

## **Background Data Report on Economic Foundations and Peer Regions**

Regional Economic Summit  
November 19, 2004

### **Prepared for:**

Puget Sound Regional Council  
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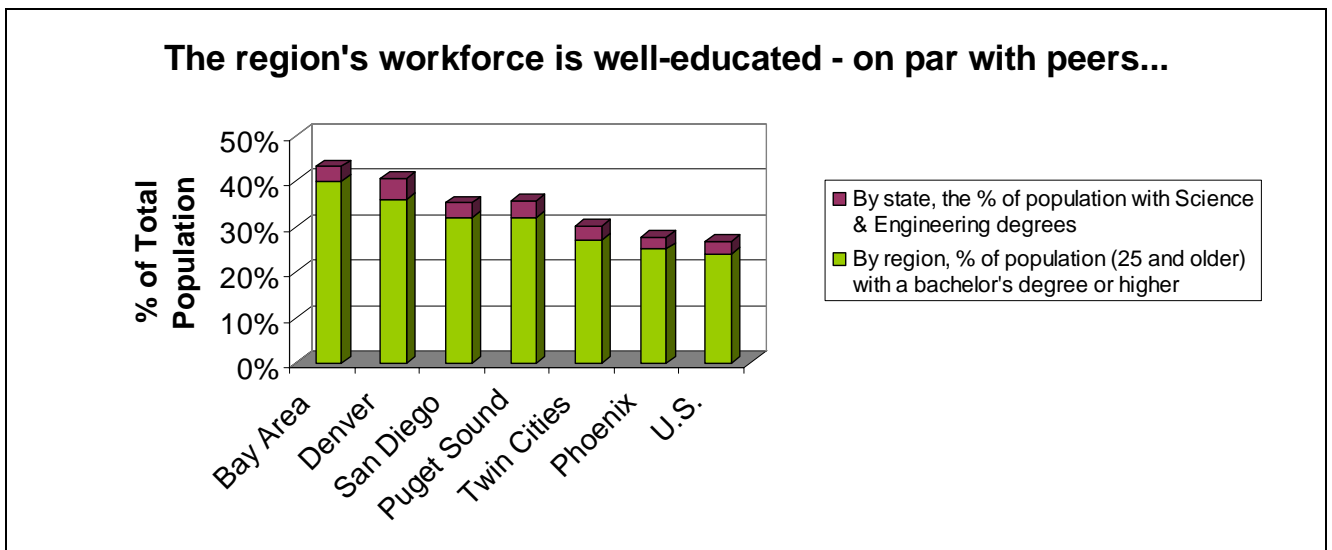
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# I. ECONOMIC FOUNDATIONS and PEER REGION COMPARISONS

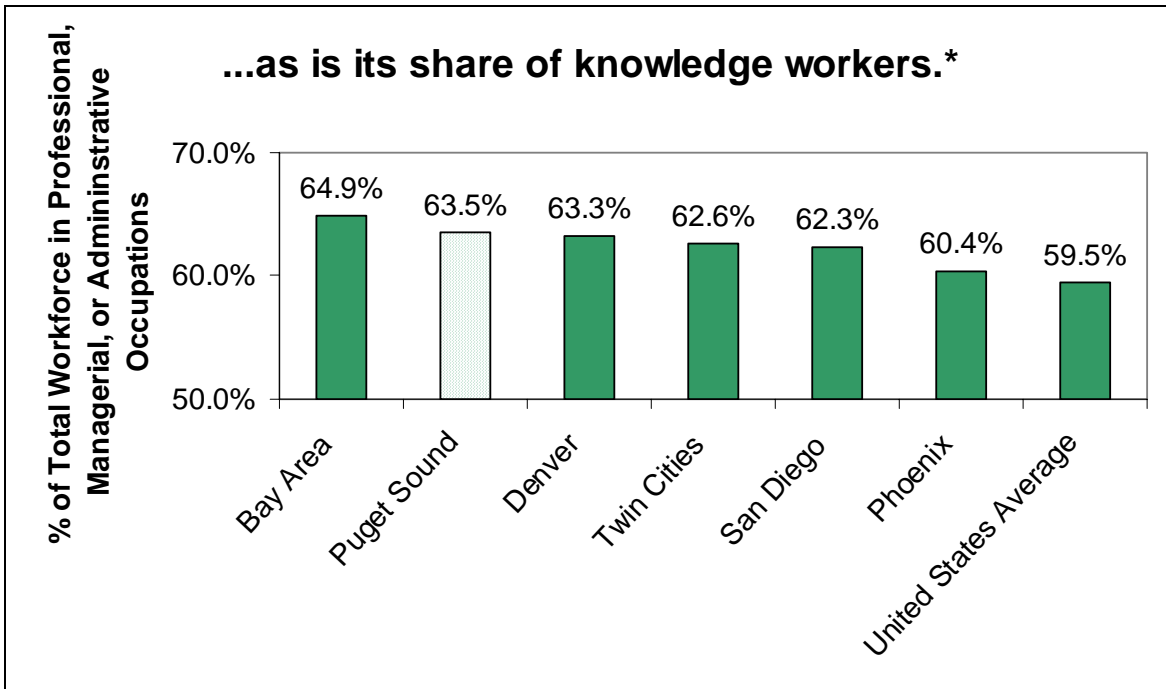
Underpinning every successful cluster are the economic foundations of a region: an educated and productive workforce; the quality of research and development and other sources of innovation; a competitive business climate; the ability of its firms to obtain financing; well-developed, cost-effective physical infrastructure; inter-personal and organizational networks that embody the “social capital” of a region – its ability to facilitate transactions and investment due to trust and access to information; and, finally, the quality of life the region offers its residents. This section provides summary statistics for each of these foundations – and several indicators of its “global reach” and trade – for the central Puget Sound region.

## A. Human Resources

Competitive economies require a workforce that has the necessary technical skills, the ability to continue developing skills as technologies and market change, and a commitment to perform high-quality work (i.e., good work ethic). Education and job skill training are the primary ways by which the human capital of a nation or region is preserved and enhanced. The role of K-12, community colleges and 4-year institutions is key to a strong human resource foundation at the regional level.

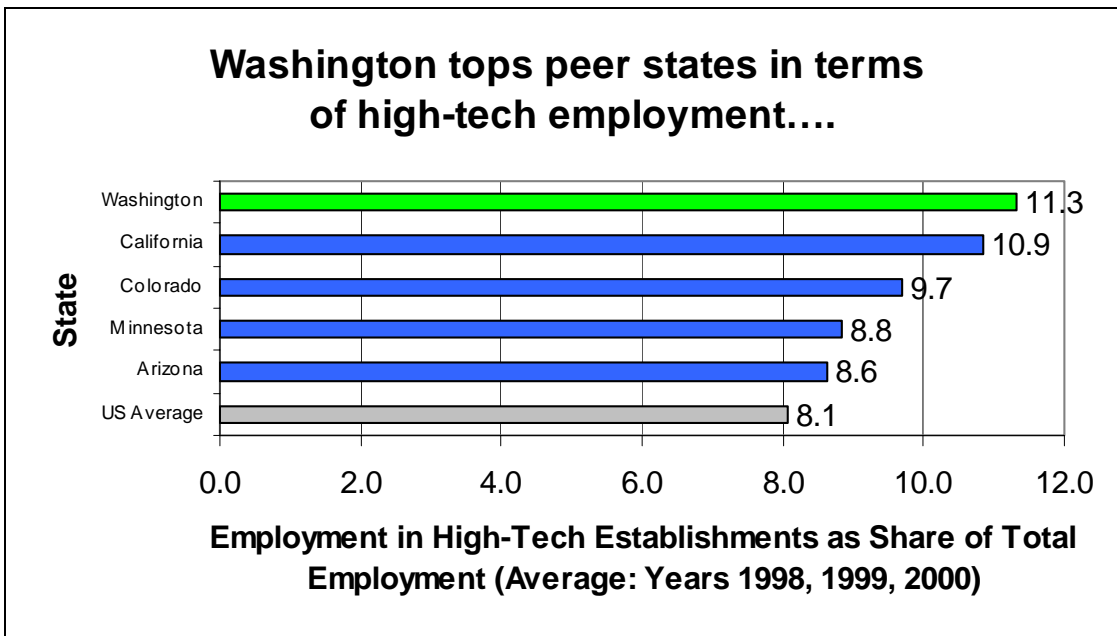


Source: Regional data from the U.S. Census, 2000. State data from the National Science Foundation, 1999.



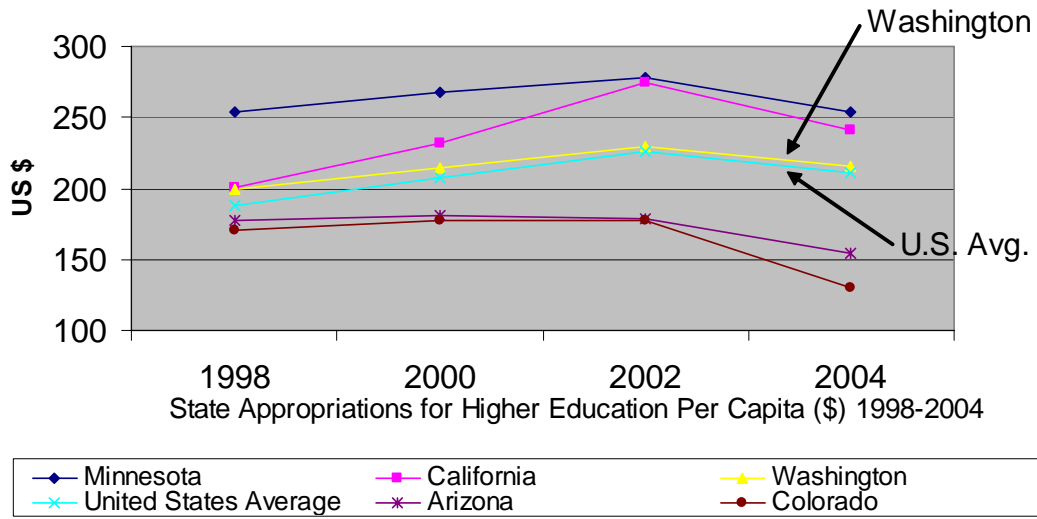
Source: Bureau of Labor Statistics, PMSA Regions

\*Knowledge Workers are characterized as workers employed in professional, executive and administrative support occupations



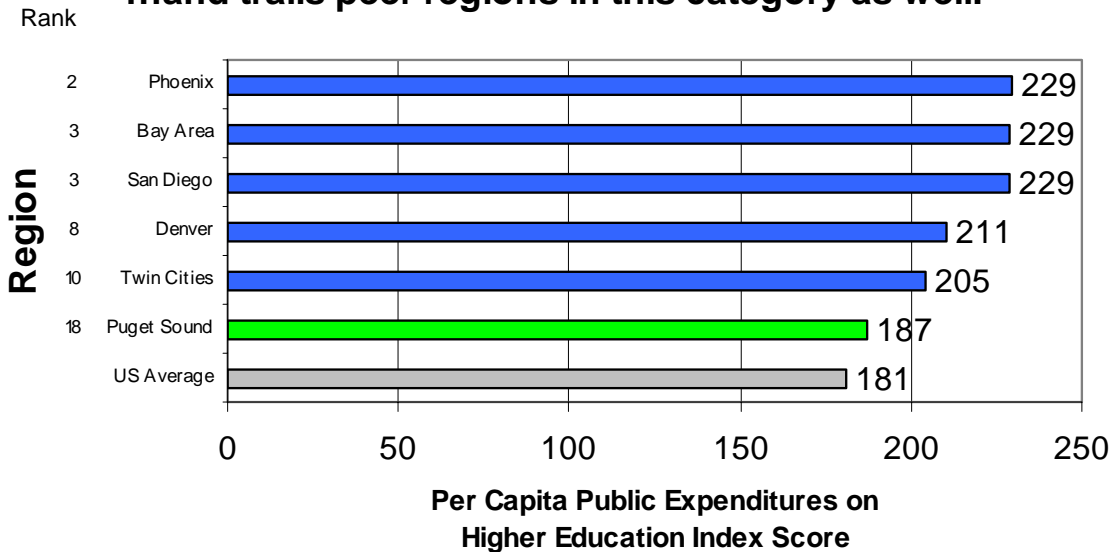
Source: National Science Foundation and ECG analysis

**...but the state is average in its funding of higher education...**



Source: National Center for Higher Education Management Systems and ECG analysis

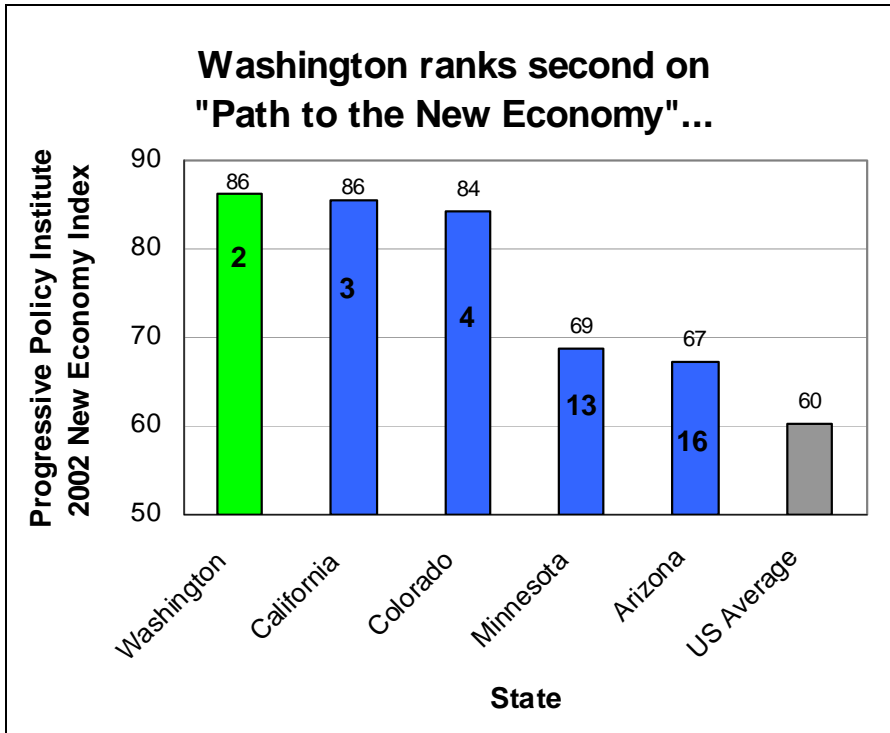
**...and trails peer regions in this category as well.**



Source: 2004 World Knowledge Competitiveness Index and ECG analysis

## B. Innovation/Technology

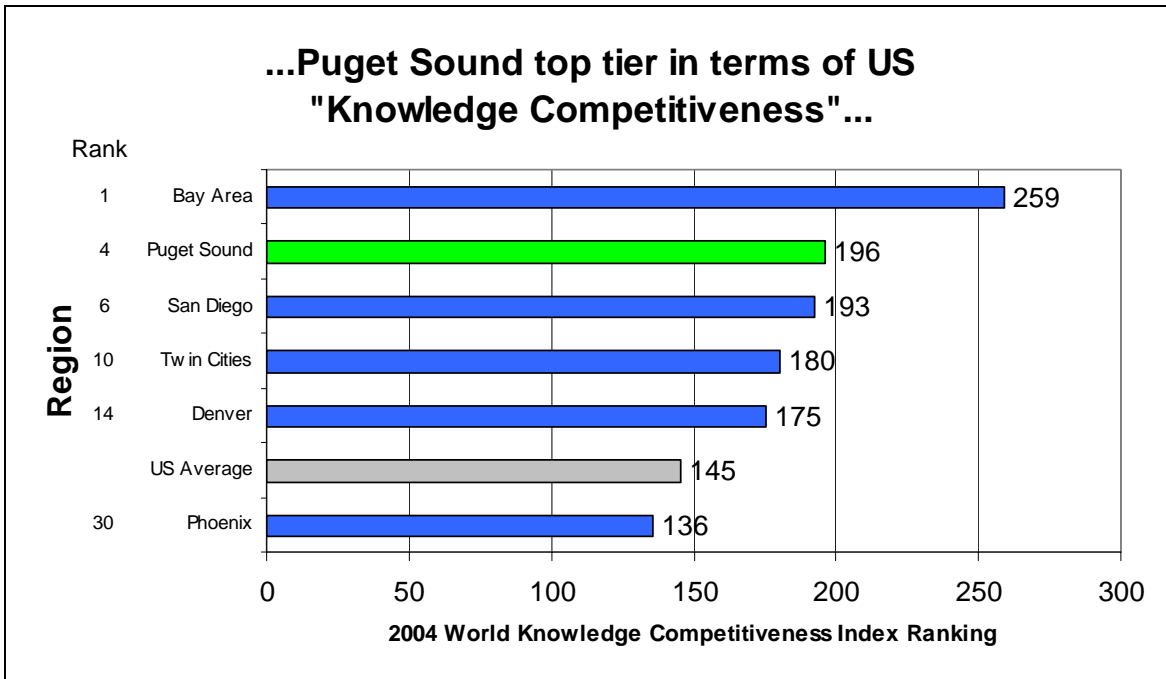
Competitive economies require that industry, large and small, new and mature, have access to high-quality science and technology resources for use in developing new products and services and improving production processes. A strong technology infrastructure that is accessible to industry will be a critical factor in a region's ability to move to a higher-value-added, more productive economy.



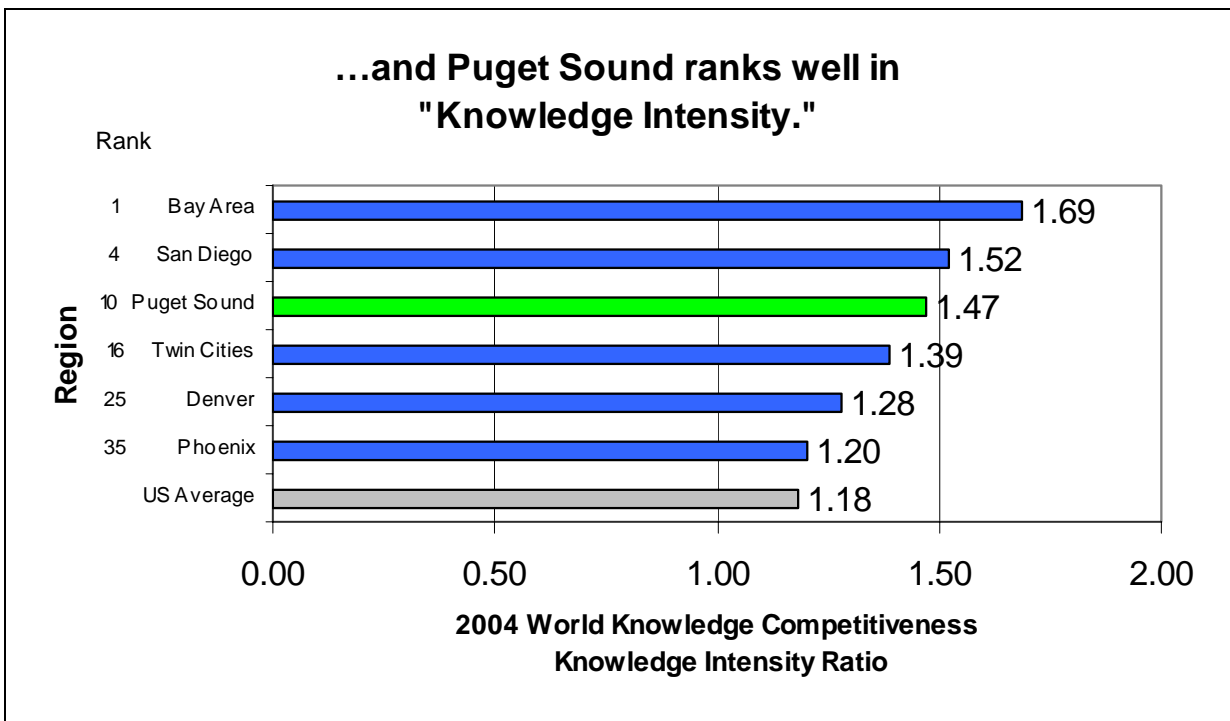
Source: New Economy Innovation Index. [www.neweconomyindex.org](http://www.neweconomyindex.org)

Data not available by region

Methodology: Aggregate of 21 indicators from five categories: knowledge jobs, globalization, economic dynamism and competition, transformation to a digital economy, and technological innovation capacity.

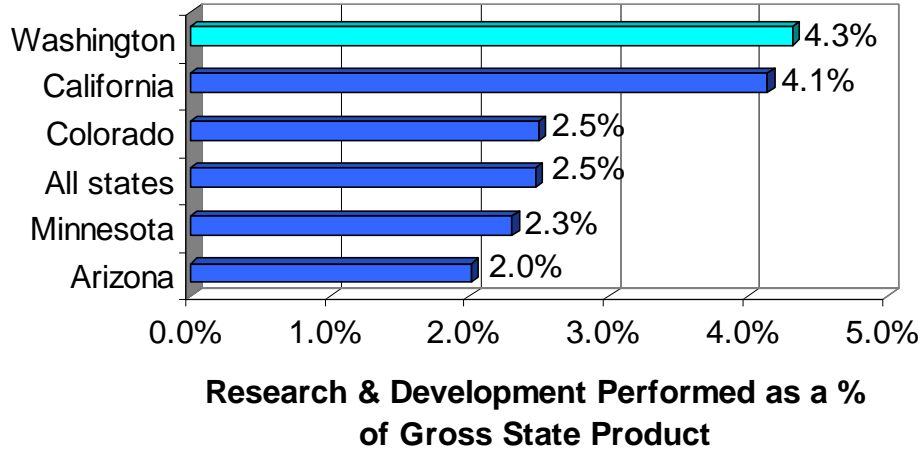


Source: 2004 World Knowledge Competitiveness Index and ECG analysis  
 Calculated from region's relative scores in 19 indicators broken down into five main categories: human capital, financial capital, knowledge capital, regional economy outputs and knowledge sustainability. Rankings out of 125 global regions (49 US regions)



Source: 2004 World Knowledge Competitiveness Index and ECG analysis  
 Calculated on the basis of a region's World Knowledge Competitiveness Index score (above) relative to its index of GDP per capita. Rankings out of 125 global regions (49 US regions)

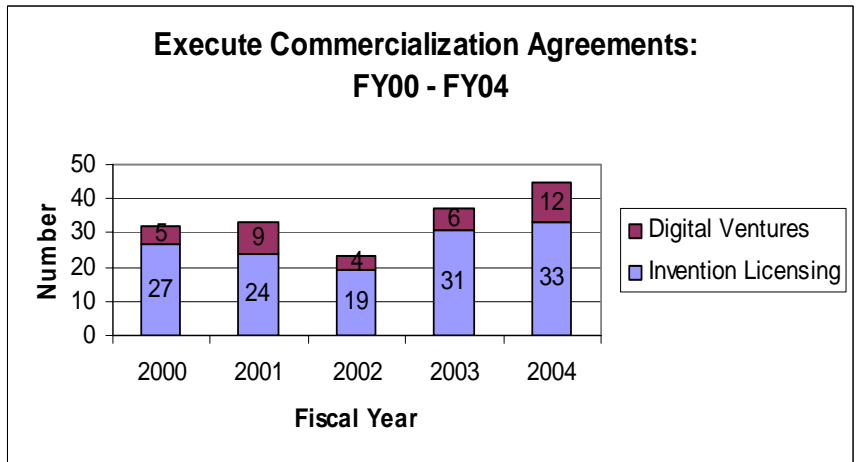
**Washington R&D budget (as a % of GSP) is top among peers and 3rd in the nation...**



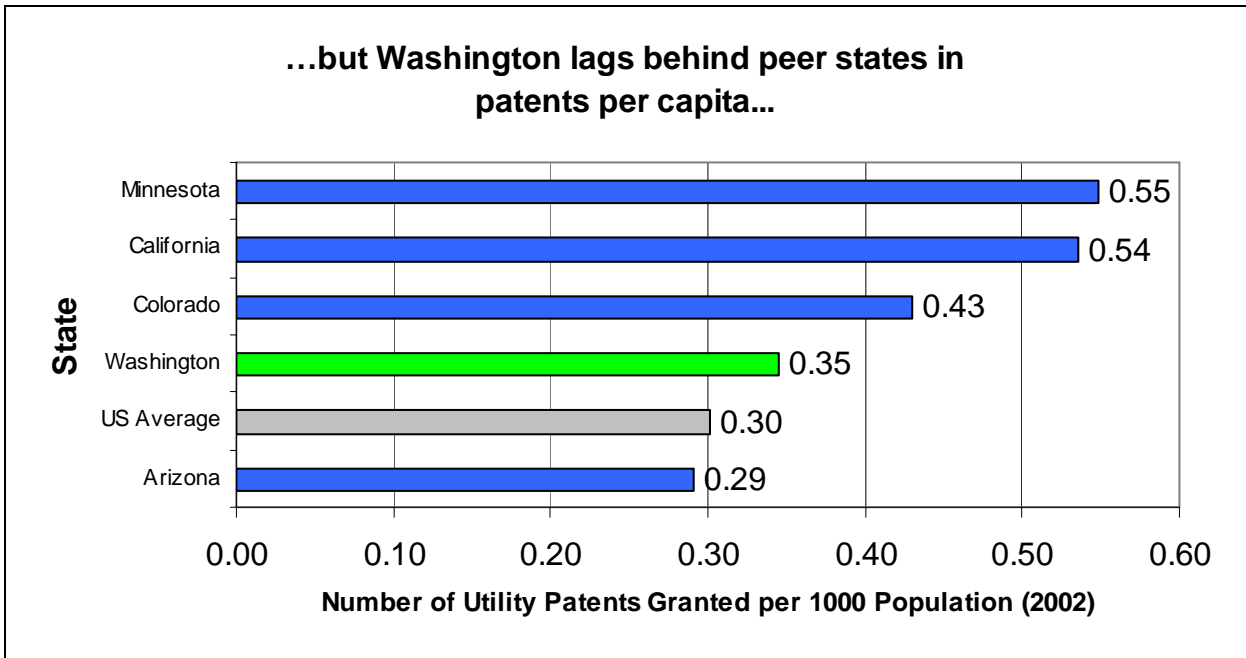
Source National Science Foundation

**...and UW's Technology Transfer Capacity Beginning to Improve in 2003 and 2004...**

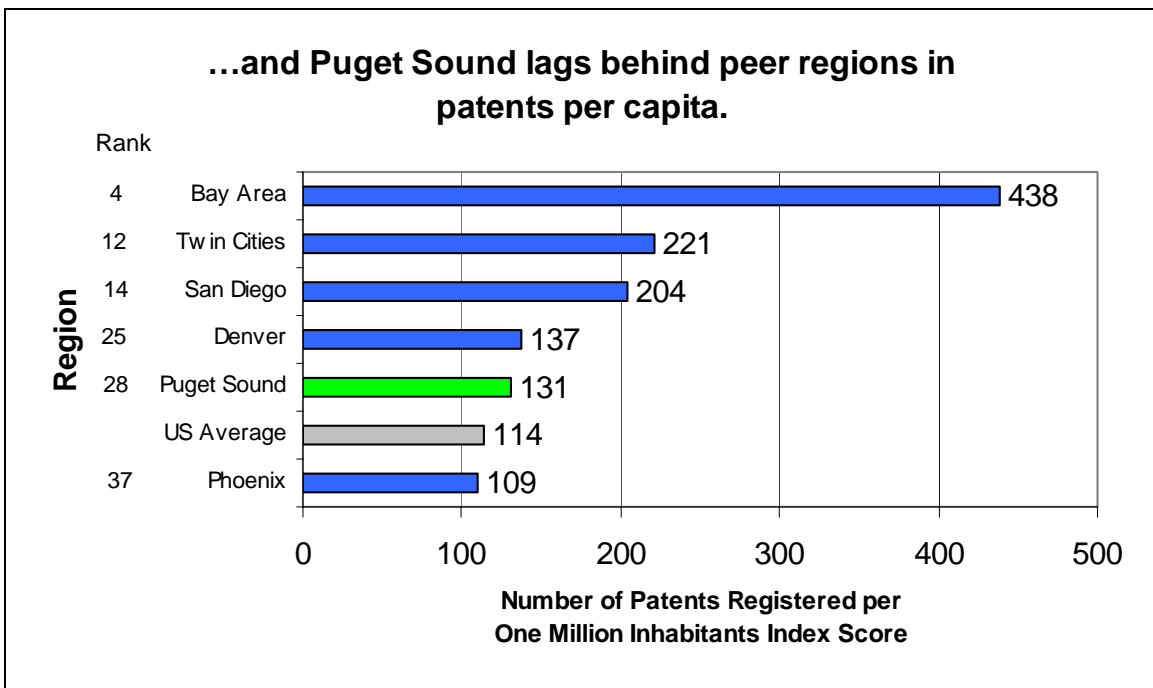
<b>UW's R&amp;D Expenditures Not Yielding Equivalent Results</b>	
<i>Inputs, 2002</i>	<i>Rank</i>
Total R&D expenditures	5
<i>Outputs, 2003</i>	
Invention Disclosures Received	16
New U.S. Patent Applications Filed	23
Licences & Options Executed	14
Adjusted Gross Income	8
Licenses & Options Yielding Income	5



Source: National Science Foundation, [www.ucop.edu/ott/ars/ann04/aro4.pdf](http://www.ucop.edu/ott/ars/ann04/aro4.pdf), AUTM Annual Licensing Survey, FY03, <http://depts.washington.edu/techtransfer>



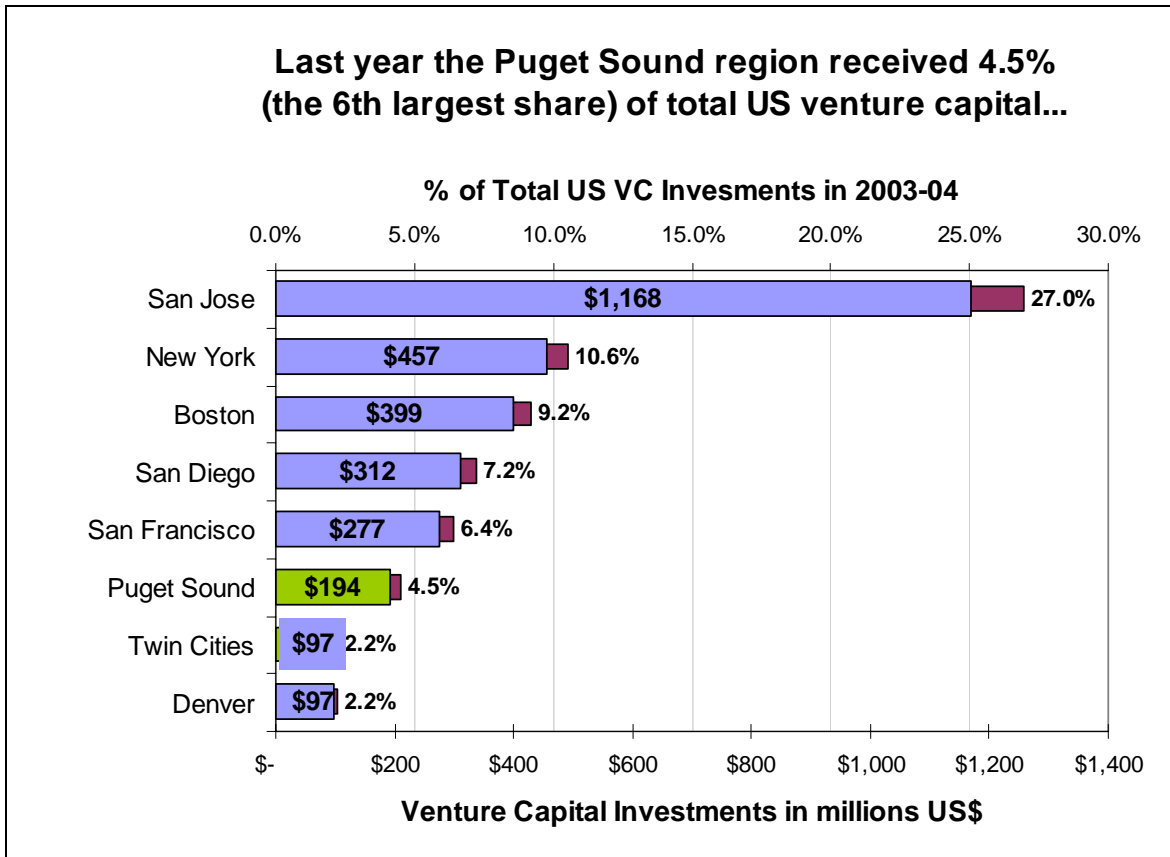
Source: US Census Bureau, US Patent and Trademark Office and ECG analysis



Source: 2004 World Knowledge Competitiveness Index and ECG analysis

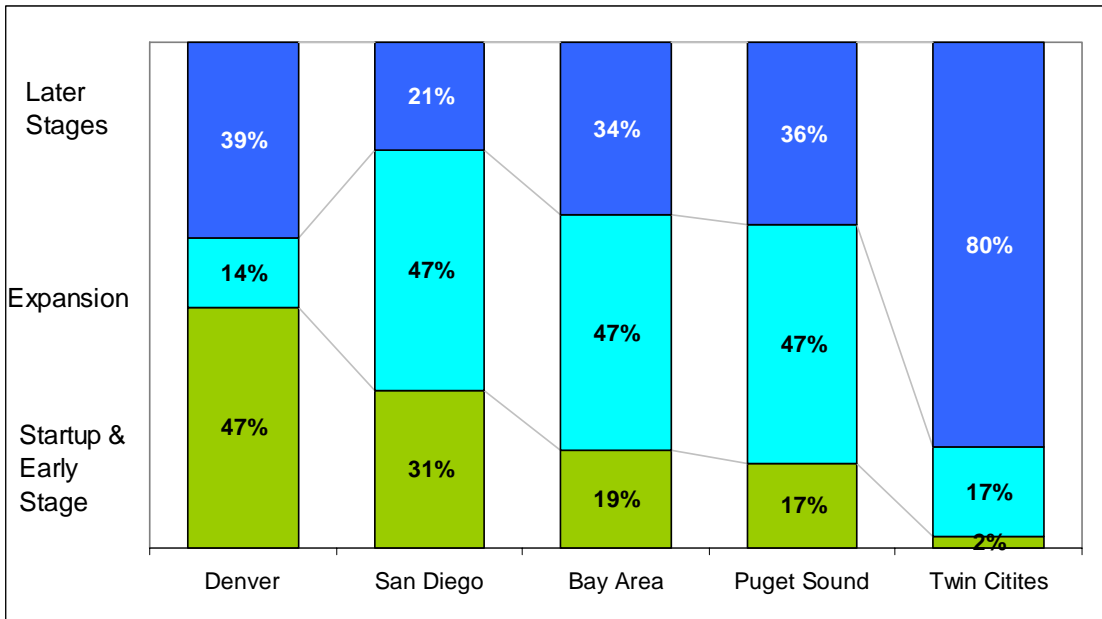
### C. Access to Capital

Making capital available at an affordable price for all type of business is also important to competitiveness. Regions need to ensure that the necessary capital flows to the firms that are most likely to achieve rapid growth and move to higher value-added: start-up capital for firms in emerging industries, expansion capital for firms in emerging and expanding industries, and modernization financing to enable mature industries to find new markets and value-added products.



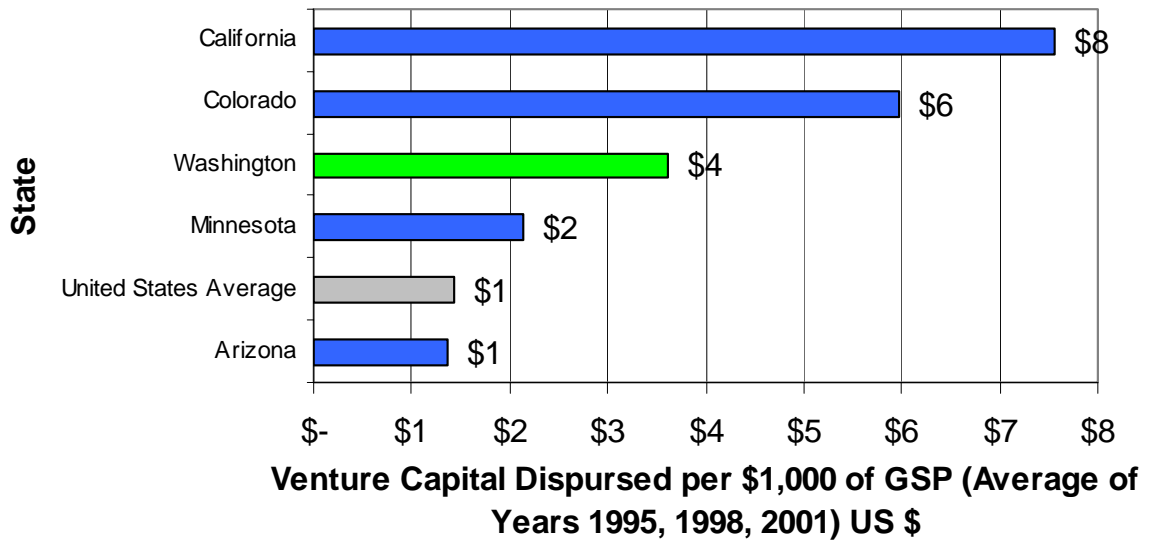
Source: *Venture Economics and ECG analysis*

**...but early stage investments lagged other investments...**

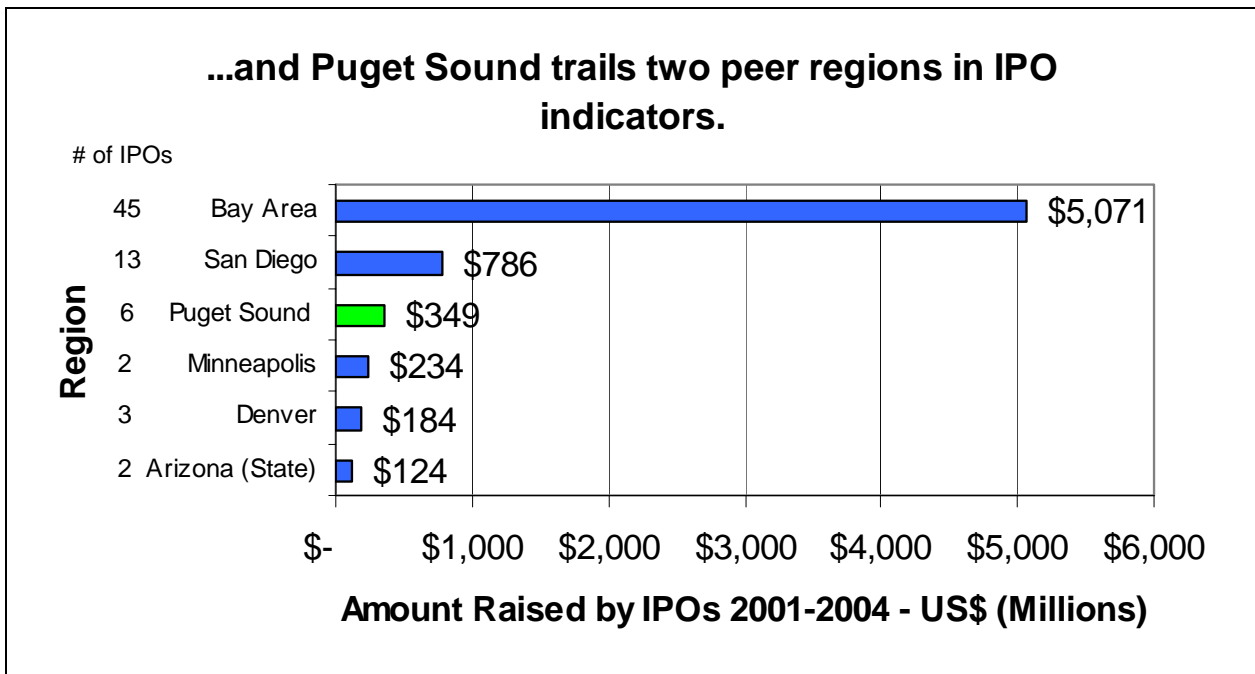


Source: Venture Economics and ECG analysis

**...and state well above US average in VC invested, but still trails two peer states significantly...**



Source: National Science Foundation and ECG analysis



Source: Venture Economics and ECG analysis

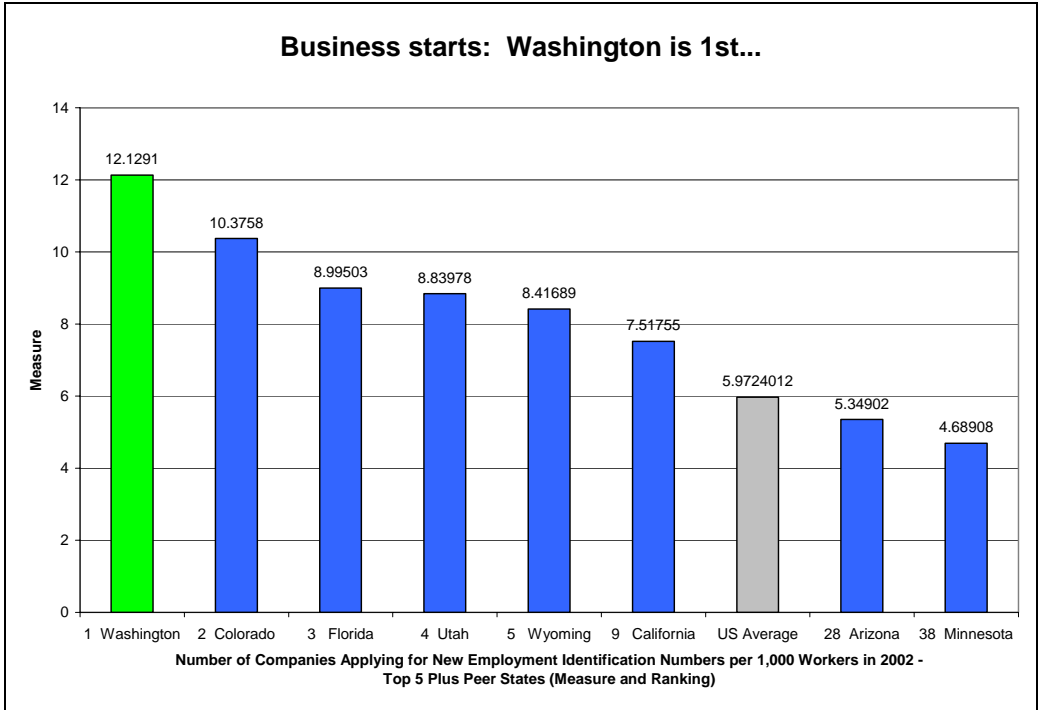
#### **D. Business Climate**

This foundation area is about creating a regulatory and tax environment that ensures adequate funding for necessary services and adequate regulations to protect an economically and otherwise attractive quality of life, but that is streamlined to eliminate unnecessary constraints on economic growth. Competitive regions will be those that remain at least competitive with other peer regions. From a public policy perspective, it is a matter of balance. There is a need for a tax system that equitably ensures adequate revenues for necessary public services to support economic growth in the region and a regulatory system that effectively protects quality of life as well as health and safety for its citizens.

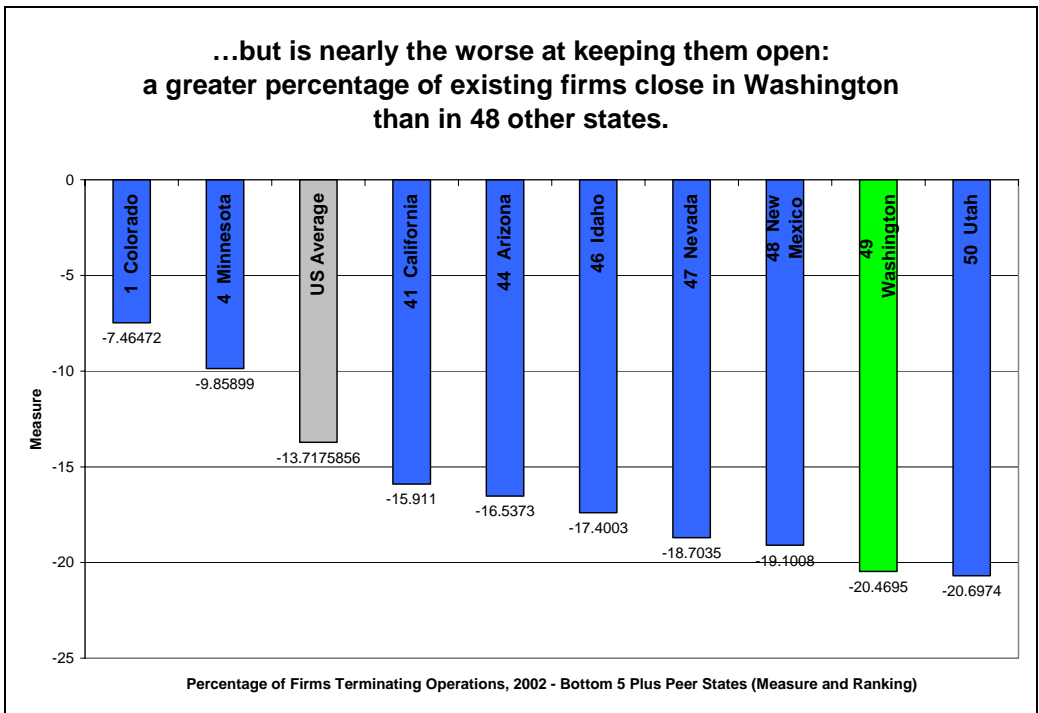
**...but the rank would be higher if it were not for the B&O tax.**

Indicator	Rank
Corporate Income Tax Index Rank	1
Individual Income Tax Index Rank	1
Sales & Gross Receipts Tax Index Rank	50
Unemployment Insurance Tax Index Rank	36
<u>Fiscal Balance Index Rank</u>	<u>23</u>
Overall Rank	9

Source: Tax Foundation

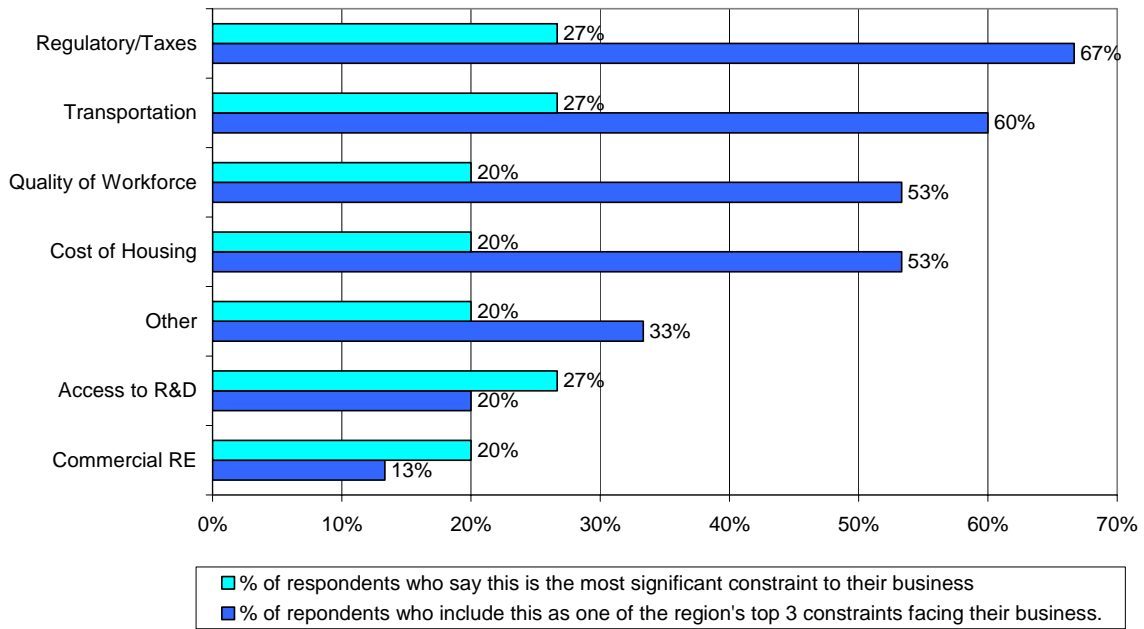


Source: Corporation for Enterprise Development



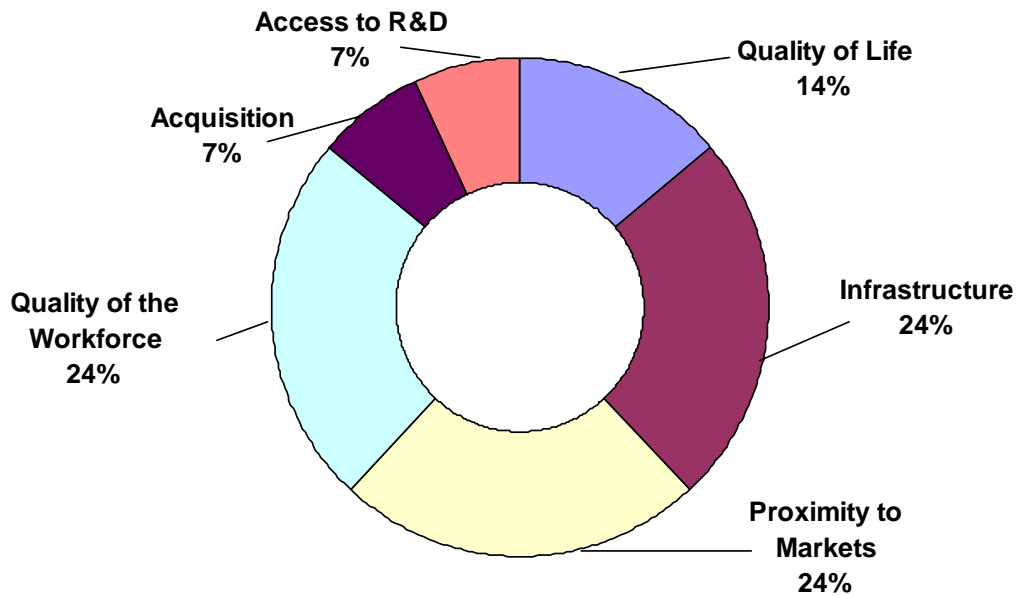
Source: Corporation for Enterprise Development

**Top constraints to doing business  
as ranked by business executives in the region...**

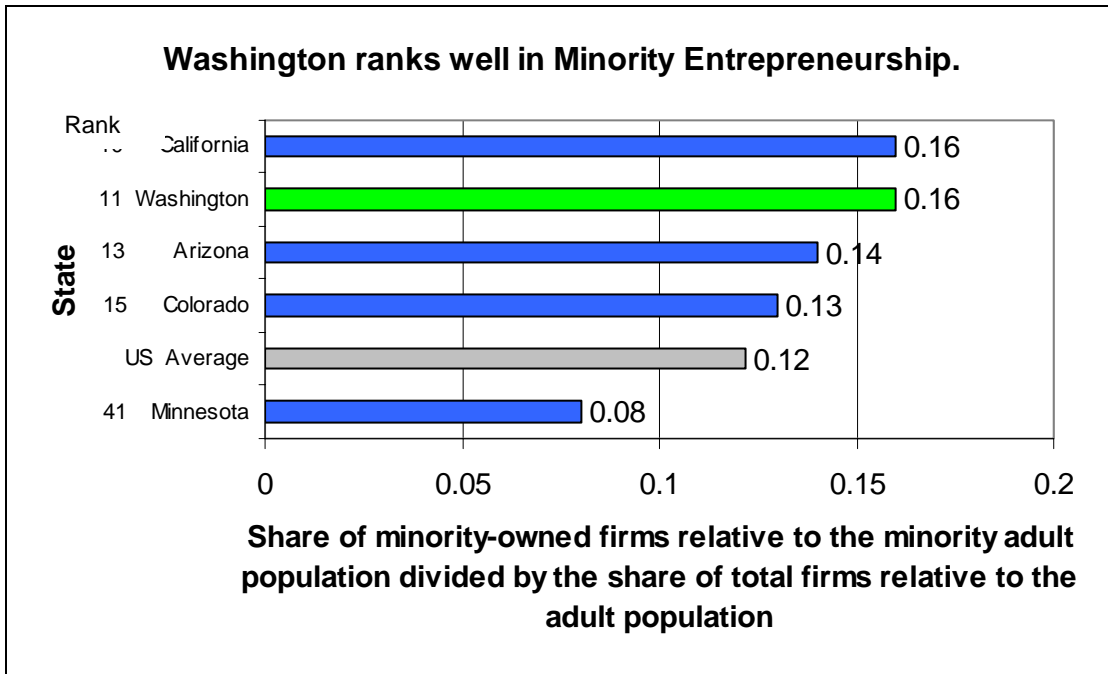


Source: Preliminary results from ECG's one-on-one interviews with senior-level representatives of firms in each of the region's key clusters.

**...firms cite infrastructure (port/airport) and workforce as top strategic reasons why their companies are here...**



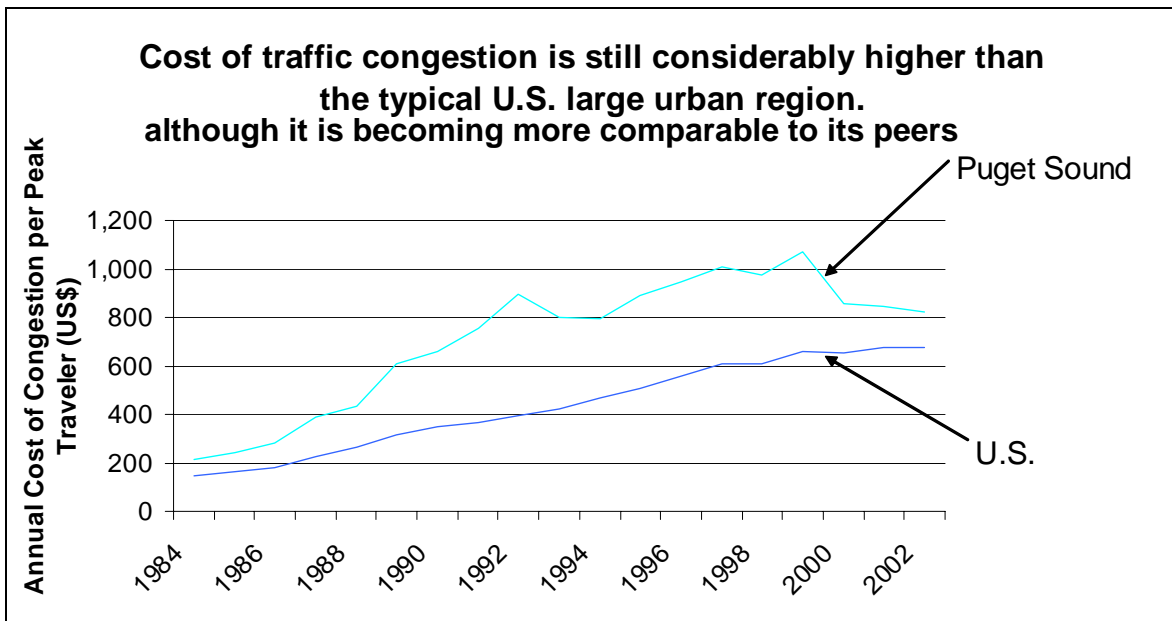
Source: Preliminary results from ECG's one-on-one interviews with senior-level representatives of firms in each of the region's key clusters.



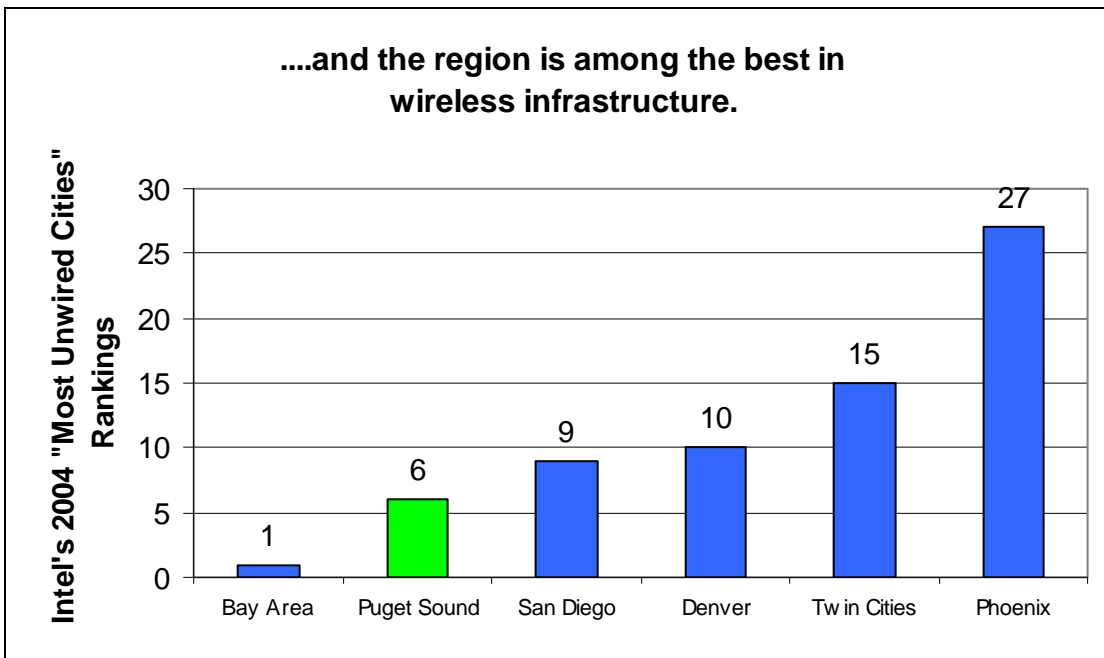
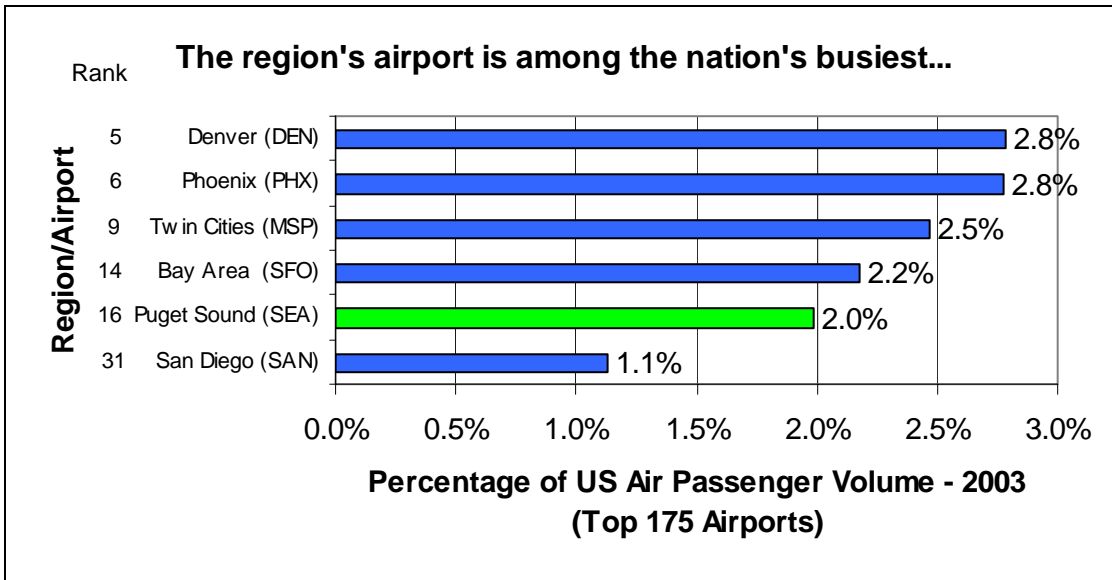
Source: Corporation for Enterprise Development: State Asset Development Report Card and ECG analysis

### E. Physical Infrastructure

Competitive regions must provide to industry not only basic services such as electricity, ports, roads, water, and waste management, but also more advanced infrastructure, such as sophisticated telecommunications capacities that enhance business efficiency and links to external markets.

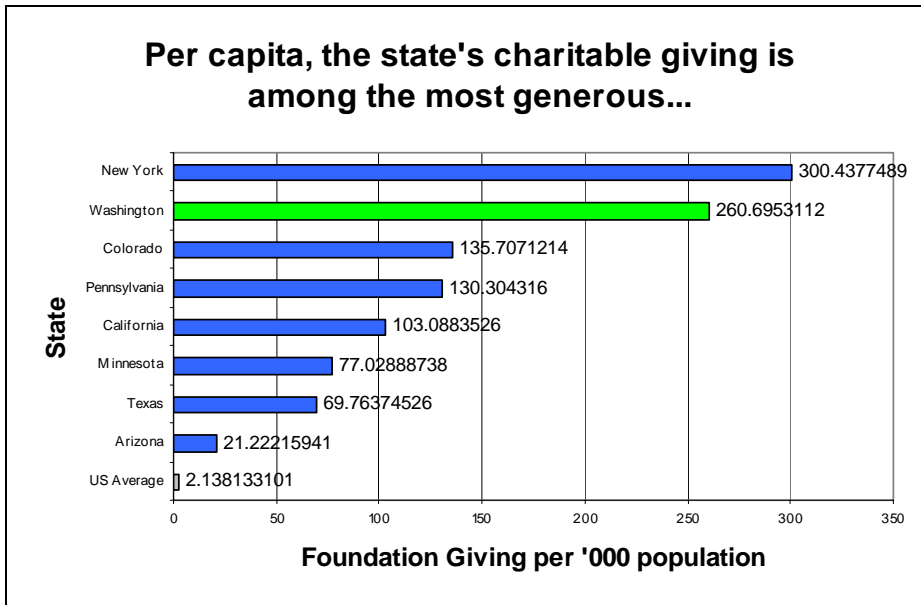


Source: Texas Transportation Institute



## F. Social Capital

This foundation area refers to the community capacities and problem-solving cultures (i.e., trust) that help make a region a good place to live and work. Measures of social capital are elusive but include the reach and work of non-profits, community philanthropy, and other quality-of-life considerations. Two decades of experience have shown the importance of social capital and quality of life as key factors in attracting and retaining “knowledge” workers for existing and new industries.



Source: *The Foundation Center*

## G. Quality of Life

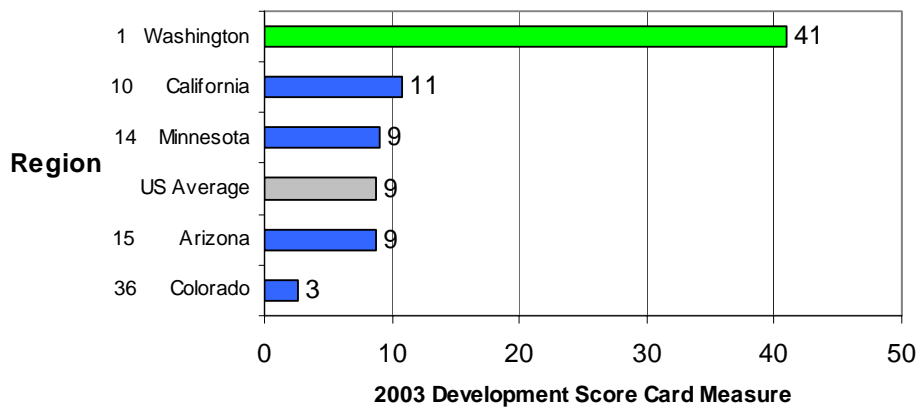
People, especially if they are well education, are increasingly mobile. They have many options about where to live and work. Going forward, the most challenging competition faced by firms will be the competition for people—for human talent. Those regions that offer a high quality of life will be the winners in this competition—places with clean air and water, and that have an array of cultural, leisure time and recreation offerings.

## Puget Sound's concentration of arts-related organizations is tops...



Source: *Americans for the Arts: Creative Industries Study*

## ...and Washington Exceptional in Use of Renewable Energy

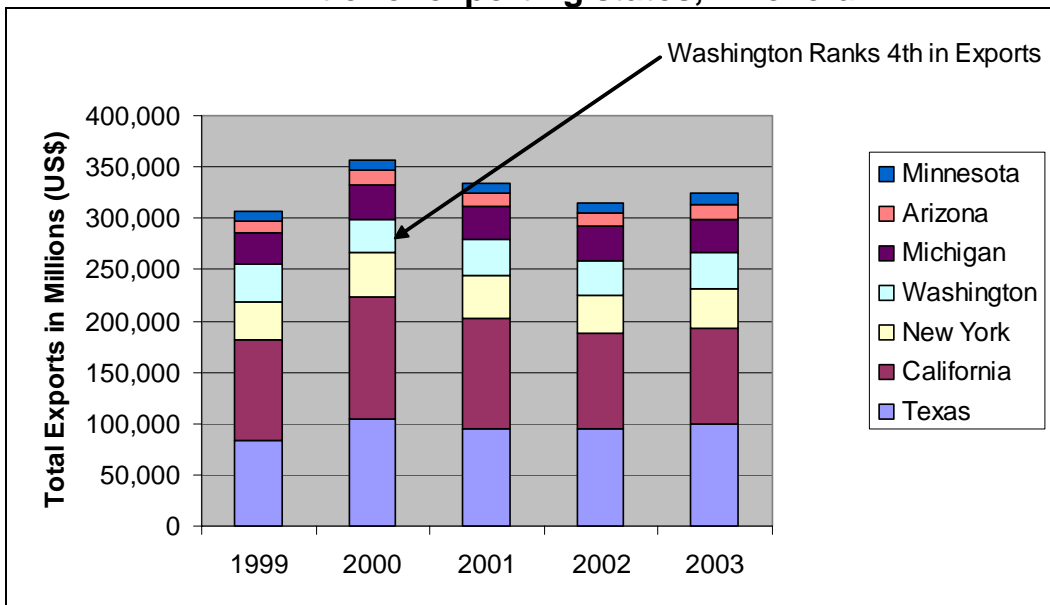


Source: *Corporation for Enterprise Development*

## H. Global Reach

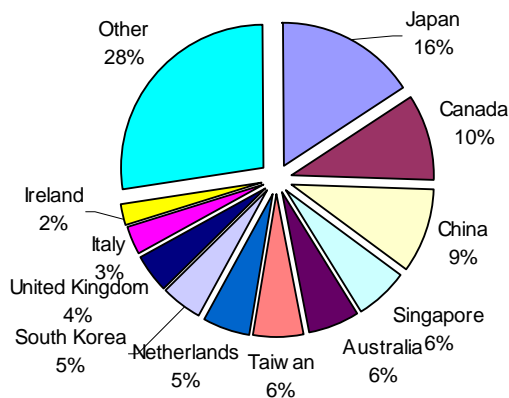
As the process of economic globalization continues, successful regions will be those that have “found a place” in the world’s economy. Export activity is just one measure. Global reach also includes the movement of foreigners, especially business people, into and out of the region. It means access to foreign investment capital, and investment in foreign businesses. Global reach is becoming a key indicator of a region’s economic competitiveness in the 21st century.

**The value of goods it exports to the world places the state in the top tier of exporting states, 4<sup>th</sup> overall...**



Source: US Office of Trade and Economic Analysis (OTEA)

**...and Washington's export trade is heavily focused on the Pacific Rim.**



Source: US Office of Trade and Economic Analysis (OTEA) (2003 Figures)