firms that opened in the fall of 2010.

Current/Planned Activities to Support Portland's Entrepreneurs: Entrepreneurship 2.0

- Portland 100: targeted mentoring to increase number of successful exits in Portland;
- Strategic Venture Capital Recruitment Plan;
- Follow-on investment in Portland Seed Fund;
- Central Eastside Entrepreneurship District;
- Redevelopment of Burnside Bridgehead into a "Digital Hub";
- Implementation of Research & Commercialization plan;
- Bioscience and Drug Commercialization Accelerator; and
- Cluster-focused entrepreneurship initiatives.

**ATTACHMENTS:**

- A. State of Entrepreneurship Report

## THE STATE OF ENTREPRENEURSHIP IN PORTLAND

### INTRODUCTION

Entrepreneurship drives job growth, and Portland's prosperity depends on developing the small, scalable, entrepreneurial firms that create jobs and economic opportunity. The region's natural resources, affordability, and lifestyle amenities will not be enough to remain competitive in a global economy.

Our region's capacity to innovate, create jobs, support business start-up, growth and expansion, to deliver world class talent and engage in strategic partnerships will further Portland's competitiveness. Understanding the dynamics of Portland's entrepreneurial community can help inform policy and initiatives for maintaining and growing the city's status as a pioneering place for business and industry.

The State of Entrepreneurship in Portland reviews the current state of entrepreneurship in Portland and defines an action plan to complement the City's target industry cluster and neighborhood economic development strategies and catalytic redevelopment efforts.

Over the course of several months PDC engaged entrepreneurs, business leaders and service providers to better understand the entrepreneurial environment. The resulting information indicates that conditions are mixed, considerable challenges exist, and perceptions don't always match reality. Still, challenges point to opportunity, and together civic leaders and the economic development community can respond effectively to achieve a more successful entrepreneurial environment.

#### Highlights

- Business leaders, investors and entrepreneurs agree: Portland is an entrepreneurial city, and is experiencing impressive growth in new business creation.
- Interviewees disagree on the role that access to capital plays in Portland's entrepreneurial climate.
- A similar disconnect exists around the understanding of tax burdens, and executive-level resources.
- Local entrepreneurship has driven the growth of Fortune 500 headquarters in both Seattle and San Francisco...but in Portland, not so much.
- Despite its shortcomings, Portland remains a strong choice for start-ups: experienced entrepreneurs would choose Portland to start a business if they had to do it again.
- Success demands that funding and mentoring go hand-in-hand.

## METHODOLOGY

The State of Entrepreneurship in Portland relies on research, data and analysis. Report findings were derived from secondary data analysis, interviews and surveys, and are intended to answer questions about Portland's entrepreneurial health, and to identify barriers to and opportunities for entrepreneurial firm growth. Contributing partners included the University of Portland, Willamette University and Impresa, Inc.

### Secondary Data

With a population of 2.2 million, the Portland MSA ranks 23<sup>rd</sup> among the 51 largest metro areas, and includes Multnomah, Clackamas, Washington, Yamhill and Columbia Counties in Oregon as well as Clark and Skamania Counties in Washington. The University of Portland *et al.* research compared the 51 largest metro areas, using a set of indicators common to healthy entrepreneurial eco-systems<sup>1</sup>: average firm size, small firms per 1,000 in population, non-employer firms per 1,000 in population, percent self-employed, college attainment, creative class, and venture capital investment per capita. [See Appendices, Table 1, *Top 51 MSA Cross-Sectional Comparison*]

For further comparison, UP *et al.* identified six benchmark regions, of similar size to and frequently used in comparison with Portland.

**Austin** – A similar size and often compared to Portland for its lifestyle, amenities and culture. Considered a healthy community for start-ups.

**Cincinnati** – The closest to Portland in terms of population. Many similarities, including lack of a large comprehensive research university.

**Denver** – Similar in size and the nearest competitor metro outside of the West Coast.

**Minneapolis** – A larger metro with high educational attainment. Economy has shown resilience during economic downturns. Effective in attracting research funding and supporting larger homegrown enterprises.

**San Francisco** – Nearest West Coast peer besides Seattle with some Portland companies choosing to relocate there. Significant number of success stories with a large network for entrepreneurial support. Similar culture and politics to Portland.

**Seattle** – Close proximity and many similarities to Portland. Effective at growing and supporting high-growth firms. Has large research university.

<sup>1</sup> **Average Firm Size** – The average number of employees per establishment.

**Small Firms per 1,000 in Population** – Studies have shown that employment growth is closely correlated to the presence of small firms.

**Non-employer Firms per 1,000 in Population** – Firms without payroll or self-employed.

**College Attainment** – Percent of adult population who have completed at least a four year degree.

**Creative Class** – Percent of adult workers who are in a "creative profession".

**Venture Capital per Capita** – The amount of venture capital attracted per capita in 2008.

**Table 1 - MSA Cross-Sectional Comparisons**

MSA	POPULATION <sup>2</sup>	AVG FIRM SIZE	SMALL FIRMS PER 1,000 POPULATION	NON-EMPLOYER FIRMS PER 1000 POPULATION	COLLEGE ATTAINMENT	CREATIVE CLASS	VENTURE CAPITAL INVESTMENT \$ PER CAPITA
Austin	1,592,590	16.2	21.1	82.5	38.2%	11.0%	213
Cincinnati	2,143,824	18.9	18.9	61.4	28.1%	7.0%	16
Denver	2,453,393	14.7	26.7	84.8	37.5%	9.0%	169
Minneapolis	3,197,620	18.0	24.8	75.9	37.6%	9.3%	141
Portland	2,166,491	14.5	25.7	70.3	33.3%	8.6%	69
San Francisco	4,216,125	15.8	24.8	85.7	43.4%	11.8%	2,473
Seattle	3,298,225	15.4	26.4	68.7	36.4%	10.9%	22

### Interviews

The interview structure was a Strengths, Weaknesses, Opportunities and Threats (SWOT) framework to gain an understanding of the interviewee's assessment of entrepreneurship in Portland. In total, twenty five people were interviewed.

Interviewees represented various constituency groups: entrepreneurs, investors, service providers, businesses in the city's five target industry clusters (athletic and outdoor; clean technology; advanced manufacturing; software; and research and commercialization). Interviewees also included leaders of companies and organizations in biosciences, as well as some scalable local firms not in the target clusters but that are experiencing growth. The focus was on firms that are doing all or a significant share of traded sector business, as well as a few firms that have been able to grow locally with little or no traded sector participation.

### Surveys

A survey instrument was developed to gather information on improving the local environment for entrepreneurship. The survey was sent to 89 people identified as knowledgeable about entrepreneurship in Portland. Thirty people completed the survey for a response rate of 34%.

In addition, the survey was sent to a number of Portland organizations involved in entrepreneurship for distribution to their members. Participating organizations were: the Oregon Entrepreneurs Network (OEN), the Software Association of Oregon (SAO), and the Oregon Bioscience Association (OBA). An additional 119 people completed the survey, with the greatest response generated from OEN members.

*See Appendices for full survey details, including the interview and survey instruments and all responses.*

<sup>2</sup> American Community Survey, 2008

## ENTREPRENEURSHIP HAS IMPACT

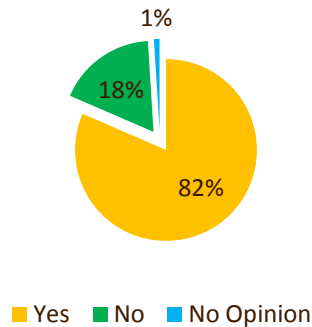
### Overview

Entrepreneurship is essential to stimulate Portland's economy and Portland provides a nurturing environment based on openness, energy, an enthusiastic small business community, problem solving and smart decisions. Portland was recently ranked as one of the best cities in the nation for being an entrepreneur,<sup>3</sup> a place where a blend of cooperation and competition has created vibrant electronics, clean-tech, health sciences and apparel sectors, and one of the largest and most innovative open source software communities in the world. Interview respondents confirmed the importance of small business and entrepreneurship to the region's economy and many referenced the concentration of well-educated, creative workers living in the city, as documented by economist Joe Cortright<sup>4</sup> and affirmed by CEOs for Cities Talent Dividend research.

### Survey respondents agree: Portland is entrepreneurial

A high percentage of survey respondents consider Portland an entrepreneurial city (Chart 1), although their opinion changes when comparing Portland to other cities (Chart 2). Barriers notwithstanding, entrepreneurs would choose Portland to start a business if they had to do it over again (Chart 3).

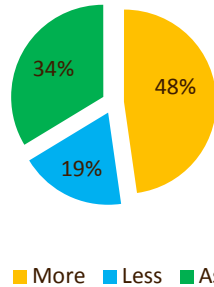
**CHART 1 - DO YOU CONSIDER PORTLAND TO BE AN ENTREPRENEURIAL CITY?**



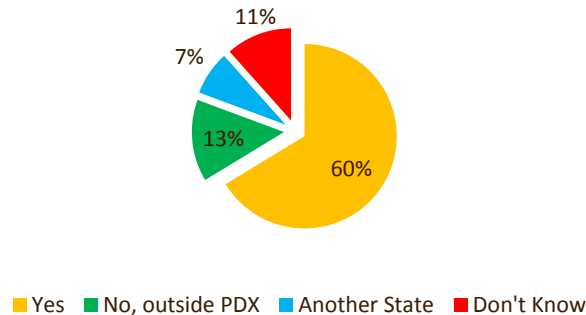
<sup>3</sup> Entrepreneur Magazine, *Where to Be an Entrepreneur: The Cooperator: Portland, Oregon*, August 2009

<sup>4</sup> The Young and The Restless: How Portland Competes for Talent, 2004

**CHART 2 - COMPARED TO OTHER CITIES PORTLAND IS MORE, LESS OR AS ENTREPRENEURIAL?**



**CHART 3 - IF YOU LIVE IN PORTLAND AND WERE TO START A BUSINESS, WOULD YOU LOCATE IT IN PORTLAND?**



### **Entrepreneurship and small business go hand-in-hand, and together, drive the regional economy**

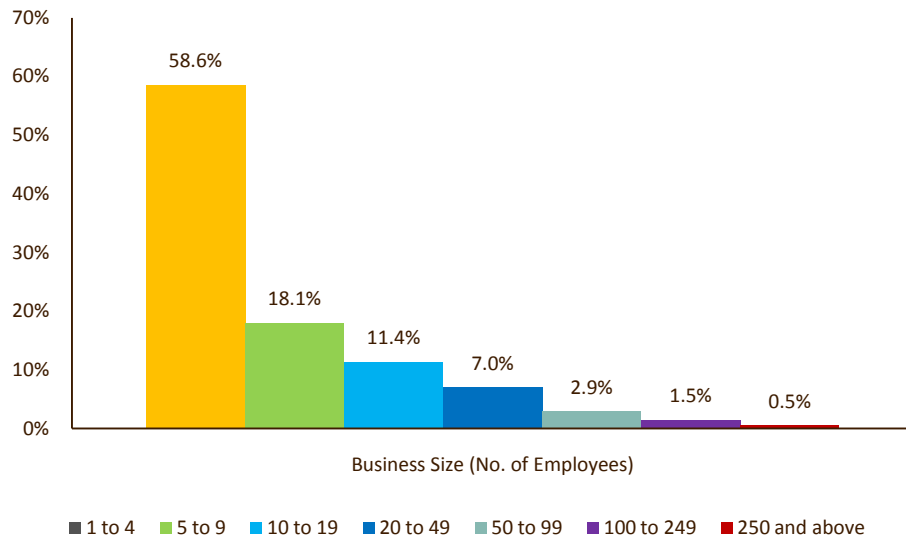
A recent study confirms that economic growth is highly correlated with an abundance of small, entrepreneurial firms<sup>5</sup>. Employment growth is strongly predicted by smaller average establishment size, both across cities and across industries within cities.

Small business dominates Portland's economy, as illustrated in Chart 4. Ninety-five percent of all businesses in Portland have 50 or fewer employees. Nearly sixty percent of businesses have four or fewer employees, 18 percent have between five and nine employees and 11 percent have 10 to 19 employees.

<sup>5</sup> Clusters of Entrepreneurship, Edward L. Glaeser, William R. Kerr, and Giacomo A. M. Ponzetto, <http://www.hbs.edu/research/pdf/10-019.pdf>



**CHART 4 - PERCENTAGE OF BUSINESSES BY SIZE IN PORTLAND**

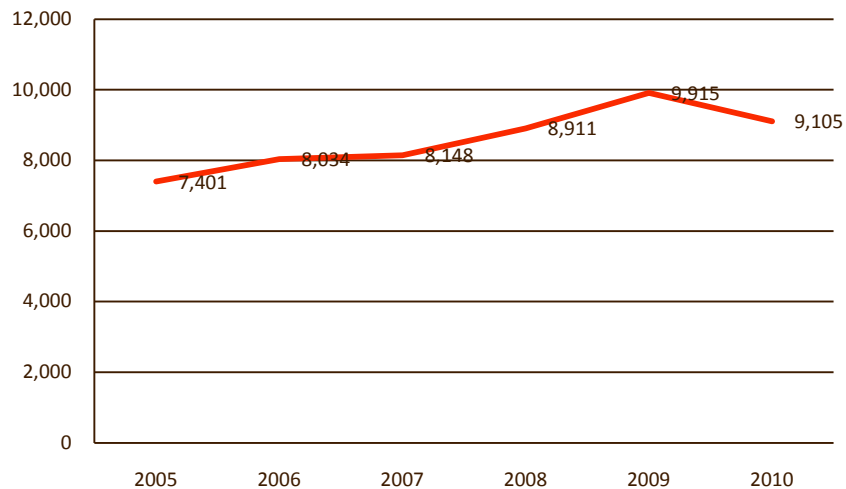


SOURCE: ESRI INFOGROUP/INFOUSA 2010 BUSINESS LISTING FILE

Portland’s small business environment is complemented by the increasing presence of self-employed entities, and impressive growth in new business creation.

From 2005 to 2010 the number of new business accounts increased from 7,401 to 9,105, a change of 23 percent as evidenced in Chart 5. A decline in new business accounts between 2009 and 2010 correlates with the economic downturn.

**CHART 5 – NUMBER OF NEW BUSINESS ACCOUNTS IN PORTLAND 2005 TO 2010**



SOURCE: CITY OF PORTLAND REVENUE BUREAU

Almost all recent net job creation in the Portland region came from small growing local firms - either through new business creation or expansion. In 2008 almost 150,000 businesses were classified as self-employed or very small firms, up from 123,000 in 2002.<sup>6</sup> And as Table 2 indicates, the self-employed represent one of the areas of net job growth for the region.

As noted in Table 2, more than 80,000 jobs between 2004 and 2008 were created by small firms and the self-employed (24,880 by new self-employed; 47,285 by firms with 2-9 employees), while larger firms (500+ employees) contracted or moved out of the Portland region. Without small business creation and expansion, regional job growth would be negative.

Clearly entrepreneurship – at all levels - is a major source of employment and recent job growth in Portland. This data shows a compelling case that entrepreneurs, engaged in starting new businesses or expanding existing ones, have a major impact on the Portland economy.

**TABLE 2 - PORTLAND MSA NET JOB CHANGE FROM FIRM ACTIVITY, 2004 TO 2009**

JOB	OPENED	CLOSED	NET OPENED	EXPANDED	CONTRACTED	NET EXPANDED	MOVE IN	MOVE OUT	NET MOVED IN
<b>Total</b>	<b>191,201</b>	<b>193,130</b>	<b>-1,929</b>	<b>165,517</b>	<b>98,564</b>	<b>66,953</b>	<b>9,402</b>	<b>8,361</b>	<b>1,041</b>
Public sector	14,904	19,592	-4,688	13,090	9,514	3,576	170	463	-293
Non-local private sector	17,818	61,169	-43,351	30,580	37,099	-6,519	3,394	1,263	2,131
Local private sector	158,479	112,369	46,110	121,847	51,951	69,896	5,838	6,635	-797
Self employed (1)	38,610	13,730	24,880	19,214	*0	19,214	586	506	80
2-9 Emp	90,803	43,518	47,285	44,934	11,728	33,206	2,097	1,655	442
10-99 Emp	21,963	37,796	-15,833	38,467	14,995	23,472	1,895	2,019	-124
100-499 Emp	3,475	10,735	-7,260	11,495	9,068	2,427	1,260	1,005	255
500+ Emp	3,628	6,590	-2,962	7,737	16,160	-8,423	0	1,450	-1,450

Source: YourEconomy.org data created from the National Establishment Time Series (NETS)

### Entrepreneurship fuels industry clusters

Portland recognizes the central role that industry clusters play in economic development — groups of related firms that sell into distinct markets, and utilize similar skills and technologies. Portland’s economic competitiveness is driven by several target clusters including: clean technology; advanced manufacturing; athletic and outdoor apparel/gear; and software. The clusters are primarily composed of small, entrepreneurial firms, and as such, are the likely sources of future job growth.

<sup>6</sup> U.S. Census Bureau Nonemployer Statistics, <http://www.census.gov/econ/nonemployer/index.html>

**TABLE 3 - AVERAGE EMPLOYMENT SIZE OF PORTLAND'S CLUSTER INDUSTRIES**

CLUSTER INDUSTRY	AVG EMP. SIZE	% OF FIRMS WITH 20 EMPLOYEES OR LESS
Advanced Manufacturing	58	66%
Athletic and Outdoor	18	92%
Software	10	90%
Clean Technology	21	77%

SOURCE: CITY OF PORTLAND ECONOMIC DEVELOPMENT STRATEGY

Two of the region's signature clusters demonstrate the critical role of entrepreneurship in generating cluster growth and economic game-changing for the regional economy.

Recent genealogy analyses of these two industries – high technology, and athletic and outdoor - show the critical role of transformative entrepreneurship. The Silicon Forest Universe diagram (originally developed by Heike Mayer in 2003, updated in 2010) illustrates the hundreds of firms that now populate the region's high technology industry, the majority of which were started by local entrepreneurs<sup>7</sup>. A similar analysis in 2010, also generated by Dr. Meyer, shows an explosion of entrepreneurial activity in the athletic and outdoor industry cluster, particularly in the last decade, and demonstrates the influence of the larger firms in supporting entrepreneurial activity as their alumni left to start their own ventures.<sup>8</sup>

While economists are often loathe to attribute economic growth to the actions of individuals, rather than macroeconomic forces, it is clearly the case that the actions of some individuals make a huge difference in economic development, and in the Portland region, have driven the development of these two clusters.

Without the entrepreneurship of Howard Vollum and Jack Murdock there would have been no Tektronix, and therefore, almost certainly no Silicon Forest<sup>9</sup>. Had Phil Knight and Bill Bowerman not founded Nike in Oregon, there would likely be no athletic and outdoor cluster. Similar stories could be told in other metropolitan areas<sup>10</sup>. In Seattle, the entrepreneurial vision of Bill Gates and Paul Allen (Microsoft), Jeff Bezos (Amazon), and Howard Schultz (Starbucks), was essential to the emergence of these transformative companies.

In essence, clusters are the result of entrepreneurial companies growing to a size where they serve as a catalyst in attracting workforce, talent, spinning off new companies and attracting other companies to start, expand or relocate to be part of the industry ecosystem. Implementing strategies to support the growth of clusters through entrepreneurial efforts will nurture start-ups and spin-offs, leading to greater job creation while strengthening the cluster.

<sup>7</sup> <http://www.pdx.edu/ims/silicon-forest-universe>

<sup>8</sup> <http://pdxeconomicdevelopment.com/docs/activewear/Athletic-and-Outdoor-Industry-Poster.pdf>

<sup>9</sup> Cortright, J., & Mayer, H. (2000). The Ecology of the Silicon Forest. Portland, OR: Institute for Portland Metropolitan Studies, Portland State University

<sup>10</sup> Cortright, J. (2010). The Athletic and Outdoor Industry Cluster: A White Paper. Portland: Portland Development Commission

While most entrepreneurs alone will have only a small impact on the regional economy, occasionally a new firm will tap into a much larger market and trigger the creation of a new industry cluster that impacts the regional economy. This very asymmetric distribution of economic returns from entrepreneurship—a few extraordinary firms produce major impacts—suggests that policy cannot rely on the expectation of regular, predictable or outsized gains from promoting entrepreneurship. But a region that fails to promote entrepreneurship forecloses a major source of economic dynamism.

### **Entrepreneurship offers economic opportunity**

Entrepreneurship is a cornerstone of the American dream. For immigrants and minorities, it is a key avenue to participate in the U. S. economy, and an important component of immigrant success.

In 2010, immigrants were more than twice as likely to start businesses as were the native-born<sup>11</sup>. In Oregon, 9.5 percent of residents are foreign-born. In the Portland metro area, more than 260,000 residents are foreign-born, accounting for 12 percent of the population. Based on Census data, 20,000 of those residents are self-employed.<sup>12</sup>

Nationally, immigrants are driving the creation of high-tech businesses. A recent study estimated that in 2005 immigrant-founded companies in the United States produced \$52 billion in sales and employed 450,000 people. The same study estimated that 25 percent of technology and engineering companies started nationally since 1995 have a least one immigrant founder, and in California's Silicon Valley 52 percent of companies had an immigrant as a key founder<sup>13</sup>.

Portland is included in a Kauffman Foundation study looking at the impact of immigrant entrepreneurs in technology centers<sup>14</sup>. Yet even with a relatively large number of foreign-born residents and a high percentage that are self-employed, only 17.8 percent of Portland tech startups have been identified as having a foreign-born founder, below both the average of comparison metros and the national average of 25.3 percent.<sup>15</sup> Portland lags in translating this asset into the creation of high-tech entrepreneurial businesses.

<sup>11</sup> Kauffman Index of Entrepreneurial Activity 1996 - 2010

[http://www.kauffman.org/uploadedFiles/KIEA\\_2011\\_report.pdf](http://www.kauffman.org/uploadedFiles/KIEA_2011_report.pdf)

<sup>12</sup> Data on Self-Employment from Census Bureau, American Community Survey, tabulations obtained from University of Minnesota Integrated Public Use Microsample (IPUMS).

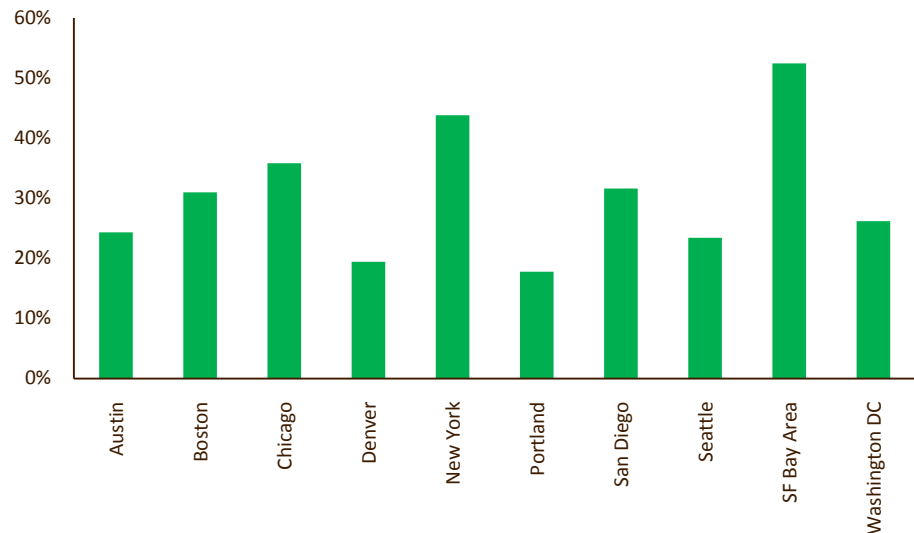
<sup>13</sup> Wadhwa, Vivek, *et al. America's New Immigrant Entrepreneurs, 2007*

[http://people.ischool.berkeley.edu/~anno/Papers/Americas\\_new\\_immigrant\\_entrepreneurs\\_1.pdf](http://people.ischool.berkeley.edu/~anno/Papers/Americas_new_immigrant_entrepreneurs_1.pdf)

<sup>14</sup> Wadhwa, Vivek, *et al. Education, Entrepreneurship and Immigration: America's New Immigrant Entrepreneurs, Part II*  
[http://www.kauffman.org/uploadedFiles/entrep\\_immigrants\\_2\\_61207.pdf](http://www.kauffman.org/uploadedFiles/entrep_immigrants_2_61207.pdf)

<sup>15</sup> Other metros included are: Austin, Boston, Chicago, Denver, New York, the Research Triangle in North Carolina, San Diego, Seattle, Silicon Valley and Washington DC.

**CHART 6 - IMMIGRANT-FOUNDED ENGINEERING & TECHNOLOGY COMPANIES AS A PERCENT OF TOTAL START-UPS IN MSA TECH CENTERS**



*SOURCE: MASTER OF ENGINEERING MANAGEMENT PROGRAM, DUKE UNIVERSITY; SCHOOL OF INFORMATION, U.C. BERKELEY. REPRINTED FROM EDUCATION, ENTREPRENEURSHIP & IMMIGRATION, KAUFFMAN FOUNDATION, 2007*

### **The Place of Entrepreneurship**

One of the key infrastructural supports for entrepreneurs is a business location where there is an abundance of resources for startups. As an example, one study notes that the abundance of small independent firms in the Silicon Valley have furthered entrepreneurship there by lowering the effective cost of entering business through the development of local suppliers, venture capitalists and its culture . In order for these elements to flourish, real estate must be available for small firms to become established and grow.

### **Space for Startups**

From a real estate perspective, startup companies don't make the best tenants. Often with no credit, little money and no track record they tend to take up little space and don't have funds to pay for tenant improvements. This is why many startups begin in the proverbial garage or other no-to-low cost location.

One of the drawbacks of startups working in isolation is the lack of community that is often necessary for an entrepreneur to become successful. The traditional way to correct this lack of community has been the creation of an incubator where startups share common space and services. More recently shared work spaces have become a model where startups from different industries rent desk space and share common facilities. In Portland, NedSpace is the most commonly known shared work space available to startups, while the Portland State Business Accelerator is a local example of a business incubator.

### Cultivating Entrepreneurship Space

Besides the traditional incubators and the new shared work spaces, entrepreneurs are increasingly being attracted to specific neighborhoods. While the Silicon Valley is itself a sprawling urban area, it is a few concentrated nodes that startups tend to congregate, including Palo Alto and Menlo Park. Recently, startup activity has migrated to larger cities including San Francisco, Seattle and New York. The areas in these cities have been attractive to tech startups that would have typically sought out a Silicon Valley location. In New York the area is known as Silicon Alley, concentrated in the Chelsea and Flatiron Districts. Seattle has seen activity in South Lake Union and the burgeoning SODO district. In San Francisco, the South of Market district has been an important area for startups to congregate. Boston has started the Innovation District to draw start-ups and provide an area that provides amenities to work, live, and play.

San Francisco's example is especially apt given the presence of fast growing Twitter. In this case, there have been numerous articles documenting the influence that Twitter has had in attracting other tech startups to the South of Market neighborhood . In addition to attracting other firms to locate in the South of Market area, a service industry including real estate brokers and interior designers has developed in the neighborhood to service the specific needs of the startup firms .

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*"[There has been] lots of small business startups of all types, even during downturn we've experienced the last few years."*

## PERCEPTION COLLIDES WITH REALITY: ACCESS TO CAPITAL

Access to capital is often noted as a key driver of entrepreneurial growth and success. But when it comes to capital for start-up and entrepreneurial firms in Portland, an apparent knowledge and expectation gap exists, especially between company founders and angel and venture investors.

Those that responded to the open survey, access to capital was noted as the most important factor to promote business success in Portland. Yet in in-depth interviews that were conducted with entrepreneurs and entrepreneurial experts, access to capital was only mentioned a few times, and data shows that it may not be as much of an issue as perceived. The investment community insists that there is adequate money available to fund investor-ready start-ups and young companies, while some entrepreneurs feel strongly that the lack of start-up capital is a major barrier. Perceptions aside, the reality is that venture capital is used less frequently than self-financing or bank loans by start-up companies, and is inherently limited in Portland because of its concentration in particular industries where Portland is less competitive.

### Venture capital: not a primary source of start-up financing

Very few firms receive investor funding at the start-up phase. Most entrepreneurs do not take equity capital to start their business, and instead, fund their start-up phase through either owner self-financing or borrowing from friends or family. Other sources of outside financing include bank loans, credit cards and government guaranteed loans.

According to the Survey of Business Owners<sup>16</sup>, the Census Bureau's compilation of feedback from nearly 17,000 businesses in the United States, 63.6 percent of business owners stated that they used their own savings or personal assets to start or buy their firm. Another 27.7 percent stated that no capital was required to start their firm, while only 2.7 percent indicated that they had taken funds from an outside investor of any kind (e.g. business angel, friends, venture capital firms). When looking only at employer firms (those employing one or more workers, beyond the founders/owners) the percentage of those investing their own funds or borrowing against their own assets goes up to 77.3 percent, while the percentage raising outside investment also goes up to 4.7 percent of firms.

The story is similar among high-growth companies. In a 2005 study of the Inc. 500, companies characterized as the fastest growing firms in the United States, a large majority (70 percent) financed their launch with the founders' personal savings or assets. Only 4 percent got their start up capital from a private equity source, including venture capital. Twice as many (8 percent) used bank loans as a component of their startup capital. The fact is most firms do not finance themselves through seed, angel or venture funding. Rather, nearly 90 percent of the

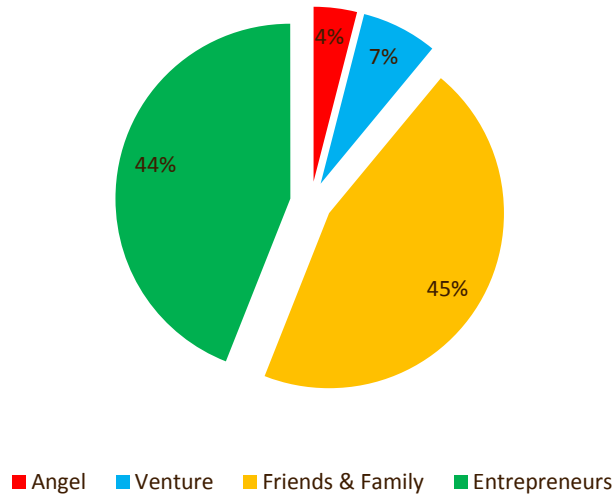
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*"I think the gap is more in debt than equity. Not many businesses or startup owners seem interested in or capable of taking on venture or angel capital. Most want or need bank financing to help establish or grow their business. I would love to see a Bank of Oregon formed with the express purpose of lending to small businesses."*

<sup>16</sup> Characteristics of Businesses: 2002, <http://www2.census.gov/econ/sbo/02/sb0200cscb.pdf>

financing is from the entrepreneur (44%), friends and family (45%) with very small percentages from angel and venture sources (11%) as illustrated in Chart 7.

**CHART 7- SOURCES OF CAPITAL FOR START-UPS**



*SOURCE: SHANE, SCOTT 2009. FOOL'S GOLD?: THE TRUTH BEHIND ANGEL INVESTING IN AMERICA. OXFORD UNIVERSITY PRESS*

The minor role played by venture capital in Portland is furthered due to Portland's portfolio of industry specializations, which may somewhat limit growth in venture capital investment. Venture capital is concentrated in a handful of industries – biotechnology, high tech and medical firms in particular - with strong intellectual property and very high growth prospects. Regions are only likely to be competitive for venture capital if they have significant economic activity in those industries – and none of these three are powerhouses in the Portland metro area. Currently, nearly 20 percent of all venture capital funding goes to biotechnology<sup>17</sup>, an industry in which Portland has relatively low activity.

In contrast, the San Francisco Bay area and Boston historically account for 60 percent of all of the venture capital invested in the entire United States. In the first three quarters of 2010, these two regions accounted for \$8.4 billion of the \$16.7 billion of venture capital invested nationally.

<sup>17</sup> PricewaterhouseCoopers/ National Venture Capital Association: MoneyTree Report  
<https://www.pwcmoneytree.com/MTPublic/ns/index.jsp>



**TABLE 4 - LARGEST AREAS OF U.S. VENTURE CAPITAL INVESTMENT, 2010**

INDUSTRY	% AGE	Q3 DEALS
Software	20.79%	190
Biotechnology	19.58%	108
Medical Devices & Equipment	11.88%	82
Information Technology Services	9.40%	64
Industrial/Energy	9.14%	59

SOURCE: PWC MONEYTREE, 2010

*“The biggest funding gap is for seed/concept stage companies who need less than \$100K. As the Oregon Angel Fund has moved upstream, along with the early-stage venture firms, those seed stage companies have fewer options. A fund focused on that very early stage is critical.”*

Portland’s potential for venture capital participation appears strongest in the software arena, where investment activity has accelerated over the past two years.

**Venture capital doesn’t equal job creation**

As a rule of thumb, half of all entrepreneurial firms backed by venture capital fail outright or lose money, another 30 to 40 percent lose money or break even, and only 10 to 20 percent of venture capital deals turn out to be profitable. Of those, a few “home runs” – wildly successful companies like Google – produce a disproportionate share of the profits and create the majority of jobs.

Venture capital funding is one indicator of entrepreneurial activity – and attracting it is a good thing, but not a panacea. Venture capital investment has not been a primary driver of jobs or firm growth in the Portland region, and should be seen as a lagging indicator of improving entrepreneurial climate. That is, as the economic climate improves there will be an inflow of capital to meet the needs of growing investor-ready companies. The recent uptick in venture capital deals in Portland could be a sign of increased economic activity in high growth industries and improving entrepreneurial climate in the city.

Overall, venture capital-funded firms have directly added approximately 5,000 net new jobs to the Portland metropolitan economy over the past 15 years. Over this time period, 189 Oregon-based businesses obtained venture capital financing<sup>18</sup>.

<sup>18</sup> PricewaterhouseCoopers/ National Venture Capital Association: MoneyTree Report  
<https://www.pwcmoneytree.com/MTPublic/ns/index.jsp>

### Funding plus mentoring promote success

At the early startup phase, if a company does seek investor funding, it is likely in the form of a seed or angel investment. The value of such funding is extended by the mentoring that generally accompanies the investment<sup>19</sup>. Seed funders like Y Combinator and Tech Stars make small investments in startup companies and augment their funding with expert assistance in growing revenue and building the business model. Participating startups gain additional access to capital through the connections that are made with investors who know the business model has been vetted.

Survey and interview respondents see Portland as having a substantial ecosystem of networking organizations, training and development programs, angel capital groups and events, and grants, loans and programs from which to secure seed funding.<sup>20</sup>

Local examples feeding the ecosystem include the Portland Angel Network (PAN), a professionally managed fund that seeks to invest from \$250,000 to \$2,500,000 in Oregon companies with strong growth and profit potential; OEN's Angel Oregon, an annual event where companies "pitch" to investors through rounds of competitive presentations; the city-launched Portland Seed Fund; and PIE (Portland Incubator Experiment) which, like Y Combinator, offers funding, office space, mentorship and collaboration to accelerate new business and keep innovation at the forefront.

While Oregon Entrepreneurs Network (OEN) is the most widely recognized, with 91 percent of respondents indicating familiarity, respondents agreed that whatever the resource, mentors are necessary to help small companies grow and succeed. Seasoned investors can offer both money and advice—a combination that often leads to a board seat or other position where the investor is able to counsel the business. This is one of the reasons for the success of Silicon Valley, where a plethora of investors are available to mentor a growing company.

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*"When you are starting out, there are so many firsts, and in most cases you fly by the seat of your pants. Having a business mentor is really important...someone to call on, to ask questions, to find an accountant, business insurance, telephone systems, computer systems, on and on..."*

<sup>19</sup> William R. Kerr, Josh Lerner, and Antoinette Schoar "The Consequences of Entrepreneurial Finance: A Regression Discontinuity Analysis", Harvard Business School, March 2010 <http://hbswk.hbs.edu/item/6347.html>

<sup>20</sup> City Entrepreneurship Interactive Ecosystem Maps, <http://www.up.edu/cfe/default.aspx?cid=11226&pid=3832>

## CHALLENGES TO SCALABILITY

### **Size matters: both small and large firms are necessary for entrepreneurial success**

Given that many start ups fail or remain small, two factors are critical to achieve significant economic results: an environment that leads to the creation of a large number of new companies and that supports the rapid development of these new firms to grow into larger companies. In other words, the two keys to high economic value are to generate a high birth rate and improve the percentage of firms that avoid death and grow rapidly.

In any given year, the top-performing one percent of firms generates roughly 40 percent of all new jobs<sup>21</sup>. These "gazelle" firms<sup>22</sup> comprise less than one percent of all companies, yet generate roughly 10 percent of new jobs in any given year. The average firm in the top one percent contributes 88 jobs per year, and most end up with between 20 and 249 employees. The average firm in the economy as a whole, on the other hand, adds two or three net new jobs each year.

The role small business plays in the entrepreneurial ecosystems is well established. At the other end of the spectrum, large companies have a corresponding effect on entrepreneurial growth. Venture backed firms often have an "exit" or "liquidity" strategy as the end goal - that is, the company and its investors are able to issue and sell stock for a profit. Without issuing stock, it is far more common for venture company startups to sell themselves to larger firms. Such liquidity events recapitalize investors, and can trigger further rounds of investment and serial entrepreneurship.

But without a base of larger firms to make such buyouts, smaller Portland firms are acquisition targets from larger firms outside of the region. This often means that the larger firm from elsewhere creates a presence in Portland through the acquisition, but the acquired firm no longer has the potential to scale into a larger enterprise.

With only two Fortune 500 companies (Nike and Precision Castparts), Portland lacks enough larger firms to accelerate entrepreneurial growth. Success breeds success – and this is clear when examining the origins of Fortune 500 companies headquartered in Seattle and San Francisco.<sup>23</sup>

In Seattle, the growth in Fortune 500 headquarters over the past several decades has come entirely as a result of local entrepreneurship. This entrepreneurial activity is also relatively new with only one company, Nordstrom, around before 1975.

<sup>21</sup> *High-Growth Firms and the Future of the American Economy*, Ewing Marion Kauffman Foundation  
<http://www.kauffman.org/uploadedfiles/high-growth-firms-study.pdf>

<sup>22</sup> A high-growth firm, typically "A business establishment which has achieved a minimum of 20% sales growth each year over the interval, starting from a base-year revenue of at least \$100,000." See Gazelles as Job Creators – A Survey and Interpretation of the Evidence [http://www.ratio.se/pdf/wp/mh\\_dj\\_gazelle.pdf](http://www.ratio.se/pdf/wp/mh_dj_gazelle.pdf)

<sup>23</sup> Data on Fortune 500 companies from: <http://money.cnn.com/magazines/fortune/fortune500/2010/>

**TABLE 5 - SEATTLE AREA FORTUNE 500 COMPANY HEADQUARTERS**

COMPANY	LOCATION	FORTUNE 500 RANK
Costco	Issaquah	29
Microsoft	Redmond	44
Amazon	Seattle	171
Starbucks	Seattle	277
Nordstrom	Seattle	299

The same is true of the San Francisco Bay Area, where nearly all of the increase in the number of locally headquartered Fortune 500 firms in the past several decades has come from entrepreneurial businesses founded in the region:

**TABLE 6 - SAN FRANCISCO BAY AREA FORTUNE 500 COMPANY HEADQUARTERS**

COMPANY	LOCATION	FORTUNE 500 RANK
Wells Fargo	San Francisco	19
Intel	Santa Clara	62
Cisco Systems	San Jose	71
Apple	Cupertino	103
Oracle	Redwood City	137
Google	Mountain View	150
Gap	San Francisco	162
Sun Microsystems	Santa Clara	184
Applied Materials	Santa Clara	270
eBay	San Jose	326
Yahoo	Sunnyvale	353
Advanced Micro	Sunnyvale	406
Symantec	Cupertino	461

What’s more, while venture capital isn’t a primary job driver for Portland startups, the lack of investors in Portland does have an ancillary negative effect: without a large seasoned investor network, Portland’s fast growing firms have fewer mentors available, and need to rely on finding executive level talent to help with their growth.

“[T]here is limited senior technical and managerial talent, no world class colleges so not a deep local talent pool to feed or sustain the entrepreneurial spirit”

**Talent – both executive and technical – drives successful entrepreneurial ecosystems**

One of the keys to creating a large number of companies and keeping those companies alive and growing into larger firms is the availability of executive talent. Portland lacks a large pool of CEOs, CTOs or CFOs to work for start-ups, ranking as average or below average in executive and related talent when compared to peer regions. On a per worker basis, Portland is only competitive in its number of Marketing Managers.

**TABLE 7 - MANAGEMENT OCCUPATIONS IN PORTLAND & PEER REGIONS, 2008**

MSA	CHIEF EXECUTIVES		COMPUTER & INFORMATION SYSTEMS MANAGERS		FINANCIAL MANAGERS		GENERAL & OPERATIONS MANAGERS		MARKETING MANAGERS		SALES MANAGERS	
	EMP	RATIO	EMP	RATIO	EMP	RATIO	EMP	RATIO	EMP	RATIO	EMP	RATIO
Austin	990	777:1	2,250	342:1	2,220	347:1	11,340	68:1	1,020	754:1	1,850	416:1
Cincinnati	2,190	454:1	2,540	392:1	3,850	258:1	7,210	138:1	1,180	843:1	2,650	375:1
Denver	1,090	1118:1	3,110	392:1	2,860	426:1	22,910	53:1	1,380	883:1	2,310	528:1
Minneapolis	3,330	519:1	8,090	214:1	9,360	185:1	20,930	83:1	4,090	423:1	7,120	243:1
Portland	1,220	814:1	2,920	340:1	3,400	292:1	12,060	82:1	2,470	402:1	2,530	393:1
San Francisco	5,510	358:1	8,150	242:1	12,550	157:1	36,170	55:1	6,630	298:1	9,090	217:1
Seattle	1,840	908:1	6,820	245:1	7,730	216:1	13,600	123:1	3,650	458:1	5,480	305:1

SOURCE: U.S. BUREAU OF LABOR STATISTICS

Portland also suffers in comparison to the peer regions for professional occupations that would be the sources of either potential entrepreneurs or talent for growing firms.

Tables 8 and 9 show small firm and professional occupation numbers for Portland and the peer regions in Information, Professional and Technical occupations, all likely sources for fast growth and scalable firms. On a percentage basis Portland has a slight lag in Information jobs, especially relative to its West Coast peers, and for Professional, Scientific, and Technical Services jobs Portland is only ahead of Cincinnati in the percentage of jobs for firms with 10-99 employees<sup>24</sup>.

<sup>24</sup> Firms with 10-99 employees are likely to be second-stage companies. These are firms that have grown past the startup stage but have not grown to maturity. A business typically begins to enter its second stage when it approaches \$1 million in total receipts. See Second-Stage Entrepreneurs: Characteristics of Second-Stage <http://www.edwardlowe.org/secondStage/>

**TABLE 8 - SMALL FIRM INFORMATION & PROFESSIONAL JOBS FOR PORTLAND & PEERS, 2008**

MSA	EMPLOYMENT BY FIRM SIZE		INFORMATION EMPLOYMENT				PROFESSIONAL & TECHNICAL EMPLOYMENT			
	2-9	10-99	2-9 EMP.	10-99 EMP.	% OF TOTAL EMP. FOR 2-9	% OF TOTAL EMP. FOR 10-99	2-9	10-99	% OF TOTAL EMP. FOR 2-9	% OF TOTAL EMP. FOR 10-99
Austin	199,885	206,141	5,313	7,080	2.7%	3.4%	25,919	30,885	13.0%	15.0%
Cincinnati	190,181	269,042	2,683	4,032	1.4%	1.5%	21,232	26,741	11.2%	9.9%
Denver	364,673	336,837	8,448	9,041	2.3%	2.7%	44,557	46,257	12.2%	13.7%
Minneapolis	355,381	503,702	7,645	10,737	2.2%	2.1%	43,034	55,600	12.1%	11.0%
Portland	272,295	280,058	5,736	5,495	2.1%	2.0%	30,001	29,107	11.0%	10.4%
San Francisco	567,398	650,916	15,052	24,877	2.7%	3.8%	78,297	102,012	13.8%	15.7%
Seattle	374,569	442,573	8,557	11,360	2.3%	2.6%	47,554	51,664	12.7%	11.7%

SOURCE: YOUR ECONOMY.ORG DATA CREATED FROM THE NATIONAL ESTABLISHMENT TIME SERIES (NETS)

Portland ranks in the middle or bottom compared to the peer regions for professional occupations that either would be potential entrepreneurs or be a source of talent for growing firms. The one exception where Portland ranks towards the top in concentration of workers is for Architecture & Engineering. For overall Management talent, Portland ranks in the middle, but ranks towards the bottom for Life, Physical, & Social Science. Most glaring is Portland's ratio of Computer and Mathematical Science occupations ranking second to last. Given Portland's ranking and wage levels for those common occupations within the software industry it is understandable the challenge that Jive and other tech firms face in finding local talent.

**TABLE 9 - PROFESSIONAL OCCUPATIONS IN PORTLAND & PEER REGIONS, 2008**

MSA	ALL EMPLOYMENT	MANAGEMENT		COMPUTER & MATHEMATICAL SCIENCE		ARCHITECTURE & ENGINEERING		LIFE, PHYSICAL, & SOCIAL SCIENCE	
		EMP	RATIO	EMP	RATIO	EMP	RATIO	EMP	RATIO
Austin	769,370	38,570	20:1	41,560	19:1	23,770	32:1	11,260	68:1
Cincinnati	994,930	40,240	25:1	28,200	35:1	17,360	57:1	9,080	110:1
Denver	1,218,790	54,510	22:1	54,700	21:1	31,090	39:1	13,840	88:1
Minneapolis	1,729,750	104,590	17:1	68,380	25:1	36,610	47:1	21,310	81:1
Portland	993,470	49,360	20:1	29,170	34:1	26,870	37:1	10,970	91:1
San Francisco	1,973,500	134,440	15:1	86,340	23:1	45,770	43:1	37,330	53:1
Seattle	1,670,200	75,740	22:1	93,500	18:1	55,150	30:1	27,390	61:1

SOURCE: U.S. BUREAU OF LABOR STATISTICS

Portland is also less competitive overall in terms of both executive and professional wages. While Portland is in the top three of benchmark regions for CEO wages, the metro ranks toward the bottom for all other occupational categories. Lower wages make it difficult to attract outside executive level talent to Portland, especially for growing firms where competition from

San Francisco and Seattle is fierce<sup>25</sup>. The most conspicuous example has been Jive Software's move of its headquarters from downtown Portland to Palo Alto to be in a position to recruit experienced managers from California<sup>26</sup>, although the company continues to maintain a large workforce in Portland.

**TABLE 10 - MANAGEMENT OCCUPATION AVG. WAGES IN PORTLAND & PEER REGIONS, 2008**

MSA	CHIEF EXECUTIVES	COMPUTER & INFORMATION SYSTEMS MANAGERS	FINANCIAL MANAGERS	GENERAL & OPERATIONS MANAGERS	MARKETING MANAGERS	SALES MANAGERS
Austin	\$178,360	\$126,380	\$117,800	\$118,610	\$141,930	\$128,190
Cincinnati	\$172,730	\$110,840	\$109,240	\$111,830	\$111,400	\$114,620
Denver	\$181,450	\$126,230	\$119,870	\$117,900	\$120,380	\$114,770
Minneapolis	\$191,630	\$119,260	\$122,070	\$121,440	\$123,460	\$112,810
Portland	\$196,940	\$122,750	\$109,560	\$112,130	\$111,410	\$113,420
San Francisco	\$197,910	\$144,660	\$141,230	\$135,810	\$149,220	\$132,290
Seattle	\$206,580	\$133,720	\$118,080	\$141,740	\$126,190	\$126,900

SOURCE: U.S. BUREAU OF LABOR STATISTICS

**TABLE 11 - PROFESSIONAL OCCUPATIONS AVG. WAGES IN PORTLAND & PEER REGIONS, 2008**

MSA	ALL EMPLOYMENT	MANAGEMENT	COMPUTER & MATHEMATICAL SCIENCE	ARCHITECTURE & ENGINEERING	LIFE, PHYSICAL, & SOCIAL SCIENCE
Austin	\$45,180	\$107,770	\$80,530	\$73,450	\$61,680
Cincinnati	\$42,340	\$102,950	\$69,610	\$71,510	\$59,790
Denver	\$48,560	\$110,740	\$81,780	\$80,330	\$71,110
Minneapolis	\$48,670	\$109,100	\$76,490	\$70,890	\$69,500
Portland	\$46,080	\$102,210	\$74,890	\$73,650	\$64,640
San Francisco	\$58,250	\$126,260	\$91,440	\$87,300	\$81,880
Seattle	\$51,850	\$118,720	\$87,620	\$79,830	\$72,200

## OREGON LAGS NATIONALLY IN TECHNOLOGY TRANSFER

Many factors affect success in commercialization of research technologies, including the type and amount of research funding, quality and expertise of researchers, and availability of seed stage funding to launch spin-out ventures of promising technologies. The culture of an institution, along with its policies and processes, also bears heavily on outcomes for commercialization.

<sup>25</sup> *Seattle's Tech Job Crunch: How Long Can the Valley Invaders Poach from Microsoft, Amazon Before the Talent Well Runs Low?* Xconomy, March 2011 <http://www.xconomy.com/seattle/2011/03/28/seattles-tech-job-crunch-how-long-can-valley-invaders-poach-from-microsoft-amazon-before-the-talent-well-runs-dry/>

<sup>26</sup> *Oregon startups find success - some find it elsewhere*, The Oregonian, February 2010 [http://www.oregonlive.com/business/index.ssf/2010/02/oregon\\_startups\\_find\\_success\\_.html](http://www.oregonlive.com/business/index.ssf/2010/02/oregon_startups_find_success_.html)

Technology commercialization from Portland's research universities, Oregon Health and Science University (OHSU) and Portland State University (PSU) has played only a small part in the creation of firms and employment. Neither university has a strong history of creating spin-out companies. The amount of research funding received in Portland is about average nationally and is below many of its peer regions. Portland should encourage entrepreneurial development at OHSU, PSU and the state's other research universities, but none are currently in position for large scale technology transfer or commercialization.

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*"Schools with significant R&D – OSU and OHSU – do not have robust commercialization arms and do not have significant startup activity as a result."*

Still, these less-than-stellar results for commercialization activities are consistent with all but the top 25 institutions in the United States, according to research by the Association of University Technology Managers (AUTM) and the Kauffman Foundation. Further, this research supports the best results occurring at institutions with strong medical research programs, and which are generally located in areas with very strong cultures and ecosystems of high technology and bio-science entrepreneurship (e.g. San Francisco Bay Area, Boston.) A 2005 study found that the average number of spin-outs for U.S. universities was only 1.9 per year<sup>27</sup>. Yet, the outliers created significantly more; 31 for the Massachusetts Institute of Technology in the year on which the study data was based, with an average of more than 19 annually. Similarly, a 2008 study traced the development of Yale's entrepreneurial culture as the key driver to the ultimate growth of that university's spin-outs to 30 annually, with at least 65% of those locating in the New Haven, Connecticut area<sup>28</sup>. Yale's research funding throughout that period was roughly the same as OHSU's and PSU's combined. It is also notable that the University of Washington is consistently ranked by AUTM as one of the top 25, in terms of spin-out creation, technology transfer programs in the United States.

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*"[It's] still hard to make the leap from 'cool technology' to 'who cares and what problem does it solve and how much will people pay to solve that problem?'"*

Accordingly, everything that can be done to foster greater numbers of invention disclosures, licenses and spin-outs, as well as a gradual shift in creating a culture of entrepreneurship at OHSU and PSU (and the state's other research universities, which have in the past three years contributed several technologies leading to many of the Portland area spin-outs) should certainly be encouraged, but it would not appear to be a source of significant firm formation or job creation for Portland in the near term.

Table 12 shows the research funding and spin-outs and associated data for the Portland region compared to the peer regions.

<sup>27</sup> O'Shea, R.P., Allen, T., Chevalier, A., and Roche, F. 2005. *Entrepreneurial Orientation, Technology Transfer and Spinoff Performance of U.S. Universities*. Research Policy

<sup>28</sup> Breznitz, Shiri M., O'Shea, R.P., Allen, Thomas J. 2008 *University Commercialization Strategies in the Development of Regional Bioclusters* The Journal of Product Innovation Management



**TABLE 12- RESEARCH & COMMERCIALIZATION ACTIVITY IN PORTLAND & PEER REGIONS, 2008**

MSA	RESEARCH FUNDING (\$M)	2006 - 2008 RESEARCH FUNDING (\$M)	UNIVERSITY SPINOUTS	LICENSE INCOME (\$M)	PATENTS ISSUED
San Francisco	\$4,761.88	\$12,662.46	15	\$197.70	350
Seattle	\$1,026.79	\$2,924.63	9	\$80.30	56
Denver	\$661.00	\$1,931.37	11	\$6.00	28
Minneapolis	\$583.52	\$1,726.37	1	\$84.70	37
Austin	\$527.14	\$1,450.11	10	\$11.60	25
Portland	\$320.00	\$924.99	4	\$4.70	15
Cincinnati	\$211.39	\$503.10	0	\$1.60	8

SOURCE: ASSOCIATION OF UNIVERSITY TECHNOLOGY MANAGERS, U.S. PATENT & TRADEMARK OFFICE

*“The greatest constraint for my business is the tax law in Oregon. If you sell a company in Oregon, versus Washington, the tax implications are enormous.”*

### TAX POLICY AFFECTS THE INVESTMENT ENVIRONMENT – AND CONSEQUENTLY THE ENTREPRENEURIAL ECOSYSTEM

Further challenges to Portland’s entrepreneurial health and the region’s ability to generate a wealth of startups that progress steadily through gazelle-like growth lie in tax policies that deter investors and business owners.

Investors face state-level capital gains taxes in forty-one states. States with the highest capital gains rates are at a disadvantage since the tax burden substantially increases the difference between what an investment yields and what an individual investor actually receives. The higher the difference, known as the “tax wedge,” the fewer investments are undertaken. State capital gains taxes, combined with the federal tax, can therefore be a direct impediment to entrepreneurship and regional economic growth<sup>29</sup>.

With one of the highest capital gains tax rates in the nation, Oregon is at a distinct disadvantage at attracting investment capital.<sup>30</sup> Venture capital hot spots like California, New York and Massachusetts also have punitively high capital gains rates, but unlike those other states Oregon does not have a large base of investors living here to invest. What’s more, outside investors investing in an Oregon business are taxed for their capital gains at the same rate as a resident<sup>31</sup>.

<sup>29</sup> *State Individual Capital Gains Tax Rates*, American Council for Capital Formation, October 2008  
[http://www.accf.org/media/dynamic/4/media\\_494.pdf](http://www.accf.org/media/dynamic/4/media_494.pdf)

<sup>30</sup> *Tobias Read says Oregon has one of the highest capital gains taxes in the nation*, Ryan Kost, March 21<sup>st</sup>, 2011  
<http://www.politifact.com/oregon/statements/2011/mar/21/tobias-read/tobias-read-says-oregon-has-one-highest-capital-ga/>; also see *The good, the bad and the ugly of Oregon taxes*, Jeremy Rogers, April 26, 2011  
[http://www.oregonlive.com/opinion/index.ssf/2011/04/the\\_good\\_the\\_bad\\_and\\_the\\_ugly.html](http://www.oregonlive.com/opinion/index.ssf/2011/04/the_good_the_bad_and_the_ugly.html)

<sup>31</sup> Nonresidents of Oregon pay taxes on dividends from an S corporation or partnership that has no business activity outside Oregon. For businesses that do have activity outside the state, the tax rate is proportional.

Other potential investors — such as business owners seeking to capitalize by building and selling their companies — face the same capital gains disadvantage, coupled with the added burden of Oregon’s single-factor sales tax for companies supplying services and intangibles.

Although most states are moving to a market-based apportionment, Oregon still sources revenue based on the “greater costs of performance” approach, which apportions 100 percent of the sales generated from services and intangibles to the state with the greater proportion of direct costs. Growing companies which generate a significant portion of revenue from outside of Oregon could pay taxes on their revenue in both Oregon and the other states in which they conduct business<sup>32</sup>. For example, for a company with \$10,000,000 in costs of performance — \$4,000,000 in Oregon, \$3,000,000 in Idaho and \$3,000,000 in California — Oregon would apportion 100 percent of the income to Oregon because Oregon’s share of the costs of performance were greater than either California’s or Idaho’s, but the company may still have to pay taxes to the other states.

Table 13 shows the 10 states with the highest combined federal and state capital gains rates for individuals.

**TABLE 13 - STATES WITH HIGHEST RATES FOR INDIVIDUAL CAPITAL GAINS TAXES\*, 2008**

STATE	INDIVIDUAL CAPITAL GAINS RATE
California	25.3%
Oregon	24.0%
Iowa	24.0%
New Jersey	24.0%
District of Columbia	23.5%
Maine	23.5%
Minnesota	22.9%
Idaho	22.8%
North Carolina	22.8%
Hawaii	22.3%

*\*Includes top federal marginal capital gains rate of 15%*

SOURCE: AMERICAN COUNCIL FOR CAPITAL FORMATION

The business tax burden is mitigated to some degree by Oregon’s lack of sales tax, which despite city and county business taxes makes Portland’s overall tax burden less than most other cities around the country. Among this study’s survey respondents, entrepreneurs starting new ventures were less likely to cite taxes as a barrier than the more established companies. Much like the views on the availability of capital, the real challenge lies in resolving the difference between perceptions and reality.

<sup>32</sup> This scenario would only affect C Corporations and would likely not impact start-ups or small businesses. The issue would be when these firms are large enough to participate in an IPO, and/or issue shares and substantially grow their business outside of Oregon.

## ACTION PLAN FOR ENTREPRENEURIAL DEVELOPMENT IN PORTLAND

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*“Put the priority on getting things done, with the measurement being the rate of startups in the city and the pace of growth of existing businesses.”*

### **Goal 1: Achieve measurable success, evidenced by job and revenue growth, for Portland’s startup businesses**

**Objective:** Portland has a cohesive, concentrated system of support for scalable startup business

**Actions:**

1. Support Scalable Start-ups: Establish an accelerator program that provides mentoring, connections and a support network for promising startup businesses such as the Portland 100 concept or another national program.
2. Portland Seed Fund: Maintain City of Portland-supported fund that selects companies through an independent application process for startup financing and limited technical support.
3. Central Eastside Entrepreneurial District: Work with property owners in Portland’s Central Eastside for redevelopment of commercial spaces that offer attractive, flexible and affordable space for startups. Establishment of the district provides a one-stop for entrepreneurs to access appropriate resources.
4. Entrepreneurial Network: Create the appropriate infrastructure for entrepreneurs to network, access resources and increase knowledge base.

### **Goal 2: Create entrepreneurship-friendly investment community**

**Objective:** Attract outside investment, increase local access to capital and retain businesses in Portland by creating a more favorable investment environment

**Actions:**

1. Lower Tax Impact: Ensure that City of Portland’s legislative package includes support for lowering capital gains for Oregon investment and lower personal income tax for successful entrepreneurs.
2. Increase Number of Local Investors: Work with partners to market the potential for high net worth individuals to invest in Portland startups.
3. Business synergies: Create an environment for entrepreneurs to cluster that draws attention from outside resources similar to South of Market in San Francisco or Silicon Alley in New York

### **Goal 3: Increase commercialization of innovation from Oregon universities**

**Objective:** Create a culture of entrepreneurship and collaboration around research and commercialization at Portland State University, Oregon Health and Science University, Oregon State University, University of Oregon and the Oregon Institute of Technology

**Actions:**

1. Robust Technology Transfer: Advocate for increased funding for technology transfer offices; support collaboration among local universities to strengthen technology transfer efforts, especially as it relates to research and commercialization, in health sciences, clean tech and software.
2. Portland Innovation District: Establish a new urban renewal area to support physical investments that enhance innovative capacity and align with higher education efforts, specifically Portland State University and OHSU.
3. Incentive Award: Work at the state level to create incentive award for faculty at Oregon universities for successful commercialization activities.
4. Internet Portal: Establish statewide website for entrepreneurs and researchers to access technology transfer and commercialization opportunities and related resources.
5. Work with university partners on programs to support innovation and entrepreneurship; create events recognizing entrepreneurs and appropriate faculty.
6. Strengthen Entrepreneurship at Oregon Health and Science University: Support target specialties at OHSU to improve new company creation and spin-outs for health sciences, biotechnology and related disciplines.
7. Support development of higher education incubator and lab space.
8. Burnside Bridgehead: Include a hub for entrepreneurs and higher education for technology transfer and commercialization opportunities in the adaptive re-use of the Convention Plaza building.

### **Goal 4: Monitor the health of Portland's entrepreneurial economy**

**Objective:** Gauge and report on indicators to demonstrate Portland's progress in supporting and nurturing entrepreneurs

**Actions:**

1. Survey: Conduct annual survey to solicit feedback from Portland's entrepreneurial community.
2. Monitor Effectiveness: Track assistance to startups by Portland-supported organizations working with entrepreneurs.
3. Scorecard: Publish annual report measuring Portland's entrepreneurial economy.