



State Snapshot

The Business Services cluster is the most diverse of all clusters, as it is comprised of industries and occupations that provide a wide array of professional services to the business community, including Transportation, Information, Financial Services, Real Estate, Professional Services, Management, and Administrative Services. An important aspect of the Business Services cluster, one that makes it unique from all other clusters, is that the cluster is about occupations common to all industries. Business Services is the vital backdrop to the successful operation of all other clusters. Success and growth in Tourism & Hospitality Services, Manufacturing, Bio-Tech & Bio-Medical Devices, Agri-Business, Education, Construction, Public Services, and Health Care are dependent upon a thriving Business Services cluster.¹

Business Services is often used a barometer for the regional economy and its workforce due to the diversity of firms within the cluster, as well as their supporting role in the regional economy. Historically, the Business Services cluster has represented one of the most rapidly growing sectors as measured by the rate of job growth.² Over 1,109,000 individuals work in Business Services; the cluster grew 23% from 2002 and 4% from 2009. Projections show Business Services growing an additional 12% through 2015.³ Reasons for growth include: an expanding export market, local firms supplying services formerly imported, growth in outsourcing, technological changes, growth in consumer demand, and changes in business operations to improve production and increase competitiveness.⁴ The strength of the Business Services cluster allows Washington to have a world-class export system, and in challenging economic times it is a powerful export engine that allows Washington to fare better than most other states.⁵

Currently, statistics reveal a mixed economic picture for Washington and Snohomish County Business Services. Housing data is discouraging, but the commercial market is holding up stronger than expected. Retail sales have slowed dramatically, but that is not stopping store owners from developing new shopping experiences.⁶ Additionally, Washington was recently ranked as the third best state for business.⁷ Growth may be slowing, but business is still getting done. This edition of the Business Services cluster report will highlight Transportation and Information, two industries that have fared extremely well during the recession.

¹ (Godbe Research, 2004): Print report available from WDC

² (Godbe Research, 2004): Print report available from WDC

³ (Economic Modeling Specialists, Inc, 2010): Not accessible without paid subscription

⁴ (Washington State Employment Security Department, 2002): Link not available

⁵ (Gregoire, 2008): <http://www.governor.wa.gov/speeches/speech-view.asp?SpeechSeq=94>

⁶ (Washington CEO, 2008): <http://www.washingtonceo.com/home/print-story/article/307/the-glass-is.html?print=1>

⁷ (Badenhausen, 2008): http://www.forbes.com/2008/07/30/virginia-georgia-utah-biz-cz_kb_0731beststates_print.html

Snohomish County Data

Business Services Defined

The North American Industrial Classification System (NAICS) is the current industry classification standard in the United States. NAICS breaks Business Services into subsectors according to specialization. The table below depicts 2007 NAICS codes for the Business Services cluster.⁸

NAICS Code	Industry Title
TRANSPORTATION	
4811	Scheduled air transportation
4812	Nonscheduled air transportation
4821	Rail transportation
4831	Sea, coastal, and Great Lakes transportation
4832	Inland water transportation
4841	General freight trucking
4842	Specialized freight trucking
4851	Urban transit systems
4852	Interurban and rural bus transportation
4853	Taxi and limousine service
4854	School and employee bus transportation
4855	Charter bus industry
4859	Other ground passenger transportation
4871	Scenic and sightseeing transportation, land
4872	Scenic and sightseeing transportation, water
4879	Scenic and sightseeing transportation, other
4881	Support activities for air transportation
4882	Support activities for rail transportation
4883	Support activities for water transportation
4884	Support activities for road transportation
4885	Freight transportation arrangement
4889	Other support activities for transportation
4991	Postal service
4921	Couriers and express delivery services
4922	Local messengers and local delivery
4931	Warehousing and storage
INFORMATION	
5111	Newspaper, periodical, book, and directory publishers

⁸ (North American Industry Classification System, 2007): <http://www.census.gov/epcd/www/naics.html>

5112	Software publishers
5121	Motion picture and video production
5122	Sound recording industries
5151	Radio and television broadcasting
5161	Internet publishing and broadcasting
5171	Wired telecommunications carriers
5172	Wireless telecommunications carriers (except satellite)
5173	Telecommunications resellers
5174	Satellite telecommunications
5175	Cable and other program distribution
5179	Other telecommunications
5181	ISPs and web search portals
5182	Data processing, hosting, and related services
5191	Other information services
	FINANCIAL SERVICES
5221	Depository credit intermediation
5222	Nondepository credit intermediation
5223	Activities related to credit information
5231	Securities and commodity contracts intermediation and brokerage
5232	Securities and commodity exchanges
5239	Other financial investment activities
5241	Insurance carriers
5242	Insurance agencies, brokerages, and related
5251	Insurance and employee benefit funds
5259	Other investment pools and funds
	REAL ESTATE
5311	Lessors of real estate
5312	Offices of real estate agents and brokers
5313	Activities related to real estate
5321	Automotive equipment rental and leasing
5322	Consumer goods rental
5323	General rental centers
5324	Machinery and equipment rental and leasing
5331	Lessors of nonfinancial intangible assets
	PROFESSIONAL SERVICES
5411	Legal services
5412	Accounting, tax preparation, bookkeeping, and payroll services

5413	Architectural, engineering, and related services
5414	Specialized design services
5415	Computer systems design and related services
5416	Management, scientific, and technical consulting services
5417	Scientific research and development services
5418	Advertising, public relations, and related services
5419	Other professional, scientific, and technical services
	MANAGEMENT
5511	Management of companies and enterprises
	ADMINISTRATIVE SERVICES
5611	Office administrative services
5612	Facilities support services
5613	Employment services
5614	Business support services
5615	Travel arrangement and reservation services
5616	Investigation and security services
5617	Services to buildings and dwellings
5619	Other support services
5621	Waste collection
5622	Waste treatment and disposal
5629	Remediation and other waste management services

Employment in Business Services

The number of workers in Snohomish County's Business Services cluster totaled over 78,000 as of April 2010. Employment within the cluster increased 38% from 2002 and 5% from 2009. The top 20 occupations in the Business Services cluster are listed in the table below.⁹

SOC Code	Occupation Title	Jobs	% of Industry
41-9022	Real estate sales agents	4,198	5%
41-9021	Real estate brokers	4,087	5%
11-9141	Property, real estate, and community association managers	2,486	3%
13-2011	Accountants and auditors	1,867	2%
13-1111	Management analysts	1,649	2%
37-3011	Landscaping and groundskeeping workers	1,566	2%
43-4051	Customer service representatives	1,541	2%
27-4021	Photographers	1,516	2%

⁹ (Economic Modeling Specialists, Inc, 2010): Not accessible without paid subscription

37-2011	Janitors and cleaners, except maids and housekeeping cleaners	1,499	2%
43-3031	Bookkeeping, accounting, and auditing clerks	1,487	2%
53-3032	Truck drivers, heavy and tractor-trailer	1,221	2%
43-9061	Office clerks, general	1,199	2%
13-2052	Personal finance advisors	1,156	1%
41-3021	Insurance sales agents	1,118	1%
37-2019	Building cleaning workers	1,113	1%
53-7062	Laborers and freight, stock, and material movers, hand	1,043	2%
41-3031	Securities, commodities, and financial services agents	993	1%
43-1011	First-line supervisors/managers of office and administrative support workers	988	1%

Puget Sound is and will continue to be known as a region that attracts Information workers such as software programmers and developers. The strong supporting network of universities, venture capital companies, and partners combine to foster the region's Information industry. Additionally, Puget Sound's local culture and amenities, combined with high wages for most occupations in the Information industry, will continue to attract the nation's talent.¹⁰

Business Services Spending and Activity

Transportation

Transportation as it pertains to Business Services deals mainly with the shipment of cargo, which is a significant industry in Snohomish County. The industry includes rail, sea, and road transport of cargo, the warehousing of freight, and the connections between various modes of transportation.

Washington and the entire nation depend on the ability of the highways and rail lines in the Puget Sound gateway to move goods for retail, industrial, and agricultural sectors. Snohomish County has major rail service both north-south and east-west and both Burlington Northern Santa Fe and Amtrak have their major north-south and east-west routes passing through Snohomish County.

The Port of Everett provides direct deep-water access and container shipping opportunities. The Port of Everett operates eight berths on 100 acres of land and can handle approximately one million tons of cargo per year. Primary exports include logs, lumber, and agricultural products. Primary imports include bulk alumina ore and specialized aircraft parts for the Boeing Company. The Port of Everett also operates a 4,000 ton warehouse and has cold storage capacity.¹¹ Puget Sound ports serve a national market; 65% to 75% of the international containers entering these ports are transferred to rail to supply inland markets beyond Washington. Ports in this region comprise the third largest marine container load center in North

¹⁰ (Berk & Associates, 2005): http://www.seattle.gov/economicdevelopment/files/ict_final_report_july_2005.pdf

¹¹ (Snohomish County Economic Development Council, 2007): <http://www.snoedc.org/general-business-information/transportation>

America, behind only Los Angeles/Long Beach and New York/New Jersey.¹² The Port of Everett was deemed a strong economic driver in the region, according to a May 2009 report assessing economic impacts of transportation systems around the world. The study found that last year alone, the Port of Everett provided \$2.7 billion in total wages, salaries, and local consumption expenditures to the local and regional economy. In addition, the Port of Everett generated roughly \$3.6 billion of revenue for local businesses and \$246.8 million in state and local tax revenues. The influx in economic benefits to the region is a direct result of the Port's increase in shipping operations and its role in servicing the local and regional aerospace industry, thus making the Port of Everett a critical piece of infrastructure to support the local and regional aerospace industries. The study also found that 80% of the jobs generated by the Port stay within Snohomish County and 40% stay in the City of Everett.¹³

The Port of Edmonds provides the only public boating access in the highly populated 30-mile stretch between Seattle's Shilshole Bay and the Port of Everett.¹⁴ While focused on public usage rather than the shipment of cargo, the Port of Edmonds must be mentioned for its impressive efforts to work with and serve its community, efforts that led to the Port of Edmonds being named the 2006 Marina of the Year by *Marina Dock Age* magazine. The Port of Edmonds has transformed itself into a destination stopover for boaters on the West Coast and is a major economic force in the community.¹⁵

Since 1998, the Freight Action Strategy for the Everett-Seattle-Tacoma Corridor (FAST), a coalition of public and private partners in the Puget Sound, has leveraged \$568 million of public and private funding for strategic freight mobility infrastructure improvements. Such improvements support Washington's effort to actively pursue global markets to participate in the international economy. For Snohomish County, Washington's desire to remain a global leader along with local infrastructure improvements translates to increased need for transportation services and considerable growth in this industry.¹⁶

While the transportation of cargo is the main focus of Business Services, the transportation of residents and workers has become of particular concern in recent years, given that people are experiencing increased difficulty affording gas and maintaining personal automobiles. This has resulted in fewer vehicles on highways statewide. In June 2009 (the most recent month for which data is available), an average of 1.52 million vehicles drove on state highways daily, about ,14,000 fewer than in July 2008 and 85,000 fewer than July 2007.¹⁷

¹² (Puget Sound Regional Council, 2006): <http://www.psrc.org/fastcorridor/fastbrochure.pdf>

¹³ (Martin Associates, 2009): http://www.portofeverett.com/docs/economic_impact_report_2008.pdf

¹⁴ (Port of Edmonds, 2008): Link not available

¹⁵ (Marina Dock Age, 2006): <http://www.marinadockage.com/moy/06/index.html>

¹⁶ (Puget Sound Regional Council, 2006): <http://www.psrc.org/fastcorridor/fastbrochure.pdf>

¹⁷ (Washington State Department of Transportation, 2009): <http://www.wsdot.wa.gov/mapsdata/tdo/annualmileage.htm>

During the last four years, transit ridership in the Puget Sound grew 23%, outpacing a strong national increase in ridership of 10%. Transit ridership increased more than regional population, employment, transit service, and highway usage by automobiles. Transit agencies in Snohomish County are scrambling to meet the growing demands for service. From 2005-2008, Sound Transit bus ridership increased 42%, Sounder commuter rail ridership increased 110%, Community Transit ridership increased 30%, and Everett Transit ridership increased 29%.¹⁸

Community Transit, which provides bus and vanpool service, as well as transit service in Snohomish County for people with disabilities, carried a record 11.9 million passengers in 2008, a million more than in 2007 and an increase of over 9%. This marked the fourth consecutive year of record ridership for the agency.¹⁹ In July 2008, Community Transit served more than one million people for the first time in its history. Ridership is dropping again after four years of record highs, which is not unexpected given high unemployment and downward national transit trends due to the recession.²⁰

Transit providers are enhancing services to individuals with special needs through the Snohomish County Special Needs Transportation Coalition (SNOTRAC). An estimated 35-45% of the Snohomish County population has difficulties with transportation; the mission of SNOTRAC is to work together with a broad-based group of human services providers, advocacy groups, and community members to develop a coordinated transportation system for this population of riders.²¹

Information

The region's Information industry is rooted in the local concentration of aerospace, University research, and technical occupations in other industries. The success of Microsoft and McCaw Cellular grew the industry in the 1980s and early 1990s, with Amazon.com and other companies emerging in the late 1990s and anchoring the industry today.²² Success in the Information industry has not faded away. Growth in popularity of items such as cell phones, pagers, wireless devices, satellite services, and data and video transmission devices makes for an active Information industry. Elements of the Information industry are used in most daily activities and demand continues to increase for the latest in Information products.²³

Washington ranks third among its 10 peer states in concentration of high-tech employment, second in the nation in new company creation, and second in the nation in software exports.²⁴ King County was recently

¹⁸ (Puget Sound Regional Council, 2009): <http://www.psrc.org/assets/2122/t6jun09.pdf>

¹⁹ (Community Transit, 2009): <http://www.commtrans.org/News/New.cfm?id=1316>

²⁰ (Community Transit, 2010): <http://communitytransit.blogspot.com/2010/03/swift-vanpool-ridership-rise-as-overall.html>

²¹ (Jones, 2007):

http://www.co.snohomish.wa.us/documents/Departments/Human_Services/Community/Transportation/SNOTRACPerformanceReport2007.pdf

²² (Berk & Associates, 2005): http://www.seattle.gov/economicdevelopment/files/ict_final_report_july_2005.pdf

²³ (Washington Department of Commerce, 2008): <http://www.choosewashington.com/industries/detail.asp?i=23>

²⁴ (Washington Technology Industry Association, 2008): <http://www.washingtontechnology.org/>

ranked the fifth best county in the nation (with a population of 500,000 or more) for outstanding use of technology. Skagit County was ranked the fifth best county in the nation in its population category (less than 150,000).²⁵ It is clear that the Puget Sound is a leader in the Information industry, and the industry in turn is critical to the economic success of the region.

In short, the Information industry constitutes a growing, vibrant, innovative sector the regional economy. The industry provides good jobs and contributes an increasing share of the economic base. If trends of the past years are any indicator, the Information industry will plan an even more important role in the economy in coming decades.²⁶

Snohomish County Outlook

Business Services Forecast

Data forecasts growth in the number of workers in Business Services industries in the next five years, as shown in the table below. Few industries show decline while the others show robust growth. Decline in one area within Business Services tends to be a result of changing trends and evolving customer tastes, both of which result in growth in a different industry. For example, within Information, the wired telecommunications industry is declining while the wireless telecommunications industry has shown tremendous growth. On a similar note, the publishing of written materials is declining while the internet publishing and broadcasting industry is on the rise.²⁷

NAICS Code	Industry Title	2010 Jobs	2015 Jobs	% Change	Earnings Per Worker
TRANSPORTATION					
4811	Scheduled air transportation	39	24	(-38%)	\$61,465
4812	Nonscheduled air transportation	21	23	10%	\$206,438
4821	Rail transportation	455	422	(-7%)	\$96,880
4831	Sea, coastal, and Great Lakes transportation	27	33	22%	\$41,006
4832	Inland water transportation	<10	<10	--	--
4841	General freight trucking	1,435	1,555	8%	\$42,954
4842	Specialized freight trucking	695	766	10%	\$48,815
4851	Urban transit systems	<10	<10	--	--
4852	Interurban and rural bus transportation	278	333	20%	\$45,236
4853	Taxi and limousine service	209	252	21%	\$18,938
4854	School and employee bus transportation	169	161	(-5%)	\$33,159

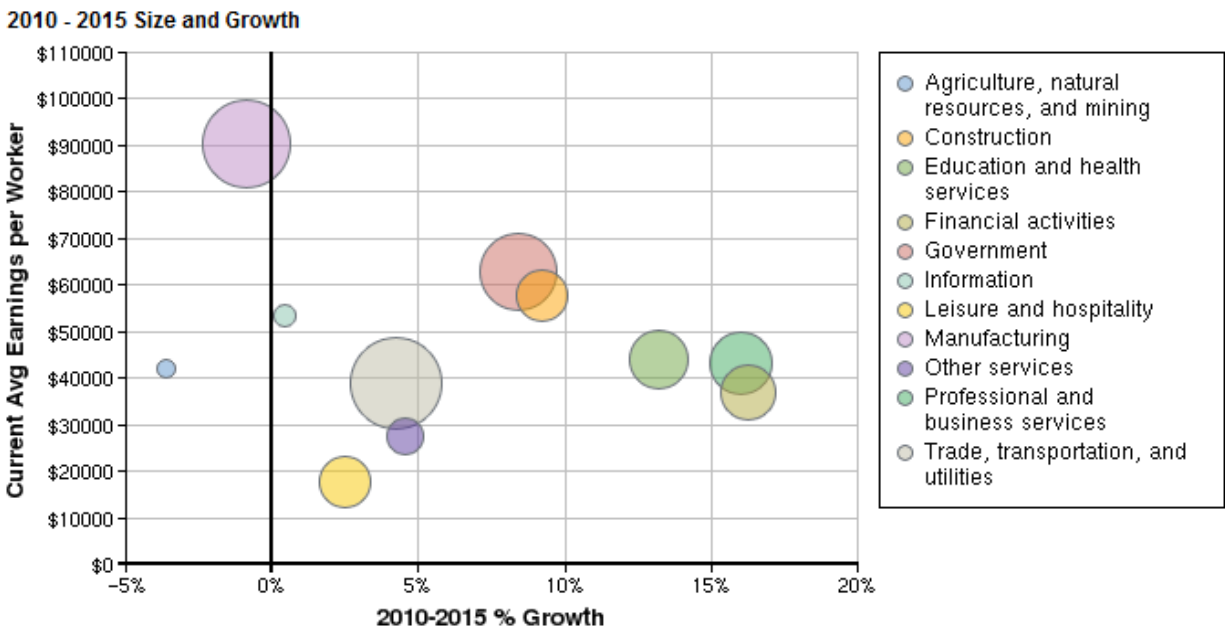
²⁵ (Center for Digital Government, 2008): <http://www.centerdigitalgov.com/surveys.php?survey=counties>

²⁶ (Berk & Associates, 2005): http://www.seattle.gov/economicdevelopment/files/ict_final_report_july_2005.pdf

²⁷ (Economic Modeling Speciliasts, Inc, 2010): Not accessible without paid subscription

4855	Charter bus industry	<10	<10	--	--
4859	Other ground passenger transportation	78	70	(-10%)	\$28,210
4871	Scenic and sightseeing transportation, land	--	--	--	--
4872	Scenic and sightseeing transportation, water	17	22	29%	\$26,132
4879	Scenic and sightseeing transportation, other	<10	<10	--	--
4881	Support activities for air transportation	281	300	7%	\$66,204
4882	Support activities for rail transportation	<10	<10	--	--
4883	Support activities for water transportation	272	280	3%	\$79,134
4884	Support activities for road transportation	175	182	4%	\$38,882
4885	Freight transportation arrangement	184	171	(-7%)	\$59,552
4991	Postal service	1,095	1,051	(-4%)	\$80,867
4921	Couriers and express delivery services	934	1,005	8%	\$30,871
4922	Local messengers and local delivery	81	93	15%	\$10,016
4931	Warehousing and storage	487	532	9%	\$30,702
	INFORMATION				
5111	Newspaper, periodical, book, and directory publishers	608	383	(-37%)	\$51,796
5112	Software publishers	538	642	19%	\$67,716
5121	Motion picture and video production	552	500	(-9%)	\$17,236
5122	Sound recording industries	65	73	12%	\$11,917
5151	Radio and television broadcasting	63	74	17%	\$32,008
5161	Internet publishing and broadcasting	117	147	26%	\$41,686
5171	Wired telecommunications carriers	1,126	825	(-27%)	\$79,303
5172	Wireless telecommunications carriers (except satellite)	1,412	1,516	7%	\$50,526
5173	Telecommunications resellers	13	<10	--	--
5174	Satellite telecommunications	--	--	--	--
5175	Cable and other program distribution	760	968	27%	\$50,391
5179	Other telecommunications	17	10	(-41%)	\$28,045
5181	ISPs and web search portals	54	68	26%	\$17,166
5182	Data processing, hosting, and related services	319	447	40%	\$43,582
5191	Other information services	26	35	35%	\$22,395

The figure below that, overall, industries within the Business Services (green) cluster show moderate growth and Earnings per Worker compared to other clusters in Snohomish County.²⁸



Training and Educational Needs

Transportation

The University of Washington has several programs geared toward the Transportation industry. The Global Trade, Transportation, and Logistic Studies (GTTL) program prepares students for careers in international trade and transportation systems. The GTTL program offers a GTTL certificate, an annual conference, and evening classes in global supply chain management for mid-career professionals. The Intelligent Transportation Systems Research (ITS) program focuses on the application of computer and communications technologies to solve transportation problems. The ITS program collaborates with government and industry, making it an educational program as well as a regional resource for advanced answers to transportation issues. The School of Marine Affairs (SMA) offers an internationally recognized master's degree program for launching careers in marine policy and administration. After receiving a Master of Marine Affairs degree, graduates are qualified for various marine affairs-related positions, and often go on to become policy makers, analysts, planners, administrators, consultants, non-profit managers, activists, and researchers.²⁹ Lastly, Washington State University offers a Geotechnical and Transportation Engineering program emphasizing the various human and material design aspects of transportation facilities including traffic, geometrics, planning, pavements, and materials.

²⁸ (Economic Modeling Specialists, Inc, 2010): Not accessible without paid subscription

²⁹ (University of Washington, 2008): <http://www.washington.edu/>

Transportation Northwest (TransNow) is a Regional University Transportation Center hosted by the University of Washington and administered by the United States Department of Transportation. The mission of TransNow is to develop and maintain a center of excellence in transportation research and education, serving as a primary source of and resource for competent transportation professionals for the 21st century. TransNow focuses on traffic operations, freight operations and logistics, and infrastructure construction. TransNow is a showcase for transportation research and education in the Pacific Northwest. TransNow also provides support for research, education, and technology transfer through its consortium university, Washington State University.³⁰

Information

Nearly every high school, community college, university, and career and technical school in the Puget Sound region offers courses and programs in information technology. Being a wired business is necessary for today's competitive market. Realizing this need, Washington State Economic Development Councils & Associations, state and local government, business, and research institutions formed a partnership to market the connectivity and competitive advantages located within rural areas in Washington. The Center to Bridge the Digital Divide, hosted by Washington State University, focuses on increasing information-based jobs. The project includes inventorying the telecommunications infrastructure, workforce capacity, and facilities available to host information-based jobs. Also at Washington State University, the School of Electrical Engineering and Computer Science created a wireless communication emphasis within the Bachelor of Science in Electrical Engineering degree program. The Radiowave Communications Consortium provides financial and in-kind support that allows Washington State University to offer a laboratory-based education in wireless communications with extensive hands-on experience.³¹

The Business & Technology Trades Career Tree, below, depicts experience required and potential earnings for occupations within this cluster.³²

³⁰ (Transportation Northwest, 2008): <http://www.transnow.org/>

³¹ (Washington Department of Commerce, 2008): <http://www.choosewashington.com/industries/detail.asp?i=23>

³² (Workforce Development Council Snohomish County, 2007):
http://careertrees.org/history/documents/originalcareertrees_000.pdf

Business & Technology Services

<p>Advanced Degree (6 - 8 years) \$41,000 - 84,000 per year</p>	<p>Certified Public Accountants* (p. 18) Operations Research Analysts* Statisticians</p>		
<p>Bachelor's Degree (4 years) \$22,000 - 145,000 per year</p>	<p>Accountants & Auditors* (p. 18) Actuaries (p. 22) Administrative Service Managers Advertising Managers (p. 39) Advertising Salespeople (p. 39) Agents & Business Managers Appraisers & Assessors (p. 22) Budget Analysts* Business Executives (p. 18) Computer & Information Systems Managers* (p. 33) Computer Engineers* (p. 33) Computer Network & Data Communications Analysts* (p. 33) Computer Programmers* (p. 33) Computer Systems Administrators* (p. 34)</p>	<p>Computer Systems Analysts* (p. 34) Credit Analysts Database Administrators (p. 34) Employment Recruiters (p. 18) Financial Analysts (p. 22) Financial Counselors* (p. 22) Financial Examiners Financial Managers* (p. 22) General Operations Managers* (p. 18) Graphic Designers* (p. 17) Human Resource Managers* (p. 19) Insurance Adjusters & Examiners (p. 23) Insurance Agents* (p. 23) Insurance Underwriters (p. 23) Interpreters & Translators (p. 31) Job Benefits Analysts & Specialists Journalists (p. 17)</p>	<p>Loan Officers (p. 23) Management Analysts* Market Research Analysts* Marketing Managers* Meeting & Convention Planners New Account Clerks Public Relations Managers Public Relations Specialists* (p. 19) Purchasing Managers Sales Managers* (p. 40) Sales Representatives* (p. 40) Securities Salespeople* (p. 23) Tax Examiners (p. 23) Web Specialists (p. 34) Winemakers (p. 13)</p>
<p>Associate's Degree (2 years) \$20,000 - 73,000 per year</p>	<p>Appliance Installers & Repairers Automatic Teller Machine (ATM) Services Automobile Electronics Installers & Repairers (p. 39)</p>	<p>Computer Security Specialists (p. 33) Computer Support Specialists* (p. 33) Desktop Publishers (p. 34) Embalmers Executive Secretaries* (p. 18)</p>	<p>Funeral Directors Home Electronic Repairers* Office Managers* (p. 19) Tax Preparers (p. 23)</p>
<p>Short-Term or On-the-Job Training (2 - 12 months) \$18,000 - \$70,000 per year</p>	<p>Auto Body Repairers (p. 43) Auto Glass Installers (p. 43) Automobile Mechanics* (p. 22) Bank Tellers* Bill & Account Collectors* Billing Clerks* Bookkeeping & Accounting Clerks* (p. 18) Brokerage Clerks (p. 22) Bus & Truck Mechanics* (p. 43) Camera & Photographic Equipment Repairers Coin & Vending Machine Repairers (p. 39) Computer Equipment Repairers (p. 39) Computer Operators (p. 33)</p>	<p> Couriers & Messengers* Credit Checkers & Authorizers Customer Service Representatives* (p. 18) Data Entry Keyers Employment Interviewers* Farm Equipment Mechanics* Funeral Attendants* (p. 31) General Office Clerks* (p. 19) Heavy Equipment Mechanics* (p. 44) Human Resources Assistants* Insurance Policy & Claim Clerks Legal Secretaries* (p. 19) Loan Clerks* (p. 23) Mechanic & Repair Helpers*</p>	<p>Motorboat Mechanics Motorcycle Mechanics (p. 40) Office Machine Repairers Order Clerks* Payroll & Timekeeping Clerks* Property & Real Estate Managers (p. 19) Real Estate Sales Agents Receptionists* (p. 19) Secretaries* (p. 19) Shipping & Receiving Clerks* Small Engine Mechanics Statistical Clerks</p>
<p>Foundations for Success</p>		Math	English

Innovation and Entrepreneurship in Business Services

Transportation

The transit industry is experiencing dramatic technology changes, and Community Transit continues to be ahead of the curve in this area. Advanced Public Transportation Systems will make transit more efficient and easier to use within the next couple of years. The system offers automatic passenger counters and automated stop announcements on buses, as well as advanced traveler information services that offer real-time bus information to riders, in order to help people make the best choice for their travel. Another system, electronic alerts, allows riders to sign up to receive emails on their computer or PDA, or text messages on their phones, which notify them about transit news or major changes to their bus service. Buses on a ten mile stretch of Highway 99 in Snohomish County are kept on schedule through an innovation called 'transit signal priority'. Using this technology, buses can get traffic signals to stretch a green light or shorten a red light by a few seconds to allow the bus through the intersection. Those few seconds can add up to several minutes saved on each bus trip. These innovations may appear to be

small changes, but to riders they offer more accessible and user-friendly service, and may mean the difference between missing the bus and getting to work on time.³³

Finally, Community Transit became the first transit agency in the country to establish a MySpace page geared toward younger riders. Teens say they feel empowered when they can find their own way to a destination, and the MySpace page gives Community Transit a forum to reach this audience.³⁴

Information

The Information industry in the Puget Sound region has always fostered a spirit of innovation and entrepreneurship. The entire industry originated from a common interest in technology among skilled and educated people living in Seattle. The advancement of programming and communication technologies accelerated in the late 1970s and early 1980s, a time when Seattle's coffee-house culture and community values created an instant network of people interested in innovation and business start-ups. Local financiers and entrepreneurs intersected and converged with the programming community to further develop new ideas. The success of Microsoft and McCaw Cellular enhanced the area's reputation as a place for success in the Information industry. The development of new technologies and the breadth of their applications in turn spurred spin-off companies as employees of successful firms left their jobs to become entrepreneurs.³⁵

Today, the region is known internationally as a hotspot of Information businesses and talented people. As a result, new technologies and companies are surfacing. Microelectronics is an emerging industry in the region, with research institutions such as University of Washington's Washington Technology Center Microfabrication Lab providing resources necessary to promote continued advancement and new business creation within Washington. Nanotechnology is another recent addition to the Information industry, with University of Washington's Nanotechnology program and Pacific Northwest National Laboratory acting as pioneers in this important field.³⁶

Sustainability in Business Services

Transportation

Transportation is embracing sustainability in Snohomish County, and establishing powerful new partnerships in order to do so. In a move designed to improve the sustainability of transit services, Community Transit and Everett Transit recently released a fast and unique style of bus service to Highway 99 in Snohomish County. The Swift bus will not only enhance transportation on this route with

³³ (Community Transit, 2008)

³⁴ (Community Transit, 2008)

³⁵ (Berk & Associates, 2005): http://www.seattle.gov/economicdevelopment/files/ict_final_report_july_2005.pdf

³⁶ (Washington Department of Commerce, 2008): <http://www.choosewashington.com/industries/detail.asp?i=23>

more frequent service and fewer stops, it will also run on hybrid diesel-electric propulsion. This technology is friendly to the environment and lowers operating costs over the life of the vehicle. Community Transit also released the region's first public transit double-decker bus. The double-decker bus accommodates twice as many riders (90) as a standard bus while taking up the same amount of space on the road, thus transporting more people with less fuel and maintaining the same environmental footprint.³⁷

Community Transit has become a key proponent of bicycle travel in Snohomish County. Bicycling is a non-polluting and healthy alternative to driving, and through the use of on-board bike racks or bike lockers at park-and-rides, cyclists can extend their range and commute options. Bicycle use is growing and Community Transit encourages this mode of transportation through a number of actions and programs including: being a primary sponsor and coordinator of the annual Snohomish County Bike to Work Day and Community Challenge, producing bicycling maps and guides, retrofitting all buses with three position bike racks instead of two position bike racks, and advocating for bicycle-compatible roadways and site design.³⁸

The Port of Everett recognizes the importance of good environmental practices and is taking active steps to improve the environmental health of the Port District. The Port of Everett recently graduated from the Second Flight of the Environmental Management System (EMS), which is endorsed by the U.S. Environmental Protection Agency. The EMS is a management of processes and procedures that allow an organization to evaluate, control, and reduce the environmental impacts of its activities, products, and services and operate with greater efficiency and control. As the second port in the state to complete this project, the Port of Everett is a role model for other areas to implement clean energy practices.³⁹

The Port of Everett is also upgrading its aging vehicle and equipment fleet with environmentally progressive options. Electric vehicles and hybrid and low-sulfur diesel vehicles joined the Port of Everett fleet in 2008. Additionally, the Port of Everett invested \$7 million into the cleanup of the North Marina and removed more than 85,260 tons of contaminated soil from the site. Other sustainability initiatives include restoration of habitat on Jetty Island and the Union Slough Saltmarsh sites, protection of habitat and salmon near the shore, and beach restoration.⁴⁰

Information

The issue of sustainability in the Information industry has received much attention in recent years. Numerous articles have appeared in popular press that address the issue of electronic waste (e-waste)

³⁷ (Community Transit, 2008)

³⁸ (Community Transit, 2008)

³⁹ (Port of Everett, 2008)

⁴⁰ (Port of Everett, 2008)

and the environmental effects of the Information industry. National Geographic News reported about the increased popularity of reducing, reusing, and recycling electronic junk items such as old computers, cell phones, and televisions. The Smithsonian Magazine highlighted the growing concern about the more than 100 million electronic devices that are discarded every year. Websites have been developed to address green and sustainable technology issues. International organizations have taken active roles to publicize the environmental problems associated with the Information industry and advocate for increased regulation.⁴¹

Such efforts are making a noticeable difference in global and local communities, and in April 2008 over 100 datacenter executives banded together to create the Information industry's first set of metrics to measure sustainable information technology practices. The Green Grid uses two metrics that are helping companies do something about their datacenter energy challenges: the Power Usage Effectiveness (PUE) metric and the Data Center Efficiency (DCE) metric. Both metrics allow datacenters to establish a baseline and goals for future energy usage, which the Green Grid considers an important starting point for any company looking to embrace sustainable information technology practices. The Green Grid is currently working with governments in North America, Europe, and Asia to incorporate the metrics into their own goals and regulations.⁴²

Additional efforts to bring sustainability to the Information industry include: encouraging scanned and emailed documents over printed and faxed documents, favoring Energy-Star compliant computer technology, turning off computers and equipment during long periods of inactivity, and using technology to reach a mass audience rather than relying on printed material. The Information industry also plays a critical role as workplaces host video meetings and conferences instead of traveling to various locations in an effort to save both time and fuel.

Conclusion

The Business Services cluster in Snohomish County is holding strong, in part due to the continued growth and prosperity of the Transportation and Information industries. These industries offer good jobs and contribute an increasing share of the economic base. If trends of the past years are any indicator, the Transportation and Information industries will play an even more important role in the economy in coming decades. Despite current news reports that portray a mixed economic picture for Business Services, the positive news must be allowed to shine. The local economy is stronger than expected, and Washington is still the third best place in the nation for business. With future projections in mind, Business Services is indeed an excellent cluster in which to begin a career.

⁴¹ (Green IT, 2008): <http://www.greenit.net/resources.html>

⁴² (Gruman, 2008): http://www.infoworld.com/article/08/04/22/17FE-green-15-2008-greengrid_1.html